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OF THE
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ADOPTED 1861.

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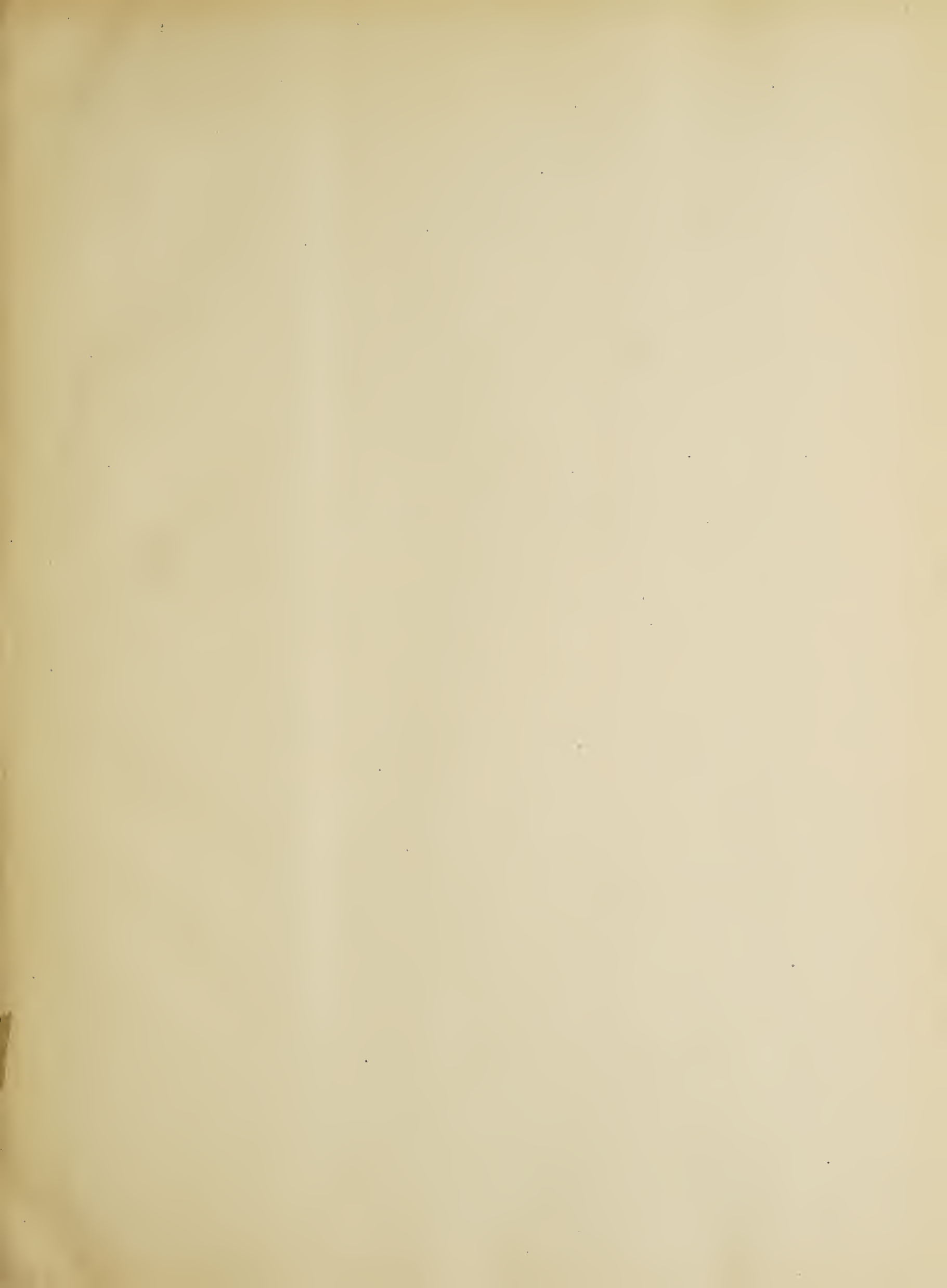
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INDEX.

A

- *A Classified Botanical Garden..... 12
- *A Few Uncommon Vines..... 29
- Accounts, Park Nomenclature and 141
- Address by President Loring, Detroit Convention, American Park and Out Door Art Association... 178
- Agricultural Schools..... 208
- *American Park and Out Door Art Association..... 84, 94, 200
- *Animal Sculpture for the Parks... 11
- Annual Planting or Embellishment of Cemetery Lots..... 135
- Aquatic Plants:—**
- **Nelumbium Album Grandiflorum* 45
- **Victoria Regia*..... 59
- Water Lilies—A Retrospect..... 189
- Water Lilies and other Aquatics.. 249
- **Aralia Spinosa*..... 186
- Arbor Day..... 248
- Arbor Day in North Carolina..... 21
- *Arboretum at Rose Brake, The,.... 74
- Arlington National Cemetery, Washington, D. C..... 68
- Association of American Cemetery Superintendents..... 84, 104, 130, 126
- Associations:—**
- *American Park and Out Door Art Association..... 84, 94, 200
- Association of American Cemetery Superintendents..... 84, 104
- Michigan State Horticultural Society..... 241
- New York Tree Planting Association..... 21
- Park and Forest Association, Lincoln, Neb..... 21
- *Avenue of Castor Oil Plants, An... 252

B

- *Batterson Monument, Hartford, Conn., The..... 215
- Botanic Garden, Public Value of a, 113
- *Botanical Garden, A Classified,.... 12

C

- Care of Trees on the Streets of Cities, The..... 137
- *Cary Monument, The,..... 14
- Cemeteries:—**
- Allegheny Cemetery, Allegheny, Pa..... 108
- Babylon, N. Y..... 260
- Bridgeport, Conn., Mountain Grove Cemetery..... 174
- Cambridge, Mass..... 88, 260
- Cemetery Association, Marion, O. 67
- City Cemetery, Buffalo, N. Y.... 68
- City Cemeteries, Cleveland, O.... 22
- Cote des Neiges Cemetery, Montreal,..... 125
- Cristobal Colon Cemetery, Havana, Cuba..... 40
- Dowagiac, Mich..... 107
- *Early Cemeteries of New Haven, Conn., The,..... 161
- Elmwood Cemetery, Detroit, Mich..... 107, 121
- Elmwood Cemetery Co., Sherbrooke, Canada..... 88
- Evergreen Cemetery Association, New Haven, Conn..... 22
- Fair Haven Union Cemetery, Fair Haven, Conn..... 240

- Fairmount Cemetery, Denver, Colo..... 260
- Fernhill Cemetery, St. John, N. B..... 67, 182
- Forest Hills Cemetery, Boston, Mass..... 48
- Forest Home Cemetery, Milwaukee, Wis..... 67
- Forest Park Cemetery, Troy, N. Y. 152
- *Glenwood Cemetery, N. Y. Improvements in..... 55
- Grand Rapids, Mich..... 125, 202
- Green River Cemetery, Greenfield, Mass..... 202
- Hollywood Cemetery, Richmond, Va..... 202
- Island Cemetery, Newport, R. I. 48
- Lake Side Cemetery, Erie, Pa.... 125
- *Lake View Cemetery, Skaneateles, N. Y..... 81
- Lowell Cemetery Association, Lowell, Mass..... 22, 107
- Magnolia Cemetery, Charleston, S. C..... 67, 108
- Morningside Cemetery, Brattleboro, Vt..... 202, 260
- Mt. Auburn Cemetery, Boston, 107, 182
- *Mt. Elliott Cemetery, Detroit, Mich., Ornamental Planting at, 5
- Mt. Olivet Cemetery, Detroit... 121
- Mt. Royal Cemetery, Montreal, Canada..... 240
- Norwood Cemetery, Philadelphia, Pa..... 221
- Oakland Cemetery, Atlanta, Ga.. 202
- Oakland Cemetery, St. Paul, Minn..... 240
- Oak Hill Cemetery, Herkimer, N. Y..... 88
- Oak Hill Cemetery, Newburyport, Mass..... 48
- Outside Cemeteries of San Francisco, The,..... 171
- Petersborough, Ontario..... 260
- Pine Grove, Lynn, Mass..... 260
- *Portland, Me., Evergreen Cemetery,..... 212
- Prospect Hill Cemetery, Brattleboro, Vt..... 182
- Ridgeland Cemetery, Watertown, Mass..... 125
- Riverside Cemetery, Cleveland, O. 240
- St. John's Cemetery, Clinton, Mass..... 68
- San Juan Cemetery, Porto Rico.. 152
- St. Mary's, Delaware, O..... 125
- Somerton Hills, N. J..... 88
- Spring Grove Cemetery, Cincinnati, O..... 48, 182
- Swan Point Cemetery, Providence, R. I..... 22
- The Nyack Rural Cemetery, Nyack, N. Y..... 152
- Woodlawn Cemetery, Canandaigua, N. Y..... 125
- *Woodlawn Cemetery, New York. Some Noted Mausoleums in, 172
- *Woodward Lawn Cemetery, Detroit, Mich..... 31, 121
- Worcester, Mass..... 260
- Notes**..... 22, 48, 67, 88, 107, 125, 152, 182, 202, 221, 240, 260
- **Cerus Grandiflora*..... 166
- Chinese Burials..... 240
- *Cinnamon and other Ferns..... 211
- *City Park, Mannheim, Germany... 85
- *Clark Memorial, Forest Hills Cemetery, Boston..... 247

- Cleaning Asphalt Streets..... 68
- Country School Houses, The,..... 119

Correspondence:—

- Art Out of Doors..... 108
- Eastern Cemeteries..... 241
- How to Start and Carry on a Cemetery on the Lawn Plan..... 126
- Mt. Auburn Cemetery, Boston... 241
- Ornamental Shrubs for Western Minnesota..... 261
- Cremation Question, The, 63, 88, 221
- Cristobal Colon Cemetery in Havana, Cuba..... 40

D

- *Design for a Memorial Receiving Vault..... 41
- Destroying Ants..... 127
- *Detroit, Mich., The Hecker Mausoleum, Woodward Lawn Cemetery 233
- Detroit Notes..... 121
- *Drainage..... 30
- Drives, Walks and,..... 210

E

- *Early Cemeteries of New Haven, Conn., The,..... 161

Editorial:—

- A Proper Trust..... 158
- A Retrospect..... 206, 226
- Agitate in Favor of Improvement 205
- American Park and Out Door Art Association..... 71, 93
- Annual Flower Shows..... 206
- Appalachian National Park..... 245
- Appropriateness in Public Statuary..... 112
- Arbitrary Rulings..... 158
- Association of Park Superintendents of New England..... 129
- Arbor Day..... 1, 28, 245
- Arbor Day and Women's Club... 186
- Automobiles in the Chicago Parks 71
- Care of Trees..... 27
- Cemetery Improvement..... 185
- Cemetery Officials at the Convention of the A. A. C. S. 129
- City Art Commissions and our Soldiers' Monuments..... 72
- City Care of Cemeteries..... 27
- Convention of the Association of American Cemetery Superintendents..... 111
- Course in Landscape Architecture at Harvard..... 245
- Cremation..... 28, 52
- Effect of Severe Winter of 1898-99 152
- Federal Care of Confederate Graves..... 51
- Good Roads..... 157
- Graceland Cemetery, Chicago... 130
- Influence of a well-kept Cemetery 1
- Labeling Plants and Trees..... 225
- Lack of Planting Space in our Cities..... 72
- Landscape Art in the Cemeteries. 93
- Landscape Gardening..... 158
- Memorial Day..... 52, 71
- Memorial Trees..... 52
- Mr. Widener's Benefaction... 205
- Municipal Art League..... 185
- Nature Study..... 226
- Park Flower Shows..... 186
- Petty Depredations in Parks and Cemeteries..... 157
- Photography in Landscape Work. 51

Progress in Cemetery Memorials.....	246	*Hypericum, The,	168	Monument to Captain Speke, Eng- land	84
Progress in Improvement.....	2			*Philadelphia's Tribute to General U. S. Grant.....	73
Property Adjacent to Parks	27	I		*Rockefeller Monument, Lakeview Cemetery, Cleveland, O., The... 188	
Public Comfort in Parks and Cem- eteries	112	Improvement Associations:—		*The Burns Monument, Barre, Vt. 136	
Public Art.....	206	A Hint	120	Mountain Grove Cemetery, Bridge- port, Conn.....	174
Rebuilding of Lincoln Monument	2	*Church and Schoolhouse Grounds 149		Mulching for Winter.....	203
Single Grave Sections in the Cem- etry	94	Civic Organization of St. Paul, Minn.....	19		
Small Parks.....	51, 185	Edgemont, Ohio.....	217	N	
Spring Planting	205	*Further Suggestions Apropos of Winter Work.....	216	*New Haven Conn., The Early Cem- eteries of.....	161
State Reservations	2	Helena, Mont.....	61	*New Haven, Public Parks of..... 159	
Swan Point Cemetery, Provid- ence	157	Kingston, R. I.....	217	*Note on Hardy Chrysanthemums and Cosmos, A.....	209
The Advertising Sign Nuisance ..	112	Lisbon, Me.....	43	Notes on Parks and Park Work.... 176	
*The Bicycle in the Cemeteries.... 72		Local Cemetery, The.....	177	Nurseries, An Excellent Fertilizer for.....	19
The Care of Parks.....	129	Methods.....	42		
The Coming Humanitarian Cen- tury	112	Minneapolis, Minn.....	61	O	
The Copyright Law	226	More and Bolder Suggestions.... 83		*Ornamental Planting at Mt. Elliott Cemetery, Detroit, Mich.....	5
The Department of Agriculture at the Paris Exposition.....	111	Organization and Objects..... 18		Out Door Art in School and College Grounds	116
The Paris Exposition of 1900.... 71		*Playgrounds for Small Children. 254		Outside Cemeteries of San Francisco, The.....	171
The Park Laborer.....	28	Peterboro, N. H.....	217		
Vault Building	225	*Plans	235	P	
Woman in Landscape Work	246	*Practical Suggestions.....	102	Parks:—	
Effect of Trees on Temperature, The, 164		Richfield Springs, N. Y. 217		*Animal Sculpture for the Park... 11	
Elm Leaf Beetle in Kentucky, The, 109		Rural Cemeteries.....	61	Arizona Petrified Forest	239
*England, A Lovely Home in..... 80		Suggestions	60	Audubon Park, New Orleans.... 220	
Epitaphs.....	96, 172	Tennesseetown, Kansas..... 43		Belle Isle Park, Detroit..... 121	
*Evergreen Cemetery, Portland, Me. 212		Winter Work	197	Bronx Park, New York City.... 87	
Excellent Fertilizer for Nurseries, An.....	19	*Improvements in Glenwood Ceme- tery, Oneida, N. Y.....	55	Calaveras Grove, Calif.....	259
		Improvement of the House Lot.... 145		Cambridge, Mass.....	259
		*Interstate Park, Dalles of the St. Croix, Minnesota-Wisconsin, The, 3		Chickanauga - Chattanooga Milit- ary Park	259
		*Isle of Wight, England, Whipping- ham Church.....	231	*City Park, Mannheim, Germany. 85	
F				Cleveland, O.....	151
Fall Grass Pest, The.....	101	J		Crandall Park, Glenn's Falls, N. Y.....	47
Fall and Winter Work Among In- jurious Insects	262	*Japanese Maples	227	Denver, Colo.....	151
Fertilizer for Nurseries, An Excel- lent.....	19	John Marshall's Grave....	215	*Detroit, Mich.....	77
*Floral Steps	46	L		Donation to Cleveland Park Board 220	
Forest Conditions of Porto Rico... 180		Labels for Living Plants, Printed... 257		Essex County, N. J.....	87
Forestry, Landscape.....	219	Lady of Warwick Hostel, Reading, England	54	Fairmount Park, Philadelphia, Pa. 201	
*From Swamp to Water Garden.... 46		*Lakeview Cemetery, Cleveland, O., The Rockefeller Monument..... 188		Fredericksburg, Va., National Park.....	201
Funerals in Arabia	82	*Lake View Cemetery, Skaneateles, N. Y.....	81	Grand Rapids, Mich.	106
		*Land for Cemetery Purposes..... 37		Hartford, Conn.	181
G		Landscape Forestry	219	Height of Buildings, Boston ... 201	
Garden at Lainz, Austria	65	Lawn Making.....	262	*Horticultural Hall, Audubon Park New Orleans, La.....	56
*Garden Plants.—Their Geography:—		Legal:—		*Hubbard Park, Meriden, Conn... 34	
Ebenales—Chrysophyllum, Dros- pyros and Styraax Alliance.. 86,	104	A Lawful Business	241	Indianapolis, Ind	106
Ericales—Vaccinium, Erica and Epacris Alliance.....	17	Does not apply to Cemetery Asso- ciations.....	23	*Interstate Park, Dalles of the St. Croix, Minnesota-Wisconsin... 3	
Gentianales—Jasminum, Fraxinus and Menyanthes Alliance... 198		Holds City Liable.....	23	Joliet, Ill.....	87
..... 122, 147, 179,		Regulation of Location of Ceme- teries.....	222	League Island Park.....	21
Polemoniales—Polemonium, Con- volvulus and Solanum Alliance	258	Unwarranted Regulations..... 261		Lebanon, Ind.....	153
..... 218, 237,		*Logan Grove, Medford, Mass.... 167		*Logan Grove, Medford, Mass.... 167	
Primulales—Statice, Primula and Myrsine Alliance.....	44, 64	*Lovely Home in England, A, ... 80		London, England.....	87
*General U. S. Grant, Philadelphia's Tribute to,.....	73	M		Mackinac Island Park, Mich... 181	
*God's Acre	143	*Magnolia Glauca.....	253	Mansfield, O.....	250
Grafting of Trees.....	257	*Magnolia Lotus, The	45	Milwaukee, Wis.....	66
Grass Pest, The Fall,	101	*Maples, Japanese.....	227	Minneapolis, Minn	259
*Grouping for Instruction	207	*Marginal Planting	174	Minnesota National Park 106, 124, 151	
		*Mausoleums in Woodlawn Ceme- tery, New York.....	172	National Park, Yosemite, Calif... 239	
H		Missouri Botanical Garden, St. Louis, 10th Annual Report..... 153		National Park, Santiago, Cuba... 47	
*Hardy Palms	33	Mole, Destroying The.....	69	Noted Parks of England.....	181
*Hecker Mausoleum, Woodward Lawn Cemetery, Detroit, Mich., The.....	233	Monuments:—		Nurseries in Chicago Parks... 239	
*Home Grounds.....	7, 36	*Cary Monument, The.....	14	Old "Physic Garden," Chelsea, London.....	66
*Horticultural Hall, Audubon Park, New Orleans, La.....	56	*Clark Memorial, Forest Hills Cemetery, Boston.....	247	Park Associations, Elyria, O. 66	
*Horticultural Hall, Philadelphia... 140		*Hartford, Conn., The Batterson Monument.....	215	Parkersburg, W. Va.....	151
House Lot, Improvement of the, ... 145		*Maisonneuve Monument, Mon- treal.....	39	*Pinehurst Suburban Park..... 58	
				*Public Parks of New Haven, The, 159	
				Quincy, Ill.....	19, 259

Relation of Reservoirs to Public Parks, The.....	99
*Rochester, N. Y., Parks, The....	190
*Royal Botanical Gardens, Kew, Surrey, England, XI.....	9
St. Paul, Minn.....	87
South Park, Chicago.....	259
Stillwater, Minn.....	220
Ypsilanti, Mich., R. R. Grounds.	151
Notes.....	21, 47, 66, 87, 106, 124, 151, 181, 201, 220, 239, 259
Park Nomenclature and Accounts.	141
Parks and the People, The.....	100
*Parks of Detroit, Mich., The.....	77
*Parks of Mansfield, O.....	250
*Parks, The Rochester, N. Y.....	190
Park Work, Notes on Parks and	176
*Philadelphia, Horticultural Hall...	140
*Philadelphia's Tribute to General U. S. Grant.....	73
*Pinelhurst Suburban Park.....	58
Plant Nomenclature.....	214, 230, 256
*Planting, Marginal.....	174
Planting on Cemetery Lots ..	20
Planting Trees.....	15

Poetry:

The Man With the Hoe.....	108
*Program Detroit Convention, American Park and Out Door Art Association.....	84, 94, 200
Printed Labels for Living Plants.	257
Provincialism in Parks.....	57
*Public Parks of New Haven, The..	159
Public Value of a Botanic Garden..	113
Publisher's Department...	25, 50, 70, 90, 110, 128, 155, 184, 204, 224, 243, 263

R

Railway Station Grounds Ornamenting.....	24
*Receiving Vault, Design for a Memorial.....	41
Relation of Reservoirs to Public Parks, The.....	99
Roadside, Treatment of the.....	63
*Rochester, N. Y, Parks, The.....	190
*Rockefeller Monument, Lakeview Cemetery, Cleveland, O., The,...	188
Rose Brake, Some Effects of the Cold Winter at.....	119
Rose Brake, Spiræa at.....	193
*Royal Botanic Gardens, Kew, Surrey, England, XI.....	9
Rural School Grounds.....	58
Russian Olive.....	115, 213

S

San Francisco, The Outside Cemeteries of.....	171
School and College Grounds, Out Door Art in.....	116
School Grounds Rural.....	58
School-Houses, The Country.....	119
Schools, Agricultural.....	208
*Sculpture for the Parks, Animal...	11

Selected Notes and Extracts	24, 49, 69, 89, 109, 127, 154, 183, 203, 223, 242, 262
------------------------------------	---

Shrubs and Plants:—

Azaleas.....	49
Bignonia Radicans.....	223
*Castor Oil Plants, An Avenue of..	252
*Cereus Grandiflorus.....	166
Chrysanthemums and Cosmos, A Note on Hardy.....	209
Ferns, Caring for... ..	24, 89
*Ferns, Cinnamon and Other.....	211
Flowering Shrubs for Decoration Day in the West.....	154
Forming Shrubs of Trees.....	223
Hardiness of Privet.....	127
Hedge Plants.....	203
History of the Dahlia.....	167
Hollies, Yellow Berried..	24
Hyacinth, The.....	183
Hybrid Pyrethrums.....	154
*Hypericum, The,	168
Japan Snowball and Other Viburnums.....	154
Kalmia, or Mountain Laurel....	109
Lawn Plants.....	127
Lobelia Cardinalis.....	203
Lobelias for Stock.....	183
New Varieties of Roses.....	203
Ornamental Grasses.....	262
Pansy Plants..	242
Plant Breeding.....	127
Plant Enemies and How to Fight Them	89
Plants for Ornamental Beds.....	49
Plants, Notes on Hardy.....	69
Pruning Vines in Summer.....	89
Seashore Plants.....	242
Spiræa at Rose Brake.....	193
Summer Flowering Shrubs.....	49
Transplanting Roses.....	183
*White Lilies.....	170, 195
Wild Flowers for the Garden....	183
*Vines, A Few Uncommon.....	29
*Vines, Clinging.....	114
Soil, The Waste of Leaves and Top.	196
Some Effects of the Cold Winter at Rose Brake.....	117
*Some Noted Mausoleums in Woodlawn Cemetery, New York.....	172
*Southern Vegetation.....	119
Spiræa at Rose Brake.....	193
Spraying	109
*Steam Road Roller in Parks and Cemeteries	93
Streets, Cleaning Asphalt	68
Street Trees	32
Strong Plea for the Sparrow, A... .	242
Sub-Irrigating Flower Beds.....	109

T

Temperature, The Effect of Trees on	164
*The Maisonneuve Monument, Montreal ..	39
The Toad	142
Tomb of Washington, The	236

Top Dressing Lawns	223
*Transplanting Trees	217
Treatment of the Roadside, The ...	63
Tree Planting in September.....	113

Trees.—

*A Mighty White Oak	166
Abies concolor	15
Ailanthus, The	154
*Aralia Spinosa	186
Avenues of Trees	183
Care of Newly Planted Trees ...	54
Care of Trees on the Streets of Cities, The	137
Carnaluba Palm.....	16
Evergreen Trees.....	69
*Hardy Palms	33
Hardy Trees in Beds.....	89
*Hollies	53
Labels for Trees.....	183
Magnolia Glauca	253
Magnolias	262
Palmetto Blooms.....	69
Picea pungens.....	15
Pin Oak, The.....	24
Pinus Palustris	75
Planting Trees	15, 17
Pruning Evergreens too Close....	242
Rapid-growing Shade Trees	154
*Russian Olive	115, 213
Shade Trees	62
*Sophora Japonica, Japanese Pagoda Tree.....	165
Street Trees.....	32, 49
The Age of Trees	223
The Linden Tree..	109
Tree Planting in September	113
Trees on the Streets of Cities, Care of.....	137
*Trees, Transplanting.....	217
Trees, Care of Newly Planted.....	54
Two choicest Evergreens, The....	15

U

Uses of Evergreen Branches	242
----------------------------------	-----

V

*Victoria Regia, The.....	59
*Vines, a few Uncommon.....	29
Vines, Clinging.....	114

W

Walks and Drives.....	210
Wall Edgings	127
Waste of Leaves and Topsoil, The .	196
*Water Garden, From Swamp to....	46
Water Lilies and other Aquatic Plants	249
Water Lilies—A Retrospect	189
*Whippingham Church, Isle of Wight, England	231
*White Lilies.....	170
Wild Flowers for the Garden	262
*Witch Hazel, The.....	103
*Woodward Lawn Cemetery, Detroit, Mich., The Hecker Mausoleum ..	233

PARK AND CEMETERY.

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CONTENTS.

EDITORIAL—Arbor Day—Influence of Well-Kept Cemeteries—Effect of Past Winter on Plant-Life—Public Reservations—The Lincoln Monument, Springfield, Ill.—Work of this Journal	1, 2
*The Interstate Park, Dalles of the St. Croix, Minnesota—Wisconsin.....	3
*Ornamental Planting at Mt. Elliot Cemetery, Detroit, Mich.....	5
*Home Grounds.....	7
*Royal Botanic Gardens, Kew, England, XI.....	9
*Animal Sculpture for the Parks.....	11
*A Classified Botanical Garden.....	12
*The Cary Monument.....	14
Trees and Shrubs—Planting Trees—The Two Choicest Evergreens.....	15
*Garden Plants—Their Geography, XXXIX.....	17
Improvement Associations.....	18
An Excellent Fertilizer for Nurseries.....	19
Planting on Cemetery Lots.....	20
Park Notes.....	21
Cemetery Notes.....	22
Legal.....	23
Selected Notes and Extracts.....	24
Reviews of Books, Reports, etc.....	25

*Illustrated.

ARBOR DAY is approaching in many states, and has been observed in those favorably situated as to latitude and climate. It is gratifying to note that the observance of the day is becoming more a matter of general interest, as well it may, for from the ethical standpoint it represents a growing sentiment in favor of becoming more intimate with nature, living closer to her, and, on the practical side, it is helping in the work of improving our surroundings, besides reinstating tree and plant life where it has been ruthlessly destroyed. The preparations which are annually made long before the appointed time in our public schools for making it a useful and instructive day, measure the hold it is taking on the people, and insure that the rising generation shall not only contribute to the good of the present but shall be prepared to continue the work into the next; and the signs of the times are that art out of doors will be one of the crowning evidences of the condition of the American people as time advances. One of the pleasing features of Arbor Day is the opportunity it affords for a set time to plant memorial trees. Trees that are particularly suitable for such a purpose are of long life, and besides of themselves being such objects of interest and care to those immediately concerned, they carry history along

with them, and by the associations connected with their planting become heirlooms. The planting of memorial trees is, therefore, urged as an appropriate and fitting observance of Arbor Day both in the park and cemetery, and the interest attaching to the special object of the act is augmented by the interest which always hovers about a tree, and makes it a revered and treasured friend.

THE influence of a well kept cemetery in the community is very far reaching, and is of necessity for good. One cannot imagine that it could be otherwise, for there would be no parallel for such a condition on record. Beauty was never degrading; it is always elevating, and the powerful influence it exerts on the human mind has been demonstrated in all times. The advance in cemetery practice, so marked in the large cities is very rapidly affecting the small communities, and it might well be one of the first considerations of the Village Improvement Societies. The lawn plan, with its restful grass plats and planting schemes, can be just as readily adapted to the small burial ground as the large one, as a fact it fits any conditions, and moreover as it reduces to a minimum the monument question, it relieves a community of expense, when properly understood, while offering far more instructive, comforting and restful returns for the outlay of time and money.

THE low temperature of the past winter, its duration and the wide area over which it was felt, will have been more or less disastrous to certain classes of our decorative plants and trees, the extent of which cannot be positively estimated until spring really starts the sap and growth begins. That all the good possible may be secured from the disaster, it will be wise to take full notes of such plants and trees as have suffered and been materially injured or destroyed; for such notes will not only be a guide for the future disposition of such plants, but will afford a basis for study of their constitutions with the possibility of improving the plants for such variations of temperature or of providing sufficient means for their protection. Our readers will be doing a good work to compile such notes and submit them to this journal for mutual benefit. These low ranges of temperature appear at intervals, and we must be prepared for the unexpected.

A MOVEMENT which is now in progress in some of the states to create state or local reservations of such tracts of their domain as contain specially attractive scenery or remarkable natural phenomena, is one that should be encouraged by all available means. In a country of so vast extent as ours, comprising such varied surface conditions, there is probably no state in the union that does not offer some particular natural attractions, not met with in the others, and which therefore become points of interest to the whole country and which should be reserved for the public benefit. But to the state itself the preservation of its beauty spots is a matter of the strongest interest, and it is a duty the state owes to its citizens. Hitherto, no reason has been recognized for such a course, but the actions of the older states, Massachusetts, Connecticut, New Hampshire, and of the newer ones, Minnesota and Wisconsin, set the seal upon the right of the question, and we have commissions looking into the merits of proposed state parks and forest reservations, whose work before long will result in the setting apart of certain tracts to be improved and reserved for the people for all time.

GOVERNOR Tanner in his message to the Illinois legislature, in which he recommends an appropriation of \$100,000 for repairs to the Lincoln monument at Springfield, necessitated by the defective foundations and construction, directs attention to this all important subject in relation to cemetery memorials. The uncertainties attending this work in the past led all the important cemeteries to enact rules by which the associations themselves construct all foundations, and such are now built as to depth, dimensions and material upon the soundest methods of engineering practice. This insures as much stability and permanence as it is possible to obtain with our present knowledge, and makes it certain that memorials erected thereon will remain stable and sightly. This rule should be adopted by all cemeteries if the structures erected as memorials are to have the permanence their character demands. Specific charges are made, which only vary in particulars readily appreciated, which are, of course, borne by the lot owner, but incidentally the work affords a legitimate source of profit to the association.

WITH this issue the ninth volume of this journal begins its course, and in glancing through its past issues and comparing the signs of the times with the suggestions contained in its columns, it is particularly gratifying to note that much of its suggestive matter has been the forerunner of actual practice, in the particular fields it has been the aim of the journal to cultivate. Those of our readers who may be in touch with the

movement in cemetery improvement will realize how strongly the principles of the idea are affecting communities all over the country. Likewise, the demand for park areas where none exist, and for increased acreage where parks have been developed, show that the efforts to educate along these lines, lines that are fraught with so much that is elevating and inspiring to man, are bearing fruit. The field of usefulness of PARK AND CEMETERY is very broad, and in all its varied aspects the practical ideal has been its constant goal. There are always limits to the possibilities of the present, but by keeping up close to the possible and practical, as time progresses it makes less of a chasm to bridge in order to continue the advance into the next movement of progress. As though a leaven were permeating society generally, the improvement of home surroundings is becoming a constantly available question for comment. These propositions, while they are all old, they have simply been waiting to explain their necessity; they have been kept in the background by the more sordid requirements of man, but at last stand prominently forward for adjustment. One of the favorable means to the end sought is the local improvement society; this is comparatively an old institution, but progressive conditions have promoted its revival in a marked degree, so that in assigning space in the new volume to a department devoted exclusively to such societies we feel that we are advocating nothing new—rather, are merely falling into step with the times. It is true that in some parts of the country it may still be necessary to speak of the advantages of such organizations, but generally this goes without saying. It is already an accepted fact. What seems to be wanted is something definite as to the formation and conduct of such associations, and perhaps, above all, hints as to their objects and the best means of attaining them. We hope and expect to make the new department of real practical value. We believe that the various divisions of the topic will be treated interestingly and vigorously. And if even radical measures are sometimes suggested, we know that our readers will understand that vigor includes enthusiasm, and that an enthusiast is likely to be something of a radical. Heroic measures are sometimes essential to success when individuals are to be roused to action and far-reaching results are to be the issue. Half-hearted work is never effectual. So, if the editor of this department uses her pen as a sort of combination horticultural implement, or even occasionally as a warlike weapon, no industrious advocate of the work need tremble. She is only ambitious to add recruits to the force and force to the recruits now marching to victory over barrenness and squalor.

THE INTERSTATE PARK, DALLES OF THE ST. CROIX,
MINNESOTA—WISCONSIN.

The idea of preserving the natural beauties of the country is happily a growing one. In a few instances it has become facts, and work has been in progress to establish public parks, so that the characteristic natural features of the locality may be perpetually reserved for the people. It may be assumed that in the past the time was not ripe for successful effort in this direction, nor has the wealth of landscape, emphasized and embellished as it is by natural phenomena in so many places, exercised

for a public reserve, and the first law looking to that end was passed in the State of Minnesota April 25, 1895, and by Wisconsin, April 19, 1895. After the preliminaries were settled the governor of Minnesota appointed Mr. Hazzard commissioner for the park, and, with an appropriation of \$5,000, he proceeded with the work of improvement, which has been carried on for two years with remarkable results considering the comparative small amount of funds at his disposal. It may be well to state in connection with this that the project had a large number of ardent supporters, who, notwithstanding



TAYLORS FALLS, MINN.

ST. CROIX FALLS, WIS.

VIEW FROM A HIGH POINT BELOW THE ELBOW IN THE DALLES, ON THE WISCONSIN SIDE.

an influence potent enough to move the people to the propriety of legislation to attain the desired object.

Such apathy is at an end, and in many states steps have been taken to secure favored localities, and work undertaken to create of them public reservations. For a long time the Dalles of the St. Croix, the river forming part of the boundary between Minnesota and Wisconsin, have been famous for the scenery and for the wonderful geological conditions presented. The locality has long been an El Dorado for the geologist and botanist, and for the lover of nature in wild grandeur few spots offer more enticing attractions.

It was in 1895 that Mr. George H. Hazzard of St. Paul, Minn., called public attention to the desirability of securing the Dalles of the St. Croix

the usual discouragements, upheld the commissioner's hands and encouraged him to constant effort.

When operations for the improvement of the tract were begun the place was rough indeed—nothing but wild nature, with means of access to the points of interest only available to the pioneer used to such surroundings. With the above appropriation the park has been maintained for two years, 150 acres cleared up, some 30 old houses and outbuildings removed, mud holes and small swamps drained, replanting where necessary trees, shrubs and vines, adding to the mosses and ferns in their nooks, erecting offices and public comfort buildings, constructing platforms, walks and steps, and providing furniture. In addition, a steamboat dock with approaches has been built, and row boats

PARK AND CEMETERY.



LOOKING DOWN THE DALLES FROM THE ELBOW—MINNESOTA TO THE RIGHT, WISCONSIN TO THE LEFT.

secured to add to attractions. The river being navigable the United States government has now made an appropriation which will improve the river facilities and steamboating is resumed on the St. Croix river. Some of the most interesting work accomplished has been the cleaning out of the so-called "pot holes" or wells.

With the illustrations herewith given, it is hardly necessary to dilate upon the scenic attractions of the place, they can be better imagined than described.

The plant life about the Dalles is most varied and remarkable in extent. A writer speaks of the place thus: "The moss covered rocks and logs are likened unto beautiful mats, so varied are their colors. All the different vines of the northern climes are found here. Among her trees are the white, Norway and jack pines, red and white cedar, spruce, fir, birch, willow, butternut, linden, poplar, the maple family, ash, walnut, mountain ash, elm, oak, ironwood, cherry, hickory and the junipers, the larch and Canadian yew. Among her thousand plants is found the mocassin flower, the golden rod, blue harebells, roses, blueberries, jacks-in-the-pulpit, columbine, honeysuckle, blue gentian, anemones, asters and lilies. Among her very exceptionally large family of ferns, the most choice and rare are found, including the walking and bulb fern; and among her mosses and lichens is found the prickly pear cactus. The 'Glacier Gardens' are among her most noted features—the footprints in

the rocks, the many pot-holes, or wells, made by the whirling, surging water keeping the boulders or cobble stones in motion. Large numbers of these have been taken out, some among a yellow drift, as from Red River valley, and some a dark red drift, as from Lake Superior. Many of the stones are worn very round and smooth. The names of many of the characteristic places are: 'Old St. Croix Fireplace,' the coloring of which is remarkable; 'The Devil's Chair,' 'The Kitchen,' 'Bake Oven,' 'Sitting Room,' 'Pulpit,' 'The Cross,' 'Old Man of the Dalles,' or sentinel; 'The Cave,' 'The Gopher,' 'The Hammer Head,' or two-faced man; 'Desk Rock,' 'Echo Rock,' 'Eagle Nest Point.' "

A visit which the writer made to this park last summer impressed him with the wonderful lavishness with which nature had invested this region, drawing attention to the vast stretch of ages which had spanned the trail from the making of the pot hole to its present discovery and investigation on the one hand, and to the nodding harebells and quivering ferns greeting one with their thousand and one companions from every point of sight on the other—two phases of nature, fascinating and yet awe inspiring in contemplation of her vast resources.

No better work has been done for their people than the preservation of this locality in an interstate park by the sister states, and Mr. Hazzard is to be highly commended for the efficient part he has played in its preservation and development.

ORNAMENTAL PLANTING AT MT. ELLIOTT CEMETERY, DETROIT, MICH.

Effective permanent planting, to any extent, in old cemeteries crowded with grave mounds, monuments and headstones of every imaginable design is a difficult undertaking, and even discouraging when valuable trees and shrubs have to be torn out to make room for some meaningless piece of stonework. Still we push on and make the best of what is left. When planting, we have invariably two objects in view.

First, to produce certain pleasing effects.

Second, to shut out some unsightly object.

Referring to the illustration, Plate 1, the open space and small work lying adjacent to the "Mahoney Monument," is the result of such treatment. All plants shown in the view are perfectly hardy with the exception of the large leaved plant at the head of the anchor, *musa ensete*, and the anchor, which was formed of *echeveria metalica*, the most beautiful of all the *echeverias* for such display. The large tree in front is an American elm, with a bank of Irish ivy at base; many shoots of this vine run up from three to seven feet during the summer, through the creeping variegated *euonymus* established on the trunk, and which was illustrated in a previous issue of PARK AND CEMETERY. The ivy generally gets killed down to snow line every winter, but the bank of glossy green foliage of the ivy in summer, rising in places two feet around the tree

group of *Eulalias* and *Erianthus*. The shrubs are *Exochorda grandiflora*, *Spiræa Van Houttei*, and *S. Reeves*, double, *Cerasus Serotina* and *Ailanthus Glandulosa*. The latter is cut down every spring within one foot of the ground which keeps it within certain bounds, and produces larger and more beautiful foliage when so treated. To right of, and in line with the monument is a pyramidal plant of *Juniperus Virginica* and an American *Arborvitæ* which shut out from view some unsightly slabs of marble. To the left on the margin of the avenue is a *Retinispora pessifera* and in the background, a Norway spruce.

The semi-circular beds in rear of the office and waiting room, Plate 2, were composed of *Cannas*—*Vaughan*, *Henderson* and *Queen Charlotte*, with marginal finish of *Pennisetum*.

In addition to *Cannas* of the best varieties, and a general collection of bedding stock, we use many other plants which produce large and attractive foliage, such as *Centaurea Babylonica*, *Nicotianas*, *Solanums* and *Wigandias*. The flowers of these plants are not by any means as attractive as the leaves, but the plants are at all times picturesque. The selection of the most beautiful and useful from the great mass of plants, is one of the most important duties of the planter, whose desire it is to present pleasing combinations. I imagine that we get better results from canna beds, that are planted with a view to having a variety in their color of



PLATE 1. PLANTING ABOUT THE MAHONEY MONUMENT.

and running at random out on the grass forms a pleasing and attractive base for the *euonymus*.

In rear of the elm and back about fifty feet is a

flower and foliage in the same bed, with due regard to height, tapering from center to margin, than when a mass of one color and height is set in beds.



PLATE 2. PLANTING IN REAR OF ENTRANCE AND OFFICES.

We have used with good effect the following plants as a marginal finish for canna beds. Zinnia mixed, and separate colors, Scarlet Sage and Blue Ageratum, Cyperus alternifolia, and variegated Anthuricum; these proved very good.

We used dwarf native Sumachs for the first time last year, as a finish to canna beds. When planting them, we cut the old wood close to the ground which induces a growth of several young shoots.

In cemeteries where no space has been set apart and reserved for the special purpose of permanent embellishment with trees, shrubs, etc., very little

Althæas, Hydrangeas, Spireæ Van Houttei and Reevesii (double), Viburnum plicatum and Weigela in variety; all these as single specimens make charming objects, when in bloom.

Cornus rubra, after mild winters blooms freely and is very attractive, but only scattering flowers appear after severe winters. Deutzia crenata flora plena, from 8 to 10 feet high is a beautiful sight when in full bloom. The grandeur of a small well proportioned tree 15 feet high of Prunus pissardi, when in flower last May was too charming for any description I could give to do it justice.

The Philadelphus granifloras and Coronarius with their sweet scented white flowers in abundance, are among the favorites. Exochorda grandiflora and Deutzia Pride of Rochester, are valuable shrubs, the former stands keeping cut down to suit any space, the latter is a slow grower, both are profuse bloomers and perfectly hardy. Hypericum Moserianum, a persistent bloomer, from the last of June to late in fall, with exceedingly rich yellow flowers is a convenient plant for small spaces.

The present winter will no doubt, test its hardiness as well as many other things of doubtful endurance. To continue the long list of other valuable plants that we use, hardy, herbaceous and tender, would take up too much of your valuable space without being of sufficient interest to your readers. I will close these few scattered notes by recommending the use of the many valuable plants, shrubs and vines, indigenous to the surroundings of the planter's location. There is something charming about their contented harmony that is difficult to produce with imported material.

The entrance, office and waiting room, Plate 2 was constructed in 1882 of Ohio, Berea stone and it cost \$8,000. The Vault, Plate 3, is constructed of Barre granite, it has a capacity for sixty bodies and as built in 1895.

John Reid.



PLATE 3. RECEIVING VAULT.

may be looked for in the way of effective grouping; but at the numerous corners at intersections and curves of avenues, around the base of large trees, even with only two or three hundred square feet to work on, when taken separately and treated with judgment and taste, we can still produce pleasing and attractive bits of scenery at a nominal cost. In general we have to depend upon isolated specimens of trees, shrubs and ornamental leaved subjects, and the following few do well here and are effective:

* HOME GROUNDS. *

Persons having land about their houses or having procured land upon which to establish a home, no matter how limited the area, should carefully study its subdivision and furnishing with a view to making it quite as much a part of the home as are the rooms of the house itself.

Such a study should when possible be taken up well in advance of construction, for the possibility of devising a well balanced and consistent plan that will give the most convenience and pleasure to each member of the family will often depend upon the position of the house, its rooms and its exits.

On the average flat and rectangular town lot 50 ft. by 150 ft., a house 25 ft. by 30 ft., with an

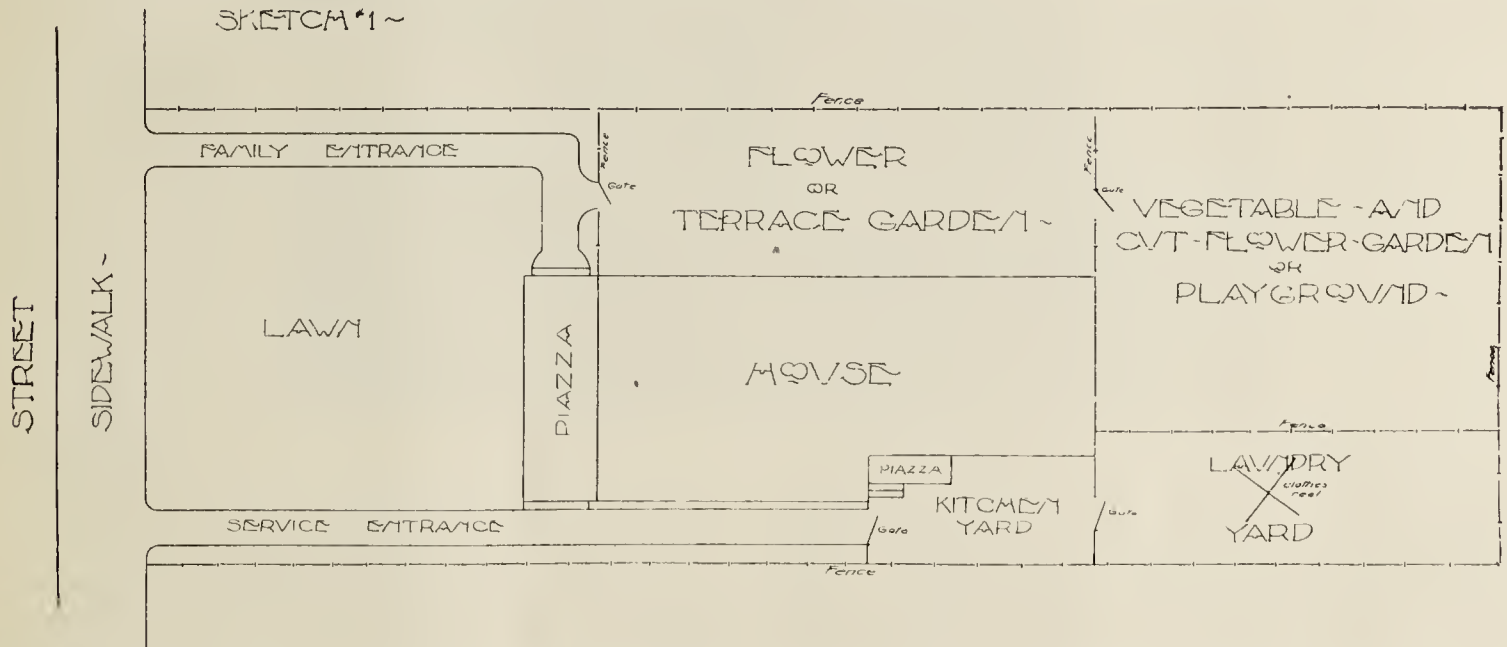
eyes of those looking out from the rooms of the house.

On such a lot, the house should be and is ordinarily planned with the hall and kitchen on the north or west side and the living rooms on the south or east. It should be located well to the north or west of the lot in order to give a maximum of open space on the sunny living side.

The grounds should be divided into a working section, and a pleasure and living section, each having independent means of access.

The first would comprise the kitchen and laundry yard connecting with the kitchen and cellar of the house, and separated from other parts of the ground by a vine covered lattice or wire fence, rather than a hedge, through which access would be given by a gate to an intermediate section to be used for growing vegetables and cut flowers or for a playground.

Adjoining this on the sunny side would be a



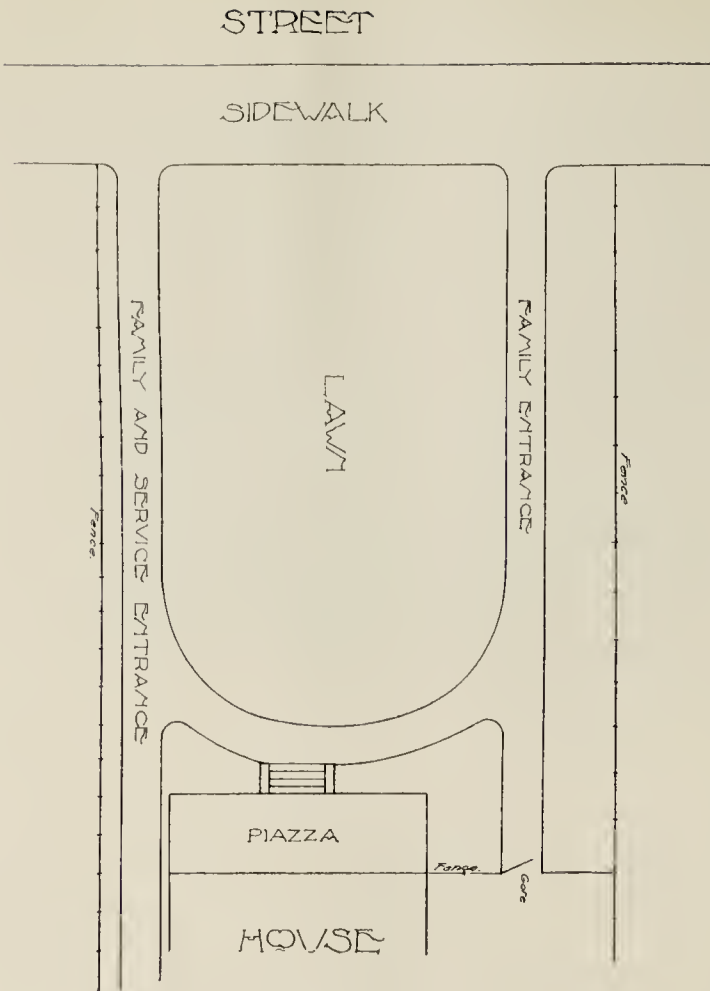
ell 20 ft. by 25 ft., is placed near the centre or at one side with the front line corresponding with that of the houses on the street.

The surface of the lot is evenly graded and grassed, and there may be a number of trees planted in it any one of which will grow so large as to seriously interfere with the free passage of air and light and shade out cultivated shrubs, flowers and grass; there may also be, usually in the centre of a grass plot, one or more beds filled with a few varieties of tender plants which are not at their best until midsummer, are killed by the first heavy frost, and must be yearly renewed.

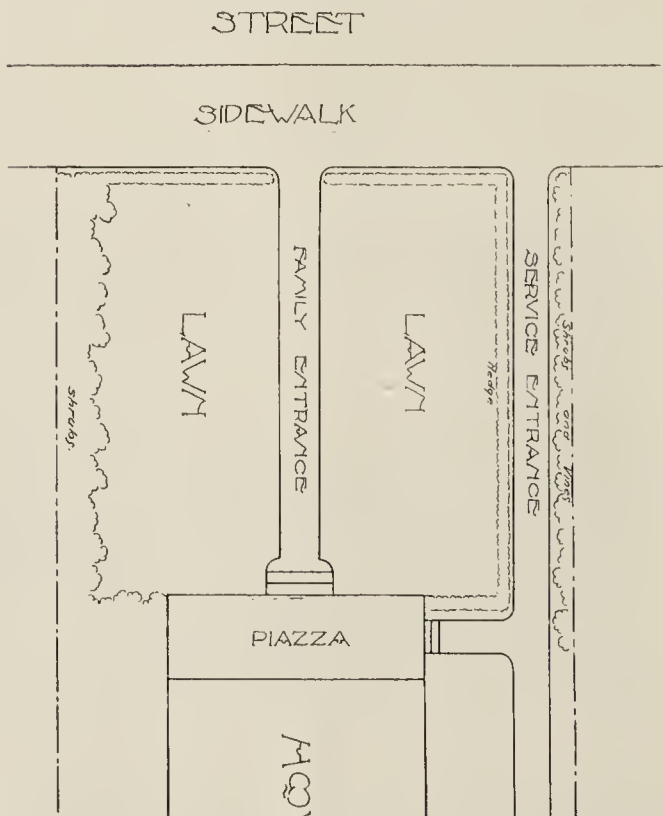
The front yard is open to the gaze of all that pass, the back yard is given up wholly to the laundry and other kitchen uses, there is little or nothing in the grounds to invite or even suggest out-of-door rest and recreation or to rest and refresh the

flower or terrace garden, made easily accessible from the house. This should be distinctly an outdoor apartment of the home, in which to sit or lunch during pleasant days and evenings. Connection would be made from this through a gate with the family entrance walk. If there should not be room for such a garden in this position it may be in the place of the vegetable and cut flower garden.

The front lawn with the planting upon it, and the vines trained on the house, give the structure its setting from the street. This lawn should be a broad stretch of turf broken only by the necessary service and family entrances, by a fringe of shrubs and vines at the house and extended to screen the terrace flower garden from the road, a small growing tree or two and a few shrubs; but with no side boundary plantations, if it be the established custom on the street to keep open front lawns and no fences.



SKETCH 2.



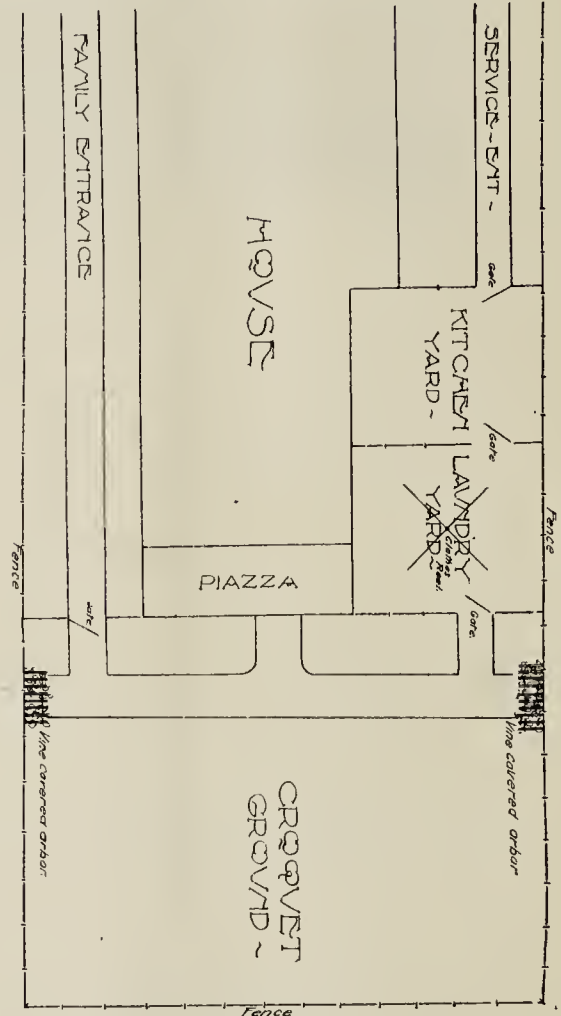
SKETCH 3.

If however it is the custom to have fenced enclosures, than a narrow boundary plantation should be

provided along the front fence and on the lawn side of the service walk to give more seclusion to the grounds, and partly screen out the walk. (Sketch 1.)

It should not be assumed that such sketches as are presented herewith are to be followed implicitly, they are presented to serve as an aid to the property owner in making an independent study. The conditions prevailing on each place and the requirements of each family make such an independent study desirable, in fact essential to secure the best results.

In the sketch it is assumed that the family ap-



SKETCH 4.

proach the house most of the time from one direction. If however they approach as often from each side, the family entrance would be from both sides and the service walk would lead off from one of the entrance walks (Sketch 2.) or a symmetrically planned house with hall and front door in centre may sometimes be better accommodated by a still more symmetrical arrangement of grounds and a straight central entrance walk. (Sketch 3.) The garden terrace can be varied much in plan by increasing or diminishing the size of the flower beds or open sitting space, the arbor, (which may also serve to screen the next lot), or the aquatic pool. (Sketches 4 and 5.)

Warren H. Manning.

(To be continued.)

ROYAL BOTANICAL GARDENS, KEW, SURREY,
ENGLAND. XI.
GARDENERS.

Advantages enjoyed by gardeners of to-day at Kew have been evolved virtually since the establishment was made public in 1841. Said Sir Wm. Hooker (Report, 1862, p. 2): "A commodious reading room for the foremen and gardeners, with the dwelling rooms for two of the foremen, have been erected adjoining the director's office. To this the men's library has been removed, and in it Prof. Oliver voluntarily delivers lectures to the foremen, gardeners, etc., throughout the winter months. The attendance at the library and lectures have been in every respect satisfactory and productive of excellent results." Sir Jos. D. Hooker committed himself thus (Report, 1875, ps. 2 and 3:) "During the last year practical lessons in various departments of botany and its kindred subjects have been given to the young gardeners with a view of preparing them better for their duties in general, and especially qualifying them for government



CROCUSES UNDER THE TURKEY OAK, KEW, ENGLAND.

and other situations in the Colonies and India, where a scientific knowledge of gardening, arboriculture, etc., is required. The lessons are given in the evening after working hours, and embrace the elements of structural, systematic and physical botany; of chemistry, physical geography and meteorology in their application to horticulture; of economic botany, forestry, etc. They are given, some in the young men's library, others in the garden or museum. Attendance is not compulsory, but any one commencing one of the courses is required to go through with it and take notes, which are written out in books, and these are examined periodically. The courses are short, and some of them are repeated twice or oftener during the year, so as to enable a succession of young gardeners (who cannot well attend to more than one course at a time) to obtain instruction in all or most of the subjects taught. It should be premised that no young gardeners are to be taken into the service of the Royal Gardens who have not passed their apprenticeship elsewhere; that they come ostensibly for the purpose of self-improvement, and are expected to remain for two years in the service. They, however, seldom remain more than twelve to eighteen months, the fact of having served at Kew being considered so high

a recommendation for curatorships of botanic and other public gardens, and by persons requiring gardeners with a special knowledge of plants, and the demands upon Kew for gardeners to serve in India and the Colonies, being very frequent. Though attendance has been voluntary, it has been remarkably good, three-fourths of the young gardeners availing themselves of the lessons, and the results have been extremely satisfactory both in respect of the encouragement to self-improvement among the gardeners and of the increased confidence with which the authorities of the establishment can recommend them for employment elsewhere. It may be mentioned here that, as has been the case

with evening attendance in the library, the fact of good attendance on the lessons is recorded in every gardener's certificate of conduct and proficiency on his leaving the service of this establishment.

Numerous applications for admission to the lessons have been received from persons inhabiting the neighborhood, which, in all cases, have been refused. It is obvious that the

amount of benefit to be obtained from such lessons given to young men who come to Kew, and who are for the most part profoundly ignorant of the subjects taught, depends mainly on the individual attention which each receives from the instructor, and that the presence of strangers would impede that free intercourse that should subsist between the teachers and their pupils, amongst whom not a few are unaccustomed to that severe training in the exercise of the hands, eyes and reasoning powers that is required to master in a few lessons a sound knowledge of the principles upon which the science and practice of botany and horticulture are based."

In the report of 1881 mention is made to the effect that twice a week for about nine months in the year lessons are given by the staff and others, and the attendance has been more than the lecture room has been adequate to. The efficiency of Kewites, as viewed by merchants, is shown by an article in the *Times* of December, 1870, a time when the cultivation of cotton in India was being promoted with earnestness and since become an established industry: "The second batch of six well-trained gardeners from the Royal Gardens, Kew, for the cotton plantation in India, sailed last

month, November, 1870; the terms granted by the Indian government are highly favorable. These men receive £40 each for outfit, a free passage, and will start at a salary of £250 per annum. The term of engagement is five years, with annual advance, from the beginning, of £50, and a free passage back at the end of it if desired. The services of the first batch are highly spoken of, so that for the improvement of the quality, as well as the increased produce from the land, great things are now being done for Indian cotton. At the present time there are about fifty men in different parts of India, in government and private employ, engaged in cultivating tea, cinchona and cotton, who have been trained at Kew, and who owe their advancement to the unremitting interest taken by the authorities at that establishment in improving the vegetable products of India. By recent accounts from Calcutta it is said that cotton is coming down from the country much better in quality and in much larger quantities."

The spirit a young gardener is now officially surrounded by at Kew is revealed by a letter of the present director: "I have always felt that a great responsibility falls upon the staff in doing what can be done to maintain a healthy and somewhat stimulating tone throughout the establishment. As you know we do not 'coddle.' We treat our young men as 'men,' and we expect them to work out their own salvation. We wish them to be manly, self-respecting and strenuous. We put, with the aid of the government, what help we can in their way, and leave them to make an intelligent use of it."

From the highest to the lowest the spirit of progress and industry is everywhere shown by those connected with Kew.

Laggards, drones and incompetents are speedily disposed of and their vacancies filled by worthy persons who leave no doubt as to their determination to improve. Studious, intelligent, energetic and capable young men always find a warm sympathy and stimulus and the absolute freedom of political or influential "pulls" guarantee to a successful graduate that his diploma is an earnest of merit and is accepted as such everywhere.

Admission requirements are: Five years' experience; partly indoors; age, 20 to 25.

It is desired that blue serge trousers and gray shirts will be worn. Hours are from 6 a. m. to 6 p. m., with one and three-quarter hours for meals during nine months of the year, and 8 a. m. to 4:30 p. m., with one and a quarter hours for meals, during part of the winter.

Appointment is for two years to Britons and one year for foreigners. Worthies are promoted to deputy foremen as vacancies arise or other assistance is given. Foreigners are restricted in number to 10 per cent of Britons. Labor is anything in the sphere of gardening, but each is given charge of a house or outdoor part, and in it is expected to promote the interests of the institution and maintain his charge in the best state of health and order. Those who give satisfaction are shifted to other departments on application as opportunity affords.

It follows that where departments so rich and complete in numbers and species as in the arboretum, the

orchids, ferns or herbaceous plants particularly—the opportunities are proportionately many and requires but the proof of a diligent student for the ever alert officials to extend to him special assistance.

Wages are 21 shillings per week for gardeners and 24 shillings for deputy foremen—lodgings cost from 13 to 18 per week.

The lectures are conducted evenings, and comprise a course of 25 in Organography and Systematic Botany, by Mr. J. G. Baker, whose special studies in cultivated plants enable him to point out with apt clearness the botanical differences and history of garden plants; 35 in Economic Botany, by Mr. J. R. Jackson, who explains the economic uses of the vegetable kingdom with rare interest and instructiveness; 10 in Geographical Botany, by Mr. R. A. Rolfe, outlining in the course the meteorological and climatic influences plants are subjected to in their native haunts, and to gardeners who deal with specimens from all parts of the world the difficulty in rearing those hitherto unknown, and but their native surroundings known, it gives a clear and highly necessary clue to cultivation; 33 in Elements of Chemistry and Physics as related to vegetable life, and series teeming with information potent to successful plant growing.

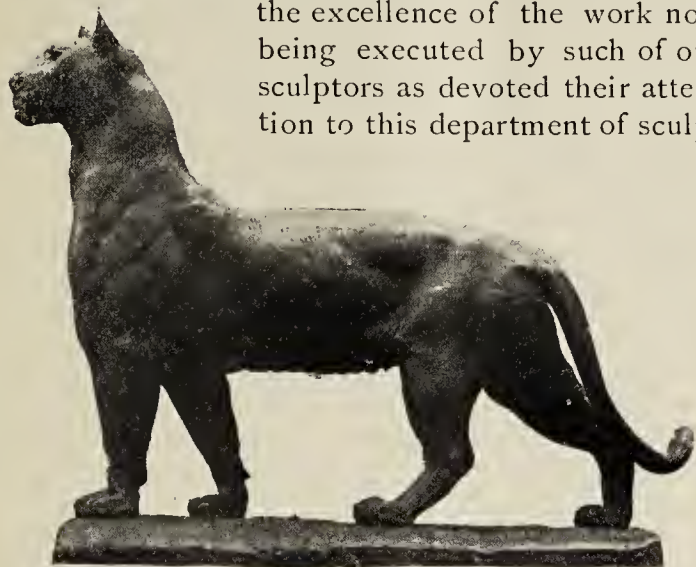
In addition, a "British Botany Club" is organized each year for collecting, mounting and studying the British flora—members of the staff offer prizes for the most comprehensive and representative collections, properly preserved, mounted and labeled, and occasionally act as conductors of excursions to the suburbs. Messrs. Baker, Nicholson, Skan, Dr. Stapf and others, are each generous in their assistance in this direction. Most important of all perhaps is the "Mutual Improvement Club" that meets weekly in the Gardener's Library to attend the reading of an essay by one of their number and later to discuss it. It is obvious that to center the cream of the rising talent of a whole nation in a room, coming as they do from all parts and ready with their varied and advanced experiences and opinions; highly instructive and interesting evenings are spent in debating in a cordial manner the interests that attract them to Kew. The interest and sympathy all show toward a novice in encouraging his speaking, the prompt and unanimous flooring of presumptuous bigotry and vanity and the instructive remarks of opposing factions, are productive of excellent results. The only demand necessary for a speaker is that he contribute to the general interest and knowledge, and while at times personal opinion and feeling run high, it is ordinarily prompted by intense engrossment in the subject, and, although a rivalry, it is always of the best and purest friendliness.

It is interesting to know that all the curatorships of the Botanic Gardens in England, Scotland and Ireland are held by Kewites, and all the superintendents and curators of the Botanic Gardens and Stations in the Colonial Empire are recruited from Kew, and there are annually a considerable number.

Kew gardeners, past and present, constituting about 500, are in close touch with one another through the channel of "The Journal of the Kew Guild," an out-growth of the "Mutual Improvement Club." *Emil Mische.*

ANIMAL SCULPTURE FOR THE PARKS.

The attractive effects produced by the appropriate use of animal sculpture about our parks, and the excellence of the work now being executed by such of our sculptors as devoted their attention to this department of scul-



"PUMA."—BY A. PHIMISTER PROCTOR, SC.

ture, are giving it a very prominent place as a distinct branch of American Art. This is the more marked from the fact that the wild animal life of this continent, that is, the species which our sculptors have shown especial talent in modelling, is peculiarly American. The lion models of Kemys and Bartlett, however, only serve to show that our sculptors are not confined in their ability to model to the creatures of this continent, but can invade with every prospect of success the domain of the great French masters of animal sculpture.

The World's Fair afforded the grandest opportunity of all for the display of this line of art, and it will be remembered to what an extent, how well disposed, and how excellent was the work displayed so lavishly in the numerous situations to which such work is always so well adapted.

Three illustrations are given herewith, one, that of the group of lionesses, modelled by M. Georges Gardet, representing the modern French school. M. Gardet has shown great boldness in his animal work, and has attained much distinction in Paris. The

other two illustrations are the work of American sculptors.

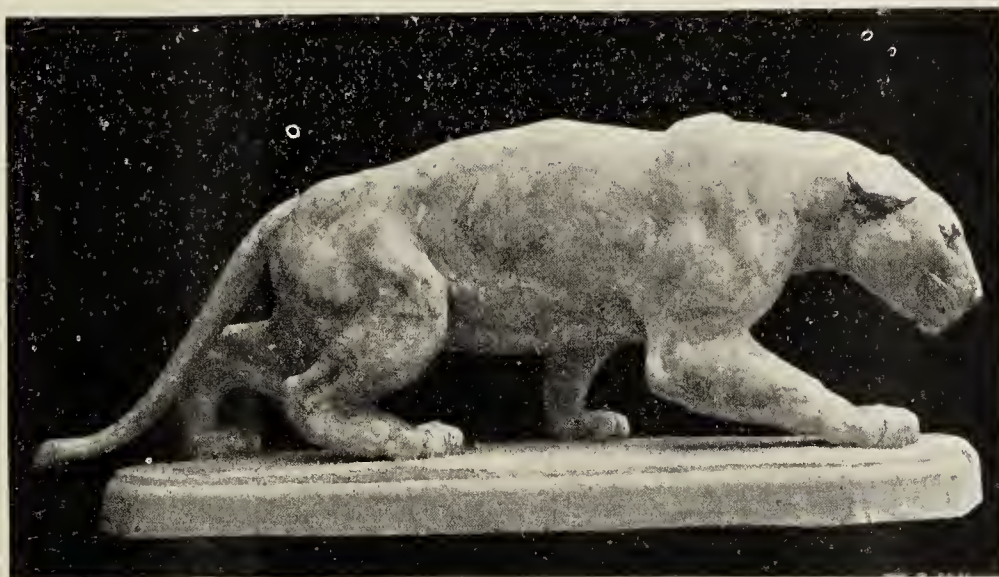
The "Puma" modelled by Mr. A. Phimister Proctor, of New York, is one of a pair, for which a commission was given by the Park Commissioners of Brooklyn, for Prospect Park. They are cast in bronze, are 6 feet high, and will surmount light granite pedestals 16 feet high, at one of the famous park's entrances.

They are strongly modelled, natural to life, to which undoubtedly Mr. Proctor's passion for hunting, in earlier days, and the acquaintance with the nature of the beast has practically contributed.



"GROUP OF LIONESSES."—BY G. GARDET, SC.

Another aspirant for fame in plastic art is Mr. Eli Harvey, who was born in Ohio, and commenced his studies in Cincinnati. In 1889 he went to Paris to continue his art education, where he has since remained, and this year he exhibited a plaster model of a "Walking Jaguar," which was well received.



"WALKING JAGUAR."—BY ELI HARVEY, SC.

Many of the parks in our larger cities are appreciating the desirability of this class of sculpture for ornamental features, and we may look forward to its more extended use, as its appropriateness in many situations in public recreation grounds is understood.

PARK AND CEMETERY.

A CLASSIFIED BOTANICAL GARDEN.

Just nineteen years ago the essentials of the grouping in the plan which appears on the opposite page were published in leading Horticultural journals of England and America, and I am pleased to know that both publications still live and enjoy prosperity. This was before international copyright became a fact and the method during all that time has been at the mercy of anyone with knowledge enough to adopt it. Even now copyright is sought merely for the sake of record, for so far as landscape gardening is concerned I cannot find that it affords the least protection; anyone is at liberty to plant from plans if they can, and a certain educational state aided institution in Pennsylvania obtained them a few years ago, and are now about to rest on the statute of limitations!

The plan given is a comprehensive one, embracing the plants of many zones and mostly every phase of gardening in the various divisions.

For this reason it is beyond the power of the contracting planter, and affords but little help to the mere imitator. Success with the method will depend upon a degree of knowledge possessed only by thorough gardeners, such as I am pleased to know are now finding their way into the leading public parks. But the problems are uncommon and too much attention cannot be given to the selection and disposition of the plants destined to embellish the various departments and allied groups, for their character must vary with every change of climate and soil. At the south for instance *Magnolia grandiflora* and *Michelia Fuscata* may be used in group 1; in southern California *Michelia Champaca*, *M. excelsa*, *M. nilagirica*, *Talaumas*, *Anonas*, *Stauntonias*, *Holbælias*, *Berberis Darwinii*, *B. Leschenaultii*, and many others may be grown with irrigation, while northward none of these can be used and the group must depend almost entirely upon deciduous plants. To select the reliable species and varieties of each alliance, determine their proportionate representation, group them into the best possible series of pictures, harmonize them and give them connection, and do the work with an economy and finish which may eventuate in either the beautiful or the picturesque, such is the problem, and such the possibilities within the reach of the progressive and versatile gardener. There cannot be haphazard or miscellaneous work, and those who persist in interlarding "botanic gardens" through irremovable native woods, may as well try to claim the lost treasure of Captain Kidd as hope for perfection. Kew, with all its resources, and in spite of the eminence of its botanists, its biographers, and its gardeners, has never attained greatness as a landscape production, or as a good

example of sequential planting, largely no doubt because it was founded upon a kitchen garden and hewn out of a Beech wood. Besides, scientific cocksureness would waste time by the half century on problematical Deodar avenues, when Lebanon Cedars were tried and known beyond question. Scientific hypothesis can never take the place of practical experience without risk of disaster, and ruinous experiments are follies.

[] Two years ago the method here proposed was so far advanced for the grounds of a State Hospital in New Jersey, that everything was ready for the planting. It then turned out that a committee man or somebody had promised it to a contractor. He might as well have promised it to the man in the moon; it would have made no difference so far as knowledge was concerned.

The executive work of a park or a garden is not and cannot be a committee's function.

These things are so vital that they can scarcely ever be ignored in this country, but where the proper ability is employed and given power the following details of the plan may be useful.

Forty-eight groups representing the whole gardening part of the vegetable kingdom are provided for, each one strictly confined to an alliance, but within itself quite at the command of the gardener to select and arrange at his pleasure, and according to his skill. Upon his taste and ability will depend his success in uniting some degree of science to the landscape and the certain avoidance of monotonous miscellany. The Key to these groups has often been published and their composition is being to some extent indicated in the series of papers on "garden plants" in "PARK AND CEMETERY." It only seems necessary to say that in the present plan Rosales are divided into Legumales, Rosales, and Saxifragales. Unisexuales into Euphorbiales, Urticales, and Quernales. Coniferales into Abietineæ, Cupressineæ, and Taxineæ. Narcissales, into Musales and Narcissales and Glumales into Cyperales and Graminales. The Ferns may be planted in tribes where their representation is possible in sufficient numbers.

Whenever aquatics are represented in a group, a tank or a sunken tub may take the place of a round bed, and other beds may be filled with soil adapted to the requirements of bog-plants or any special growths. Sub-tropical foliage, flowering herbaceous, bedding, or annual plants, may prevail according to taste and fashion. Generally about six feet is wide enough for these beds, and will give a sufficiently striking mass of form or color.

The groups containing trees and shrubs should be diligently studied and the trees never overcrowded. Remember: the only really reliable time



Copyright 1899, by James MacPherson.

A CLASSIFIED BOTANICAL GARDEN.

for thinning trees is when you plant them; you can never trust your committees to vote promptly to do it, and God alone can help the plantations left to the tender mercies of business men and politicians. Any immediate effects are better and more economically to be had with shrubs, and there are no groups more delightful in nature than those where trees grow up from among them. About all the Polypetalous and Monopetalous groups are well provided with plants suitable for undergrowth. The Apetalæ however are less well provided in temperate regions and are better adapted to the formation of open masses. A considerable area of native woodland is included in the plan, and this is supposed to be thinned and hollowed out so as to admit of the planting of a series of out-door flower-shows for the various seasons. They may be planted and embellished with trees, shrubs and herbs. Sites are found in this division for a nursery and trial ground, for stables, tool sheds, a compost ground, a pumping station on the river bank, and a curator's residence in the vicinity of which are the ferns. The economic garden is divided between the four continents, as is also the range of glass adaptable to tropical and sub-tropical plants useful in the arts, manufactures and sciences.

The conservatories are divided between the eastern and western hemispheres, as are also the reserve houses behind them, which are supposed to be capacious enough to keep the side benches constantly interesting with fresh flowering plants. The central beds in both the tropical and sub-tropical divisions should be permanently planted—the central dome chiefly with palms. Two towers are provided to be used as smoke-shafts and for water. They may be ornamented as minarets or in agreement with the general architecture—which in glass buildings admits of vastly more taste and ingenuity.

A museum and herbarium building is also arranged for, with offices, and a round open tank in front furnished with pipes from the heating plant in the buildings. At the North such a tank may be temporarily covered with glass during the late spring, and with such a prolonged season will be found better than a Victoria house.

No wheeled vehicles should be admitted to Botanical Gardens. They destroy the repose, distract the attention and disturb the sense of security. Besides, they dust over the plants and render them unsightly. The main lines of roadway are all that are supposed to be gravelled, but others may be constructed at will. All the subsidiary lines are in grass and merely parts of the lawns. In such places as the woodlands they are better to remain so, because they are infinitely more economical and com-

fortable. Americans don't visit gardens much during wet weather, and when they do they are sure to be be-rubbered.

A last word to those interested in fine gardens for instruction is: Never to form them in or too near growing cities. It is a serious mistake. Plants dislike the smoke and dust of towns. Berlin is moving her Botanic Garden. Kew has suffered and will suffer, and the day may soon come when they must either flit or give up growing several groups of plants. The facilities of travel are such nowadays that it is *planticidal* to attempt fine collections where they will be suffocated.

James MacPherson.

THE CARY MONUMENT.

The illustration herewith of the "Cary" Memorial, erected in Spring Grove Cemetery, Cincinnati, O., many years ago, to the memory of Robert Cary and Elizabeth Jessup, his wife, parents of Alice and Phœbe Cary, is interesting from its associations.

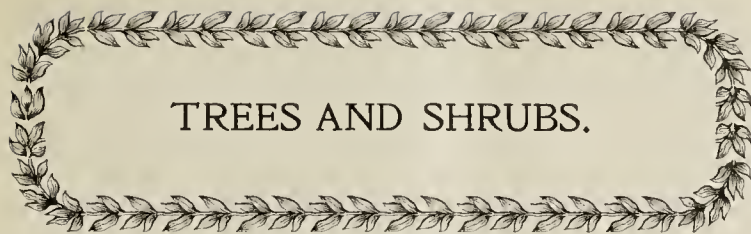
Mrs. Hales says: "The father of Alice and Phœbe Cary, was a native of Vermont, who removed to Ohio



THE CARY MONUMENT, SPRING GROVE CEMETERY,
CINCINNATI, OHIO.

whilst it was a territory. The wild place where he settled has become a pleasant village, not far from Cincinnati, and there Alice and Phœbe were born."

The monument is nestled beneath a noble Norway spruce immediately upon the avenue, and is frequently visited by admirers of the family, and of the sweet poetry of Alice and Phœbe, those pioneers of art effort in America in the realm of poetry.



TREES AND SHRUBS.

PLANTING TREES.

Although in some of the southern states the spring planting is over, in very many the coming month will see more planting done than any other month of the year.

PARK AND CEMETERY goes to a class of readers so accustomed to the planting of trees that for me to say how planting should be done seems certainly not necessary to those who comprise it. It is not my thought that my plan is better than that of others, but it is one which has led to success in the work, and there may be points in it of use to others.

It is usually conceded that deciduous trees do the best when planted as early as the ground permits. It is not so much the custom to plant evergreens early, yet I would set them out as soon as possible. The object of early planting is to have the trees firmly settled in the ground before the heat comes, which starts the buds bursting. Trees set late do not have this chance, and rarely do they thrive the equal of early planted ones.

As every one knows water is the life of a tree, the advice often given to plant when the ground is rather dry than wet seems irreconcilable, but it is not, the advice is correct. A tree to be well planted needs the soil in close connection with its roots. This can be accomplished when the soil will crumble fairly well when tapped with a spade, but all that have planted in wet weather know the impossibility of getting soggy soil well packed about the roots. The best kind of planting is that done when the soil is quite dry. The soil should be tramped or pounded firmly about the roots until the hole is three parts full. Then give the tree what it craves, water, by pouring in a pailful or two, letting it soak away, then, perhaps the next day, filling in the hole to the top with soil.

This sort of planting can be the better done in fall than spring, because that the soil is usually wet in the spring, and planting has to go on as best it can. But I would not plant when the soil is slushy, but let it be when the lumps will fall to pieces fairly well when struck. As a rule, I have found the soil in spring to be sufficiently damp that to water would hardly pay.

A great deal of the well doing of trees comes from the preservation of their roots. I do not know that there is much gained by following up to a long distance roots when digging trees any more than

because they help to steady the tree when reset. Large roots are simply channels for the conveyance of sap. Fibres, which are the thread-like roots which seek the moisture, spring out from these large roots, and usually at their extremity. All large roots, therefore, especially those broken or bruised, should be cut off to give a clean surface. The longer the slant the better, and let it be from the underside.

The old plan of cutting away the top in proportion to the loss of roots is a good one. Often a thinning out of branches, or a cutting away of some of the lower branches will suffice, instead of cutting back the head of the tree much. Often there is no need of cutting back closely the stronger shoots, unless it be with such hard cases as oaks, hickories, tulip poplars, magnolias and some others. These tough customers can only be saved by close pruning, even with good care, unless with young trees five to six feet high or thereabouts.

Evergreens may be pruned at transplanting to good advantage. It is not well to take the leading shoot off from pines or firs unless it is not desired that they grow taller, as they are many a year before they make a new leader. But spruces, arbor-vitæ, retinisporas, and most all other sorts, may be cut anywhere. But keep in mind in pruning evergreens that the cut must not be below the live foliage. But few of them will grow if cut below this, while, when above it, they usually break fresh buds freely enough.

It used to be the practice to leave the planting of evergreens until after the setting out of deciduous things, and some may still think it best. I think the practice prevailed because it was found it could be done in that way and because it was convenient and not because the planting was then more successful.

Joseph Mechan.

THE TWO CHOICEST EVERGREENS.

It has been my privilege to spend much time in the Rocky Mountains, and also in the finest parks and private grounds of the East, where there are the choicest collection of conifers the world affords. And, after seeing them so often in their own habitat and under many varying circumstances, I must say that for hardiness and beauty the *Abies concolor* and the *Picea pungens* take the lead. The *pungens* is most generally known. It is precocious and shows off well while young. It has a fitting place in parks, lawns and cemeteries. The *glauca* type, so much admired, is a sport of the species. When they are of the right color they wear royal robes of silver and sapphire.

Take those of established color, give them good cultivation, and do not let them be too much exposed to the sun and wind, and they are without

a rival. I have seen them shimmering and flashing in the sun like burnished silver.

The sheen is composed of a delicate bloom which coats the needles. You may take the choicest pungens, plant it in the sod and treat it with neglect, and it will take the sulks and turn green. The first year after transplanting it generally grows dim. Those who buy trees do not understand this, and think they have been imposed upon. Once fine specimens were set in Copley square, Boston, but they look like poor hungry things. The finest specimens while young are poisoned by dogs.

You may take the brightest trees and let them be planted on a bleak Nebraska prairie, where they will be whipped by siroccos and cuffed by blizzards, and they lose their beauty, except while growing.

Yet I have seen very fine specimens, where they have been well cultivated and receive a little shelter. It is strange that this tree, taken from a high altitude and on the north side of the mountains, will do well in every state in the Union, I think, as it has been tested in most of them. This tree does far better in the nursery than in the mountains. I have seen thousands growing in their native wilds, but they bear no comparison to those under good cultivation both East and West.

After they recover from the change the needles become much longer, larger and brighter. There is no evergreen that can so well resist the dust and smoke of cities. One winter I was in Denver. The weather had been quiet and trees were laden with dust and coal smoke. But on shaking the pungens they were as bright as ever. City conditions are fatal to soft-leaved conifers.

There are many notable specimens of this tree in the East. Some fine ones stand sentinel at the gateway of Forest Hills, near Boston. Probably the finest in America is on the grounds of C. H. Anney of Methuen. It is the chief attraction in his magnificent collection. It is the joy of the old gardener. I asked him how he made it so compact. He answered "by after transplanting." Give this tree the best of care, and until it is 30 years old it will be of supreme beauty.

The concolor is a tree on a grander scale. I spent two days with Dr. Fernow while he was chief of forestry. We studied them where they grew wild in the mountains.

It is worth a journey halt across a continent for a lover of trees to see a grove of them in all their splendor.

Some samples like the pungens are clothed in silver with deep tints of blue. The young cone on one tree will be light green, and its neighbor will have those of deep purple. These cones are about the size of an ear of early sweet corn. Pure gum

will exude from these, and they flash and sparkle like gems in the sunshine. So take a grove with ermine and emerald, its light green and its wonderful cones, moved by the winds and flashing in the sun, and you have a tree that is a gem.

I have seen them four feet through and 75 feet high. They grow very rapidly. They were considered hard to move, but frequent transplanting gives plenty of fibrous roots, so there is no trouble. The fact is this tree grows richer in color as it grows older. I have seen large trees half dead flashing a beautiful color from the branches yet alive, just as the Christian puts on more of grace and spiritual beauty as he nears home.

So having spent years in the mountains, among the parks and the private grounds of the East and West and the interior, I am sure these two trees are the choicest of all, and after thirty years the concolor will distance all competitors for hardiness and thrift, grace and beauty, that can be raised between the Rockies and the Atlantic.

C. S. Harrison.

The Carnahuba palm, which grows uncultivated in the states of Parahiba, Cæara, Rio Grande de Norte, Piaui, and some of the neighboring states of Brazil, is the most marvelous tree says the *Philadelphia Record*. "The description given of it seems incredible. In no other region of the globe is a tree to be found that can be employed for such varied and useful purposes. It resists intense and protracted droughts and is always green and vigorous. Its roots produce the same medicinal effects as sarsaparilla. Its stems afford strong, light fibers, which acquire a beautiful luster and serve also for joists, rafters and other building materials, as well as for stakes for fences. From parts of the tree wines and vinegar are made. It yields almost a saccharine substance as well as a starch resembling sago. In periods of famine, caused by protracted droughts, the nutritious substances obtained from it are of immense benefit to the poorer classes. Its fruit is used for feeding cattle. The pulp has an agreeable taste and the nut, which is oleaginous and emulsive, is sometimes used as a substitute for coffee. Of the wood of the stem musical instruments, water tubes and pumps are made. The pith is an excellent substitute for cork. From the stem a white liquid, similar to the milk of the cocoanut, and a flour, may be extracted. Of the straw, hats, baskets, brooms and mats are made. A considerable quantity of this straw is shipped to Europe and a part of it returns to Brazil manufactured into hats. The straw is used also for thatching houses. Moreover, salt is extracted from it, and likewise an alkali used in the manufacture of common soap."

GARDEN PLANTS—THEIR GEOGRAPHY—XXXIX.

ERICALES.

THE VACCINEUM, ERICA AND EPACRIS ALLIANCE.

(Continued.)

Trochocarpa from the cooler parts of Australia has 6 species. *T. laurina* is a tree of 25 to 40 feet high, bearing yellow flowers, and with a close grained wood used by turners in the colonies, where it is called the "brush cherry."

Monotoco in 7 species are Australian and have white flowers followed by edible fruits.

Lysinema in five species are Australian, also with red, pink, or white flowers.

Cosmelia rubra is a monotypic shrub from South Western Australia.

GALAX APHYLLA. From *Garden and Forest*.

Sprengelia in 3 species from the same country are also evergreen shrubs bearing scarlet or pinkish flowers.

Andersonia in 20 species from the same regions are pretty shrubs with blue or white flowers which in some species are accompanied by a pink calyx.

Richea in 18 species from Australia, and Tasmania, are shrubs or sometimes trees of 20 or 25 feet high. *R. pandanifolia* is in gardens.

Dracophyllum in 25 species are from Australia, New Zealand and New Caledonia. Those in cultivation are small shrubs with white flowers, accompanied by long bracts, similar in shape to the leaves of *Dracæna Draco* hence the name. All of the plants in these tribes with the possible exception of

the *Lebetanthus* previously mentioned, are chiefly adaptable to the gardens of the Pacific coast, or to pot culture in greenhouses.

Pyxidantha "flowering moss" or "pine barren beauty" is a creeping, prostrate, moss-like beautiful little "Pyxie" of a plant, which extends from South Amboy, N. J., to the pine barrens of North Carolina. It is covered in early summer with rose or sometimes white flowers, and is a great favorite where known.

Shortia has 2 species in Japan, and the mountains of North Carolina. The American species excited considerable interest among botanists about 20 years ago, from its having been rediscovered after an obscurity of many years as to its locality.

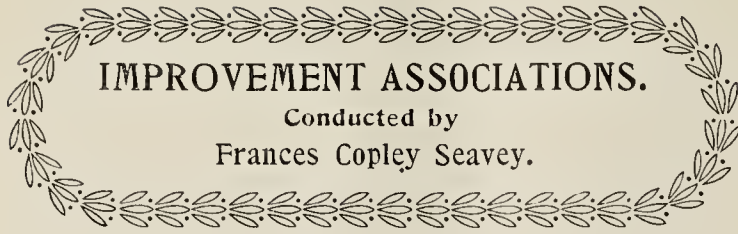
Galax aphylla is a monotypic plant found on wooded hillsides from Virginia to Georgia. The leaves are considerably used by florists in their designs, and it seems they can be collected and shipped north cheaper and better than they can be cultivated, although the plant is hardy far north of its natural range.

The tribe *Lennoeæ* are scaly root parasites somewhat similar to the *Fir-rapes*, "but with the stamens inserted in or near the mouth of the tubular corolla."

Anmobra *sonoræ* is a single species with stems two to four feet long, much of which is buried in the sand. These stems are fleshy, and vary from three-fourths of an inch in diameter, swelling gradually, tapering upward, to an inch and a half and finally into a dilated funnel shaped receptacle of two inches across, which is lined within by the little purple flowers. These curious plants have been found in Arizona, and are said to be used roasted by the Papagos Indians, who prepare them into luscious dishes. Captain Perrine however, who lived for many years among those people, and did considerable botanizing with Doctor and Mrs. Lemmon, informs me that he never met with it or heard of it, so it is probably quite local in United States territory, and more abundant in Mexico.

James MacPherson.

Set out trees in the spring at the earliest opportunity says *Joseph Meehan* in *The Practical Farmer*. They get settled and are ready to grow with the warm weather. In the Fall plant early, even before the leaves fall, which strip off. Roots will form before cold weather and the tree will be safe. Many nurserymen puddle the roots of trees before shipping them. A paste is made of soil and water in which the roots are immersed. This coats the surface, excludes air, and does much towards successful transplanting. Where trees are received which have not been so treated it would pay to do it before planting.



Leave the World a pleasanter place than you found it.

ORGANIZATION AND OBJECTS.

Pleasanter is in this application equivalent to better. Environment is coming more and more to be considered a pronounced factor of education—the education that makes for character.

If towns, villages and individual homes have an unkempt, shiftless, down-at-the-heel air, the passer-by is justified in setting down the inhabitants as shiftless; and the generation that grows up amid such surroundings is more than likely to bear their characteristic imprint.

Then, too, there is a material side to the question. The value of real estate increases in direct proportion to its possibilities for home-making. And every local business and calling, as well as all churches and schools, thrive as the ratio of desirable population increases.

When it becomes clear that the moral, intellectual and material interests of a community can be benefited by a movement, some of its members are quick to recognize the fact and to take steps toward bringing it about. This is all the more certain when immediate, visible results of an agreeable nature may safely be counted on, as they may be from the formation of an improvement society or association.

When a few members of a community feel that an improvement society is needed, let them learn the feeling of the better class of residents by a personal canvass, or by circulating printed slips similar to the following, which is a copy of one issued by the promoters of an eastern organization:

To our Fellow Citizens of — —:

The Board of Directors of the Village Improvement Association earnestly invite your co operation in the work of beautifying our town—a work in which all are mutually interested. To this end we request you to join the society by giving your name to the bearer of this note and paying, at your earliest convenience, either to said bearer or to the treasurer, — —, — cents, which is the entire expense of membership for the year.

We further invite your assistance in creating a public sentiment that will secure tidiness on all public and private property in the village.

BOARD OF DIRECTORS,
Improvement Association.

Or, let a meeting be called without such preliminaries. This meeting will often prove more successful if made attractive by a short and appropriate programme. Probably the most effective

incentive, both to attendance and to membership, is a short, pointed talk on the possibilities of improvement societies, illustrated by the stereopticon with lantern slides made from “before” and “after” views of door yards that have been “treated.” A good lantern slide of a barren back yard, littered with tin cans, ash barrels, etc., followed by another showing the same yard carpeted with grass, lined with vines and outlined by tasteful border planting, speaks for itself and for the cause as no tongue can speak.

The following copy of the constitution of a prominent society gives an idea of what is needed:

CONSTITUTION.

1. This Association shall be called the — Improvement Association.

2. The objects of this Association shall be to cultivate public sentiment in favor of improving and beautifying the homes, streets and surroundings of —, and to endeavor to promote, in every legitimate manner, the best development of the whole community.

3. The payment of — shall constitute membership during the then current year of the Association.

4. A Board of Directors of three from each ward shall be elected by ballot at this meeting and at each annual meeting thereafter. They shall constitute an executive committee, who shall have the general control and management of the affairs of the Association. They shall elect by ballot a president, three vice-presidents, a secretary and a treasurer, and the appointment of all committees by the president shall be subject to their approval. The president, vice-president, secretary and treasurer shall be *ex-officio* members of the Board of Directors.

5. No debt shall be contracted by the Board of Directors beyond the amount of available means within their control, and no member of the Association shall be liable for any debt of the Association beyond the amount of his or her subscription.

6. (This section specifies the date of the annual meeting; rules for called meetings and of quorums.)

7. This Constitution may be amended at any meeting of the Association, provided said amendment shall have been included in the published call for the meeting.

The question of membership fees is one for local settlement. Some of the societies charge none, relying for support on subscriptions, entertainments, etc. The majority of organizations heard from, however, report fees ranging from 25 cents to \$2. In every case members may work out the fee if they choose. A fee should be charged if possible, for some money is essential, and this is a simple and legitimate way to secure it.

The officers, directors and executive committee should include capable, influential, tactful and tasteful people, for on them will largely depend the success or failure of the undertaking.

Not a least advantageous feature of such associations is the fact that they furnish a common interest and a common ground upon which all shades of religious and of political opinion may harmoniously meet and work together.

Taste, not Creed, is the watchword of the

organization whose object is the preservation and creation of out-of-door beauty. Vines and shrubbery equally enhance the appearance of Protestant and Catholic churches, of Republican and Democratic headquarters, of Masonic and Odd Fellows halls. The homes of the poor, the rich, the believer and the unbeliever—all are the better for a vine-covered porch and a grassy lawn with flanking masses of shrubbery; and every street looks the better for neat sidewalks, well kept driveways and overarching shade trees.

As to objects, it is wise to begin modestly, then, as strength and numbers increase, gradually widen the scope and extend the work. At no time undertake too much. What is done should be well done. The aims of established organizations range from having weeds cut to having waterworks built and parks made.

They paint telephone poles, and protect natural scenery and wild birds. They erect drinking fountains for dogs, horses and men. They form children's street-cleaning leagues, distribute flower seeds, improve cemeteries and railway station grounds, transform local dumping grounds into bits of refreshing greenery, establish free libraries, and, in short, tackle anything their hands find to do and do it with a will.

And the best advice we have to offer new societies is to go and do likewise, for all such work is distinctly the province and, indeed, the *raison d'être* of improvement associations.

A civic organization of St. Paul, Minn., ladies met for business for the first time on March 9, with some 300 women present. It was presided over by Mrs. Conde Hamlin, who conducted the proceedings with much executive tact, and the organization was launched under very promising auspices. Among the subjects of public interest touched upon during the meeting, and which demand attention were: The quality of illuminating gas; the Public Library, which is in poor condition; A Woman's Reformatory, for which there is a crying need (and not only in St. Paul); and the question of Woman's Representation on the School Board. Some idea of the work, conditions of membership and scope of the organization as given by the president is as follows: No limit as to members; it may include all the ladies even those whose interest is only sympathetic; the work to be done by committees as the exigencies demand; a committee is to be appointed to co-operate at once with the park board, the work to be planned during the summer and a report made in fall. The fees are placed at \$1 per annum. Meetings will be held every two weeks, on Thursdays.

Quincy, Ill., owes its park system to the well

directed efforts of the Quincy Boulevard and Park Association, and on a recent circular issued by its president Mr. E. J. Parker with a view of raising more funds for extension purposes, he says: "Quincy should continue to lead—as she now does all the cities of Illinois, except Chicago and Peoria, in Park improvements. We should also aim to make Quincy more and more attractive as a place of residence, and as an educational center as well. Much of the indebtedness which Chicago and Peoria have incurred in purchasing park sites and improving them is in long time city bonds. It goes without saying that Quincy, with its present indebtedness, cannot create a bonded indebtedness for the purchase of parks or their improvement, but cities which are in a position to do so are growing much more rapidly than Quincy, and the assessed valuation of property is increasing by reason of such wise investments."

AN EXCELLENT FERTILIZER FOR NURSERIES.

A correspondent in Chatham, Ont., has addressed us on the subject of a formula for making up a fertilizer adaptable to young trees, shrubs, vines, etc., and transplanted stock. The question was referred to Mr. Andrew H. Ward, an authority on fertilizers, from whom we have received the accompanying reply:

"The following mixture contains nitrogen, phosphoric acid and soda alkali, and has proved destructive to all grubs and worms that either live in the ground or go into it in order to pass through the proper state and come out as full-fledged flies to work their devastation on fruit and foliage, and there lay their eggs for the perpetuation of their kind. Five hundred pounds quicklime, 200 pounds common salt, 300 pounds of powdered phosphate of lime, 100 pounds of nitrate of soda. The quicklime should be slaked, the salt then mixed with it and allowed to remain for some thirty days for chemical changes to take place, in the meantime being shoveled over three or four times to have it intimately mixed. Then mix with it the powdered phosphate of lime and nitrate of soda. The compound is then ready for use and will cost about \$8. Use 1,000 pounds of this compound per acre spread broadcast on the surface of the ground. It can be used on orchard, lawn, pasture and meadow in the same quantity. The use of this compound not only increases the quantity of the fruit but also gives the fruit a better flavor and larger size, and puts the tree in vigorous condition for future yield. The ingredients can all be easily procured in any quantity at market prices, and the mixing can be done on the farm. It does not deteriorate in quality by keeping."

PLANTING ON CEMETERY LOTS.

Much has been said and written on the question of the planting of cemetery lots, and to obtain a consensus of opinion from authorities on the subject, these queries were submitted:

“Do you advise lot owners who want flowers on their lots to use hardy plants; if so what do you recommend?”

“Is it your experience that planting of this kind has a tendency to lessen the owner’s interest in the lot?”

In reply to the above the following communications have been received:

The question of regulations or even advice for lot owners concerning the care of their lots in a cemetery is a very delicate one, and one which is often misunderstood. Individual ideas will, in a great many cases, work great harm if carried out, while at the same time some rules will be considered as entirely too strict and too much at variance with what the lot owner thinks as beautiful and proper.

In a cemetery, such questions have to be met and answered with the utmost consideration, always bearing in mind the reason that brings a person to the grounds, and advising good suggestive plans for the beautifying of lots which will meet the approval of the greatest number and still be in accordance with the general plans governing such questions. We advise lot owners in almost all cases to plant hardy roses, and if they are planted in a round or oval bed, and edged with the small leaved English ivy presents a very neat effect.

We are very strongly opposed to flowers, or to beds around the grave mounds, because they interfere with the proper care of the mounds and besides this they tend to kill the grass on them. In the larger lots where there is more room for decorating we recommend subtropical bedding, such beds or groups of plants can be made very interesting and attractive and they are not nearly so stiff and formal as carpet bedding. On such lots a less rigid observance of these rules is permissible but even here hardy herbaceous plants should not be used. They are unsuitable for lot embellishment, but may be used for borders and irregular groups in reservations where a good background of shrubs can be procured. The desire to beautify lots is often governed by preconceived ideas of what is proper and as these efforts are simply and purely to show their love for some one who “has gone before”, it is extremely difficult to change their trend. On questions of this kind no hard nor fast lines can be drawn because human nature like our different soils has to be humored and the utmost care taken to train the ideas that spring from it.

Robt. Campbell.

* * *

What we advise lot-owners has reference only to

Providence and Swan Point and would not be always applicable to more progressive and enlightened communities.

I would suggest using hardy shrubs, vines and a few herbaceous plants partly for their foliage as well as for their flowering qualities. Such as Rhododendrons, Mohonias, Azaleas, Kalmias, Heaths, and surfacing the ground with Euonymous Radicans, Daphne, Lotus, etc., and a few Euphorbia Corratata, Asters, and things with a single stem or two, to peep through and carry out the season. If one has room in connection with these, Forsythia for the spring and a few Altheas for the fall will prolong the display. With these arrangements the knife must be often used to thin out the too numerous shoots of the strong growing things, so that every plant will have a fair show.

A few combinations: See here is a side hill surfaced with rose (Wichuriana) and Rhododendrons sprinkled through at good distances apart. Another irregular planting of Azaleas, Ghent and Mollis, sprinkled with Althea (Lotus Albus) and the ground planted with Lillium Lancifoliums, Album, Rubrum, and if there is any bare earth sow a little Portulacca, this I think is better than the old way of huddling Rhododendrons, Azaleas, etc., too close together.

Another planting; the ground is surfaced with Wichuriana, and then a few plants of Rose (Setigera) and the sweet brier (Rubiginosa) carry cut the season even in winter when the seed pods of Rubiginosa are so conspicuous. So what would a fellow recommend, as there is no end to such arrangements.

As the cemetery does more or less planting before lots are offered for sale, that we seldom advise lot-owners to plant anything. The more they want and the more they try to do the more patch work they create. Make the cemetery beautiful as a whole, and the lot owners interests will not be lessened, (even in his own lot) and the desire of individuals to do something conspicuous and striking will gradually grow less, and so having fewer annual bills against lot owners, the harmony and good will of the family is assured and we are at peace with our people.

Timothy McCarthy.

* * *

I do not advise planting of any description on lots. The planting in a cemetery ought to be done on the ornamental ground of the cemetery.

I think the planting of hardy flowering shrubs does tend to lessen the interest of the lot holder in his lot.

I have not seen Euonymus radicans Var., used to cover the trunks of trees. With some trees I should consider it injurious to their growth.

Robert Scrivener.

On the subject of cemetery planting the article on “Ornamental Planting at Mt. Elliot Cemetery, Detroit, Mich.,” on another page, gives further suggestions on the choice of material for fine effects. It also suggests, which may well be emphasized, that there is generally sufficient variety of plant life in the locality to produce harmonious and satisfactory plantings.



PARK NOTES.

The commissioners of Golden Gate Park, San Francisco, have accepted an offer of Claus Spreckels to erect a marble and granite music stand to cost not less than \$60,000.

* * *

The Melrose, Mass., park commission has taken by right of eminent domain for a public park, 25 acres of land on the north shore of Eel pond in the centre of the town. This improvement is deemed one of the most important ever undertaken by the town.

* * *

The Ladies' Cemetery Association of Akron, O., propose to purchase a large piece of land lying on both sides of Glendale avenue at the entrance of the Akron rural cemetery. This land will be turned into a park and made essentially a part of the cemetery, although it will not be used for burial purposes.

* * *

In thinking of our own progress in certain departments we are apt to overlook the fact that we are behind other countries. This fact should stir us to more effective effort. For instance France has some 3,362 schools of agriculture, 78 experiment stations, and agriculture is taught in 79,000 primary schools.

* * *

Connecticut has come into line on the subject of birds as well as trees, and has recently passed a bill providing for the observance of Bird day in conjunction with Arbor Day, and the press generally is urging an effective observance of the day. This recognition of the birds is enlarging the field of nature study for the public school children, and giving it an effect which only official recognition can impart.

* * *

Miss Olga Nethersole, the English actress, visited Tower Grove Park, which her countryman, Henry Shaw, bequeathed to St. Louis, and under official auspices planted a young English elm tree near the statue of William Shakespeare. The spot selected was in close proximity to the mulberry tree planted by Adelaide Neilson in 1880, and also to the trees planted last year to the memory of Edwin Booth and Lawrence Barrett.

* * *

In the competition of plans for the improvement of League Island Park, Philadelphia, the prizes were awarded on March 1st. by the Council's committee. The first prize of \$750 was awarded to Samuel Parsons, Jr., of Parsons & Pentecost, of New York, and the second prize of \$250 to R. Ulrich, also of New York. Honorable mention was made of the plans submitted by Nathan F. Barret, of Philadelphia. Under the rules of the contest the successful plans become the property of the city. Seven designs were submitted by New York men and five by Philadelphians. The successful plans will be utilized by Chief Eisenhower in the improvement of the park, a selection of the best points in each being made.

* * *

"The love of wayside trees is strong among Americans. It has a practical as well as a sentimental side. A city or village in which the street trees are numerous, well kept and beautiful, is more attractive to investors, to desirable residents, and to locating manufacturers, than a treeless town, or one in which the trees are neglected." The foregoing is a quotation by a writer in a S. Framingham, Mass., paper, who discusses the injury done to the trees of this locality overhead by the electric and telephone wires and fastenings and underground by the leakage in the gas

main. From this communication it appears that Framingham is fast losing its trees from such causes, and as it was highly favored in this respect, it behooves the authorities to heed the warning and take radical measures to put remedies in operation.

* * *

A Park and Forest Association for the State of Nebraska has been organized at Lincoln, Neb., a constitution adopted and Rev. C. S. Harrison, of York, elected president. The other officers are: G. T. Stephens, Crete, First V. P.; A. J. Brown, Geneva, Secretary; George A. Marshall, Treasurer. Directors: Hon. J. Sterling Morton, Dr. C. E. Bessey, Peter Youngers, Jr. Nebraska was the birthplace of Arbor Day and this worthy movement was prompted by a realization of prospective necessities. Out-door life is a requirement of health both in the individual and the community, and the resources for such life will be chiefly found in parks and such like resorts, and in connection with this forest growth is well said to be a prime factor. This movement is a sign of healthy progress.

* * *

Mr. Cornelius B. Mitchell, Vice-president of the New York Tree Planting Association has given the following open letter to the press, which has been widely copied: "It may not be generally known that trees can be successfully planted in our streets from now until next May; after which time, when the sap is flowing, transplanting from a nursery to our streets should not be undertaken. The interest shown by the public in the effort to embellish our city, our streets, and our homes, would indicate that many trees will be set out in the spring. To secure the best results, orders for trees should be placed early. This association will send free of charge a list of trees recommended by experts, together with the names of nurserymen, who do the completed work, and their charges for the same—including iron tree protectors—on application, by mail only, to the office, No. 64 White street, New York City."

* * *

Arbor Day has had a remarkable effect in concentrating public attention on the advantages of landscape improvements. Even the railroad companies whose lines pass through dilapidated districts are becoming aware of the elevating influences of the day, and are awakening to the business which might follow the improvement of the villages and towns on their route. Mr. John T. Patrick, chief industrial agent of the Seaboard Air Line, takes a lively interest in the observance of Arbor Day, March 15th, in North Carolina. He has sent out pictures illustrating the resulting benefits of tree planting in the appearance of the school houses. These pictures show a pretty school house surrounded by graceful trees with grateful shade and yards and with well kept flower beds. Mr. Patrick shows his wisdom in beginning with the school house. It is the centre from which will radiate, not only more refined but more permanent results.

* * *

In a circular issued by Mr. E. J. Parker, president of the Quincy, Ill., Boulevard and Park Association, suggesting the acquisition of more park property, speaking of the help that the small tax assessed for park purposes has been in the development of parks. He says: "A one mill tax for the purchase of park sites and their improvement and which yields less than \$5,000 annually, is, for a city of over 40,000 inhabitants, a very small tax; and this tax has been collected only since 1896." But it has not realized enough to meet all the necessities of the case, and the park system of Quincy owes much to the liberality of its citizens. Quincy leads all the cities of Illinois, except Chicago and Peoria in park improvements, yet her indebtedness for this purpose only amounts to \$8,437.50. The association stands as an example of what a body of interested citizens can do to improve the city, and its efforts and success may well invite the study of all communities lacking in park facilities.



CEMETERY NOTES.

Steps are being taken to make the burying ground at Fort Russell, Wyo., a national cemetery.

* * *

The City Council of Atlanta, Ga., has voted \$4,000 for the erection of a public comfort building at Oakland cemetery.

* * *

The Oneida Cemetery Association, Oneida, N. Y., is to become the recipient of the gift of a Memorial Chapel to be erected at Glenwood, by Loring Munroe.

* * *

The Rev. E. J. Donnelly, pastor of St. Michael's Roman Catholic Church, in Flushing, N. Y., has presented thirty acres of ground to the church for a cemetery site. The land adjoins St. Mary's cemetery.

* * *

The sequence of the recent strike of gravediggers in Janesville, Wis., was the increase in daily pay from \$1.25 to \$1.50 as demanded by the gravediggers at Protestant and Catholic cemeteries. No further trouble is expected.

* * *

The directors of the Bronson cemetery, Bronson, Ky., have decided to remove the remains of persons buried on lots that have not been paid for, to the pottersfield and will sell the lots again. Before doing so, the directors had better be sure of their ground, for there has been much conflicting opinion of the rights of the buried dead in such questions.

* * *

At the annual meeting of the Evergreen Cemetery Association, New Haven, Conn., the report of the treasurer showed that the total receipts for the year, were \$16,267.18 and expenditures \$12,921.07, leaving a balance of \$3,346.11 on hand. The perpetual care fund now amounts to \$4,036.67, and chapel fund to \$7,934.99. Number of interments the past year were 420; making a total to date, 15,957; number of lots sold, 50; number of single graves sold 67.

* * *

The financial standing of the city cemeteries of Cleveland, O., for the year 1898, is reported as follows: Woodland cemetery, receipts \$18,458.71, expenses \$14,585.09; Erie Street cemetery, receipts \$793.25, expenses \$3,157.99; Monroe Street cemetery, receipts \$4,371.25, expenses \$3,526.77; Harvard Grove cemetery, receipts \$2,485.85, expenses \$2,129.96. The new West Park cemetery is about completed, and \$27,741.38 was spent on it.

* * *

It is gratifying to note the increasing desire to improve the appearance of cemeteries and to maintain a constant care, a condition which is fast spreading to our northern cousins. In this connection we note that the Army and Navy Veterans at Toronto, Canada, have asked the mayor of the city that a member of that society be appointed caretaker of the Portland street cemetery. He states that the Veterans hope to erect a suitable monument in this cemetery, in which lay the remains of General Simcoe's daughter and fifty-four old veterans of the British army.

* * *

If you cannot raise funds to erect a Receiving Vault secure an old bank safe, would seem to be a moral to be drawn from

the action of the authorities of the Yantic cemetery, Norwich, Conn., for the old vault of the First National Bank, Boston, has been taken to the Yantic cemetery to serve as a Receiving vault. It is five feet wide, six feet deep and seven and a half feet high and weighs 15,000 pounds. It has been sunk into the ground until only about six inches project. The door will be protected from the weather by a wooden cover. The steel door is three inches thick and weighs about 800 pounds. The vault will hold six bodies.

* * *

Cleveland, O., helped solve a problem always present in large cities during such weather as the past winter furnished. Aid in the form of provisions and coal was furnished to numbers of men who promised to work out the value of such supplies at the new West Park cemetery. Director Akers in an interview remarked: "The willingness of these poor men to redeem their promise is commendable and speaks well for them. For the men who work for groceries, coal and shoes we pay in proportion about \$1.50 a day. For a ration of groceries we charge \$1.07, wholesale price, and we also charge only the wholesale price, for coal and shoes. The latter run from 95 cents to \$1.10 a pair. In addition we furnish the men car fare both ways, dinner, and rubber boots to work in at the cemetery.

* * *

Superintendent Chaffee, Oakwood cemetery, Syracuse, N. Y., is quoted as speaking as follows on a growing fad of fancy outside boxes: "There is one thing, that I'd like to speak about, and that is the recent fashion of fancy outside boxes, 'rough boxes' they are called in the profession. Some of them are made of fancy woods and are quite as elaborate as the plainer coffins. If the public knew that those handsome chestnut boxes, which look so well at the funeral, fell all to pieces within a month after the burial if the ground is at all wet, they might be more partial to the plain but substantial pine boxes. Some of the fancy boxes are glued in strips, and I have discovered, when for some reason it has been necessary to reopen a grave, that they lay in slats upon and alongside the coffin."

* * *

At the annual meeting of the Swan Point cemetery, Providence, R. I., held February 7, the treasurers' report showed that including a balance on hand from the previous year of \$12,071.43, the cash receipts for the year ending December 31, 1898 amounted to \$124,487.16. Cash payments during the year 1898 amounted to \$122,029.19, leaving a balance of \$2,457.97. The perpetual care and bequest fund amounts to \$271,578.15. The permanent fund amounts to \$56,613, which has accumulated since 1880 when 13 cents a foot of all land sold was set aside to create it for the permanent care of the cemetery. The annual report of the directors contains plans for the enlargement of the cemetery by making use of the Cortland and Perry farms for cemetery purposes. The statistics of work done during the year include the following: Average number of men employed per month during the year, 59; interments, including 42 to the receiving tomb, 295; total number of interments to date, 14,352; slate vaults built, 33; plain graves opened, 156; foundations to monuments built, 141; foundations to tablets built, 174; curbing removed from lots, 3; catch basins 6; land sold, square feet, 13,257; land purchased in the cemetery and taken in exchange, square feet, 3214; number of lots under perpetual care, and upon which bequests have been made, 1,524; number of lots under annual care, 518; number of lots under partial care, 300; number of lots not under care, 936; whole number of lots sold to date, 3,278. An amendment to the by-laws was adopted whereby 15 cents per foot of land sold is set aside to increase the permanent fund, which with interest is to be added to the principal every year until a sum of at least \$300,000 is secured.

The annual meeting of the Lowell Cemetery Association, Lowell, Mass., showed a considerable falling off in the receipts as compared with last year. Among the receipts were: Sale of lots, \$2,580.81; care of lots, \$4,102.07; general work, \$472.03; greenhouse, \$102.58. In the expenditures, pay roll and salaries amounted to \$8,580.15. The total amount credited to the perpetual care fund was \$82,211.76; and to the Reserve Fund, \$16,456.12. The treasurer in his report speaks as follows on perpetual care: "Attention has been called repeatedly to this subject for the reason that so many people are found who will not protect themselves while they may. It has been pointed out that a perpetual care fund might be ample while earning 4 per cent. That is, a lot is funded with a deposit of \$100. Its annual earning at present is \$4 and the superintendent's charge for annual care is \$4. It is obvious that the fund provides for the annual care charge—nothing more. There is no margin to provide for accidental and unforeseen happenings. It is obvious that such a fund is deposited under very close calculations. Now let us suppose that our perpetual care funds shall earn less than 4 per cent. Suppose the earning rate is reduced to 3 or 3½ per cent. how then does the \$100 deposit provide for the future? Understand that such contingency is very apt to occur in the future. As many times before, I urge that lot owners increase their funds where deficient, and that those intending to provide perpetual care by will or otherwise, will carefully consider these points. This a matter which, if done at all, should be done right. These words are not uttered in the corporation's interest but for the good and protection of the lot owner."

The huge floral wreath which is annually made up at Windsor Castle has been placed before a plain tablet on the outer wall of Queen Anne's church, Soho, London. Queen Victoria never forgets the day that Theodore, king of Corsica, died. For many years it was not known who sent the floral offering to his memory, and even to day it is not known why Britain's queen chooses to honor the memory of a man who was not of royal blood, and who died the day after being released from prison. Horace Walpole wrote the epitaph set up in the churchyard, which is now a common playground for the dirty children of the neighborhood, once an aristocratic quarter. The lettering on the stone, which was fast growing dim, has just been recut. It reads:

"The grave, great teacher, to a level brings
Heroes and beggars, galley slaves and kings;
But Theodore the moral lesson learned ere dead,
Fate poured its lesson on his living head
Bestowed a kingdom and denied him bread."

The king, who was a German, named Theodore Anthony Neuhoff, had one son, a Col. Frederick, who shot himself at the gate of Westminster Abbey in 1797. He left one son; whom he refused to recognize, but who assumed the name and founded one of the great jute factories at Dundee, and the king's grandson, who is reckoned to be one of the wealthiest manufacturers in Scotland, lives in a magnificent place near Tayport, in Fife.

There is a sermon of wonderful suggestiveness in the following in connection with General Gordon's dilapidated garden at Khartoum, written by Mr. G. W. Steevens in the *London Mail*: In this garden you somehow came to know Gordon, the man, not the myth, and to feel near to him. Here was an Englishman doing his duty, alone, and at the instant peril of his life; yet still he loved his garden. The garden was a yet more pathetic ruin than the palace. The palace accepted its doom mutely; the garden strove against it. Untrimmed, unwatered, the oranges and citrons still struggled to bear their little hard green knobs, as if they had been full ripe fruits. The pomegranates put out their vermilion star flowers, but the fruit was small and woody and juiceless. The figs bore better, but they, too, were small

and without vigor. Rankly overgrown with dhurra, a vine still trained over a low roof its dwarfed leaves and limp tendrils, but yielded not a sign of grapes. It was all green, and so far vivid and refreshing after Omdurman. But it was the green of nature, not of cultivation; leaves grew large and fruit grew small and dwindled away. Reluctantly, despairingly, Gordon's garden was dropping back to wilderness. And in the middle of the defeated fruit trees grew rankly the hateful Sudan apple, the poisonous herald of desolation.

LEGAL.

DOES NOT APPLY TO CEMETERY ASSOCIATIONS.

The Supreme court of Ohio holds, in the case of Carter against the City of Zanesville, that section 3764 of the revised statutes of that state, prescribing a penalty against persons, etc., having unlawful possession of the body of a deceased person, is not directed against cemetery associations or their trustees; nor does it relate to the remains of persons long buried and decomposed.

* * *
HOLDS CITY LIABLE.

There are two or three points of more or less interest in the decision recently rendered by the supreme court of Minnesota in the case of Sacks against the City of Minneapolis and others. First of all, the court assumes that the special act of 1891 (Chap. 129), authorizing the City of Minneapolis to vacate part of the Maple Hill Cemetery, etc., is unconstitutional, as the legislature was prohibited from enacting special laws for the purpose of laying out, opening or altering highways. But it says that the charter of the City of Minneapolis authorizes it to condemn land for street and highway purposes, though it also provides that such authority shall not be construed as permitting the condemnation of any ground of any cemetery or burial place occupied for such purpose without the consent of the owner of such ground. Nevertheless, the City did, without the knowledge or consent of the plaintiff take and condemn for street purposes, his burial lot in Maple Hill Cemetery, wherein were interred four of his children and removed their bodies therefrom and buried them in one grave in said cemetery. Under these circumstances, the supreme court of Minnesota holds that the condemnation proceedings instituted by the City were within the general scope of its corporate power, as prescribed by its charter but that, as it did not obtain the consent of the owner of this lot in question, for such purpose, its acts were unauthorized and tortious, and hence it was liable to the plaintiff in damages therefor, as well as that the liability of another of the defendants was undoubted, he having assisted and taken part with aid in behalf of the City in these tortious acts.

* * *

The following decision has been recently rendered in the Arkansas Courts. Chancellor Thomas B. Martin has rendered a decree in a case in which the plaintiff sought an injunction to restrain the defendants from plowing over or otherwise desecrating a certain tract of land dedicated over fifty years ago as a burial lot, and wherein rests all that is mortal of the plaintiff's first husband and other relatives and citizens of the vicinity. The court decrees that the defendants be "perpetually enjoined from cultivating over said graveyard tracts or removing or tearing down or interfering with the stones or other memorials now on or about the graves therein, or which may hereafter be placed therein to mark said graves, and they are enjoined from destroying the mounds and other indications of graves therein, and they are enjoined from interfering with or trespassing upon said graveyard tracts or breaking, tearing down, or in any way interfering with the fence that may hereafter be placed around said graveyard tracts." The plaintiff and those interested are given ingress to and egress from the graveyard over the defendant's property under certain restrictions.



SELECTED NOTES AND EXTRACTS.

Yellow-berried Hollies.

I noticed recently an article recording the existence of a holly bearing yellow berries. On my annual journey to the Gulf Coast, I have several times noticed such a holly at two different points on St. Andrew's Bay, Florida, and thinking perhaps you might be interested in seeing it, I to day send you a few branches, together with a few branches of the red which grew adjoining. I cannot see any difference in the habit of the trees, though the leaves of the yellow seem to be a little narrower, and there are always a cluster of the shrubs, instead of the tree-like character of the red. The yellow berries are never oblong, like the red growing here, but are invariably round, and smaller than the red. *G. M. West*, Escanaba, Mich.

Mrs. Thompson, of Spartanburg, S.C., also sends yellow berried hollies,—but these are larger and rounder than the ordinary red form. Another correspondent inquires about propagating hollies. Some of the American species are barren. The berried plants should be grafted on young seedlings of the species. In selecting berried plants, it is well to select isolated individuals that can only seed through having perfect flowers. Some plants, wholly pistillate, will bear berries in the vicinity of staminate ones.—*Mechans Monthly*.

* * *

Ornamenting Railway Station Grounds.

We are glad to notice within the last few years that there is an increasing tendency on the part of a number of our railroad companies to ornament their grounds with grasses, shrubs, flowers and trees. We feel that the step should be heartily commended by flower loving people and our horticultural journals. It is more to be seen with the older Eastern roads than here in the South, but all the great railroad systems are slowly growing into it. We noticed last summer through a whole division of an Illinois road every few hundred yards a group of the common Sunflower, or Helianthus. They elicited words of praise from more than one as we passed through. This was but a trifling cost, and a good show-card for the road. The Nashville, Chattanooga and St. Louis road, we understand, has already its propagating houses and uses a great many bedding plants every season. The Louisville and Nashville company has taken the initial step in converting its vacant grounds at way-stations into beautiful parks—nice fences, good walks, pretty sod, and in many places rustic seats, flowers and trees

have been introduced. The Plant system, Seaboard Air Line and others are falling into line. True, this is not a new work, but was never so noticeable as now, and there is still room for great advancement in this neglected line. *Geo. B. Moulder*, in *Southern Florist*.

* * *

The Pin Oak "An All-Around Tree."

It took years of effort before the fallacy could be dispelled, that the oak is a slow-growing and generally undesirable tree. That it has at last gained its proper station among shade trees is evidenced by the demand upon nurseries exceeding the supply. Oaks transplanted from the forest are most likely to become stunted and practically worthless in comparison with others; nursery-grown, transplanted trees, sharply pruned, and transplanted to good soil, will form most beautiful, noble specimens of rapid growth.

I dwell chiefly on the Pin oak because of its distinct character and general adaptability. By nature it is a moisture loving plant, and huge, vigorous specimens may be found along streams and in swamps; but it stands, also, a high and comparatively dry soil, making the same beautiful growth. As most persons are aware, this species is particularly distinguishable in the pendulous character of its lower branches. They do not simply droop, but fall at an acute angle from the trunk like the Sour Gum. This gives a rather pleasant effect when the trees form an avenue, such as may be seen in the vicinity of Horticultural Hall, Fairmount Park, Philadelphia. Then, too, the growth is conical, rendering pruning seldom necessary. A straight, clean main trunk is formed, seldom, if ever, diverging.

As a sidewalk tree in cities, it can scarcely be excelled, withstanding ill-conditions remarkably well; and were it better known by the general public it would not surprise experienced people to see it largely supersede the maple. For a specimen on a lawn, it is equally useful, and is then frequently kept low-branched. As a rule, its leaves do not color much in autumn, though in considerably moist soils I have seen it a brilliant scarlet. The scarlet, red, black, and white oaks are also rapid growing and perhaps just as desirable in the eyes of many.

In our neighborhood I have noticed a charming "cozy-corner" in a small yard, where a Pin has been placed rather closely in a corner made by a privet hedge about four feet in height. The tree is low-branch-

ed, and sweeps close to the hedge, making a shady summer retreat.

Oaks are not inclined to make fibrous roots, though the Pin is less necessarily included, and must be severely pruned when transplanted. By "severely," I mean to the fullest extent, from three or four inches of the upper branches to eight inches or a foot of the lower.—*S. Mendel-son Mehan* in *The Florists Exchange*.

* * *

Caring for Ferns.

A good many ferns that live in rooms during the winter come to grief because they are kept warmer than is good for them. The atmosphere is dry and arid, and quite opposite to the natural conditions under which most ferns live. A very little thought would show us how different are the conditions we are providing. Ferns greatly enjoy the slight relief afforded by an hour or two in a moister atmosphere than we aim at in our living rooms, and will be improved and freshened by such a change.

Many ferns that are cultivated in the ordinary greenhouse will grow well in rooms if they get a good share of light and are not too parched. They cannot be grown in a room in which there is a fire daily all through winter and spring. Ferns are also much spoiled by over-watering at the roots. Although we find them, both at home and abroad, in fairly moist positions, their roots are almost always upon a bank and beneath trees or hedges that would throw showers and absorb the greater part of the moisture. None of our ferns will grow in a sodden soil. Nor is it well to have them in peaty soil alone.

If we cannot sponge over the fronds of our feathery growing ferns, we can give them an occasional wash with the syringe and tepid water. Once allow them to get dusty and dry, their pores choked and kept in an arid atmosphere for a long time, they will soon show a thin and unhealthy condition.—*New England Florist*.

Removing Crocus.

Among the many interesting things in the article by the Rev. C. Wolley-Dod on "Spring in January" is a reference to the best plan of removing crocuses. To remove lumps when in full flower and leaf may appear rather unsafe, but in practice it is not only perfectly prudent, but less injurious to the future well being of the Crocus than removing at the usual time. I have had occasion to remove crocuses at various seasons, and have frequently had plants of various species sent me in flower and leaf, and have found them more likely to do well if planted when in that stage than at any other time. In raising seedlings it is a great advantage in selection to be able to transplant a superior flower at this time.—*S. Arnott*, in *The Garden*, London.

Park and Cemetery.

ESTABLISHED 1890.

An Illustrated Monthly Journal.

Devoted to the advancement of Art-out of Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

The regular contributors to PARK AND CEMETERY are among the most eminent Landscape Architects, Landscape Gardeners and Horticulturists in the United States, whose practical articles make the journal one of great value to any one identified with landscape work.

John W. Weston, C. E., Editor.

R. J. HAIGHT, Publisher,
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Eastern Office:

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Subscription \$1.00 a Year in Advance.

Foreign Subscription \$1.25.

Correspondence solicited on subjects pertinent to the columns of the journal.

Officials of Parks and Cemeteries are requested to send copies of their reports.

Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

Association of American Cemetery Superintendents.

ARTHUR W. HOBERT, "Lakewood,"
Minneapolis, Minn., President.
WM. STONE, "Pine Grove,"
Lynn, Mass., Vice-President.
F. EURICH, Woodward Lawn, Detroit, Mich.
Secretary and Treasurer.

The Thirteenth Annual Convention will be held at New Haven, Conn.

The American Park and Out-Door Art Association.

CHARLES M. LORING, Minneapolis, Minn.
President.
WARREN H. MANNING, Tremont Building,
Boston, Mass., Secretary.
E. B. HASKELL, Boston, Treasurer.

The next meeting of the Association will be held at Detroit, Mich.

Mr. John Storer Cobb, Honorary President of the New England Cremation Society, is compiling a historical account of the cremation movement in the United States.

In extending sympathy to Mr. John M. Boxell, Superintendent of Oakland Cemetery, St. Paul, Minn., on the recent death of his father, one of the early settlers of Minnesota, it is worthy of record that six sons of the deceased gentleman acted as pillbearers. The funeral occurred on March 4 and was very largely attended. The burial took place in Oakland Cemetery.

Mr. F. A. Sherman, Superintendent Evergreen Cemetery, New Haven, Conn., Chairman of the Executive Committee of

the Association of American Cemetery Superintendents, wishes to be informed immediately by members of the association upon what subjects they would like to hear papers at the next convention, and in suggesting subjects to remember that it is desirable that new subjects be presented.

Mr. Charles Nichols, Superintendent of Fairmount Cemetery, Newark, N. J., and widely known as the father of the Association of American Cemetery Superintendents, has written PARK AND CEMETERY, commending the good work done by it in behalf of the association, and urging the members of that organization to co-operate with the publisher in furthering the interests of PARK AND CEMETERY. Our good friend shows his "faith by his works" by increasing his order to six copies of PARK AND CEMETERY for distribution among the officers and lot owners of Fairmount Cemetery. This is indeed a substantial way of showing one's appreciation. * * * A letter of a similar nature comes from Mr. J. F. Mabin, president of Oak Hill Cemetery, Owosso, Mich., with an order for seven copies of PARK AND CEMETERY. Mr. George Van Atta, Superintendent of Cedar Hill Cemetery, Newark, O., in renewing his annual subscription for seven copies of PARK AND CEMETERY, says: "We cannot keep house without PARK AND CEMETERY."

To Cemetery Superintendents and Managers.

Desiring to make a list of cemetery officials of the country for the use of the Association of American Cemetery Superintendents I would deem it a favor if you would send at once to Frank Eurich, Secretary, Detroit, Mich., the names and titles of all persons connected in an official capacity with your respective cemeteries. Kindly give this immediate attention. *Arthur W. Hobert, President A. A. C. S.*

BOOKS, REPORTS, ETC., RECEIVED.

MUNICIPAL FUNCTIONS. A Study of the Development, Scope and Tendency of Municipal Socialism. by Milo Roy Maltbie, Ph. D. Published in *Municipal Affairs* by Reform Club Committee on Municipal Administration, 52 William street. New York.

Of the many valuable monographs issued under the general head of the quarterly magazine, *Municipal Affairs*, this one on Municipal Functions is perhaps the broader in its scope and significance. It is an effort to meet the demand for more knowledge concerning municipal questions, which is developing so rapidly and marks an era in our progress; and a prominent feature in this demand was the desire to know more about the experience of other cities. The basis of this monograph was a schedule of in-

quiries, which, after condensation, occupied 25 pages, and this as a foundation and a letter from the state department to its representatives abroad, as well as communication with every local source from which information could be hoped for, resulted in surprisingly full returns, 150 American and 350 foreign cities having been heard from. These returns were edited and verified from every available resource, and the data secured were supplemented by exhaustive examination of a vast amount of secondary material. The plan of this work is: A brief discussion of the historic development of municipal functions; a consideration of the scope of present municipal activities; and an analysis of the "various forces which determine the extent of municipal socialism, to discover present tendencies and forecast future developments." This is the scope of the monograph, and it does not at this time attempt to discuss what a municipality ought to do, simply what it does. A copious index makes reference a simple turning of leaves. *Municipal Affairs* is conducting one of the most potent educational campaigns ever yet prosecuted.

QUARTER ACRE POSSIBILITIES. By Frank H. Nutter, Landscape Architect, and Walter J. Keith, Consulting Architect, Minneapolis, Minn. Price, \$1

This work contains some 25 plates, showing how to embellish suburban lots in an artistic and effective manner, with descriptive text and other illustrations. There is also a short dissertation on landscape gardening and the improvement of school grounds. The striking feature connected with the production of this book is the fact that landscape art and architectural art have combined to secure good results. It is gratifying to note this, for to secure the best conditions in home grounds such co-operation is eminently necessary. Generally speaking, the designs set forth are excellent in arrangement and detail and offer numerous suggestions to the citizen desirous of improving his surrounding on a high plane, and moreover the text is full of instructive and interesting matter besides being explanatory of the designs.

SPRAYING FOR PROFIT. A practical hand-book of the best methods for suppressing the more common injurious insects and fungous diseases. By Howard Evarts Weed, M. S. Recently Entomologist Mississippi Experiment Station. The Horticultural Publishing Co., Griffin, Ga., 1899. Price, 20 cents.

This is a handy little book and full of information in a very practical shape on the subject of spraying, the materials used and the methods and appliances adopted for their distribution. Spraying has become so important a feature of the progressive horticulturist's work, and the literature on the subject so scattered, that any convenient and reliable vademecum treating the question in a succinct and practical way is much to be desired. This little book can be recommended.

Twenty-ninth annual report of the Buffalo Park Commissioners, January, 1899. Besides the reports of the superintendent of parks, the pamphlet contains those of the Director of the Botanical Garden and the Curator of the Zoological Garden. A map of Delaware Park is appended.

Books, Reports, Etc., Received.
(Continued.)

Annual report of the Tree Planting and Fountain Society of Brooklyn, N. Y., December, 1898. One can scarcely overestimate the value of this report as regards the features of municipal care and improvement to which it is devoted. In the present issue we have a series of notes on ornamental trees, giving their prominent characteristics, with suggestive remarks concerning them. These notes may be studied carefully with both interest and profit. There is considerable matter given on insect enemies and means for their destruction, and a very valuable feature of the entire report is the able manner in which the care of trees is set forth and the results of such care in the development of the tree and its bearing upon the duty the tree is called upon to perform. The report has a copious index which greatly enhances its usefulness. There is a crying need for the formation of such societies all over our country, and to further a good cause much information may be obtained at the headquarters of the Brooklyn Society, 177 Remsen street, Brooklyn, N. Y.

The Minnesota State Forestry Association, which was incorporated in 1876, has just issued a folder and other printed matter containing the constitution, financial statement and particulars concerning its work. It makes constant effort to invite co operation, and issues considerable valuable literature on Forestry culture. The membership fee is only \$1 and there are no after fees. To further attract membership, it is offering Prof. Green's comprehensive book, "Forestry in Minnesota," two assortments of seedling trees and membership for \$1.25. Surely this should be inducement enough to join such a laudable state association.

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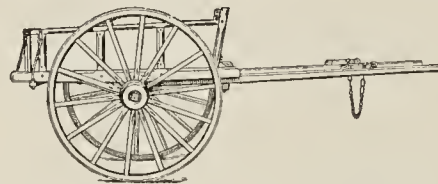
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Landscape, Garden and Plant Photographs.

The Publisher of PARK AND CEMETERY announces the following photographic competition for 1899.

List of Premiums.

NO. 1. LANDSCAPE AND GARDEN EFFECTS. A first premium of Five Dollars and a second of Three Dollars is offered for the best series of not less than four photographs of picturesque landscape and garden effects. These may include park or rural scenery, city or suburban out door art in gardening.

NO. 2. TREES, SHRUBS AND PLANTS OF THE OPEN AIR. A first premium of Five Dollars and a second of Three Dollars is offered for the best series of six photographs of trees, shrubs and plants. These may include wild trees or shrubs, or any plant grown in the open air, and may be in single specimens or groups. All photographs in this class should carry descriptions, including approximate dimensions.

NO. 3. GROUPINGS AND EFFECTS. A first premium of Five Dollars and a second of Three Dollars is offered for a series of six photographs of picturesque groupings of plants and shrubs, or suggestive spots of wild plant life, in woodland, park or home grounds. Rock or water gardens may be included in this section. These photographs should also have enough descriptive matter attached to make it possible of reproduction in nature.

For photographs retained by the publisher that are not awarded prizes 50 cents each will be paid. The competition will remain open until July 1st.

Suggestions.

Care should be taken to keep backgrounds plain to avoid confusion in picture. Figures of persons, garden utensils, and all objects liable to cause detriment to the picture or its object should be carefully kept out. The photographs must be mounted singly on cards with white backs and must not be less than five inches by four inches.

Instructions.

The photographs may be of objects in the possession of either the sender or others; but there must be no question as to the right of photographing or using them. There is no limit as to number, and the publisher shall have the right of engraving and publishing any of the chosen photographs. They may be printed on any good paper that shows the subjects clearly, and that will make good half tones.

The name and address of the sender, together with the name and description of the objects shown, should be plainly written on the back of each photograph.

All communications relating to the competition must be addressed to R. J. Haight, 334 Dearborn Street, Chicago, and the class for which the photographs are intended should be marked on the parcel, which must also be labelled "Photographic Competition."

Books, Reports, Etc., Received.
(Continued.)

Annual report of the Park Commissioners of the City of Taunton, Mass., for the year ending Nov. 30, 1898. This interesting report gives a history of the work of the Board since December, 1893, which, though as to expenditures, is comparatively very small, nevertheless points a moral as to what can be done in the way of improvement by commissioners sincerely devoted to a city's welfare. Since organization this Board has had the trees, city squares and cemeteries placed in its care, and Taunton may well be congratulated on what has been accomplished.

Ninth annual report of cemetery commissioners and forty-eighth annual report of Wildwood Cemetery, Winchester, Mass. This report contains a list of lot holders whose lots are in perpetual care.

Annual report of the Trustees of Woodlawn Cemetery, Everett, Mass., for year ending Dec. 31, 1898, with reports of treasurer and superintendent, and by-laws, rules and regulations. Illustrated with half tones. The pamphlet contains a directory of all the paths and avenues. MAINE AGRICULTURAL EXPERIMENT STATION, ORONO, ME.

Bulletin No. 49. February, 1899.
Care of Orchards. Prof. Munson.

Trade Literature, Etc.

The use of Jadoo fibre in the growing of all kinds of plants and seeds, and even extending to crops, is rapidly on the in-

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The Lawn Mower will soon be in demand, and among the well-known makes the Pastime, an advertisement of which appears on another page, has many improvements which recommend it, a most important one being that by a slight adjustment it can be made to cut within

one-eighth of an inch of a curb, fence or tree, thereby obviating the use of shears to finish the work. The Pastime weed digger is another device made by this company, and is an ingenious tool for cutting the root of the weed and extracting it almost simultaneously. Send for catalogue.

The users of Hobson's Standard Carts all speak well of them. They are compact, durable, and constructed with especial pains to meet service requirements. Their catalogue which illustrates a large line of carts should be in the hands of park and cemetery officials.

Thomas Meehan & Son's, Germantown, Philadelphia, catalogue contains, besides descriptive matter treating of an immense assortment of trees, shrubs and plants, valuable and instructive matter on the planting and care of trees and pruning of shrubs. This is practical matter from expert practitioners.

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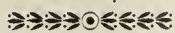
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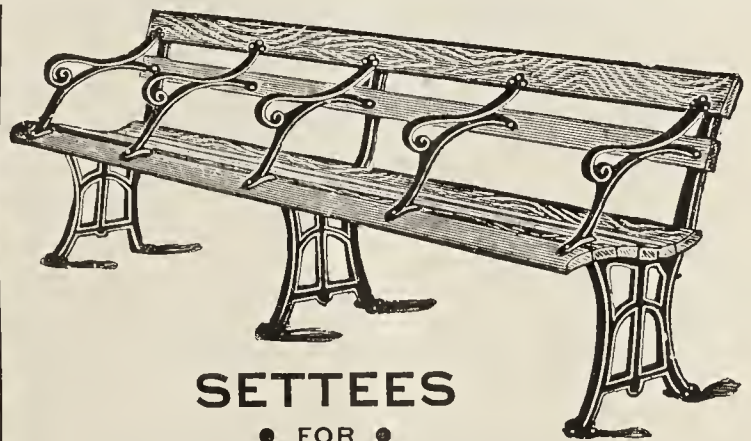
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Supplemental Catalogue. Novelties in fruit and ornamental trees, shrubs, roses, etc., 1899. Ellwanger & Barry, Mount Hope Nurseries, Rochester, N. Y. A remarkable list of fine stock.

Retail catalogue of fruit and ornamental trees, shrubs, roses, etc. R. Douglas' Sons, Waukegan, Ill.

Glenwood Nurseries, Nurserymen, Horticulturists. Landscape Artists. The Wm. H. Moon Company, Morrisville, Pa.

Phoenix Nursery, Bloomington, Ill., Trees, Shrubs, Flowers. Spring of 1899.

CEMETERY LITERATURE.

The report of the 12th Annual Convention of the Association of American Cemetery Superintendents held at Omaha, Neb., Sept. '98 printed in pamphlet form is for sale at 20 cents per copy.

Modern Cemeteries: A selection of valuable papers on all phases of cemetery work, read before the annual meetings of the Association of American Cemetery Superintendents from 1887 to 1897. 190 pages, bound in cloth. Price 50 cents, postpaid. F. Eurich, Sec'y., 624 Union Trust Bldg., Detroit, Mich.

DON'T SPOIL THE TURF!

Managers of Cemeteries and Parks know how difficult it is to produce a nice, even, firm turf and should guard against its being broken from any cause. Heavy hauling for the erection of monuments, the removal of earth, grass, etc., and the transplanting of trees, etc., is at times necessary. The ordinary wagon will cut in, "rut" and ruin the turf. A wagon equipped with the broad-tired

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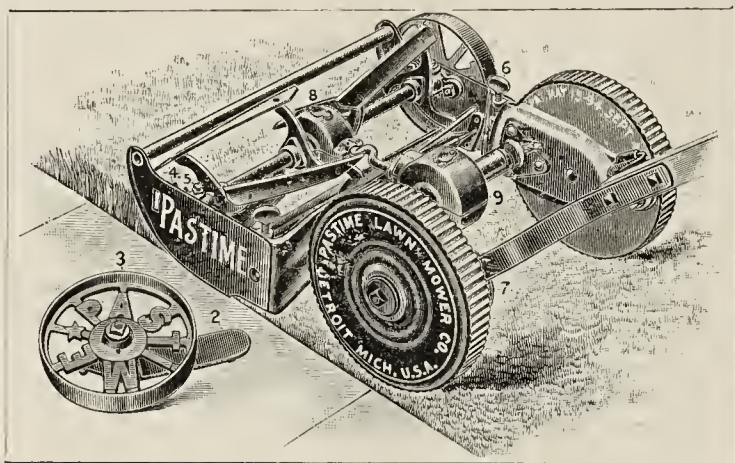


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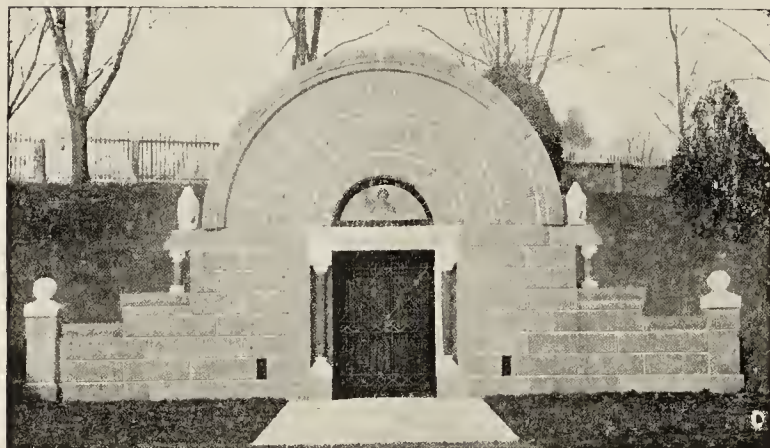
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PARK AND CEMETERY.

✻ A Monthly Journal of Landscape Gardening and Kindred Arts. ✻

VOL. IX.

Chicago, April, 1899.

NO. 2.

CONTENTS.

EDITORIAL—City Foresters a Necessity—The Policy of Property Holders in Park Matters—City Engineers and Cemetery Practice—Arbor Day—Park Laborers Must be Intelligent—Cremation.....	27, 28
*A Few Uncommon Vines.....	29
*Drainage.....	30
Street Trees.....	32
*Hardy Palms.....	33
*Hubbard Park, Meriden, Conn.....	34
*Home Grounds.....	36
*Land for Cemetery Purposes.....	37
*The Maisonneuve Monument, Montreal.....	39
Christobal Colon Cemetery, Havana, Cuba.....	40
*Design for a Memorial Receiving Vault.....	41
Improvement Associations.....	42
*Garden Plants—Their Geography, XL.....	44
*The Magnolia Lotus.....	45
*Floral Steps—From Swamp to Water Garden.....	46
Park Notes.....	47
Cemetery Notes.....	48
Selected Notes and Extracts.....	49
Reviews of Books, Reports, etc.....	50

*Illustrated.

NOW that the indiscriminate tree butcher is abroad in the land, under the guise of the trimmer and pruner, the suggestion to employ a city forester is of great import and such an officer is one of the most needed additions to official life. The public is being awakened so thoroughly to the position the tree occupies in our city civilization, the many useful purposes it serves, the wondrous addition to urban scenery it affords, and the delightful associations it recalls, that interest in our trees is becoming a factor of public intelligence, and demands are being made upon the city fathers in many localities to institute active steps to ensure proper treatment of the trees. It is, perhaps, unnecessary to say that the care of trees requires trained heads and hands, and the difference in the care bestowed by the intelligent or ignorant caretaker is unfortunately everywhere manifest. Town foresters have been appointed in a number of cities, and such an officer is a crying need in the great majority of American cities.

THERE is a short sighted policy often exhibited by property holders in demanding prohibitory prices for property required for park purposes. It is a policy which not only retards park development itself, but it tends to keep back improvements in other directions, and creates a lack of confidence in the community. Such a condition

has come to notice in Louisville, Ky., where the project to improve Central Park, for which the Du Pont heirs once asked \$250,000, is receiving a serious setback because the same heirs now ask a larger sum for the property. Wherever a piece of property is desirable for park purposes and is in demand for that purpose, the owners would be helping themselves first and the community afterwards, by asking reasonable compensation. Were they sufficiently public spirited to think of the community first and themselves second, they will surely have their reward.

I N many of our smaller cities, where the cemeteries are conducted by the municipal authorities, their care naturally falls under the jurisdiction of the City Engineer, where such an official has general supervision of all public works. Many city reports coming to hand, show this to be the case, and this at least suggests that the work will be conducted with intelligence. But it is also to be observed that, to the lack of interest which has generally characterized the behavior of the people toward their cemeteries, at least up to within a very few years, and which is even very largely the case to-day, the old ideas still prevail, being subject to the routine of official procedure. The cemetery is rapidly becoming an important feature of our progressive civilization; instead of being the last thing to be thought of, it is gaining a position in public esteem next only to the public parks. The beautiful landscape features in our important cemeteries are permanent examples of such work, and the fact that such development is actually demanded, compels the suggestion to those city engineers having charge of cemeteries, that they should make a study of the best cemetery conditions of to-day, and guide their methods accordingly. Should they labor under the impression that there is little to be learned in cemetery practice, let them secure permission to attend the next convention of the Association of American Cemetery Superintendents, to be held in New Haven, Conn., in the fall, where they will be surely disillusioned, and will return to their charge fully imbued with the importance of the work and the absolute necessity of keeping abreast of the times in cemetery improvement. Under any circumstances their attendance at the convention will be a paying investment.

IT is very exhilarating to observe how widespread has become the interest in Arbor Day. It is but a few short years ago that Nebraska set the example. Some of her far-sighted and public spirited men realized to the fullest the value of forest lands in certain localities, not from an industrial standpoint, the lumbermen knew all about that and had profited thereby utterly regardless of every other consideration, but from the standpoint of natural laws in regard to the conservation and distribution of moisture, and consequently the general welfare. They thereupon went to work and induced the state legislature to pass a law setting apart a day to be generally observed as a day upon which to plant trees, not as a mere holiday amusement but with a definite purpose in view. A number of the states soon recognized the wisdom of thus inaugurating a movement which would tend to in time make good the waste of former years, and followed the example of Nebraska. The movement is rapidly spreading, and in its development it would appear to have taken hold where its originators would best have desired it, in the public schools. In this direction there has rapidly grown a positive interest in Arbor Day, and if Nature herself in her complex harmonies were striking her strongest chord, the idea has enlisted the active sympathies of the educators themselves, and the questions of utility and sentiment, in relation to plant life is receiving, we may venture to say, more general attention than such questions ever received before. It is from the public schools that permanent interest in the movement will receive its strongest impetus, and its benefits be more widely disseminated. It is a question so intimately associated with the elementary course in nature study, that it is safe to say in common phraseology, "it is here to stay."

ONE has only to think a little in order to realize that the quality of the responsible park laborer is of an entirely different grade from that of any other class of labor. In his way he should be a specialist, that is to say that besides being capable of intelligently fulfilling his duties, he must or should have special knowledge, if only of a practical kind, of the trees and plants with which his duties continually associate him. This knowledge cannot be obtained altogether from books; it is a matter of experience and practice, augmented and increased by faithful devotion to duty. The lack of this experience and knowledge in the labor employed is detrimental to park interests, and is a very potent and significant argument against the exercise of political methods in park management. We note a comment in an exchange wherein it was intimated that following an expressed desire on the

part of the citizens the park authorities had had labels made with which to mark the trees and shrubs, but owing to the fact that there was so little practical knowledge among those directly in charge, great difficulty had been experienced in distributing the labels. What a lesson to the people! This emphasizes the necessity on the part of park boards of not only making sure of employing labor of the necessary intelligence, but of offering facilities to their employes for acquiring knowledge in the line of their work. The result of such a course would yield much fruit in the not distant future, and avoid the accidents of ignorance which are unfortunately of not infrequent occurrence. Then what a boon it would be to an efficient superintendent to have under his control an intelligent body of employes, men who could comprehend the requirements of the various tasks as they were assigned to them, and who could be relied upon to carry them out in a manner conducive to the best results.

IT matters little how we may regard cremation as a method of disposing of our dead, the fact remains that its more general adoption is progressing. We, who by reason of sentiment or prejudice in favor of earth burial hold to that principle, must not blind ourselves to the knowledge that many eminent thinkers and teachers boldly advocate cremation as a wise and consistent course to pursue with the dead, nor to the fact that in our large cities the number of people annually passing away require so much land wherein to dispose of the remains, that it is becoming a hard problem to consider for the future in the light of present laws of sanitation. Figures have recently been published concerning this question in the great city of London, and it appears that there are 130,000 deaths to provide for annually, and that the area of land required for cemetery purposes to dispose of such a vast death list, is attracting the serious attention of the health authorities, and directing thought to cremation as a sensible means of meeting the difficulty. The same considerations will in due course force themselves upon us, and they at least for the present suggest to the cemetery officials of our larger cemeteries the establishment of crematories, where it might reasonably be expected they may be required, and thus meet the question half way. From the tendency of the times it can readily be inferred that the public may be educated in time to this means of caring for their departed. In point of fact cremation has ceased to be the objectionable term it formerly was. It does not now convey a repulsive idea to the majority of people, but it is being thoughtfully considered by many as a proper solution of the disposal of the dead, especially in large communities.

A FEW UNCOMMON VINES.

There have not been a great many new vines introduced of late years, but there are some new ones,



RESIDENCE OF MR. H. CRAMER, GERMANTOWN, PHILADELPHIA. VINE CLAD WITH BIGNONIA CAPREOLATA.

and there are besides many old sorts brought to notice, which may almost be classed as new, they were heretofore so uncommon.

Actinidia polygama is a Japanese vine, of value for its large green leaves on reddish leaf stalks. It is a good vine for covering rockwork or similar structures, but is rather of too heavy a growth for porches or similar places, unless where something heavy is wanted.

Celastrus articulata is also from Japan. This I think a better species in many respects than our native staff vine, *Celastrus scandens*. One valuable feature is that it evidently bears its flowers and scarlet fruit earlier and more profusely than ours does. It is a good vine where one is wanted to run half wild and where its clusters of red fruit would be valued in late fall and winter.

Dolichos Japonicus, the Kudzu vine is becoming fairly known. It is noted for the immense growth it makes annually.

Strong plants will make shoots 50 to 75 feet in length of a season. The rosy purple flowers are in short racemes, not unlike *Wistaria*, but are upright instead of drooping. The leaves are very large, and not unlike those of a Lima bean. This vine is almost of a half herbaceous nature, the growth dying back partly, but not wholly to the ground. It would need planting where lots of room could be afforded it.

The climbing hydrangea, *H. scandens*, has been before the public too long to be deemed new, and yet but few persons know of it. As a matter of belief, but few ever will. It is such a very slow grower that no one has patience with it. Given an old log to climb to it runs along fairly well, but in hardly any other situation is it satisfactory. When seen thriving, as I have occasionally seen it, its large green leaves are quite attractive. Perhaps as much can hardly be said for its flowers, though they are not without some merit.

Vitis Coignetia is a grape from Japan, in which country its foliage takes on a brilliant scarlet color in autumn. In this vicinity, where it has been grown for several years, it has failed to take on any autumn color at all, simply turning yellow and falling as an ordinary grape vine does. But all hope has not been abandoned, and we are looking for its doing better as the vines get older.

Clematis paniculata, though newer than any I have mentioned, is the best known of all. It is in every way an improvement on the well-known *flamula*, the old "sweet scented clematis," being strong growing, floriferous, sweet scented and hardy.

Of good old vines, but very little known, there



SPRAY OF FLOWERS OF BIGNONIA CAPREOLATA.

is the ever-green trumpet vine, *Bignonia capreolata*, a lovely vine from the southern states. Just how far north it would live out I cannot say, but it does very well about Philadelphia. This does not climb by rootlets as common trumpet vines do, but by tendrils, more like the grape. Yet it has the power of attaching itself to stone walls, as I have seen

it sustain itself and climb to the roof of a three story building. The flowers are orange yellow, and are produced in May, soon after new growth is made.

We are indebted to Mr. H. Cramer, Germantown, Philadelphia, for photographs of this fine vine.

Clematis coccinea is a *herbaceous* species, bearing beautiful small, somewhat bell shaped scarlet flowers. After being in one position for some time and its roots become strong, it will make a growth of 6 to 8 feet a year. It is a beautiful and interesting little vine, where one of annual growth and small size suffices. It comes from Texas, and being herbaceous, it thrives in New York and no doubt much further north of that state.

Decumaria barbara is sometimes called American climbing hydrangea, because of its close botanical relationship to the hydrangea. It has pretty, shining green leaves and clusters of white flowers. Its clinging character much resembles that of the common ivy. It is a well known and valued vine in the south, but only of late years has it been grown in the north.

The lovely Carolina Jasmine, *Gelsemium sempervirens*, though not hardy enough for general cultivation in the north, could be grown in many a place where it is now a stranger. I have seen it growing in Philadelphia, but am told that its tops are annually partly winter killed, and that it does not flower. There are, no doubt, sheltered positions for it where its tops could be preserved, that its lovely yellow flowers could be enjoyed. Last winter I saw in a florist's greenhouse a dozen or more small plants of it in 3-inch pots, beautifully in flower. It would, it seems, make a lovely pot plant for early spring blooming.

Joseph Meehan.

DRAINAGE.

Surface and subsoil drainage must naturally vary considerably according to locations and character of soils; often two independent systems are employed, though most generally, one system, combining both surface and subsoil drainage, can be planned.

First of all, it is of the greatest importance for any system to locate free and unobstructed outlets for the main trunks either into ravines, ditches, lakes, rivers or other waterways, where there can be no possible chance or danger of backwater. It is also of importance to protect all outlets so as to prevent vermin, such as rats, mink, skunk, etc., from getting up into the drains.

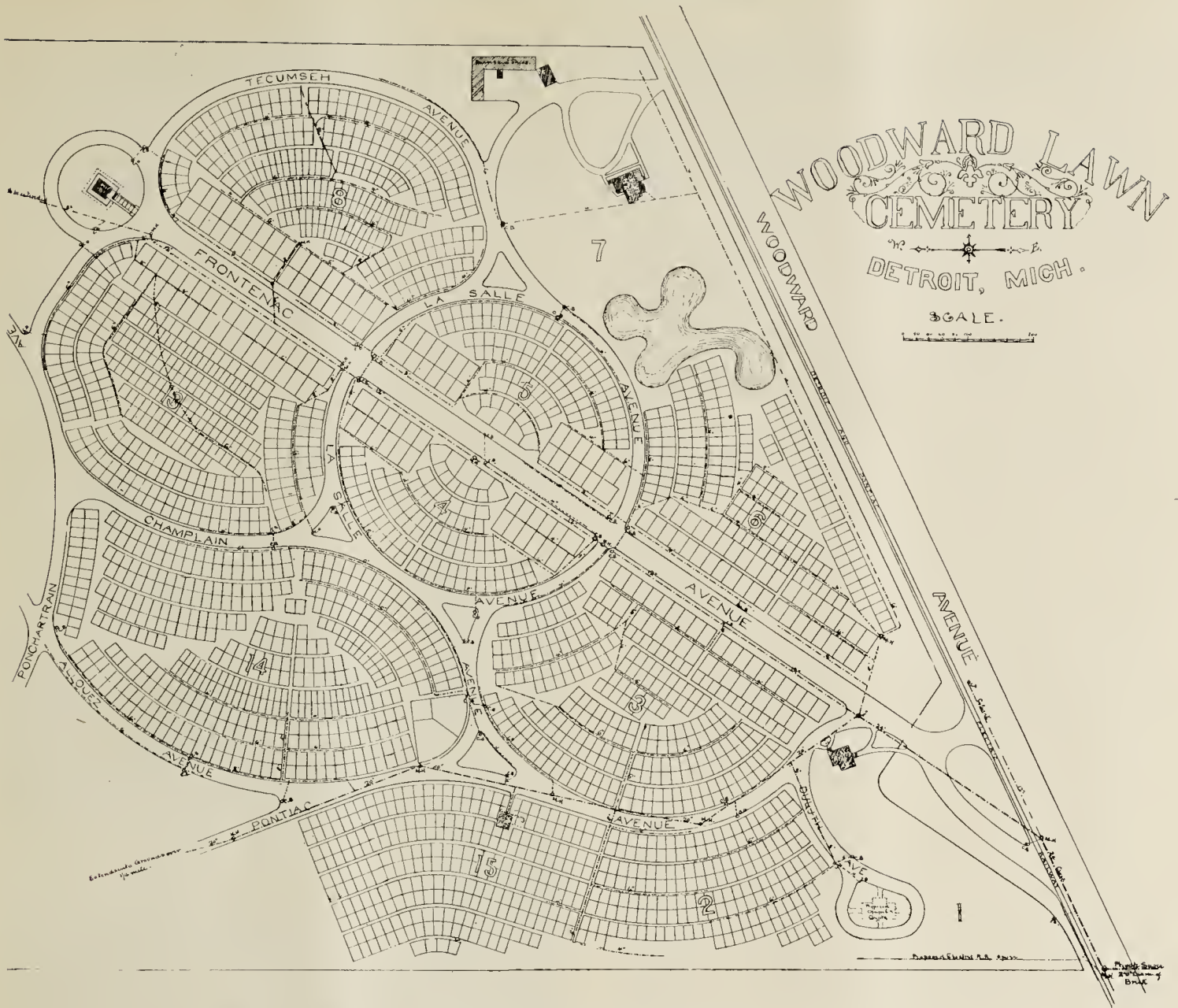
Following this in importance will be the planning of a graduated system of pipes and inlets fully competent to carry off storm water from drives and sections after the heaviest rainfalls. This, of course, requires considerable calculation, but, with the aid of easily procured tables and memoranda showing amount of water per acre at various precipitations,

also capacities of various sized pipes laid at different inclinations or grades, any ordinarily intelligent person, not an engineer, will be able to determine what sizes of pipe will be required. Carefully taken leveling of the area from outlet to end of proposed drain will establish the grade.

In the following particulars attention will be paid to sub-drainage. It is conceded that the greater or more quick the grade of a drain the easier it will be to construct the same. The least inclination of a drain grade admissible will solely depend on the ability and carefulness of those constructing the same. In Woodward Lawn cemetery conditions and surroundings demanded a system where no greater fall than 0.12 per 100 ft. (twelve one-hundredths of a foot) could be procured, yet the drains are working satisfactorily. I do not doubt that drains laid on a dead level even will afford some relief, so long as the head of water above the drain overbalances the friction in the pipe, and, of course, the larger the pipe used the less will be the friction. It is safe to say, however, that, for effective drainage, no one would care to try such an experiment, but would rather seek for an outlet sufficiently low to insure a complete emptying of the lowest lying main.

Having in mind the main object to drain or make dry the burial areas of a section, the depth of drains ordinarily used in land drainage (viz. 3 to 4 ft.) is not sufficient. We must go down to the level of the bottom of the grave, or better yet, somewhat deeper, especially where naturally wet soil and clay are found, bearing in mind all the time that free and unobstructed outlets are necessary and that the drains are laid on perfectly even grades, without sag or depression. As the greater proportion of expense in draining is the digging of the trenches, and the cost of the pipe the least consideration, ordinary soft agricultural tiles should never be used for such important work. Vitrified salt glazed sewer pipe, with bell ends, or where they can be procured, the Portland cement pipe are to be recommended.

Being laid to drain the land the joints must be open for water to enter, and not cemented. Considerable discussion on this question was had at the Richmond meeting of the Association of American Cemetery Superintendents and much was said pro and con. I still maintain, that in deep drainage especially, there is no danger of water forcing its way under the pipe, or that roots of trees will eventually block the system, if proper care and precaution are taken when the work is done. In all drain work the back filling is as important as any part of the work. When the crocks have been carefully laid to grade and firmly pushed into place so that pipe fits to



NOTE.- The drainage is shown by dotted lines. Although the scale is small, the details of the scheme can be understood by close examination.

pipe, either clean coarse gravel, stone screenings or coarse cinders should be packed under and around the pipe, particular attention to be paid to the joints. When this has been done carefully it will be of much help to put on a layer of tough sod with the grass side down before the trench is filled in. I am of the opinion that drains in trenches tamped solidly at once do not show results so quickly as those that are allowed to settle gradually. This is proven by the grave, which is filled and solidly tamped in courses, so as to *prevent* water from entering and cause unsightly settling, while in a drain trench we expect water to enter from the sides, if not from the top.

There is this to say about deep drainage in clay, that no one need despair of ultimate success; results will not be apparent at once, as the water held in areas between deep lying pipe will be slow in forcing its way at first, but as the immediate surrounding strata nearest the drain are being

relieved slowly, but surely, the clay contracts, small fissures or cracks appear, running sideways and upwards from the drain, forming as it were, channels for the water to follow. As the strata become more relieved and consequently drier, these channels increase both in opening and in length, affording room for larger quantities of water to escape, which makes the assertion clear that the deeper a system of drain pipe is laid the more area will be relieved from excessive moisture. By deep drainage we not only draw the water away, but also invite the air to enter into such spaces relieved from water, thereby arating the soil and equalizing the temperature of the same.

When quicksand is found special care and precautions are necessary. Formerly it was universally recommended that drains through quicksand should be laid on boards or planks to prevent uneven settlement, but experience proved that this method was not only expensive, but added much more difficulty

and complication to the work of laying of pipe to the grades and consequently many failures resulted therefrom.

The sides of trenches, especially through heavy cuts, should be slightly sloped, and thoroughly braced and curbed. Only short distances should be prepared at a time and work must be done with dispatch. To place the pipe into proper position for grade, construct and put down a box of plank, somewhat wider and longer than one length of pipe, drive this into the sand to grade, quickly remove the sand from within the box and replace the same by a length of pipe, firmly forcing the latter up against the one previously laid, and protecting the bell end either by a small bundle of hay or a circular board, fitting into bell end, thus preventing any running sand to enter. Pull up the box, fill in around the pipe with coarse gravel or cinders, or in the absence of either, use tough sods around the joints and pack the pipe solidly, then proceed as before.

For an extensive system of drainage, where the entire graduated network of piping finally leads into one main trunk, it is of importance to provide manholes, substantially built of brick, opening up to the surface of the ground, and capped off with iron frame and lid.

In Woodward Lawn cemetery, the easterly quarter area of which is shown by annexed plan, drains have been laid through quicksand, muck, clay, and in some places through pockets of water gravel, and although only the above-mentioned slight fall per 100 feet was obtainable from the outlet, the results are remarkable in so short a time.

Frank Eurich.

STREET TREES.

Many of the New England towns and Washington, D. C., are noted for the beauty of their streets by virtue of the trees planted upon them. No intelligent student can question the benefits street trees exert upon the beauty and sanitary conditions of a city. Many of the smaller towns throughout the United States are adorned with unbroken avenues of Elms, Maples, Live and Water Oaks. But with the tremendously rapid growth in commerce and population, in many of our American cities, especially in the east, these avenues disappear before widened and paved streets, close building, smoke and gases, neglect and other well known causes.

But a reaction is setting in to conserve and renew these past effects of beauty and sanitation. In Brooklyn a Tree Planting and Fountain Society is organized and with creditable perseverance is disseminating a popular knowledge of the conservative attitude necessary to preserve and protect trees.

Newspaper articles prepared to explain the preliminary operations of providing suitable soil, selecting desirable kinds of trees, suggesting kinds of tree guards, offering expert pruning service and spraying insects or fungus infected trees at cost price are among the practical methods adopted. It is an omen of public spirit conscious of the merit of art as exemplified by civic corporations. In Washington the street trees, their planting, protection and pruning are placed in the trust of a committee of three. Boston places her street trees under the supervision of one man styled "City Forester." In Brooklyn no special laws are enacted to invest an official with the care of street trees, each property owner possesses the street trees in front of his estate. Publishing the correspondence of a society assuming the leadership of concerted action towards advancing the interests of tree planted streets is a commendable method. In the northern states due weight is not accorded the argument of adaptability for special kinds of trees for their use in planting as street trees. The Soft Maple for instance will not withstand the weight of heavy snow storms; the Poplars are rapid growing but susceptible to the attacks of borers; Ailanthus will grow in a soil too sterile and insufficiently aerated for most others but it is soft wooded. Ginkgo is too diaphanous; the American Plane mildews and Catalpas and Horse Chestnuts are broken by boys. In narrow streets with houses abutting the sidewalks broad headed trees are undesirable. Lombards, Bolleana Poplars and fastigate Maples and Tulip trees are best adapted there.

In filled-in streets the consequent drainage and porous soil is especially adapted to elms but they should be alternated with temporary trees, spacing the elms sixty feet apart. Lindens and Norway Maples are perhaps best adapted for the sections built up with brick structures, flagged walks and paved streets. We would prefer to see a better selection of trees in the Brooklyn Society publication, omitting such large proportioned specimens as *Gleditschia triacanthos*; half hardy *Paulownia*; insufficiently proven *Cedrelas*; unsymmetrical *Sassafras* and others that are virtually shrubs as *Oxydendron Arboreum* and *Cornus florida*. Variety is essential and great merit should be accorded those with excurrent stems, compact heads, broad leaves, varied heights, longevity, hard and close grained wood, immunity from diseases and insects, adaptability to soil, smoke, draught and pruning. It is most gratifying to note the steps taken in 1894 were well directed, and resultant effects appearing in the future, as the outcome of the Brooklyn Society, will command the endorsement of public spirited and enlightened citizens throughout the country. *Emil Mische.*

HARDY PALMS.

The phenomenal cold of 1895 and of 1899 have tested the endurance of palms. And New Orleans may, in a certain sense, be called nature's experiment station, in that tropical or semi tropical plants that survive such winters, when fully exposed, may be relied upon to stand the fluctuations of temperature in any ordinary greenhouse, or living room. The Cycads have proven perfectly hardy. The same ones that lost their fronds in '95, will make the same sacrifice in '99 as they had entirely regained their size and beauty since '95. The intense cold has blackened them to apparent death; but basing ex-



PALMS IN NEW ORLEANS AFTER THE COLD WAVE.

FIG. 1. Shows effect of frost on palms before being cut back.
 FIG. 2. Shows trunk denuded of its foliage. These palms stand in private grounds and were some 25 feet high.

pectation upon the experience of '95, when spring returns they will revive.

Gray says, "*Cycas revoluta* is erroneously called the Sago Palm;" but so it is called, and of all the Cycads is the hardiest. It has beautiful, dark green, outwardly arching pinnate leaves, or branches that are the picture of grace and elegance in growth, and last long when cut. These fern-like fronds are exceedingly popular in mortuary designs.

In the most exposed positions in New Orleans and all along the Gulf Coast, the *Cycas revoluta* and the closely allied *Zamia integrifolia* have never been destroyed by adverse winters. The Cycads in Audubon Park that withstood the cold of '95 are handsome specimens, up to date, but the fronds

will require cutting off, leaving the trunk free to put forth another set. It is exceedingly interesting to observe nature's process in the new formation of a crown. The young fronds are red and up-turned, like a filagree cup and at a distance look like a flower. As they grow the reddish hue changes, through various shades, to green, and attaining sufficient size the stems arch outward, gradually assuming the graceful, feathery form that is so truly beautiful.

One peculiar feature of the recovery of the Cycad, is that the young plants revive first and make the quickest growth. Those that are ten or twenty years old will be barren of growth, not yet prepared to rally, while the three and four year old ones will be putting up the cup of reddish young leaves. When the older, stronger ones do start, however, the number and size of the branches, of course, surpass the younger plants.

The Cycads partake of the nature of Conifers and consolidate the trunk from the exterior, like the oak, and other exogenous trees. They are of slow growth, and this very fact commends them to favor as plants for special purposes. If secured at the proper stage, they will give satisfaction for years without overgrowing the allotted space. Could I have but one Cycad, for all round purposes, and all climates the *Cycas revoluta* would be the choice. The *Zamia integrifolia* is also a comely Cycad, but less elegant in appearance than *revoluta*.

The pinnate leaves are less divided, less fern-like and the trunk of *revoluta* is perfectly straight from base to summit, whereas *Zamia* has a round, bulb-like base. But the two together, are much grown, there being less desirable plants than *Zamia*.

Wherein they suit general culture lies partly in the fact, that at their best and sturdiest, they are dwarf plants. There need not be any fear of getting a white elephant for which the cage will be too small. I have seen specimens twenty years old that were very neat and easily accommodated in ordinary bounds. The rapidity with which they recover the crown lost by hard cold, is attributable to the already acquired vigor of the roots and trunk. The growth of the entire plant is slow and the leaves remain tolerably near one size a long time, increasing in beauty by new ones from the centre of the crown. The new leaves do not curl up like those of the fern, but from their very incipiency are up-raised, slightly touching their tips, like the fingers of hands lifted up in prayer.

G. T. Drennan.

* * *

[Supt. Fonta informs PARK AND CEMETERY that *Chamærops excelsa* withstood the severe weather better than any other of the fifty or more varieties of palms, and will henceforth be used extensively in Audubon Park. ED.]

PARK AND CEMETERY.

HUBBARD PARK, MERIDEN, CONN.

The field of philanthropy is a very broad one, offering many opportunities either for the good Samaritan or the public spirited citizen, and each opportunity fraught with far reaching possibilities. Yet the beneficence which lies in the donation of a park to a community is of peculiar significance, touching so many features of public benefit, and moreover extending into the future further than any one generation can see.

Hubbard Park, Meriden, Conn., is one of the most suggestive examples of this class of philanthropic effort we know of. Meriden is a manufacturing city of some 30,000 inhabitants, and yet by this gift of Mr. Walter Hubbard to his fellow citizens it is placed in the front rank of park cities. The park has an area of some 800 acres and is the largest single public park in New England. Messrs. Olmsted Bros., the landscape architects, pronounce it the most interesting and striking reservation of natural scenery possessed by any New England city. Meriden may well be grateful for this surpassing gift, not only for the beautiful tract of scenic splendor and health giving opportunities but for the fact that Mr. Hubbard gave himself to the work, and being a rare lover of nature conceived and carried out the phases of improvement which in his cultured eye seemed to him best for the development of the park.

As will be seen from the illustrations it is largely a mountain park, suggestive of primeval days, but including rare spots of sylvan beauty. Brooks course down the hill sides, rippling and bounding



VIEW IN HUBBARD PARK, MERIDEN, CONN.

from point to point; wild flowers of many descriptions give touches of color with nature's lavish hand;

while shady dells and mossy crags alternate, to interest, refresh and instruct, as one passes along to



VIEW IN HUBBARD PARK, MERIDEN, CONN.

investigate and discover the various attractive feature to be found on every hand.

Mr. H. Phelps Arms gives the following description in the Connecticut magazine: "The scenery of the hills is exceedingly picturesque, the crags being partly, and most charmingly, draped with evergreen and deciduous trees and bushes of the most interesting species. The trap ledges are softly tinted with various delicate hues, merging into a general effect of warm gray that harmonizes most admirably with the broad stretches of different shades of green of the all pervading deciduous woods. Here and there groups of dark green hemlocks, pines and cedars occur, especially on the steepest and least accessible parts of the mountain side, and serve to divide almost as strikingly as the cliffs the ever recurring masses of deciduous foliage.

"A tour among the peaks well repays the effort to climb them. The scene is remarkably bold and picturesque in its varying forms of crags, cliffs and precipitous hill sides. The view of the surrounding country is more than usually beautiful

and interesting because of its many hills, ponds and varied topography, crowned as it is with extensive tracts and irregular patches of woodland, interspersed with green pastures and dotted here and there with picturesque villages and hamlets."

A brief history of the park will be interesting. To many the land comprising the major part of the area would have been considered valueless, but to Mr. Hubbard there appeared great possibilities for a public recreation ground, and with characteristic business energy he set to work to put his ideas into execution. Part of the area lay within the municipal bounds, and he applied for and obtained permission of the city fathers to improve it. He then by heavy purchases and donations from friends secured more adjacent land and proceeded with the work of development. Work was commenced in

Waterbury turnpike. Passing through wonderfully beautiful woodland scenery, we come to the junction of the main drive, where lies between two abrupt hills Lake Merimere, with its wooded island and beautiful drives. Near this lake the cliff drive starts gently up the mountain until Fair View is reached, where all about one is a grand panorama of valley scenery, impossible in limited space to describe. Driving west from Fair View one passes the Giant's Play Ground, where detached rocks from the surrounding precipices lie in heaped confusion, and which has been a favorite resort for the geologist. Then there is Boulder Bluff which leads to wilder scenery, and close by a path takes the wanderer to West Peak, the highest point of the park and one of the highest in this section of the state. Here grand views may be obtained, unexcelled in



Cliff Drive.

Beehive Drinking Fountain.

Fountain near Entrance.

HUBBARD PARK, MERIDEN, CONN.

1897 and in the intervening two years it has so far progressed as to be practically completed and has been opened to the public.

The illustration on this page shows some of the improvements. A good road leads up to the park entrance, near which inside the limits is the fountain shown, and hereabouts are some very attractive features, including a pavilion designed on Grecian lines, between the columns of which suggestions of the scenery beyond may be caught. It is in this locality that the main lawn and the floral beds are situated, and from here radiate the driveways and paths which meander throughout the park to bring the visitor to the innumerable natural beauties that are offered to him.

Among the features most interesting are, perhaps, Mirror Lake, a beautiful body of water, so protected by surrounding hills that scarcely a ripple disturbs its surface; the old "Notch" road, one of the oldest thoroughfares of the district, where once stood the toll-gate house on the Meriden and

their quality of beauty and extending over a large territory.

Mr. Hubbard did not forget the children. A playground has been provided for them and a wading pool; then there are boats and gymnasium appurtenances; trout pools and fountains; picnic groves and all the fascinating features of a recreation park, are provided for the pleasure, comfort and enjoyment of Meriden's citizens, young and old.

It is a happy thought to recognize the fact that Mr. Hubbard has perfected this park project in his life time, and that notwithstanding his more than three score and ten years of life, he is still taking active superintendence of the finishing touches of this fine public property. This personal interest largely enhances the value of the gift, and attaches to it the donor's personality in such a manner that while it remains forever Hubbard Park, the people's pleasure ground, it will be a magnificent memorial of one man's love for his fellow man.

❖ HOME GROUNDS. ❖

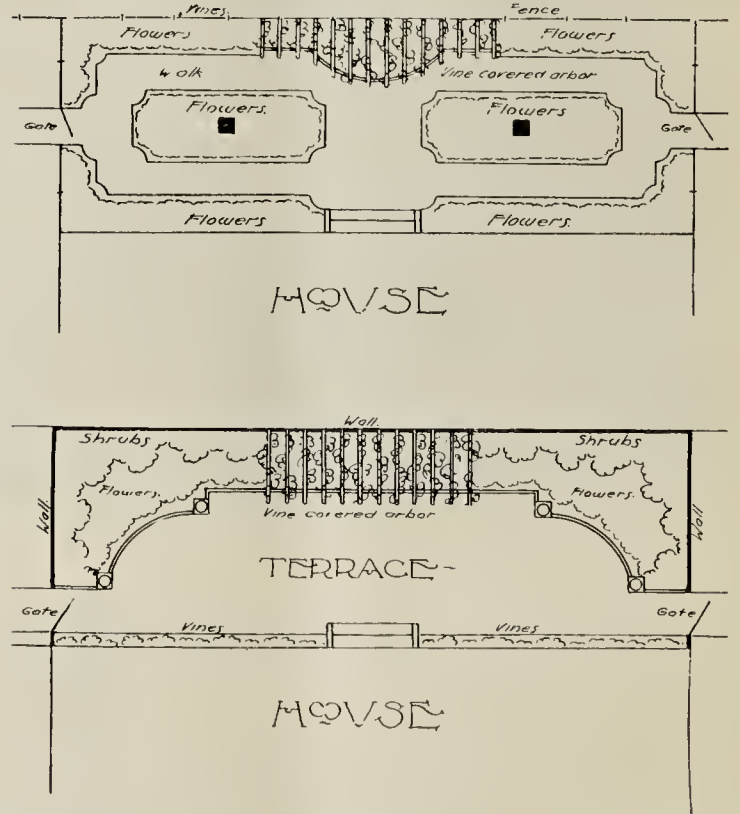
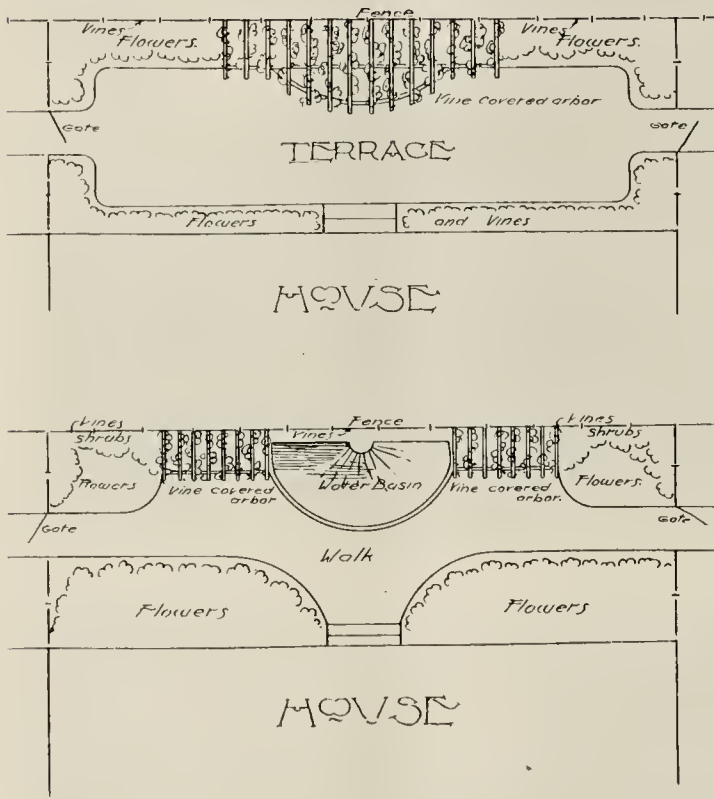
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The planting on a place of this size should be composed almost wholly of shrubs, herbs and small trees.

Such trees as maples, elms, lindens, birches, beech, which spread ultimately from forty to sixty feet should not be planted. Such small trees as the flowering dogwoods, red-bud, kolreuteria, Japan tree lilacs, having a spread of from fifteen to twenty-five feet, will give all the shade required, and be attractive in foliage and flower.

rods and sunflowers, may be added with the shrubs of the border plantations.

The beds of the flower or terrace garden should be completely filled throughout the season with a brilliant and varied display of hardy perennials, annuals and tender plants backed up by shrubs or vine covered fence or arbor. Here would be the place for hollyhocks, phlox, Japan anemone, sweet williams, pinks, poppies, seal flower, marigolds, heliotrope, geraniums, cannas, and the many other garden favorites, arranged with the taller varieties at the back and varied from year to year. This would not however be the best place for such useful cut flowering plants as the rose, sweet pea, nasturtiums, mignonette, which would be used freely in the house if available. Such flowers would be best grown in rows in the vegetable garden as a



SKETCH 5.

Such shrubs as the mock orange, syringa, Tartarian honeysuckle, Persian lilac, California privet, Rose of Sharon, should be used very sparingly for they will ultimately spread from eight to twelve feet. The deutzias, weigelias, Japan quince, Van Houtte's and Thunberg's spiræas, which spread from five to seven feet are useful for border plantations, and such small shrubs as the Thunberg's barberry, Indian currant, snowberry and dwarf deutzias are indispensable in narrow places and to face down taller plants.

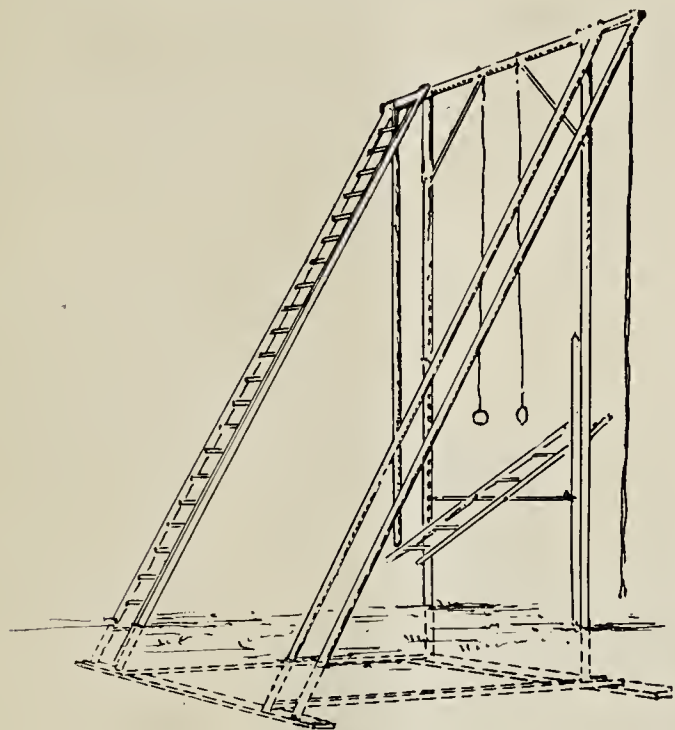
These shrubs have a short season of bloom, however, so in order to extend the period of flowering through the summer such strong growing herbaceous perennials as the pæony, native asters, golden-

crop in the same manner as would be lettuce or tomatoes.

There is nothing that will so effectually soften the rigid and angular lines of a building and blend it into the surrounding vegetation as vines, which should be used liberally. The Chinese wistaria, grape and pipe vine, grow very rapidly and can be trained high, the Virginia creeper and bitter sweet will also grow high, the forms of clematis, especially Clematis paniculata, the Japanese evergreen and other species of honeysuckle, are the best covers for lattice fences and low trellises.

With the exception of the flowering dogwood, California privet, Indian currant and bitter-sweet, the plants named need a sunny place to make a sat-

istactory growth. In shade, such high shrubs as the witch-hazel, arrow-wood; such medium high shrubs as the sweet-pepper bush, common privet,



SKETCH 6.—LAWN APPARATUS.

spice bush; and such low shrubs as the rhodotypos, all do well or fairly well in shade. In dense shade, however, much more satisfactory results are secured by carpeting the earth with low trailers like the myrtle and moneywort, with ferns and with the large class of beautiful woodland flowering shrubs, represented by the wake-robins, violets, hepaticas, spring beauties, toothworts, ladies' slippers, pyrolas, etc.

If a kitchen garden is to be maintained, it can not be large enough to grow such crops as potatoes, cabbages or corn. A grape vine can be grown on the laundry fence, possibly a single crab-apple on which can be grafted several varieties, one or two varieties of small fruits, lettuce, radishes, tomatoes, beets for greens, a few of such herbs as thyme, sweet marjoram, sage, wormwood, etc. If, however, the space at the back of the pleasure ground is to be much used for amusements the surface should be covered with gravel or tan bark, for grass will not withstand constant rough use. The most compact and useful apparatus for outdoor exercise is a combination frame with place for climbing rope, pole, ladder, and for trapeze swing, adjustable bar (Sketch 6) or a simpler modification of it. A place could be provided for a teeter board, sand court for the baby, chest weight against a fence, etc.

No doubt many readers will say that which has been out-lined herein is beyond their ability to plan and execute. Most persons can, however, devise and execute a plan for their grounds that will enable and induce their family to derive far more

healthful pleasure and comfort from them than is now secured. If he does the work himself, or has it done under his own directions, serious mistakes are not likely to be made, and from any that are made profit can be drawn from experience. Often a plan will not be entirely carried out at one time. It should however be worked out in advance of construction in order that any work accomplished may be done with a view to ultimately completing the plan.

Warren H. Manning.

LAND FOR CEMETERY PURPOSES.

An erroneous impression prevails that land too rough for agriculture, and unfitted for any other purpose, is suitable for conversion into a burial ground. Particular pride is frequently displayed



FIG. 1. VIEW IN OAK LAWN CEMETERY, WILKES BARRE, PA. Before man's ingenuity was brought to bear.



FIG. 2. THE SAME A FEW WEEKS LATER.

by the officials of several of the most modern and up-to-date cemeteries, in pointing out to visitors how terribly rough was the original state of the

ground before man's ingenuity was brought to bear upon it. True, the rougher the former state of the land, the more remarkable the improvement.

But the prominent fact of the great cost of construction is lost sight of. The first and most important point that occurs to those about to form a new cemetery is price of land. The lowest priced tract that can be found is generally selected and considered the cheapest. But is it the cheapest? Land can frequently be had at exceedingly low figures which will entail an expenditure of from five up to fifteen hundred dollars an acre for development.

A number of the cemetery officials of the present day can easily call to mind the large sums of money that have been literally sunk in the laying out of their grounds. The writer knows of scores among the oldest and most beautiful of our burial grounds that have been most costly to construct, and their maintenance correspondingly heavy, owing to the before mentioned fact, that their sites were considered unsuited for any commercial purpose, and consequently were given over to the interment of the dead.

Higher priced lands doubtless could have been procured at the time these places were started, which would have been far easier to construct, and their later care of comparatively moderate expenditure. In most of these old places of sepulchre the development has been gradual, and the cost therefore not felt, because probably it came out of income. But had the monies which were sunk in developing the grounds been invested the perpetual care fund of these cemeteries would not cause much anxiety.

In the earlier history of most of the old graveyards those portions of the grounds easiest to lay out were first brought into use, and until sheer necessity compelled the development of the rougher and more difficult to handle parts, their improvement was invariably postponed. The first lot of officials have likely passed away, leaving the hardest part of the work to the men of to-day. How thankful these men should be to the Cemetery Superintendents' Association for the many opportunities annually afforded for gaining the requisite knowledge by observation and discussion, how best to grapple with such work. Their predecessors in office had not those golden opportunities for learning and, of course, had to perform their duties according to their own light, consequently the cemetery man of to-day should not review too hastily the works of those who came before.

From the errors of the past in all details of cemetery management, valuable lessons are being learned and should be the means of introducing betterments

in the future. And it is to the newer cemeteries, more particularly in large cities, that the people will naturally look for improvement and be inclined to copy as models. Their promoters have all the opportunities for taking advantage of the "other fellow's" mistakes and profit thereby. But will they? There's the rub. Too frequently the same old error is being perpetrated in making use of the lowest priced lands for conversion into "God's Acre."

If projectors of modern cemeteries would only consult men experienced in the construction of cemeteries it would be better for the future welfare of these places. The landscape work in parks, as well as of cemeteries, is very similar in character as far as the work of beautifying is concerned. But in the former all thought is given to the surface, whereas in the cemetery, consideration must be given to what lies beneath, and how suitable it may prove for the repose of the bodies of the departed and not give offense to the living.

Not long ago a syndicate had an option upon an exceedingly rough piece of land which, according to the real estate man who had it for sale, was an ideal spot for a burial ground. One of the members, knowing that a "brand new" cemetery was being made near by his boyhood home upon a notoriously rough piece of property, that was unfitted for building purposes, and had been the frolicking place of the community for years, paid a visit to the spot and was much impressed with the change and improvement. To him it seemed scarcely credible that art could have been brought into such close communion with nature.

The party in charge of the work was invited to inspect the syndicate property, which was rough indeed, and would have made a grand park. Test holes were sunk and rock found close to the surface all over the entire tract. The cost of constructing a cemetery upon such a site would have been enormous, to say nothing of the large cost in the future working. Mr. "Experience" soon selected suitable land close by, but the price was more than double, and it required considerable argument to convince the syndicate that the its adoption would eventually prove the cheapest.

Bellett Lawson.

Mr. E. L. Shuey, representing Mr. John H. Patterson, of the National Cash Register Co., Dayton, O., recently delivered a lecture, profusely illustrated by stereopticon views, at Westville, Conn., on the improvement in home surroundings of the employes of the above company, induced by the intelligent and philanthropic co-operation of the employers. This work has attracted intense interest wherever it has been described.

“THE MAISONNEUVE MONUMENT, MONTREAL.”

The best monument in the city of Montreal is that in the Place d'Armes, erected to the memory of Maisonneuve, the founder of the city. This work is by Philippe Hebert, a French Canadian artist, whose studio at the present time is in Paris. The monument was unveiled on July 1, 1895. It is considered Hebert's masterpiece. We have nothing better in the United States, I believe, unless it be Augustus St. Gauden's Shaw memorial in Boston. As one of the orators said on the day of the inauguration of the Maisonneuve monument, “This monument is a poem, that of the heroic period of Canadian history, not sung in Homeric hexameters,

but reproduced in bronze and granite, to speak to the eyes and forever engrave on the hearts of the people the memory of the virtues of that handfull of heroes and saints who left their country, families, and repose, to cross the ocean on frail barks and plunge into the wilderness, in the midst of savage tribes, with the sole purpose of glorifying God and making themselves useful to their fellow-men.” The artist rose to the height of his subject, and has given us a noble, picturesque and stirring embodiment of the courage, chivalry, dash and nerve of the French pioneers in the New World. The figure of Maisonneuve himself is a perfect and typical plastic expression of the Gallic explorer, soldier, and gentleman of the seventeenth century. It is superbly spirited, buoyant, graceful, gallant, and elegant without effeminacy. It is the figure of a man of action, fearless and hardy. The flowing lines and picturesque folds of the costume of 1642 lend themselves most aptly to the statuary's ends. Paul de Chomedey de Maisonneuve is worthy of a monument; he is of that illustrious group which comprises Jacques Cartier and Samuel de Champlain, the heroes of New France. The story of his exploits reads like a romance. Placed

at each of the four corners of the base of the monument, is a subsidiary figure, belonging to the history of that remote period, one of the little company of colonists which came out from France with Maisonneuve, and helped him to found the great metropolis of Canada. At the South-East corner we see the virile and admirable crouching figure of Lambert Closse, the scout, holding back his too eager French dog *Pilote* with one hand, and grasping his pistol in the other hand, ready to fight the swarming Iroquois whose thousands of braves were held at bay through so many years by the little squad of dauntless Frenchmen in their fort on the St. Lawrence. What a superb

figure! What an eagle glance, and what an indomitable type of bravery! At the south-west corner, is the crouching figure of Jeanne Mance, the first sister of charity in America, dressing the wound of a squirming little Indian boy. Nothing could be more exquisitely beautiful than the unspeakable tenderness, firmness and skill with which this lovely woman ministers to the astounded savage; it is a memorable, an almost unequalled thing. At the north-east angle we have a squatting figure of Charles LeMoyne,



THE MAISONNEUVE MONUMENT, MONTREAL.

the first colonist of Ville Marie, holding in his right hand a sickle, and in his left a handful of grain, but with a rifle slung behind his back. Finally, at the north-west angle, there is the lithe, muscular, and elastic form of an Iroquois brave in ambush, a remarkably imposing and life-like type of the North American savage. The pose is a striking example of suspended action, stealthy, cat-like, and full of the sense of latent power and activity. It has the dramatic quality of the recoil, the gathering together of the muscular forces, the suspense and breathless silence of the moment before the spring of the beast of prey upon his victim. Such is the masterpiece of Hebert, and the monument which

Montreal proudly shows to her visitors. It is finely placed in the old Place d'Armes, the very centre of business and trade, surrounded by massive banks, insurance offices, and the principal cathedral in the city (Notre Dame). The architecture of the monument is worthy of its splendid statuary. The details, the bronze reliefs, the fountain around the granite base, all are well considered, and interesting in themselves. *William Howe Downes.*

CRISTOBAL COLON CEMETERY IN HAVANA, CUBA.

The present interest in matters pertaining to Cuba should make the following by John S. Kendall in the New Orleans *Picayune*, entertaining. After stating that the bone pile, of which so much has been written, had been covered with two feet of earth, and describing the crude and irreverent methods of dealing with the dead, the writer continues: "In the poorer parts of the cemetery one may frequently see a typical Cuban funeral—typical not merely because it occurs so frequently, but because the grinning attendants, the manifest love of show and the moral obtuseness of the race are all in evidence. It is not unusual to run across three or four cheap funerals approaching the cemetery at one time. They are very pathetic. The coffin, borne on the shoulders of four men, is sometimes followed by a little band of bareheaded mourners, but more frequently makes its last journey alone. It is not strictly accurate to speak of the coffin making its last journey, because most of the time it is a coffin which is farmed out by the undertaker and used merely to bring the body to the grave, after which it must be returned. In that way one coffin is used scores of times.

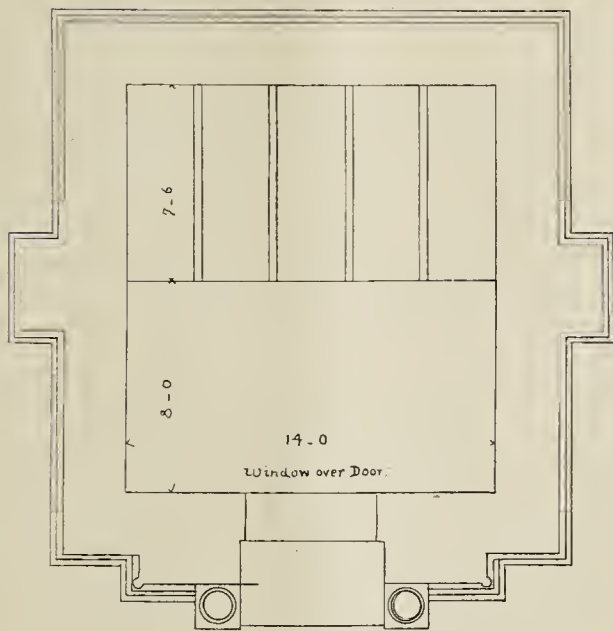
"In San Jose de las Lajas I was shown one such coffin which had done duty for the reconcentrados. The people said it had buried 4,000 corpses. So the custom appears to be universal throughout the island. When such a funeral reaches its destination, the mourners stand around and watch the cemetery employes break open the coffin and take out the body, which is then lowered into the grave with ropes.

"But Cuba is a land of contrasts. The hapless fate of the pauper dead is in marked contrast with the gorgeous mausoleums in which the rich lay their dead to rest. In the same cemetery, almost within stone's throw of each other, stand the wooden crosses which mark the poorer graves and the superb marble monuments which mark the graves of counts and grandees of Spain. As you enter the cemetery through superb gates of rose-colored stone, elaborately carved, and fitted with bas-reliefs of scriptural subjects in Italian marble, the visitor is confronted by a magnificent avenue lined with trees and leading up to a graceful chapel.

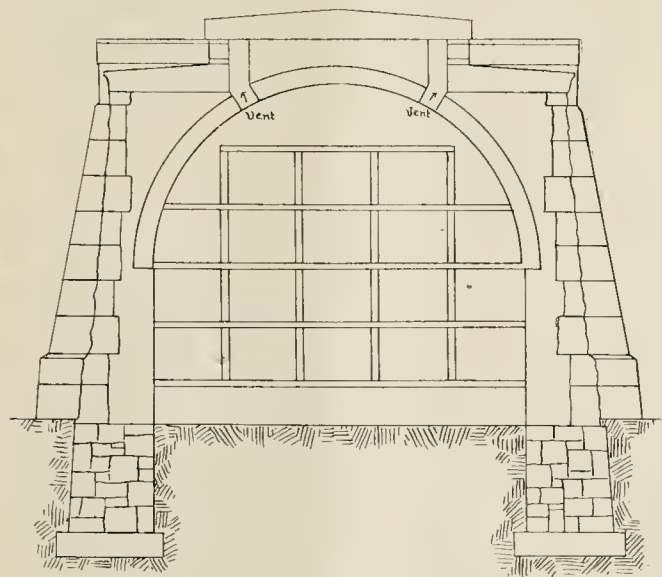
On either hand are the monuments—the exquisite monuments to the students who were killed in Havana in a riot some years ago, and the celebrated firemen's monument, built within the last three or four years, to commemorate the deaths of fifty or sixty young men belonging to the volunteer fire department of Havana, who perished in an explosion of gunpowder in a burning warehouse.

"The *Diario de la Marina*, the leading morning paper of Havana, raised a fund of \$180,000 with which the expense of having the monument executed by the best Italian artists was defrayed. It is a singularly noble work. A solid marble shaft ornamented with the insignia of the firemen, rises from an elaborate sarcophagus surrounded by medallions of the young men who died. The shaft is surmounted by the figure of an angel pointing to heaven, while with the other arm she supports a dying fireman. At the angles of the sarcophagus are placed statues of women representing 'Fame,' 'Heroism,' 'Grief' and 'Duty.'

"It is in this cemetery also that the Maine victims lie. In a previous letter I gave a description of the unkept condition in which we found that sacred spot when we first came here. The bodies of our seamen are placed on a narrow avenue in the less conspicuous, but by no means obscure, part of the cemetery. When we first saw them the place was marked merely by a badly-faded American flag stuck in the ground. It was a very little 10-cent flag, and ridiculously out of place. A gas-pipe cross with a painted sign 'Victimas del Maine,' and a neat wooden cross raised to the heroic dead by the J. Bruno Zayas Club of Cubans, were the only other marks. Now the association of American ladies in Havana have placed on the spot a wooden cross 8 or 10 feet high, with a suitable inscription painted on a medallion at the intersection of the arms. The remains of the artificial flowers which were placed on the graves in great abundance on the anniversary of the destruction of the Maine are still there, but they have been sadly mutilated by relic hunters. There was at one time talk of digging up the bones and relegating them to the bone pile, because the ground where they lie does not belong to the United States, and was merely rented, according to the custom of the cemetery. Naturally no rent has been paid for some time. But I don't think these bones will ever be disturbed even by the godless cemetery people. But the place ought to be marked by some adequate monument. The failure of the American people to provide such has often been commented on. Some day, I presume, Congress will be wakened to the fact that the national honor demands a monument there, and then perhaps it will be built."



PLAN



SECTION

DESIGN FOR A MEMORIAL RECEIVING VAULT.

DESIGN FOR A MEMORIAL RECEIVING VAULT.

The above illustrations show a Memorial Receiving Vault designed expressly for this journal by Mr. A. Fehmer, Hartford, Conn.

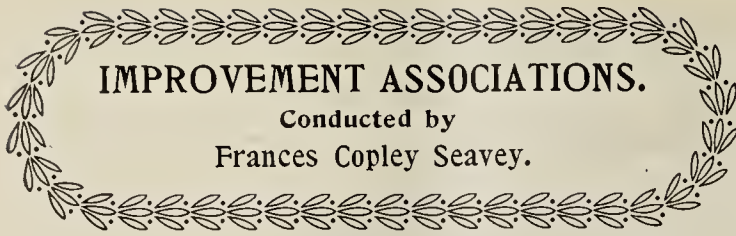
Its details are all on the most approved modern lines, very careful attention being paid to drainage and ventilation, two features of radical importance in vault construction.

The specifications call for a stone foundation,

and the superstructure to be of brick faced with granite or marble, all laid up in cement mortar. The floor will be of concrete and the shelves and partitions of slate.

It will be observed that four ventilators are provided in the arch, two on each side, and the window in the door is hung on pivots.

The design can be carried out in the Eastern states for about \$4,500.



Leave the World a pleasanter place than you found it.

METHODS.

We have found, stated broadly, that the purpose of Improvement Associations is the building up and the beautifying of towns, villages, communities and neighborhoods, to the direct end of making them more inviting places of residence.

The incidental results are many and include: (1) the increased healthfulness of such locations, (2) the added comfort and pleasure of the residents, and (3) the increased value of real estate.

Diverse methods of accomplishing these ends have been and may be adopted. Those that prove successful in one place may not fit the conditions elsewhere. It is for officers and executive committees to choose wisely among the many, those that in their judgment, best suit local prejudice and feeling. The tact that is able to do this is pretty sure to carry the entire undertaking to a successful issue.

Among the methods that we shall suggest are some that would seem adapted to all locations and conditions, and some that have been successfully tried by established societies whose officers have kindly reported their proceedings for the common good of writer and readers; to all of whom I now return grateful thanks.

A favorite method with some of the eastern associations, and one that would seem applicable everywhere, is the "Field Day" so-called, which consists of a forenoon devoted to the work of the organization (carefully planned before hand), followed by a public dinner with speeches, toasts and perhaps some other features of entertainment. In applying this method it would probably sometimes be better to give a full day to work followed by a supper and a social evening.

In some places this is called the "Sidewalk Dinner", because the society keeps the walks in order, but in incorporated villages of the middle west this work would be outside the province of the Improvement Club. There can be as many Field days as seems desirable and they may be set for any time that seems best, but there are several semi-legal holidays in the spring any one of which would serve.

Washington's or Lincoln's birthday would do very well for preliminary spring work, but Arbor Day is a pre-eminently fitting choice either for the first Field Day of the year, or in its individual ca-

capacity as the time wisely set apart by the Government primarily for tree planting—though the planting ought not to be limited to trees.

Arbor Day work may appropriately include planting trees and shrubs in streets, and in church, school and railway station grounds; preparing and planting any unsightly plot that may be utilized, even temporarily, as a little park; preparing and turfing a generous strip of ground between sidewalks and street driveways, where street shade trees are set and where shrubs can often be used with excellent effect; gathering and carting away rubbish from streets, public ground and vacant lots, and either utilizing such material for drainage or burying it; the removal of ash heaps that should not have been allowed to accumulate, but rather have been spread in low spots in unpaved streets; setting street hitching posts in shaded, but out of the way situations where they will not become a public nuisance; and such other work as is necessary to make streets, and public and vacant property tidy.

Such work adds to the pleasure and comfort of living, tends to better sanitation, sets an example that influences individuals to make improvements that they might otherwise overlook, and even spurs a town in its corporate capacity to appropriate money for needed, but too often neglected, improvements.

The features mentioned are necessary preliminaries common to all communities, and while it is not probable that all can be done in a day—even a Field day—still, with good management and enthusiastic leaders, an excellent start can be made, and an impetus generated that will push the spring work to completion.

Some Improvement Associations place galvanized iron receptacles at intervals into which it is requested that ashes, banana skins, apple cores, waste paper, etc., shall be thrown instead of in the streets, and organize children into a volunteer street cleaning department, whose business it is to see that such rubbish is so deposited, or, if there are no receptacles that it is otherwise decently disposed of.

Decoration Day may well be chosen as appropriate in time and character for certain phases of the work. It is the time of universal interest in the "sweet grave ground," so the efforts of the day should, as heretofore, be devoted to cemetery work, but with these differences: let permanent planting at least partially replace the ephemeral decorations that perish before sunset; and, if it is possible, inculcate a broader view of what constitutes good cemetery decorations by considering the ground as a whole, instead of as an aggregation of individual lots, and planting in such a way as to improve the looks of the entire inclosure. This may be done

by setting an irregular belt of shrubbery and small trees quite around it just inside the boundary fence to serve as a screen and give the air of pleasant seclusion that is needed; or by planting vines to trail over the boundary fences, or in several other ways.

Ministers usually make interested and efficient members of Improvement Societies and Egleston tells in his "Home and its Surroundings" of a pastor who read the following among his Sunday morning notices: "All who are willing to aid in making the surroundings of the house of God pleasant and comely are invited to go to the woods with me to-morrow and 'bring the fir-tree, the pine-tree and the box together to beautify the place of God's sanctuary, and make the place of his feet glorious.'" (Isaiah.)

The State Federation of Women's Clubs of Minnesota issues and distributes a placard that they call "Do and Don't" cards, which they request permission to place in prominent positions in the various rooms of the public schools. It is a practical method and no doubt accomplishes much good. The cards are as follows:

- | |
|--|
| <p>Do make your yard and street in front as clean and pretty as you can.</p> <p>Plant or help plant shade trees.</p> <p>Cultivate as many flowers as possible.</p> <p>Burn or bury all tin cans and other rubbish.</p> <p>Pick up and destroy all loose paper, small branches and similar things.</p> <p>Dig up and burn unsightly and harmful weeds.</p> <p>Pile wood neatly, dispose of all ash heaps, and keep a tidy back yard.</p> <p>DON'T throw upon the sidewalk or into the street, banana or orange skins, water melon rinds, nut shells or anything else.</p> <p>Don't scatter pieces of paper on the street.</p> <p>Don't mark sidewalks or buildings.</p> <p>Don't injure young shade trees by bending, cutting or shaking.</p> <p>Don't spit on sidewalks or floors.</p> |
|--|

Every member of an Improvement Society should appoint him or herself a committee of one to keep an eye on trolley and telephone line men to see that they do not injure trees or shrubbery, and to look out for all delinquents, just as members of Humane Societies are alert to note and bring to just punishment every person that causes a dumb animal to suffer.

The example of the famous "Laurel Hill" Association of Stockbridge, Mass., in making a gala day of their annual meeting is a method to be recommended. The meeting is a local holiday and is held in the open air in mid-summer when the town is full of summer visitors, and occurs on Laurel Hill, the purchase of which was the origin of the organization. There is a picnic dinner, a speech,

usually by some successful native of the place, remarks by others, pleasant social intercourse, and music and singing—a Village Festival in which rich and poor share, the result being, as Egleston has said, "a kindlier interest in one another, and a stronger attachment to the place where their lot has been cast."

Any Improvement Society that achieves these results need offer no excuse for its existence.

* * *

What has been an eyesore to the townspeople and others at Sterling, Mass., for the past 20 years—the old cider mill building, on the line of the New York, New Haven and Hartford railroad—was demolished by the people recently, after first procuring permission of the owners. The building was in a terribly dilapidated condition, and a regular fire-trap. The Village Improvement Society was the starter in the movement, and was the means of effecting a great benefit.

* * *

The Tennesseetown Village Improvement Society, Kansas, met with great success last year in a scheme of prizes offered the colored people for various improvements about the gardens and homes and in domestic matters. This year the scheme has been enlarged and the colored people are taking it up with great enthusiasm and the results will undoubtedly be still more encouraging.

* * *

The Progressive, of Lisbon, Me., is a practical improvement association. Through its instrumentality a clause was inserted in the town warrant asking that street lighting should be provided in the three contiguous towns, which will probably be undertaken. Its move for the immediate future is for street cleaning, and the beautifying of the streets, vacant lots, waste places and unsightly buildings. A committee will provide garbage cans for the streets, and will interest the children in the subject. Another committee has for its work the providing of shrubs for lawns, vines for piazzas and old buildings and fences, and other unsightly objects which cannot be done away with. Seeds will be distributed to those desiring them for the beautifying of otherwise bare spots of ground, and the club has discussed the feasibility of using a part of the funds in the treasury for the purchase of additional seeds.

Every continent except Australia, produces wild roses, and there is little doubt that the rose is one of the oldest flowers. In Egypt it is seen on many early monuments dating from 3,000 to 3,500 B. C. The essence of roses, is mentioned in the "Iliad." It is also familiarly mentioned in the Proverbs.

GARDEN PLANTS—THEIR GEOGRAPHY—XL.
PRIMULALES.

THE STATICE, PRIMULA, AND MYRSINE
ALLIANCE.

This alliance of 10 tribes, 57 genera, and 1,100 species, is but poorly represented in North American gardens, although the plants are common in the northern hemisphere, where they are mostly



ARDISIA CRENULATA.

herbs often growing at great altitudes. The subtropical and tropical tribes, however, are chiefly



STATICE SPICATA.

shrubs and small trees, a few species of which extend to temperate regions.

There are quite enough of pretty species to form a most interesting group in fertile cold temperate regions, and Ardisias and Myrsines hardy enough to yield the shade which many of the beautiful

herbs require before they will thrive in warm climates.

Acantholimon has 85 species described, a number which is probably capable of reduction. They are branchy evergreen spiny herbs, with spikes of pinkish flowers,—two or three of which are known in gardens. They are found in the oriental Mediterranean regions, and eastward to Thibet.

Statice, "sea lavender," is enumerated in 120 species. They are found in the seacoast regions in many parts of the world, and on the deserts of North Africa and parts of Asia. Two species and several varieties are found in the salt marshes of both coasts of North America. The handsome varieties of *S. macrophylla*, such as *Halfordii*, and others from the Canary Islands, do well in Southern California, and there is no lack of pretty perennial and annual kinds, such as *S. latifolia*, etc., adapted



PLUMBAGO ROSEA.

to the north. The flowers are white, changing to blue or purple, reddish, pink, and sometimes yellow.

Armeria, "thrift," has a great number of names to designate 6 or 8 species and their varieties. These are found on the seacoasts and mountains of Europe, South Africa, Northern and Western Asia, and North and South America. Very many varieties are referred to *A. maritima*, but I have never seen the form of that species as I remember it on British seacoasts, thriving in a garden. On the east coast tidal marshes it forms the most beautiful turf imaginable, so much so, that I remember a clergyman friend making repeated and heroic attempts to establish it as a lawn plant. His

laborers, I now believe, cut the turves without the roots, for although salt water was tried for watering he never succeeded with his lawn of "sea thrift." Several varieties of *A. elongata*, varying in color from white to purple, are in gardens, so also are varieties of *A. latifolia*; probably a dozen or more species and well marked varieties of varying height, color and hardihood could be gotten together, and they are well worth getting.

Limoniastrum, in 2 varieties, are sub-shrubby blue flowered plants from Sicily and other western Mediterranean points.

Plumbago has 12 species scattered over the warmer parts of the world. *P. scandens*, with white flowers, is found wild in South Florida. *P. capensis* and its whitish variety are hardy in parts of California and South Florida. *P. rosea* is East Indian, and has been in cultivation since 1777, but was lost for many years prior to (about) 1860, when the superior Neilgherry form was reintroduced by way of Ceylon. I never met with this plant wild, but imagine it is a woodland plant, growing at the lower elevations. Its requirements are quite tropical.

Ceratostigma is in 3 or 4 species from China, the Himalayas and Abyssinia. *C. plumbaginoides* is a beautiful blue flowered hardy perennial from China, often met with in gardens, and the better of a covering of leaves northward.

Hottonia "featherfoil," in 2 species of water weeds, constitute a tribe. They are found in streams and ponds in Europe, Eastern Siberia and Northeastern America.

Anagallis, "weather-glass," has 17 species in temperate and sub-tropical regions. The British "pimpernel," *A. arvensis*, is the plant of which it has been said: "Closed is the pink-eyed pimpernel, 'twill surely rain." There are several others of various colors.

James MacPherson.

(*To be continued.*)

THE MAGNOLIA LOTUS.

(*NELUMBUM ALBUM GRANDIFLORUM.*)

It is not the good fortune of everyone to possess a lovely magnolia and but few know it is possible to have a flower that is even larger, more fragrant, more graceful and of a richer color than one of our southern magnolias. But such is true of this noble aquatic. At a distance it very much resembles a huge magnolia the color being a clear pearly white, while the outside of the outer petals are softened with cream at their bases. The texture is fine and uniform as in *N. Roseum*. The stamens are long, numerous and prominent; color bright sulphur yellow. The seed pod is of the

same rich color, displaying well the beautiful waxy pistils. Both foliage and flowers are stronger and more bulky than that of Egyptian Lotus; the flowers open out wider, the petals are broader and more rounded. It is the largest of all the lotuses, often measuring ten to twelve inches across. The foliage of itself is very commanding, comes immediately into notice, and is as showy as *caladium esculentum*. This plant is very attractive and graceful aside from its gorgeous flowers, which are always to be seen, on good specimens. Its habit and culture afford a pleasant, interesting fascination from the



NELUMBUM ALBUM GRANDIFLORUM.

day of planting—a peculiarity unexplainable but rarely met in a flower.

Its blooming period extends from June to last of September in this latitude. It is one of the best for tubs and being for ages under rigid culture in China and Japan, submits freely to crowded tanks and ponds. It is hardy anywhere in the United States and Southern Canada.

The accompanying illustration shows a bud, a half open blossom, a flower four days old and a ripe seed pod, with one of the large leaves in the back ground.

I have cultivated every variety of water lily for a number of years and pronounce this one of the best.

Geo. B. Moulder.



FLORAL STEPS, CASCADE PARK, NEW CASTLE, PA.

FLORAL STEPS.

The illustration of what Mr. John S. Barker calls "Floral Steps," is that of a feature of the improvements made under his charge in Cascade Park, New Castle, Pa., and of which an illustrated article was given in a previous number.

It is a very suggestive method of overcoming a difficulty and one that met with much public favor. Owing to the conformation of the land a flight of steps was necessary to give easier access to the rising ground that led up to the pavilion, and to subdue the harshness of the stone steps in the scene, the idea was conceived of constructing the buttresses to contain and grow plants and flowers during the season, making them answer the double purpose of buttresses and flower vases.

They are so located that they are a feature of the views from a considerable distance. The end buttresses are 2 feet 6 inches wide, and the center one 5 feet wide. When in full growth they were very pretty and attracted much attention.

Mr. Barker describes a treatment of steep banks in the park, of which he had a few impossible to avoid. Sodding was out of the question. He says: I procured some 200 good plants of *Rosa Wichuriana*. I set them five feet apart, preparing large holes for each plant, and I did not lose more than six. They grew splendidly, many of them making shoots eight feet long, in the season, and if these shoots are pegged down in the open spaces on the bank they will root freely and make additional shoots, so that in two years they will cover the banks. For variety and for early spring flowering I used *Hepaticas*, *Violas*, *Houstonia*, *Saxifrages*, etc. In such locations it would be nearly useless to lay sods, even if you could. It is true grass is seldom out of place, but where the banks back up to the natural woodland, would it be in keeping quite so well, as to treat it in the way suggested."

These are practical suggestions for overcoming some of the difficulties that so frequently present themselves in the improvement of the landscape for park purposes.

FROM SWAMP TO WATER GARDEN.

The accompanying illustration is really a transformation scene. The spot was a swamp, which last spring was cleaned out and afterward planted for a water garden.

In the immediate foreground is a fine group of *Nymphæa Superba*, the large hardy white lily, pronounced the most hardy *nymphæa*, the flowers being nearly one-third larger than any other, while it is the most vigorous grower and free bloomer of all.

At the back of this is *Nymphæa Devoniensis*; the large circular leaves are *Eurale Ferox*, and on



FROM SWAMP TO WATER GARDEN.

either side is a group of Water Hyacinths. A few *Typhas*, *Eulalias*, *Saggetarias*, etc., may be seen around the edges. Altogether it is a pretty piece of landscape gardening. *Geo. B. Moulder.*

PARK NOTES.

The Common Councils committee on Parks of Detroit, Mich., has decided to recommend the appropriation of \$12,000 for new green houses for Belle Isle Park.

* * *

A bill has been introduced into the Wisconsin legislature authorizing the common councils of cities to establish park districts.

* * *

The authorities of Cedar Rapids, Ia., have begun work on the improvement of Bever park. Mr. John Thorpe was entrusted with the preparation of plans by the park committee.

* * *

The park board of Oshkosh, Wis., has voted to spend \$10,000 on North Park. This park is little more than wild property at present.

* * *

The city council of Indianapolis, Ind., has transferred all the park funds before held by the Board of Works to the new Park Board, amounting to \$100,000, with full power to distribute the funds.

* * *

The Richmond, Ind., city council has decided to convert Maple Grove cemetery into a public park, to form an entrance to Glen Miller. No burials have been permitted in the cemetery for the past ten years, and people are given until May 1 to remove the remains of what relatives and friends still lie there.

* * *

Worcester County, Mass., people believe they should have a park made out of Wachusett mountain, thinking they have as much right to an open space as the people of the "Metropolitan Park" district. The mountain would cost \$254,000, and the owners are desirous of selling.

* * *

A bill has been reported in the Massachusetts legislature to allow Boston to borrow \$500,000 for extending its public park system, the bonds to be outside of the debt limit. Also another bill to permit the Boston Park Commission to buy lands on the White estate on Chestnut Hill avenue for park purposes at not over \$120,000.

* * *

The Woman's Civic League of Cincinnati, O., has succeeded in securing from the Board of City Affairs the Pearl Street Market place, between Elm and Plum streets, for a children's playground. The space set apart is 53 feet by 350 feet, and it is placed under the control of the Park department. Gymnastic apparatus, sand piles, etc., will be supplied by the league.

* * *

The Memorial tree association of Indianapolis, Ind., has offered to plant 300 trees at Riverside Park in the near future. The association has decided to mark the trees in honor of friends of the association and noted persons. The ten-acre tract in which these trees will be planted is to be known as Memorial Park.

* * *

The Scottish diversion of Golf, which has been making such inroads upon the activities of our leisurely citizens, has invaded the South Park Board of Chicago, and public links will in all probability be a feature of the recreation department of that park. The board may even appoint a professional guide and instructor.

* * *

The action of the mayor of New Orleans in signing an ordinance passed by the common council, cutting off a piece of Audubon Park for the benefit of some of the neighboring property owners, has raised the question in that city as to whether aldermanic councils have the power so to interfere with park properties after they have been dedicated to park uses for the people. It seems ridiculous to think it possible.

* * *

A movement is on foot to create a national park at Santiago, Cuba, to take in the territory of San Juan hill and El Caney. It is, however, very early to consider such a project, or at least it might be well to await the time when something definite may be known as to Cuba. In the meantime, care should be taken to preserve the points of interest as far as possible as the battles left them, to add to their future interest.

* * *

Since 1885 Pittsburg, Pa., has acquired by purchase, gift and investment \$5,204,500 worth of substantial property, including lands, buildings and parks. These are among the most attractive acquisitions of the city in recent years. Those which can be classed as new are valued by the municipal officers at about \$4,000,000. Included in this estimate are the 400 acres of Schenley Park with its improvements, Phipps conservatory, and the propagating houses; Highland Park, 290 acres, and Friendship Park.

* * *

Governor Scofield of Wisconsin signed the inter state park bill March 30. It provides for a commission to acquire over 600 acres of land at the Dalles of the St. Croix, lying on the river for some two miles opposite the Minnesota Park. It appropriates the money to pay for them and gives the governor of Wisconsin the authority to co-operate with Minnesota in perfecting Interstate Park plans and improvements. The secretary of state has had some handsome full-page half tone engravings made of the Interstate Park of the Dalles of the St. Croix to be inserted in the thirty thousand blue books to be printed.

* * *

Bishop Potter, of New York City, has two plans which he hopes to carry out in connection with the new Cathedral of St. John the Divine, for the benefit of the poorer classes of the tenement district. He plans to surround the cathedral with a public park and to provide free transportation to and from the cathedral and the tenement districts Sundays, beginning next summer. For the park it is proposed to plot it with playgrounds and lawns and walks, with shrubbery and flowers and benches and other devices for recreation and rest. This beauty spot on Morningside Heights will be given over to the public under certain restrictions.

* * *

Crandall Park, Glen's Falls, N. Y., is to be adorned with a column monument 51 feet high, to be surmounted by a bronze star 5 feet from point to point. It is of Woodbury, Vt., granite, and will have cost when erected \$7,000. Crandall Park lies on the northern limits of the village and is crossed by the Halfway brook, which Mr. Crandall has dammed. In the pond thus made he has built several artificial islands, giving picturesque effects. Trees have been set out and thousands of dollars have been spent in beautifying the park. North of the pond are about fifty acres of meadow land, upon which Mr. Crandall is planning to set out trees and construct drives and walks during the coming summer. It is surmised that it is his intention to give the whole property, after he has had it laid out as he wishes it, to the village for a public park, although he refuses to either confirm or deny the report.

CEMETERY NOTES.

A bill to prevent locating cemeteries within ten miles of cities has been passed by the Tennessee legislature.

* * *

The perpetual care fund of Mt. Hope cemetery, Rochester, N. Y., now amounts to \$26,871.58.

* * *

The Connecticut Senate has concurred in a resolution authorizing the Collinsville Cemetery Association to set aside a permanent fund for the care of the cemetery.

* * *

The perpetual care fund of the Pittsfield Cemetery Association, Pittsfield, Mass., now amounts to \$23,839. The total number of interments in the cemetery, January 1, 1899, was 6253.

* * *

Under the care of Mr. B. D. Judson, superintendent of St. Agnes cemetery, extensive improvements are being carried out in St. Mary's cemetery, Albany, N. Y.

* * *

Assistant Corporation Council O'Connor of Detroit, Mich., recently sent to the board of assessors his opinion that the land, tombs and vaults of cemeteries are exempt from taxation, but that the stock of a cemetery corporation may be assessed.

* * *

The Michigan House of Representatives recently passed the following: "Authorizing the issue of the scrip of rural cemetery associations in \$10 shares and giving the holders of that much scrip one vote, right to vote being now limited to holders of \$100 worth.

* * *

The greenhouse plant at Forest Hills Cemetery, Boston Mass., received large additions during the past year according to the annual report, three new greenhouses and eight cold frames were constructed at a cost of \$16,484.94. The fund for the care of the cemetery now amounts to \$46,454 18.

* * *

Meetings have been called all over Hunt County, Texas, to interest and obtain the help of the people in the work necessary in the cemeteries at this time of year. An exchange says: "This is a custom here and is a good one as it serves to keep the country graveyards in good and clean condition."

* * *

A great stride in advance is that of the authorities of St. John's Catholic Cemetery Association, Clinton, Mass., who have decided that there shall be no stone bounds or curbing set in the new cemetery. The plan is to put in iron stakes to mark the boundaries of the lots. The idea of doing away with stone bounds is that the beauty of the cemetery may be increased.

* * *

The Pine View Cemetery Association, Glen's Falls, N. Y., has been incorporated, and the purchase of a tract of land of 111 acres has been consummated. It is proposed to commence the erection of a Barre granite receiving vault at once, and carry out improvements this year to the amount of \$40,000. The lawn plan and perpetual care are leading principles of the management.

* * *

The legislature of California has passed an act authorizing

cities and towns of less than the first class to purchase or receive by donation or will, and dispose of, all and any necessary property for cemetery purposes. The Act gives authority to the Board of Trustees, or other governing body, of said municipalities, to make all necessary rules and regulations concerning such cemetery property. To take effect immediately.

* * *

Col. W. H. Knauss, Columbus, O., is carrying out a unique idea in connection with the improvement of Camp Chase cemetery just west of the city, in which some 2200 confederate dead are buried. He is receiving consignments of trees indigenous to the original confederate states, but which will withstand the rigorous climate of the more northern latitude. When he has heard from all the states interested the trees will be planted in the cemetery with appropriate ceremonies.

* * *

Mr. William Salway, superintendent of Spring Grove cemetery, Cincinnati, O., has taken steps to stock that cemetery with wild birds, such as wood ducks, wild geese and pheasants. His aim is to make the burying grounds less artificial in appearance. The wood ducks introduced there have already begun to nest. The grounds at present are well stocked with swans and ducks. The crows and blackbirds, which swarm the country woods by the thousands, also make the cemetery their home.

* * *

In the annual report of the treasurer of the Island cemetery Newport, R. I., the total receipts for the year including a balance of \$5,129.06 of March, 1898, amounted to \$14,046.50. The total amount received for sale of lots was \$3,897, one half of which is credited to fund for improvement and preservation of cemetery. There was also received for labor and material \$5,641. In the expenditures were \$1,550 for salaries and \$5,456 for labor and incidentals, and a balance of \$6,982.33 was carried over.

* * *

Mt. Evergreen cemetery, Jackson, Mich., is to have a new memorial speaker's stand under the auspices of the G. A. R. In the small cemeteries where the Memorial day exercises are the important annual feature, the speaker's stand should be made to answer the purposes of a shelter house, and be constructed of permanent materials and of appropriate style, and should be maintained in perfect condition. When possible, its location should be such as not to cause damage to private burial lots, as is too often the result of Memorial Day gatherings.

* * *

A finely carved stone tablet has been placed on the exterior of the new mortuary chapel at the entrance of Mt. Auburn cemetery, Cambridge, Mass., from a design by Willard T. Sears, the architect of the building. At the top of the tablet is a bronze sun-dial, and occupying the large space below are these lines from Whittier:

"With warning hand I mark time's rapid flight
From life's glad morning to its solemn night;
Yet, through the dear God's love, I also show
There's light above me by the shade below."

The tablet is made from tinted Indiana limestone, and clusters of ivy leaves are tastefully engraved around the lines and sun-dial.

* * *

At the 57th annual meeting of Oak Hill cemetery, Newburyport, Mass., held March 24th, the report of Supt. John M. Bailey showed that \$5,598.50 had been received from the sale of lots during the year, 83 interments made and 15 granite monuments, and 33 granite and marble monuments were erected. Twelve iron fences and 170 feet of hedges were removed. Since the opening of the grounds in 1842, there have been 1014 lots sold and 3761 interments made.

SELECTED NOTES AND EXTRACTS.

A Selection of Summer Flowering Shrubs.

When one is suddenly called upon to furnish shrubs that will give bloom in Summer and Fall, he is likely to find his supply at command rather short. Spring flowers are abundant, and it only remains to get a good succession of bloom from early to late.

The following will be found an admirable list of blooming shrubs coming in early Summer and continuing until late Fall in the order named: Syringa ligustrina, Rosa carolina, R. multiflora, R. setigera, R. rugosa. Rubus odoratus, Spiræa Billardi, spiræa var. A. Waterer, S. Regeliana, S. rotundifolia, Andromeda Mariana, Ceanothus Americanus, Styrax japonica, yucca, Cassia Marylandica, Itea Virginica, Lonicera Ruprechtiana, Cephalanthus occidentalis, hypericum, Potentilla fruticosa, Spiræa tomentosa, Clethra alnifolia, Hibiscus syriacus, Vitex agnus-castus, hydrangea p.g., Caryopteris mastacanthus, Baccharis halimifolia, Desmodium penduliflorum, D. japonicum, Callicarpa purpurea, Hamamelis Virginiana.

Callicarpa, from its appearance at the end of the list, naturally gives a wrong impression, as it blooms early. The flowers, a light purple, are by no means valuable as the berries are, with which the stems are clad in the Fall, making a most ornamental effect. These berry plants, however, are worthy of more distinct attention, as many are extremely valuable.

The Desmodiums and Cassias are herbaceous perennials, though universally classed among shrubs, because of the nature of their growth. Hypericum Moserianum might also come under the same category, as in most severe Winters it kills back to the ground. This is a most charming little plant, suitable for the edge of beds, blooming occasionally all summer. H. calycinum is even better, in some respects, being almost evergreen through hard winters.

Another shrub, especially desirable on account of its extensive blooming period, is Rosa rugosa. But with its single and double white varieties it is so well known, further praises are scarcely necessary.

It is pleasing to see Rosa setigera coming into more general use as a shrub, for it ranks with the most desirable. Though strictly a running rose, like some other vines, if it has nothing to run on it will remain in bush form. When clothed in a mass of flowers, it is a delightful sight.

While on the subject of roses, the Japanese polyantha multiflora should come in for deserving praise. Planters are liable to overlook the merits of these single roses.

Baccharis halimifolia is a remarkably showy plant, smothered in white in the Fall, and it is particularly to be remembered as one adapted to salt air and soil.

The blue caryopteris or verbena shrub has established a reputation in a short space of time, and needs no further introduction. A white variety will this year be brought into prominence. It is said to bloom a trifle earlier.—S. Mendelson Meehan in the *Florists Exchange*.

* * *

Covering Wounds in Trees.—Street Trees and Patent Pavements.

Mr. Peter Van Vechten, Milwaukee, Wis., agrees with *Meehans' Monthly*, that the wounds, made in the stems of trees by pruning or otherwise, should have the wood preserved to keep it from decay till the new bark and wood extends over it, but he thinks gum shellac dissolved in alcohol far better than paint. He advises to put the shellac into a wide mouthed bottle, cover it with alcohol, and let it stand twenty-four hours, when it may be applied with a swab or brush. It serves, as nearly as may be, as the substance of bark; is not affected by heat or cold or wet or dry weather; and retains the sap up to the cut, healing the wound without a scar. Any limbs cut off square on top will leave a dead end from six inches to a foot, which will eventually die and rot off. Limbs should be cut off slanting—never square on top—as is often done.

* * *

It is to be expected that everyone in planting trees will exercise the usual care to see that drainage conditions are satisfactory; but when the street pavement and sidewalk are asphaltum or other patent material, unusual care is necessary to have not only good underdrainage but also good conditions above for the encouragement of moisture.

A hole one foot in diameter is insufficient if cut directly through the pavement, as both air and water must pass through for support of the tree. Two feet width is better, and six inches more will be acceptable; and if the surface be depressed towards the tree, to attract rain water, so much the better. Add a top mulch of hay or strawy manure, and the condition will be improved. A layer of well-rotted manure placed just above but not next to

the roots will hold moisture, at the same time giving food to the roots. Brick pavements are not as objectionable to trees, as there are many openings to admit the elements needed.—*Meehans' Monthly*.

* * *

Azaleas.

I am hoping, as the azalea season draws round again, that the people who buy handsome azaleas in full flower at market, or at a florists, will sometime learn to keep them in cooler rooms, so that their beauty may last longer. An azalea ought to be beautiful for a month or more, and to bloom finely for several, perhaps a dozen years, if its owner treats it right between blooming seasons. We bed ours out in summer, under a lath screen, along with tuberous begonias and other plants of that sort. The plants are not taken from their pots; the latter are merely plunged.—*Vicks Magazine* for March.

* * *

Plants for Ornamental Bed.

Taking it for granted that the bed is in a sunny situation, since no one would be likely to plant twenty flower beds in the shade, let me suggest a plant of either Banana Cavendishii, or Ricinus Zanzibarensis for the center. Surround this center plant with six plants of Aralia Sieboldii, or else, if flowers are preferred to foliage, with six plants of the Cactus Dahlia Cochineal. Surround these with twelve plants of Caladium esculentum, outside of these place twenty-four plants of the Scarlet Sage, Salvia splendens; next to these use twenty-five plants of salvia Bonfire, which is of lower growth. For the outside use either a compact white border of Candytuft, Empress, or Little Gem Sweet Alyssum; or else a red border of the dwarf Nasturtiums Brilliant, Coccineum, and Sclaret King.

If expense is an object, a more economical, but less tropical bed can be made by using yellow flowers, many of which grow readily from seed, while the others are such as can be kept from year to year. For the center of this "Yellow Bed" buy a large plant Rudbeckias Golden Glow, surround this by six plants of the double yellow Dahlia, Oriole, or the more expensive Cactus Dahlia Cilford W. Bruton. Surround these with plants of Coreopsis lanceolata, which is a hardy perennial, or with the annual Calliopis, Golden Wave, which may be grown from seed. For the border, use a wide band of the double French Marigolds, or the new dwarf Yellow Zinnia Goldbug, which, though small, is a very gay blossom indeed. Of course, whatever is used, an early start is desirable, though the Banana, and the other tender plants should not go out of doors until all danger from frost is over.—C. W. Rankin, in *American Gardening*.

Park and Cemetery.

ESTABLISHED 1890.

An Illustrated Monthly Journal.

Devoted to the advancement of Art-out of Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

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Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

Association of American Cemetery Superintendents.

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Minneapolis, Minn., President.
WM. STONE, "Pine Grove,"
Lynn, Mass., Vice-President.
F. EURICH, Woodward Lawn, Detroit, Mich.
Secretary and Treasurer.

The Thirteenth Annual Convention will be held at New Haven, Conn.

The American Park and Out-Door Art Association.

CHARLES M. LORING, Minneapolis, Minn.
President.
WARREN H. MANNING, Tremont Building,
Boston, Mass. Secretary.
E. B. HASKELL, Boston, Treasurer.

The next meeting of the Association will be held at Detroit, Mich.

Personal.

A contract to prepare plans and specifications for new cemetery grounds at Vincennes, Ind., has been awarded to Mr. O. C. Simonds of Chicago.

Mr. Warren H. Manning, landscape architect of Boston, Mass., has been engaged to prepare designs for Lyndale park, Minneapolis, Minn., which has remained unimproved ever since William S. King presented this beautiful bit of ground to that city. The park commissioners think it advisable to have a completed scheme prepared, so that all the work done on the park may be to some purpose. Mr. Manning is also to lay out plans for improving beautiful Interlachen, to determine the sites for the bridge at Interlachen and the pavilion at Minnehaha, as well as to draft designs for them.

Mr. William Stone has been unanimously re-elected superintendent of Pine Grove cemetery, Lynn, Mass.

Mr. John E. E. Goward, for eleven years past, superintendent and assistant superintendent of Mt. Hope Cemetery, Boston, Mass., died at his home in Mattapan, March 29. He was born in Dorchester, 60 years ago, of revolutionary stock. He was a veteran of the Civil War, and a man of considerable prominence, several times a candidate for the legislature.

Mr. S. S. Watson has been elected superintendent of cemeteries of Dexter, Me.

Friends of Mr. Geo. E. Rhedemeyer, superintendent Harleigh Cemetery, Camden, N. J., will be sorry to hear of the loss he has sustained in the death of his little son Rodney Elbert, who died March 28, 1899, aged 2 years and five months. The funeral was held at the residence and the little fellow was laid away in Harleigh.

Mayor Jones of Kansas City, Mo., has appointed Mr. William Barton to succeed the late S. B. Armour on the board of park and boulevard commissioners. Mr. Barton is president of the Commercial Club and an aggressive public spirited citizen by all accounts.

Mr. F. A. Sherman, superintendent of Evergreen cemetery, New Haven, Conn., chairman of the executive committee of the Association of American Cemetery Superintendents, for convention of 1899, to be held in New Haven, will be pleased to receive suggestions of topics for discussion at the convention.

At a meeting of the Grand Rapids, Mich., Florists' Club, a paper was read on the "Best Method of Heating Greenhouses," and as a result of the paper and discussion the conclusion was quite generally reached that the best returns were realized by using hot water under pressure.

BOOKS, REPORTS, ETC., RECEIVED.

LANDSCAPE GARDENING, as applied to Home Decoration. By Samuel T. Maynard, Professor of Botany and Horticulture at the Massachusetts Agricultural College, etc, etc. 165 figures, including many full page half tones. 12 mo. cloth, \$1.50, New York; John Wiley & Sons, 1899.

To enable the readers to obtain such knowledge as will help them to properly care for the ornamental trees, shrubs or plants that they may procure, and to so group and combine them with the lawn, the dwelling and other buildings, and with the surrounding conditions as to make not only a beautiful home picture, but also to harmonize with any beautiful homes or estates adjoining or near by, that the beauty may be as widespread as possible, is the effort attempted in Prof. Maynard's book. There is as he truly says the great need of education on this important and growing feature of our national life, and that education is wanted not in the language of the schools, for that is too technical for general understanding, but while absolutely correct, it must be put into the every day language of our busy people to create as the catalogues

say immediate effects. There is a demand for it, and we think such books, written in an instructive and interesting manner and withal on correct practical principles, will make the decoration and care of home grounds sooner or later as much a part of residential life as the interior of the house.

Annual report of the Smithsonian Institution, 1897, Washington City, 1898. This is the annual report of the Board of Regents of the Smithsonian Institution showing the operations, expenditures and condition of the Institution to July 1897. Besides the proceedings of the Board of Regents, the report of the Executive Committee and the annual report of the secretary, the general appendix comprises a selection of miscellaneous memoirs of interest to collaborators and correspondents of the Institution, teachers and others engaged in the promotion of knowledge. Among these is a paper by Prof. Trelease of St. Louis, on Botanical Opportunities, and there are several of very great general interest. That on the new Library of Congress building belongs to the latter class of subjects.

Fourth annual report of the Board of Public Works, and the eleventh annual report as Water Commissioners of the City of Little Falls, N. Y., 1898. The custody and management of the cemeteries, parks and public grounds of the town are now by the charter vested in the Board of Public Works.

Sixth annual report of the Board of Park Commissioners of the city of Cleveland, 1898. This report is par excellence one of the handsomest, from the point of illustrations, that has come to hand. It is profusely illustrated, and with many half tone panoramic views, and it emphasizes the fact that such park literature has a strong influence on the public thought in relation to parks. It familiarizes the salient features and cements interests in park development.

Fourth annual report of the Cemetery Board of New Bedford, Mass., for the year 1898. The Cemetery Commissioners are to be highly commended for the attractive manner in which this report has been produced. In its letter press and illustrations it is a lesson in cemetery literature, and it contains features in the way of object lessons which cannot fail to create a favorable impression. It contains a reproduction of the four plates published in PARK AND CEMETERY some time ago, showing the old and new in cemetery practice which has been a valuable regenerative agency.

Sixteenth annual report, Board of Park Commissions, City of Minneapolis, Minn., for 1898. This report is a worthy production of a most enlightened board, whose work has been remarkably successful in park development. Its text is full of suggestiveness and may be read with profit by all interested in park matters. It is profusely illustrated with half tones not previously used in former reports.

The Cottage Builder. We have received a copy of this monthly which is devoted to house and home building and their improvement, and the issue to hand that of March, has a number of house designs and plans, together with reading matter appropriate to the aim of the journal. It is published monthly in St. Louis, Mo.

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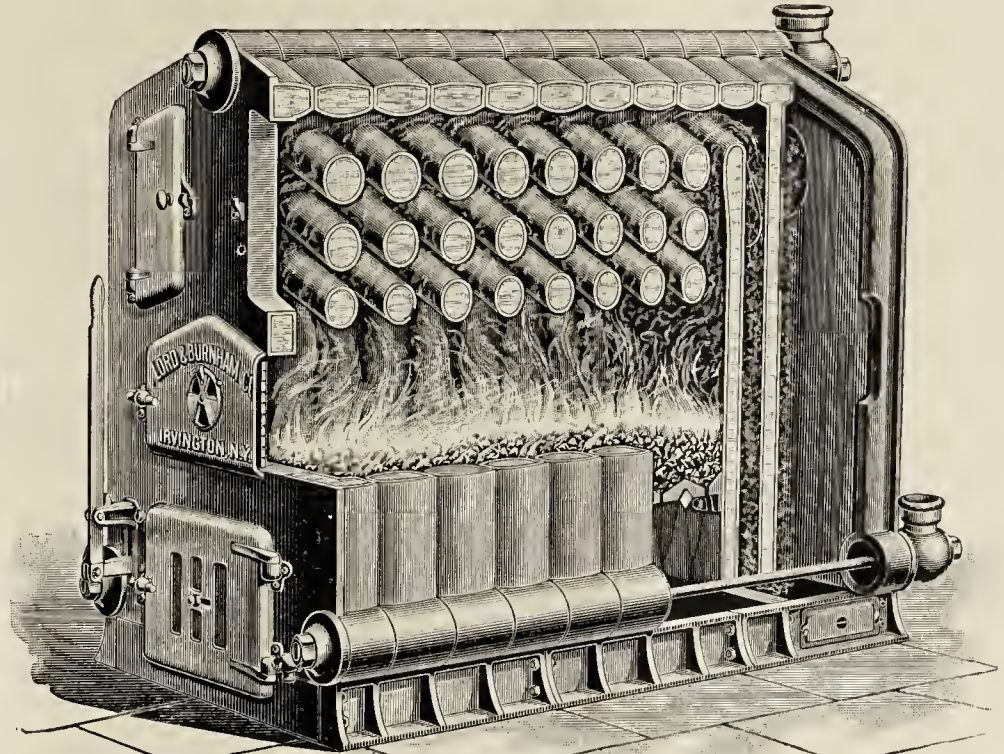


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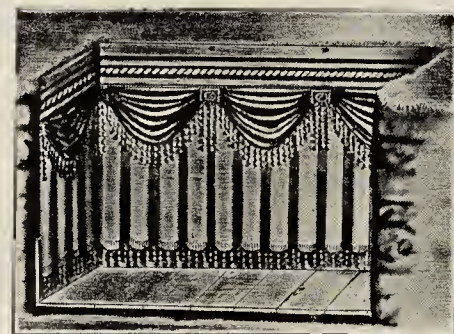
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PARK AND CEMETERY.

** A Monthly Journal of Landscape Gardening and Kindred Arts. **

VOL. IX. Chicago, May, 1899. NO. 3.

CONTENTS.

EDITORIAL—Photographic Competition—The Care of Confederate Graves by the Government—Small Parks and Play Grounds—Memorial Day—The Effect of Last Winter on Plant Life—Planting Memorial Trees—The Observance of Arbor Day.....	51, 52
*Hollies.....	53
Care of Newly-Planted Trees.....	54
*Improvements in Glenwood Cemetery, Oneida, N. Y....	55
*Horticultural Hall, Audubon Park, New Orleans, La....	56
Provincialism in Parks.....	57
*Pinehurst Suburban Park.....	58
Rural School Grounds.....	58
*Victoria Regia.....	59
Improvement Associations.....	60
Shade Trees.....	61
The Treatment of the Roadside—The Cremation Question	63
*Garden Plants—Their Geography, XLI.....	64
Park Notes.....	66
Cemetery Notes.....	67
Cleaning Asphalt Streets.....	68
Selected Notes and Extracts.....	69
Reviews of Books, Reports, etc.....	70

**Illustrated.*

THE habit of photography, for so it may be said to have become, so universal is its use, has prompted PARK AND CEMETERY to invite photographic competition on the lines of its special work. Particulars of the scheme will be seen among its advertising pages, and readers using the camera, or others sufficiently interested, are cordially pressed to contribute to a successful issue of the effort. Landscape work, planting and beautifying the home surroundings, wherever it may be, are being so rapidly encouraged by the intelligence of the present age, that such a competition under the conditions suggested and required will help the cause to a very appreciable degree.

IT is to be regretted that the women of the local chapter of the Daughters of the Confederacy at Savannah, Ga., should have passed such a resolution in regard to federal care of confederate graves, as that recorded in another column. The president's practical and christian-like proposition deserved more consideration at their hands. And from the prevailing conditions of the cemeteries of the south his proposition should have met with a

cordial reception as being a means of inaugurating a movement to remove the stigma of neglected graveyards which reflects upon all communities where such neglect is common, in whatever section they may be located. As the southern women state the case it is a sacred trust they have been fulfilling, a glorious aftermath of the devotion so bravely sustained through those terrible years, yet with it all, it loses its force in the fact that the once enemy offers to relieve them of the trust, and treat those beloved dead as sacredly as it does its own. In a word the people desire to pay homage to its departed heroes,—gray and blue alike. The Georgia Society is not in touch with the spirit of the times and we do not believe is truly representative of the prevailing southern sentiment.

SMALL parks and playgrounds for the children in the crowded portions of our cities, is once more the slogan of the school teacher and social settlement leader. And there is no more beneficent idea being advocated at the present time. Students of social economics already recognize that beautiful park tracts alone do not fill all the requirements of large communities for recreation and inspiration. They are in the highest sense beneficial to those within easy distance, or to those whose means and convenience permit of their frequent use of these larger parks. But these fine park areas are of necessity far removed as a rule from the tenement dweller and the slums, for whom primarily the idea of the large park took shape, hence the necessity of completing the park system of our larger cities by the institution of small parks and playgrounds for the crowded districts. No park system can be considered complete until it fulfills the true purpose of its existence. That there is necessity for such extensions of the park system is proven by the results of private effort in these directions. Many school teachers and others of refined benevolence have undertaken to rent and fit up small areas in their school localities as playgrounds with great results. But such reforms really belong to civic intelligence and not to private effort, and happy will be the day for our great country and its people when such reforms emanate from their representatives instead of being forced upon such representatives by the active intervention of their constituents.

THE fact of Memorial Day being with us once more calls to mind the exceptionally long and trying winter, and the comparatively short spring that has been allowed most of our cemetery superintendents in which to get their spring clearing up done and to prepare for the occasion. There is some compensation in the thought, however, that the debris and disturbance of the monument man will be progressively less in number as the years roll along, although in individual instances of greater proportions. The lawn plan has effectually reduced the number of monuments, annually to be erected in our larger cemeteries, but on the other hand it has tended to improve their proportions and importance. It has also made cemetery work less irksome in its details, and a more delightful study for those in active control. Then again the beauty of the modern cemetery has a genuinely inspiring effect upon the visitor—inspiring to the extent at least that it promotes respect for the quiet beauty of the place, and leads the thoughtless, careless, visitor to instinctively exercise his best efforts to avoid transgressing the rules or doing damage. It is probable that while greater throngs may visit our cemeteries on Memorial Day, there will be less damage done year by year, and less work left to be done by the superintendent after the anniversary has passed.

SUGGESTIONS offered by certain of our correspondents on the desirability of our cemetery and park superintendents making comprehensive notes of the damage done on their grounds by the almost unprecedented winter through which we have passed, deserves particular attention, and should not fail to be duly carried out. The importance of the matter is emphasized by the fact that the government experiment stations have been engaged in a system of correspondence to obtain such information on the lines covered by their several operations. Its importance is of far broader interest than at first sight may appear. While it may be tolerably certain that the trees, shrubs and plants of local origin and use have come through all right, the effects of such severe gradations of temperature will vary on all planting material brought for any purpose from outside territory, and a knowledge of their constitution and adaptability of some of the much prized ornamental plants and shrubbery in relation to their permanent use will be invaluable. Our readers are earnestly urged to compile such information as may be of value concerning the effect of the past winter upon plant life under their observation, and transmit it to PARK AND CEMETERY, for dissemination in the interest of others.

IN planting Memorial Trees there is one essential feature that must not be overlooked temporarily, and must receive the necessary attention in due course to secure permanence,—it is properly marking the memorial tree. It is noted in many reports from Arbor Day exercises that this is frequently neglected, and in some instances investigation has been necessary to properly identify the trees planted on similar previous occasions. It is needless to say that this unfortunate oversight detracts from both the occasion and its object, for certainly the intentionally impressive exercises attending the planting of a memorial tree absolutely requires a proper and permanent plan of identification to stamp this act for record. Now it must be taken for granted that this important feature is a necessity, and really should form part of the ceremonies. A label and proper entry of its location on the records will establish its identity of course, but some permanent record should be either attached to the tree or solidly set near by that the educational influence may be imbibed by the visitor and passerby, and the historical interest kept alive for the present generation as well as for those to come after.

IT is well worth while to think over the remarkable progress which distinguishes any well directed effort for the public good, when such effort is intelligently put before the people. No country in the world offers such encouragement as this to the man who may have a good practical idea likely to help his fellow man. And no country in the world to-day offers a broader field for the exploitation of practical means and knowledge looking to the advance of civilization in its higher phases. This happy thought is suggested by the flood of paragraphs appearing in the public press regarding the observance of Arbor Day. The progress in this beneficent idea is truly marvellous, and it is, moreover, rooting deeply into the life of the people, in that it is being grafted upon the routine of our public schools, which means evidently that the knowledge involved will be part of the education of the next generation of working citizens. It was following the directing finger of wisdom to work towards the engrafting of the inspiring and civilizing ideas connected with the principles centered in the practical observance of Arbor Day, upon the minds and hearts of the young. The soil was already ready for the planting, fresh from the annual trips to meadow and woodland after the wildflowers of spring, and ready to receive the seed of permanent love of tree and plant and of knowledge of how to combine them to make our natural surroundings keep march with progress in other directions.

HOLLIES.

All lovers of the holly must have noticed how rare it is to find it in cultivated collections. Neither the English nor our native one, *opaca*, is to be seen, or but in recent plantings. This is no doubt mainly due to the fact that hollies of some size are difficult to transplant. They are not so difficult to those who know how to treat them, but to the average planter who sets them in the ground as received from their former position, as he does other things, disappointment is pretty sure to come.

Of late many nurseries have made a feature of growing small hollies, partly from transplanted seedlings from the woods and partly from seeds of their own sowing, and these nursery raised hollies are now possessed by many owners of large grounds, so that in the future hollies will be much more of a feature in plantings than what they have been.

There is one thing which the planter of hollies must understand, which is, that every holly does not bear berries. This is often a serious disappointment to those who possess a tree and find it never gives them berries. Hollies belong to a class which contains plants which do not all produce perfect flowers. Some have male flowers alone, and only certain ones are fruit bearing. Perhaps in a hundred seedlings the half will be fruit bearing. It would be advisable to set out a half dozen of small transplanted seedlings, to insure some berry-bearing ones among them, which this should do. This is the case with all descriptions of hollies, whether native or foreign.

It should be said here that a great deal of the success in planting hollies depends on proper pruning. This consists in cutting off every bit of foliage and cutting away the branches unmercifully. Treated in this way, quite large specimens may be removed. Especially is it necessary to remove the foliage. And let me say here that this is true of all broad leaved evergreens. Take the leaves off and they can be transplanted as safely as the ordinary deciduous tree.

Our native holly is the *Ilex opaca*. Perhaps the next best known one is the European, *Ilex aquifolium*. This is rarely seen here, but is well-known to all who have lived or traveled abroad. Why it is not more planted here it is impossible to say, unless it is that it is supposed to be not hardy. There are a good many about Washington, D. C., and some fair sized ones are to be seen about Philadelphia, and the probabilities are that where sheltered they would do still further North. It is likely

that those who wished to try these could get grafted ones of berry-bearing sorts, as the Europeans pay more attention to these matters than we do. It is just as easy for them to do this as it is to propagate the golden leaved and other pretty varieties, which they do. And this leads me to say that contrary to what is usually the case, these golden leaved sorts are said to be hardier even than the green leaved ones. Some of the spineless leaved hollies are most beautiful sorts.

Lately a perfectly hardy holly has been disseminated here to some extent, the Japanese one, *Ilex crenata*, though the lovely specimen in the present illustration has been growing in its present position in Fairmount Park, Philadelphia, for nearly 25 years. It is the bushy specimen in the front and centre of the picture. It is a true evergreen, with pretty, small, spineless leaves and is as hardy



JAPANESE HOLLY, FAIRMOUNT PARK, PHILADELPHIA.

as can be. It is about 9 feet high, and most as many in width, and it is a great attraction on account of its variety. It is not believed that another nearly as large is to be found in the country. Nurseries have been offering it of late in moderate lots, but no one has much of it to offer. This specimen so far has failed to produce any berries. Most likely it is a male tree.

The pretty tree on the right of the picture is the European beech, *Fagus sylvatica*, one of the very best of park trees and one that shapens up nicely of its own accord.

The large tree on the left is the white hickory, *Carya tomentosa*, perhaps the best of all the species for noble foliage, and most country boys know its nuts are not to be despised. This tree is one of many Mr. Miller had well pruned a few years ago, with most beneficial results. It is now well clothed with foliage from bottom to top. Up its trunk English ivy is growing freely. The low shrub with spreading head growing under its branches is a *Wistaria*,

grown in shrub shape. It flowers freely every year, and is much admired when in this shape. A small plant has its leading shoot tied to a stake for a year or two until it sustains itself, when the shrub is formed or sometimes a small tree.

* * *

Care of Newly Planted Trees.

It is certain that many newly planted trees are lost for want of a little care after being properly planted. The mulching of them before hot weather sets in is one of the best things that can be done for them. Mulching consists of placing about the base of the trees some material, such as short grass or long manure, to the depth of a few inches. This covering keeps the soil beneath it moist and cool, and this is something the tree much appreciates. Probably one-half of the trees which linger along and die in summer would live were they mulched.

It is the practice of many persons to mulch established trees for a few years after planting, to aid them, but after roots have been made afresh and the tree is growing well, it is not at all important that it be done. Beds of shrubbery, roses and ornamental grasses grow much better if mulched, but the mulch need not be continued after the hot months of summer are over.

Pruning of freshly set trees is sometimes neglected at the time of planting, and it is often not too late to do it in summer. Birch and other trees will often push out down the shoots, bearing part of the top almost lifeless. Prune away all such half dead wood. Trees which have not pushed at all should be considerably shortened, to give them a chance to sustain what is left. But let me advise that if a tree pushes out a stray leaf here and there that these leaves be not cut away. Always try to preserve such few leaves. The tree that makes them is weak and if the twigs bearing them are cut away, no more will be formed, and it will die. But preserve the leaves, though but one on a limb, until the close of the season, and it will live, and the next season it will leaf out all right.

Tulip Poplars and Magnolias, after attaining a fair size, are known to be difficult to transplant. It is useless to attempt to transplant them at any other time than spring. Even then they are not sure to grow. On the other hand they are hard to kill outright; invariably they try to push from the base. If this effort be encouraged by cutting down to the ground those appearing doubtful of growing further up, in nearly all cases a shoot or shoots will form which will make a tree in time. When the evergreen Magnolia, grandiflora, is transplanted and the leaves are not stripped off, it rarely lives.

When they are stripped, they have about the

same chance as ordinary kinds, and what has been said of them applies to these as well.

The best of planters will occasionally fail to pound or tramp in the soil firm enough that the tree does not sway about. Anything of this kind being perceived the tree must be set straight and the soil pounded in tight. A tree that sways about cannot grow. As it is driven about by the wind, its fibres are torn off, and progress is stopped.

Among evergreens pines are known as particularly hard customers to transplant. Arbor-vitæ, Japanese cedars, spruces and like trees can be moved with tolerable safety, but the line is drawn at pines. There are two reasons for this, these trees make but few fibres, nothing but a few forked roots, and then the foliage is out of all proportion to the roots. And in such sorts as the Austrian and Scotch the tops are so heavy that there is often no way to keep them erect, except by staking them in some way. Large evergreens may oftentimes be pruned to good advantage after transplanting, but in doing this do not cut below the live foliage, as they rarely break fresh shoots from old wood.

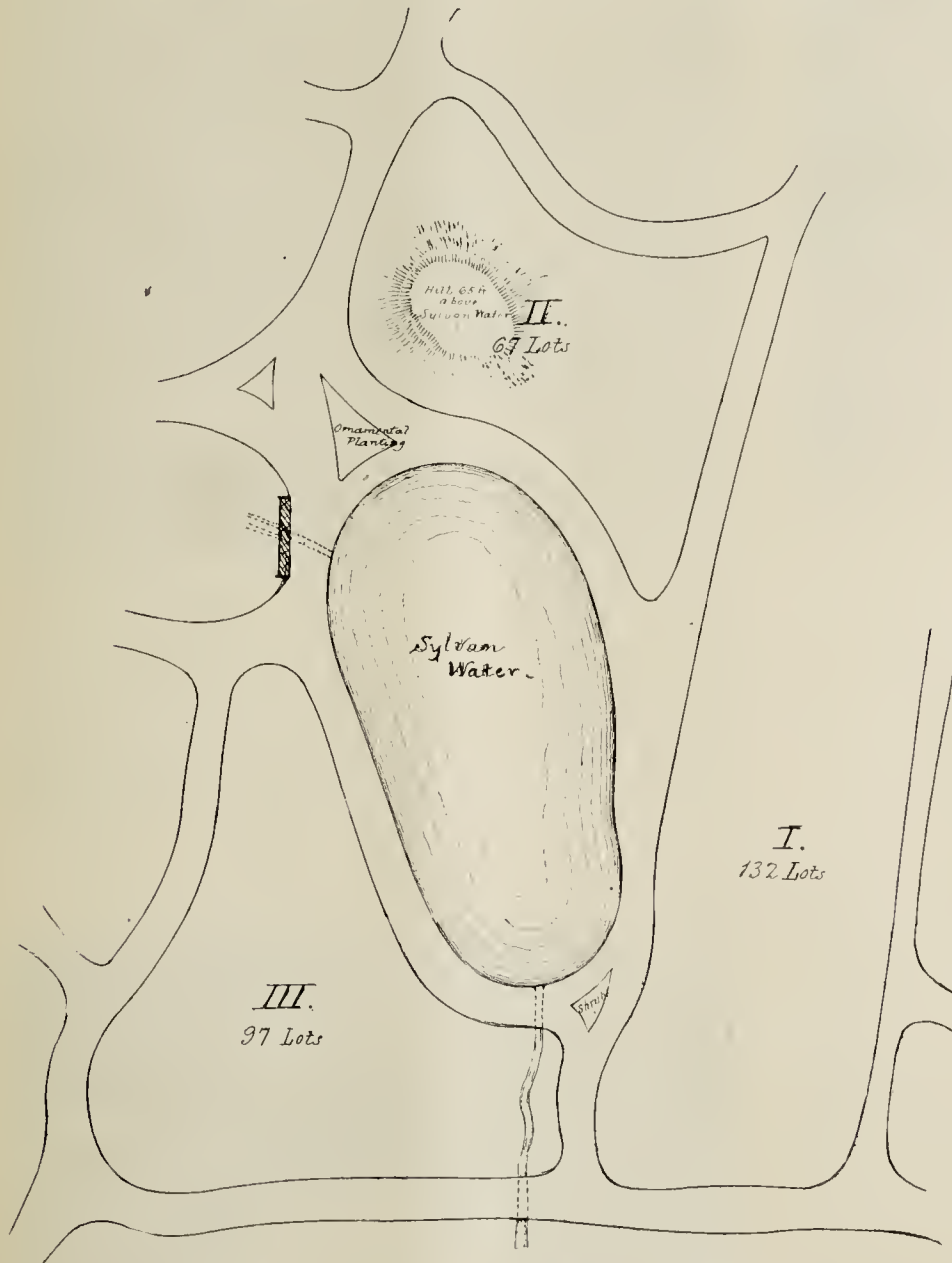
Joseph Mechan.

The Lady of Warwick hostel at Reading, England, which was opened last December, was founded for the purpose of enabling educated women to obtain a course of training in all the lighter branches of agriculture. The council of Reading college provides the necessary instruction and demonstrations—the grounds of the hostel give ample scope for practical work. The course of training extends over two years, and though students are admitted for one year under certain circumstances the shorter term is not advocated. There is practical work at the British Dairy Institute and in the hostel garden lectures on dairy farming and demonstrations in various gardens and farms. There are also visits to the cowsheds, piggeries, barns, granaries and tramps over the fields and farms of the neighborhood. To each horticultural student a strip of ground—about a rod—is given, which she is taught to cultivate, digging and trenching to begin with, then the sowing of seeds in rotation. Three quarters of each plat is devoted to vegetables and one-quarter to flowers. Seeds to the value of \$1.25 a year are allowed to each student; anything further she may provide herself. Each plat is numbered, and in the potting shed is a corresponding number under which hang the set of tools—also stamped and numbered—belonging to that particular student. As far as is possible, everything at the hostel is made an object lesson for future use and everything grown is for the home consumption.

IMPROVEMENTS IN GLENWOOD CEMETERY,
ONEIDA, N. Y.

The accompanying sketch shows some recent improvements made in Glenwood Cemetery, Oneida, N. Y., concerning which a correspondent contributes the following:

One of your readers had occasion a short time ago to visit Glenwood Cemetery in Oneida, N. Y. The association controlling this property owns



IMPROVEMENTS IN GLENWOOD CEMETERY, ONEIDA, N. Y.

sold, and the land partly terraced in the style so popular in cemeteries thirty years ago. Another part was a high irregular sand hill, also partly used; but the third part, a large rough swamp, was least available of all, and seemed useless for his purposes.

One who viewed the land last year, and who comes upon it to-day, will certainly not recognize the place. The terrace has been cut down and its contents made to help fill the swamp—the same may be said of the hill, and while the old lots in either piece of ground are retained intact, with monuments lowered to the new level, the area has been extended to include many new lots and is laid out in walks, paths and shrubbery. By careful plotting almost 50 per cent of new land has been added to both the terrace and hill plots.

These grounds now look down upon beautiful Sylvan Water, a small lake, with beautiful graded banks and trees, and encircled by a wide drive. It is fed by a winding stream running through an irregular but beautiful ravine from a never-failing spring just on the edge of the old swamp.

The old swamp has gone; part is as the reader may have guessed, the Lake Sylvan Water, and enough has been reclaimed to add 100 large lots to the border of Sylvan Water on its farther side.

This piece of ground contains the ravine spoken of above, which is shut in by trees and tasteful rock work. Here seats invite the weary, and the wild beauties of the place give him rest.

One approaches the hill by paths through shrubbery skirting its base, and after this climb the view of Madison and Oneida counties, as

they stretch for forty miles in either direction, amply repays one.

It is difficult to see how more beauty and value could possibly be added to the spot. They who sleep here will certainly "rest in peace."

Utica, N. Y.

L. H.

The Kaiser's taste for formal landscape gardening and statuary is believed to be the real cause of the destruction of two thousand large trees which have been cut down in the Berlin Thiergarten.

about thirty-three acres of land—only a part of which has been used for cemetery purposes.

Wishing to extend its available ground last spring, the trustees commissioned Mr. Roderick Campbell, an experienced landscape gardener of Utica, N. Y., to lay out the new land. It may be noted that Mr. Campbell was for twenty-one years the superintendent of Forest Hill Cemetery, Utica.

At Glenwood the task before Mr. Campbell was not an enviable one, one part of the new land had had scattered burials upon it, lots had been

HORTICULTURAL HALL, AUDUBON PARK, NEW ORLEANS, LA.

The destructive frost of February last over the Southern belt, and its effect on the annual Mardi Gras fetes, attracted considerable attention to New Orleans, where the unprecedented low temperature played havoc with its usually luxuriant tropical



AVENUE OF LIVE OAKS, AUDUBON PARK, NEW ORLEANS.

plant life. Its disastrous effect on the palms has been referred to in detail in a previous issue.

Even such a city as New Orleans is not prepared in all directions for such unexpected climatic conditions, and the hot houses and green houses suffered in degree as to their contents, with the outdoor plant life.

The accompanying illustrations give views of the interior of Horticultural Hall, and the avenue of live oaks, *Quercus sempervirens*, which the building as it were, intercepts about midway in its length from Magazine street to the river.

Horticultural Hall, Audubon Park, is in fact a memorial building, a relic of the great international exposition held at New Orleans some years ago. Some of its constructive details and proportions may be understood from the illustrations, but it has received some additions externally at the hands of the Park authorities to enhance its attractiveness, while a large fountain plays in its centre. Its principal entrance faces the approach by the avenue of grand live oaks, shown in the illustration, whose drapery of Spanish moss lends a charm which must be seen to be appreciated at its proper value. The building stands on a terrace in the improved portion of the park and is surrounded by grounds laid out in a quasi-formal style, showing some of the good features of both the old and new schools.

Horticultural Hall is especially rich in tropical plants of rarity and value, and it has been the recipient of many donations of such material. No

less than eighty-seven varieties of palms flourish under its genial conditions, and in the experiments on this class of tropical plant life it is believed that some sixteen varieties will be found hardy enough for outdoor growth in the latitude of New Orleans. Over 4,000 plants of infinite variety are grown in the hot house of the conservatory. The illustrations show the particularly tropical aspect of the house—charming in the redundance and gracefulness of tropical verdure. There are very few warm countries in the world not represented in this collection of plants with specimens of their choicest productions.

In relation to the frost of last February it may be interesting to mention, that although Horticultural Hall has a steam heating plant, adequate to all preconceived emergencies, it utterly failed on that occasion; and Mr. Fonta, the able superintendent, who, by the way, has been granted a long leave of absence in order to visit Paris, was obliged to maintain no less than thirty fires on the walks of the building to raise the temperature sufficient to keep his plant proteges alive.

In the park there is also a choice collection of trees and shrubs, which is being constantly augmented. Acacias, Araucarias, *Biota Aurea*, of which there are some charming specimens; Camellias, the beautiful flowering plants from Japan, once so popular for decorative purposes in this country and destined to become so again; Laurels in variety, Magnolias in great splendor, *Retinosporas* and a host of other plants, all worthy of comment.



INTERIOR VIEW, HORTICULTURAL HALL, AUDUBON PARK, NEW ORLEANS.

In the nurseries there were last year some 2,800 plants, which have been increased recently by 2,500, making a total now under care of about

5,300 plants, all flourishing, and which will provide liberally for the improvements to be inaugurated. Many have already been distributed.

Audubon Park, formerly known as Upper City Park, was purchased in 1871, and the tract cost \$800,000. It contains 247 acres, which is not yet all properly developed, but under the stimulus of



INTERIOR VIEW HORTICULTURAL HALL, AUDUBON PARK,
NEW ORLEANS.

present sentiment in park matters, and the active sympathy of the commissioners, a scheme of improvement has been decided upon, designed by Mr. Olmsted, which will be gradually carried out as funds and opportunities are favorable.

PROVINCIALISM IN PARKS.

Every little while the world breaks out in fads. There is no exception in parks. First, they were hemmed in by high walls, then came the idea of shearing trees into all kinds of grotesque shapes. In 1720 Pope and Addison took the matter up, censuring the custom severely. Later on William Kent came to the front. He did away with the artificial and followed nature, and even planted old dead trees, so as to be a faithful copyist. A present fad in the East is copying nature in the surrounding country. Take Massachusetts, the Savin, white spruce, white pine and hemlock are good trees, but why should others be excluded because they are not natives. Eggleston, in one of his books, makes a drunken young rowdy say to his fellows: "Now, let us do something ludicrous." So they started out and mobbed an old man and ran him over the river because he was a Dutchman. The old man was worth the whole crowd, but he had to go. I thought of that when they were running some beautiful trees out of one of the Boston parks, because they were not natives.

It strikes us that a public park should be a col-

lection of beautiful flowers, shrubs and trees which the world affords, and these should have the most tasteful arrangement and careful cultivation that art and skill can give.

I have asked prominent landscape gardeners why this exclusiveness? and the reply was: "You would not have every park copy the Arnold Arboretum." As well copy that as the 10,000 tame and monotonous native landscapes you see all over the East. Years hence people are going to feel a sense of wrong. They will say, "Money was furnished and great expense was laid out for a first-class park, instead of this monotonous affair." For 25 cents we can take the cars and go out almost anywhere and find native parks on a far larger scale.

Then the education of the people is something of an item.

How would it do to try this narrow process for food? A man goes into a Boston restaurant and says: "I want a meal of things which are indigenous to Middlesex county." The waiter shakes his head and says: "No beef, mutton or pork; no rye or wheat bread; ducks and geese all gone, and venison missing for 200 years. There is a potato, about as big as a pea, growing in the woods; can't stop to get it now; can't give you anything but cornbread and fish. Hold! Corn is not indigenous, and you can have nothing but fish and salt, with no butter and pepper on it."

Suppose you are a florist and refuse to touch anything but native flowers, what would your trade amount to? This exclusive system would not work in your garden. Why insist on it for the park? Now, the Yankee is a fine fellow. I like him; but it would not hurt him or his park to broaden them. A Scotch elm, a European linden, or a beautiful Russian olive, with its thrift, marvelous fragrance, and glauca type, would not hurt anything. While the Norway spruce, the *Orientalis*, the Nordman, and the treasures of the Rockies and Sierras would certainly enrich the conifers.

C. H. Harrison.

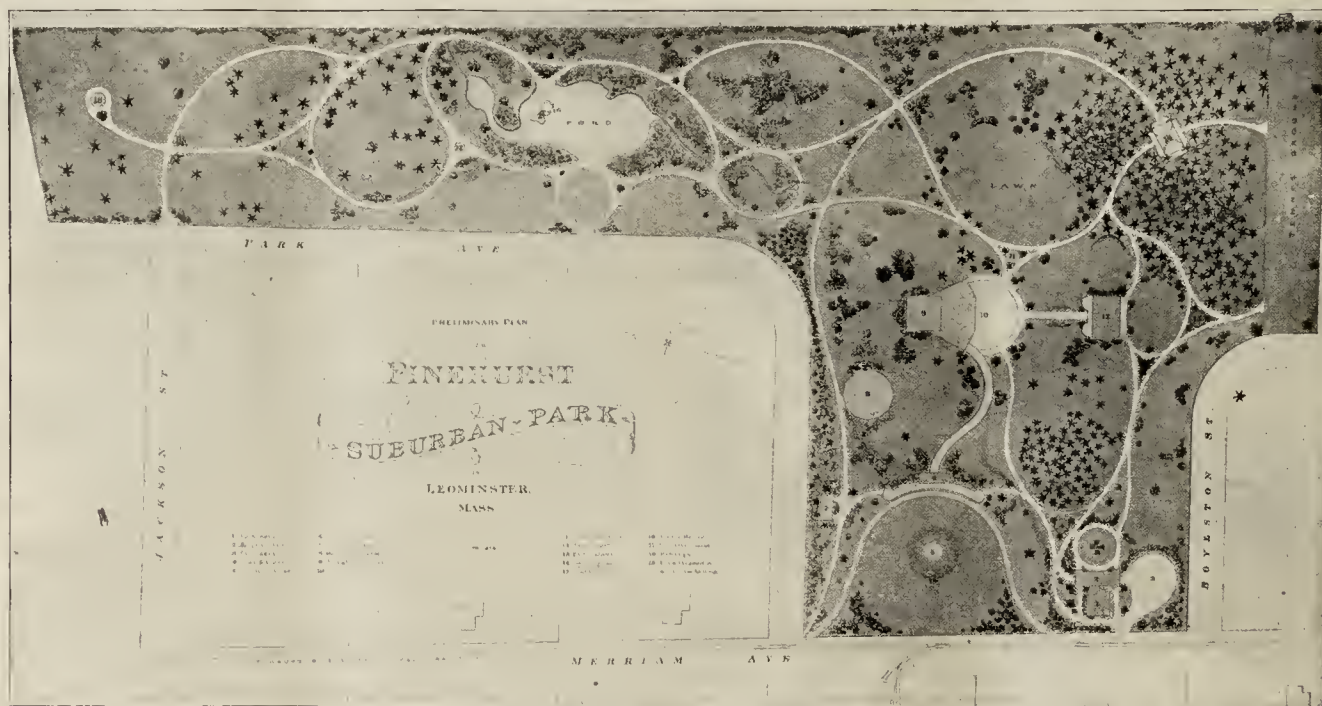
It is interesting to know that 4,200 species of plants are gathered and used for commercial purposes in Europe. Of these 420 have a perfume that is pleasing, and enter largely into the manufacture of scents and soaps. There are more species of white flowers gathered than of any other color—1,124 in all.

In every city or town in the Netherlands you will find a Rosemary street. In olden days, only undertakers lived in them—the rosemary being, in the language of flowers, specially dedicated to the dead.

PINEHURST SUBURBAN PARK.

Pinehurst Suburban Park is an amusement park designed by Mr. Edward P. Adams, landscape architect, Boston, Mass., for the Fitchburg Suburban Street Railroad, an electric railroad running between Fitchburg and Leominster, Mass. The principal natural feature is a fine grove of large white pines on the edge of the plateau at the southerly

the home and fostered in the school. This training is the result of a direct and conscious effort on the part of the parent and teacher, combined with the indirect result of the surroundings in which the child is placed. The surroundings are more potent than we think; and they are usually neglected. It is probable that the antipathy to farm life is formed before the child is able to reason on the subject.



end of the property. The extension northward is beautifully undulating. A small pond is to be enlarged and made an important feature. The central architectural feature is the theatre, which is arranged to be enclosed in severe weather, the roof being permanent. To save filling the front part of the park, which is low, and to shorten the covered walk to the theatre, the siding is swung into the property far enough to enclose a circular basin; which in summer will contain a fountain and beds of foliage and flowering plants, and in winter can be flooded for skating. A park keeper's dwelling, bicycle shed, restaurant, dancing pavilion and observatory combined, besides numerous smaller buildings, are planned for. The graceful winding walks give convenient access to every part of the park, and these will appear like wood paths, the artificial planting being simply to add variety and keep line of the walks.

RURAL SCHOOL GROUNDS.

Prof. L. H. Bailey, of the Agricultural College, Cornell University, in Bulletin No. 160, of the Agricultural Experiment Station, on "Hints on Rural School Grounds," opens the subject in the following forcible argument:

One's training for the work of life is begun in

An attractive play-ground will do more than a profitable wheat crop to keep the child on the farm.

Bare, harsh, cheerless, immodest,—these are the facts about the average rural school ground.

Children cannot be forced to like the school. They like it only when it is worth liking. And when they like it, they learn. The fanciest school apparatus will not atone for a charmless school ground. A child should not be blamed for playing truant if he is sent to school in a graveyard.

It would seem that land is very precious. Very little of it can be afforded for a school ground. A quarter of an acre of good land will raise four bushels of wheat, and this wheat may be worth three or four dollars a year. We cannot afford to devote such valuable property to children. We can find a bit of swamp, or a sand hill, or a treeless waste. The first district school I taught was on a heartless hillside. The premises had two or three disconsolate oaks, and an old barrel was stuck in the top of one of them. The second school was on an island in a swamp. The mosquitoes loved it.

The school building is generally little more than a large box. It has not even the charm of proper proportions. A different shape, with the same cost, might have made an attractive building. Even a little attention to design might make a great differ-

ence in the looks of a schoolhouse; and the mere looks of a schoolhouse has a wonderful influence on the child. The railroad corporation likes to build good-looking station-houses, although they have no greater capacity than homely ones. Plans for the improvement of schoolhouses may be obtained of the Superintendent of Public Instruction, Albany.

The following sentences are extracted from the "Report of the Committee of Twelve on Rural Schools," of the National Educational Association (1897):

"The rural schoolhouse, generally speaking, in its character and surroundings is depressing and degrading. There is nothing about it calculated to cultivate a taste for the beautiful in art or nature.

"If children are daily surrounded by those influences that elevate them, that make them clean and well-ordered, that make them love flowers, and pictures, and proper decorations, they at last reach that degree of culture where nothing else will please them. When they grow up and have homes of their own, they must have have them clean, neat, bright with pictures, and fringed with shade trees and flowers, for they have been brought up to be happy in no other environment."

"The rural schoolhouse should be built in accordance with the laws of sanitation and modern civilization. It never will be until the State, speaking through the Supervisor, compels it as a prerequisite for receiving a share of the public funds."

In reference to how to begin a reform Prof. Bailey says:

"We will assume that there is one person in each rural school district who desires to renovate and improve the school premises. There may be two. If this person is the school commissioner or the teacher, so much the better.

"Let this person call a meeting of the patrons at the school house. Lay before the people the necessity of improving the premises. Quote the opinions of intelligent persons respecting the degrading influence of wretched surroundings; or even read extracts from this bulletin. The co-operation of the most influential men of the district should be secured before the meeting is called.

"Propose a 'bee' for improving the school grounds. John Smith will agree to repair the fence (or take it away, if it is not needed). Jones will plow and harrow the ground, if plowing is necessary. Brown will sow the grass seed. Black and Green and White will go about the neighborhood with their teams for trees and bushes. Some of these may be got in the edges of the woods, but many of the bushes can be picked up in front yards. Others will donate their labor towards grading, planting and cleaning up the place. The whole

thing can be done in one day. Perhaps Arbor Day can be chosen.

"The plan of the place is the most important part of the entire undertaking—the right kind of a plan for the improvement of the grounds. The person who calls the meeting should have a definite plan in mind; and this plan may be discussed and adopted.

"Begin with the fundamentals, not with the details. If an artist is to make a portrait, he first draws a few bold strokes, representing the general outline. He 'blocks out' the picture. With the general plan well in mind, he gradually works in the incidentals and the details—the nose, eyes, beard.

"Most persons reverse this natural order when they plant their grounds. They first ask about the kinds of roses, the soil for snowballs, how far apart hollyhocks shall be planted. It is as if the artist first asked about the color of the eyes and the fashion of the neck-tie; or as if the architect first chose the color of paint and then planned his building. The result of this type of planting is that there is no plan, and the yard means nothing when it is done. Begin with the plan, not with the plants."

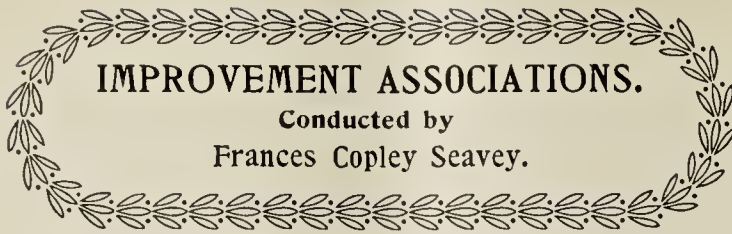
THE VICTORIA REGIA.

The question is often asked us if it is really true that the leaves of *Victoria Regia* will sustain the weight of a person. Mr. James Gurney, superintendent of Tower Grove Park, St. Louis, answers this impressively by the photo herewith made in



his park the past summer. Six persons are supported by the leaves of one plant. Strips of plank were laid on top of the leaves in order to distribute the weight of the person, but the leaves have no support except water. Finer specimen water lilies are seldom grown in this country than those by Mr. Gurney.

Geo. B. Moulder.



Leave the World a pleasanter place than you found it.

SUGGESTIONS.

In Eastern town and villages the Improvement Associations is practically a club, and the monthly meetings, held in turn at the homes of the members, are pleasant gatherings, with discussions of the objects and methods of the organization. Unselfish efforts to improve the general good and to make life better and worth living for all the people, are the themes that occupy attention, and are questions of more importance than fashion and village gossip and bring no after regret for misspent time. Few will question that they are also of greater moment than the avowed objects of many clubs.

The study of art, of Browning and of kindred subjects, while all right in themselves, are of less practical value than the study of how to improve the immediate surroundings of our homes and of our families.

There is both reason and excuse for squalor and ugliness in parts of large cities, but there is no occasion for either in towns and villages, nor around urban and suburban homes. If they exist in such locations there is something wrong—wrong with the people, and the remedy for unpleasant or common-place surroundings lies with themselves.

Frequently, perhaps generally, the disagreeable unsanitary and unsightly conditions that prevail are due to pure thoughtlessness on the part of the majority of the adult population, and often there is justification for this lack of attention in the fact that the bread-winners have no strength left for the struggle with long-existing bad conditions of home life. Again, there is the feeling that if their town is unattractive and behind the times it is not their affair. But it is the affair of every human being to live his own life, and it is his right and should be his pleasure to use every legitimate means to make that life pleasant and comfortable. In every community there are those who can and should take this matter in hand for their own and the common good.

Squalid surroundings invariably mean unsanitary conditions, and the health of every man, woman and child is jeopardized by neglect in rectifying such evils. Once accustom a family to cleanliness, order and attractive planting in and around their home, and its absence will be missed.

The youth of a family can usually be depended on to secure a continuation of what adds to the pleasure of living even if the adult portion is careless or too lacking in energy and ambition to take the steps necessary to maintain it. Pure air is more agreeable than foul air; grass plots, vines, flowers and shade trees are more attractive than rusty tin cans, ash heaps and broken crockery, and the child accustomed to poor surroundings is the first to note and to appreciate any change for the better in these conditions.

The Improvement Society may become an important social factor, the more so because it furnishes a common interest, something in which the entire community should be and usually will be concerned. All shades of religious and political feeling may safely combine on the important issue at stake—the physical and moral well being of their own families and of the people with whom they and their children come in contact. Every one must needs have an interest whether he will or not, for the neglect of one home, however humble, means discomfort and danger to every other home in the neighborhood. There is no better proof that “no man lives for himself alone.” No such thing is possible, and a recognition of this principle is a strong argument for the necessity of the associations we advocate.

The chief dependence in developing a movement that shall penetrate the homes of the masses is the children. Develop their latent taste for pleasant surroundings and the work is practically accomplished. And the simplest and most direct means to reach them is through the public schools. Children look upon the school as theirs, and everything connected with it makes some impression on their minds. When it is a frequently repeated pleasant impression, it becomes a life-long memory and lesson. Egleston says in his “Home and Its Surroundings,” to which I have before referred, that “the school house should be surrounded by well arranged grounds, in this respect comparing favorably with the best private grounds in the neighborhood. Can any one say why the whole village should not combine to make the place where all their children spend a large part of their time during the most impressible period of their lives more pleasant and more beautiful than any single dwelling place among them? The influence of such surroundings would be healthful, shaping the life and the character for good.”

Along this line there is a legitimate labor for Improvement Societies to take in hand that should prove even more a labor of love than other branches, though all their work has something of this flavor.

The children and the school house we have always with us. Happily this is true, but I have yet to see school grounds properly planted, though I trust that others have had a better experience in this matter. Still I think it is no exaggeration to say that they are usually a howling wilderness or at least a dusty desert. I take it that this is a fairly typical village, and the public school grounds here bear considerable resemblance to L'isle du Diable, the island prison of Dreyfus, though lacking the beautiful water views that must in some measure cheer the eyes of that unfortunate man. There is shade, but that is all. The earth is bare; the coal house, an unpainted shed, is the background on one side of the grounds, while on the other, the outhouses, surrounded by a prison yard stockade, offend the eyes and feelings.

A Virginia creeper planted by the coal house would soon drape its bare unsightliness, and closely grouped trees and shrubs that could be taken up in the woods and transplanted in a day would screen the stockade and shelter the walk leading to it, as well as make a really agreeable break in the barren inclosure. If to this slight planting a few vines to grow over the boundary fences the place would hardly be recognizable.

In all school grounds some such simple planting would be a vast improvement. Plant trees on the outskirts of the grounds, mass shrubs at the corners of the building, put vines where they will do the most good and, above all, teach modesty by planting a screen of small trees and pretty shrubs to shield the outbuildings and the approach to them.

F. C. S.

* * *

Mrs. Frederick C. Johnson contributes the following:

In some portions of Illinois, away from towns, one will find rural cemeteries, many of them showing sore neglect. They are overrun with weeds and shrubbery, fences, if any, are gone to ruin, and with all a desolate look pervades that makes the heart sick.

In one neighborhood where such a cemetery existed the women have changed all this and made "the desert to blossom as the rose." They formed a society called the Cemetery Association, elected officers, and met once in two weeks at each other's houses. At the place where they met the woman was to find work for them, perhaps it was carpet rags, quilting, tying comforts or doing any kind of sewing required. She must pay into the society the sum of 50 cents or \$1 as she felt able to do. The members each paid 5 cents. In this way the association not only enjoyed a pleasant social time, helped a neighbor with a big day's work, but

changed the last resting place of their dead from a wild and lonely place to one of beauty and neatness. A neat wire fence with arched gateway has been provided, the grounds have been cleared of all rubbish, weeds, etc., a man hired to care for the grounds, trees planted, a good tool house built in one corner, water furnished for watering the grounds, the grass kept mown, gravel drive and paths made, and stones and monuments that were leaning or fallen were placed in position. I wish others would take pattern and do likewise.

The Helena, Mont., Improvement Society offers the following series of prizes for the best results in tree planting as well as generally beautifying grounds: 1st. Premium of \$1 for best single tree planted and cared for by a boy or girl not over 16 years old; to be planted this spring and award made June, 1900. 2d. Best row or group of trees planted and cared for by a boy or girl not over 16 years old. 3d. Prize of \$5, open to any one, for best row or group of trees of seven or upward. 4th. Prize of \$15 for best city block or square planted with trees in unbroken rows on both sides of the street. 5th. Premium of \$15 for the best improved church grounds, with street frontage.

* * *

The Women of the Improvement League of Minneapolis, Minn., was recently addressed by Mr. Harry W. Jones, a member of the board of Park Commissioners, on the subject of the work proposed by the board for the children in the parks. An appropriation had been made of \$500 for the maintenance of children's playgrounds. For several years Loring park has been provided with tennis courts for the older boys and girls and piles on the shore and swings have been put up in Minnehaha park. This year an effort will be made to do something at Lake Harriet. The playground movement was originally started by the Improvement League and the members stand ready to assist in every way. Mrs. Barnard presented an outline of the plans of the flower committee, of which she is chairman. She purposed that vegetable instead of flower seeds be given to the boys to cultivate their practical side. It is estimated that between 15,000 and 20,000 packets of seeds will be distributed among the fifty-five graded schools. Little booklets on the culture of flowers have been presented for distribution among the children. A year book of the League has been prepared and will be ready this spring. The committee in charge presented an outline of the book which will include a brief historical review, the ordinances which the league has been instrumental in having passed, reports from the committees, and a full list of members.

SHADE TREES.

Speaking of street trees a writer in the *Chicago Record* has this to say: The value of the American elm for street planting is well known. Possibly the only objection to the elm is its comparatively slow growth and immense size at maturity, the latter not an objection truly, but frequently necessitating cutting down a tree when one not so large might remain. The variety *dovæi* is better suited to narrow streets than the American, where an elm of more rapid growth and not so tall at maturity is desired. This variety is a vigorous upright grower and rarely exceeds forty feet in height.

In some large cities difficulty has been experienced with the blighting of maple and elm trees, due partly to the coal soot in the air, which closes the pores of the leaves, and partly to the low depth at which the sewers are placed in the streets, draining the moisture from the soil. When this blight is apt to occur poplars and red and white oaks should be planted in preference to maples and elms, as the foliage is less effected by blight.

In setting trees in the street care must be taken that the holes are made large enough to take in the roots, that the soil is fairly rich and deep and that it is kept well loosened about the tree on a level with the surrounding ground for the first two or three years at least. Give water frequently during the summer and enrich the soil by spading in manure each fall or early spring. In setting the tree cut off all bruised or broken roots up to the sound portion and cut back the top growth to correspond. If the top of the tree is well branched cut out the smaller branches entirely and cut back the larger ones to within three buds of their union with the body of the tree. The heavier and more abundant the root growth the more severe should be the pruning of the top, and the reverse.

* * *

Mr. Noah F. Flitton, superintendent of Clifton Park, Baltimore, Md., speaking of street shade trees for his locality says: In and around Baltimore, where the soil is not noted for its congeniality to arboreal growth, few varieties equal, and perhaps none surpass, the silver maple—*Acer dasycarpum*. Some, however, may prefer the sugar maple—*Acer saccharinum*. Others who do not object to slower growth and prefer a more compact head and rigid outline may take the Norway maple—*Acer platanoides*.

For the grounds of suburban residences the varieties from which one may select are so much in-

creased as to become almost bewildering to those unacquainted with the subject. In addition to the maples mentioned are Wier's cut-leaved—*Acer Wierii laciniatum*, *Acer heterophyllum laciniatum*. These are varieties of *Acer dasycarpum*, and are good, vigorous growers of beautiful foliage. The last named was originated by Ellwanger and Barry, and if better known would be much more frequently met with, as would *Wierii*. The same may be said of *Acer colchicum rubrum* and *Acer rubrum*. Where a rapid growing, umbrageous tree is desirable or admissible *Acer pseudo-platanus* is excellent.

Among the birches, or *Betula*, is *Betula alba laciniata*, the cut-leaved weeping silver birch, which should be as popular as it is conspicuous. Among the beeches, or *Fagus*, is *Fagus ferruginea*, the American beech, which deserves a place in a heavily wooded landscape. The fern-leaved beech is very desirable. The finest purple-leaved tree in cultivation is River's purple-leaved beech. Among the oaks, or *Quercus*, the following varieties, if allowed abundance of room, make splendid trees: The white, scarlet, turkey, mossy cup and pin oak. The willow leaved and *Imbricaria*, or laurel-leaved, are desirable kinds.

The American white elm is a handsome tree that should not be omitted. Where a weeping or drooping habit is desired, the Damperdown weeping elm is a beauty.

As to *Aesculus*, the *Aesculus hippocastanum* and the double white-flowering variety, *Aesculus hippocastanum*, variety *rubicunda*, are fine.

In evergreens, beginning with spruce, or *Abies*, there is the Norway spruce, *Excelsa*, the best known and most popular evergreen that is grown. *Douglasii*, *Morinda* and Colorado Blue Spruce, are among the hardiest and most beautiful of all the spruces. Nordmann's Silver Fir (*Nordmanniana*), European or Comb-like Silver Fir (*Picea Pectinata*) and *Picea Pinsapo* are hardy evergreens. For general planting all or any one of the above named trees, either deciduous or evergreen, may be selected without any misgiving as to hardihood or desirability. We would also include in this list *Cryptameria Japonica*. The only species with conspicuous flowers in the list is the horse chestnut.

* * *

The Michigan Agricultural College suggests that care should be taken that the roots of the trees are not exposed to the action of the sun and dry winds. The practice of many of placing the bundles in the wagons and driving home without taking pains to cover them to prevent the drying of the roots undoubtedly has caused the loss of innumerable trees. Wet straw and blankets should be provided for protection, and they should be planted or heeled-in at once.

THE TREATMENT OF THE ROADSIDE.

Mrs. F. H. Tucker, of Newton, Mass., recently delivered a lecture before the Massachusetts Horticultural Society on Roadside Treatment. The following abstract is from *The New England Farmer*: She said that the most casual observer driving through country roads can hardly fail to be struck with what seems to be opposite tendencies in the treatment of roadsides. One is to make a clean sweep of everything that grows. All growth, whether a blade of grass, a daisy, a fern, raspberry, alder, or seedling oak or maple—everything is periodically clipped as close as scythe can cut it. The other is the let-alone tendency. On roads where this prevails there is no more attempt at tree planting than in the other case, but neither is there care or effort of any kind, and all sorts of growth flourish widely luxuriant, so luxuriant indeed as often to interfere rather seriously with the traveler's hat or carriage top.

New England love for order and tidiness led many old-time farmers to look upon roadside "bushes and weeds" as untidy, and to "clean up" the sides of the road just as his wife swept her floors and arranged the chairs in straight rows against the walls, and the conservatism just mentioned has kept him and his descendants doing the same thing ever since. A farmer who did not keep his roadside "clean" was looked at askance as "shiftless" and more or less unthrifty, whatever redeeming traits he might display.

The golden mean lies between these extremes, to be settled by systematic treatment of roadsides according to local conditions. All roadside growth is beautiful in its place, and that place can be found by the scientific artist. These objections can be met by judicious arrangement and management.

Fourth, who shall undertake this work? Mrs. Tucker said: Our state highway commission is perhaps the best equipped for investigation and experiment along these lines, while the Massachusetts Forestry Association and the Horticultural Society could find many ways to assist and advise in making our country roads beautiful without being unpractical. No official agency can be of more value in the systematic study of local conditions as a means toward a beautiful and practical treatment than the tree warden or road commissioner of each town, if he is fitted for his office.

THE CREMATION QUESTION.

The following discussion of the cremation question was recently given in the *Medical Record* of New York City: A large part of the London let-

ter in the New York *Herald* of Sunday, February 18th, was devoted to a consideration of the advisability of enforcing cremation in the interests of public health. It appears that the county council of that overgrown and ever-spreading city, London, is deeply concerned at the danger by which its inhabitants are threatened, due to the present system of burying the dead. That the alarm felt and expressed is not altogether groundless, must be allowed. Granted that contagion can be spread by such means—and under certain conditions the possibility of this occurrence has been on several occasions undeniably proved—then London, with its numerous cemeteries and graveyards, must necessarily be more or less exposed to the risk of infection. True it is that most of its large burying-grounds are situated at a distance from the city but owing to its marvellous expansion, there are many which, once in the country, are now surrounded by houses. However, putting aside sanitary reasons, in themselves a strong enough cause for an alteration, there is another point to be considered. It has been estimated that every year about twenty-four acres of land are required for the disposal of the dead of London, and the argument is brought forward that if cremation should be adopted this waste of land would be avoided. But as it is with London, so it is with all large centres of population, though to a lesser extent. Dr. Louis Windmuller, writing on the subject in the *North American Review* of August last says: "In the early part of this century graves were in evidence in New York to such an extent, that a splenetic Englishman who came to visit our shores speedily returned when he found every street lined with headstones." At one time New York was full of graveyards, and this was the case until between 1846 and 1852, when to all intents and purposes burial within the city limits was prohibited. This is certainly a change for the better; still, with the present tendency of people to flock to the towns, the question of disposing of the dead so as to preclude any fear of spreading contagion and on general sanitary grounds is a serious one. Perhaps the strongest objection to cremation will be found in religious sentiment, but, after all, it is but a sentiment. Looked at through medical spectacles, it would almost appear as if cremation had almost everything to be urged in its favor, and little or nothing against it. With regard to the difficulty of detecting poison in ashes, this can scarcely be regarded as a sufficiently serious objection to counterbalance the manifold advantages of the method. The fear of being buried alive, too, which is ever present with some people, would if cremation should be brought into use, be wholly done away with.

GARDEN PLANTS—THEIR GEOGRAPHY—XLI.

PRIMULALES.

THE STATICE, PRIMULA, AND MYRSINE
ALLIANCE.

Primula has 130 species and no end of varieties of very pretty little herbs, mostly confined to the



PRIMULA SINENSIS.
In one of its original forms.

temperate and sub-arctic regions of the northern hemisphere, southward to the mountains of Java, and represented in temperate South America. A very large proportion of the known kinds are in cultivation in Europe, but the intemperate suns of our summers are inimical to the well being of many, especially those beautiful kinds known as "alpines." There are about 7 species found in North America, always at high altitudes, or high northern latitudes. *P. farinosa* is found from Labrador to Colorado. *P. mistassinica* is found along the wet banks of streams in New England and the Rockies. *P. Parryi* has been found as far



Primula Obconica.

Primula Auricula. Primula Cortusoides Var

south as Arizona, and *P. Rusbyi* in New Mexico, on the margin of brooks at great altitudes. Many of the European and Asiatic kinds like similar situations, and in cultivation will be better with some shade, with water in summer, and mulching both in summer and winter. *Ardisia Japonica* is a small tree of the alliance, well adapted to yield the necessary shade northward to parts of New England. It is scarce in American nurseries, however. I know a bed of polyanthus in central New Jersey which has endured and increased for 25 years beneath a pear tree, with a mulching of stable manure in winter, and watering during dry summer weather. *P. vulgaris* in vars. seems to do best northward, where the snow covers it regularly in winter. It is found in groves and on grassy banks beneath hedgerows in England, and is delightfully fragrant. There are a set of double varieties ranging in colors from magenta purple, through crimson, violet, rose, lilac, sulphur, lemon yellow and white. At the foot of the Alps, where the species grows in places, it is without fragrance. *P. auricula*, *P. auriculata*, *P. Japonica*, *P. cortusoides Sieboldii* and others are occasionally met with in North American gardens, where shade and such



DODECATHEON MEDIA.

simple protection as sawdust or strawy manure is afforded. *P. denticulata* in variety is always worth the shelter of a frame. In parts of the Pacific coast *P. Imperialis*, *P. verticillata*, *P. Sinensis*, and some others should be tried, and attempts made to hybridize them. I may mention that a blue polyanthus, raised by a relative of mine more than half a century ago, and understood to be an infertile hybrid between *P. denticulata* and a light colored *P. variabilis*, came near being lost to cultivation several times, and in 1864 there was but one plant known to me. This was given into the care of John Smith, the 2nd, of Kew, from whom I received back a plant in 1870 which was sold to Mr. William Bull, of Chelsea, London. I see, from time to time, that this old variety has been used by an

English specialist as a parent for a most interesting progeny, and that seedlings often appear much darker than the original.



CYCLAMEN NEAPOLITANUM.

Androsace, in 46 species, are often pretty little plants from the Alpine and temperate regions of the northern hemisphere. Four species, with a few varieties, are found in the States. Twenty or more are kept in European collections.

Douglasia has about four species found on the mountains of Northwestern America and the Pyrenees. They are rare little evergreen rockery plants, with purple or yellow flowers.

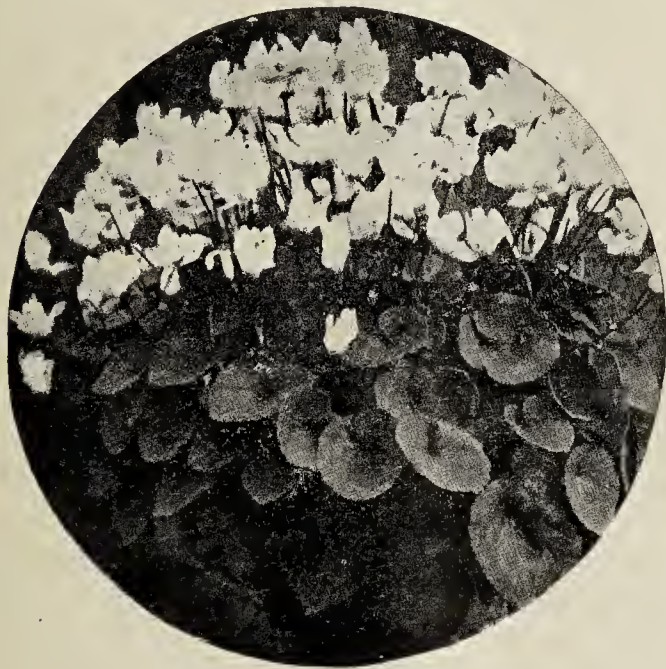
Cortusa, in 2 species, from Europe and Northern Asia, and *Soldanella* in 4 species and a few varieties, from the mountains of Europe, are in gardens, and have pretty little purple, lilac, or sometimes bluish, flowers.

Dodecatheon, "American cowslip," has 2 or 3 species in great variety, in Northern Asia, as well as here. The various forms of *D. Media* are handsome plants, extending from Michigan along the

houses, does well in the shade in Southern California. A few of the species have been tried outdoors north, but with poor success.

Lysimachia, "loosestrife," has 65 species, widely distributed through the temperate regions of the world. Eight species and varieties are native or naturalized in the States. *L. Nummularia* is apt to become a bad weed on moist, shady lawns, yet sometimes it is useful as covering where grass is difficult to grow. It has a golden leaved form. Several species are upright growers, such as the white *L. clethroides* and the yellow *L. verticillata*.

The woody tribes of the Alliance are sub-tropical with rare exceptions; often the species are found occupying insular stations on islands or mountains, but *Myrsine Africana* has a wide range from South Africa to the Himalayas; *M. Urvillei* and some others extend south to New Zealand, and *M. Rapanea* is found on the Florida "Keys." Several *Ardisias* extend northward to China; *A. Japonica*, as previously mentioned, is hardy in the middle Atlantic States, and *A. Pickeringia* is found in Eastern Florida. A species of *Jacquinia* is found further south on the islands, and another on the Mexican border. *James MacPherson.*

CYCLAMEN PERSICUM.
In Shady Ground, California.

hills southward to Texas and westward from the Rocky Mountains to the Sierras of California, and northward to Behrings Straits. The *Ardisia* shaped flowers are purplish, pink or white.

Cyclamen has 12 species, mostly in Mediterranean countries, but *C. hederæfolium* is sparingly found in England; *C. ibericum* is found in the Caucasus; *C. Persicum*, so familiar in green-

When the late Empress Elizabeth was staying at Nauheim, the Empress Frederick, on a visit to her, gave her a vivid description of her garden at Friedrichshof, near Cronberg, which had been laid out according to her own ideas. It is longer than it is broad, and is inclosed by a high wall, in which there is a sculptured niche and fountain, like those we see in the Old World gardens of Central Italy. On either side of the garden an immense pergola runs from the house to the wall, lofty and light, and overgrown entirely with roses—*Malmaison*, *Marshal Niel*, *Noisette* and others. The garden is laid out in terraces, and, with the exception of a broad middle avenue and a lawn before the house, is planted with rose trees of all kinds and of all colors. The Empress Frederick gave the Empress photographs of this garden, which she sent to the Emperor, asking him whether he did not think the idea charming, and whether he had any objection to her having a similar garden laid out at Lainz. She never had a definite answer to that letter, and now the Emperor has given orders that the garden at Lainz is to be laid out exactly like that of Friedrichshof, without delay, as the realization of perhaps the last wish the Empress ever expressed. By next spring the gardens of Lainz will be as the Empress would have wished to see them.—*London News.*

PARK NOTES.

The president is to issue a proclamation setting apart 136,000 acres of land on the south side of Lake Tahoe, Cal., as a forestry reserve and public park.

Mr. H. C. Frick so intimately connected with the Carnegie iron and steel interests, was recently in Homestead, Pa., to make the necessary arrangements toward the improvement of Homestead Park, according to his promise to the residents at the dedication of the Homestead Carnegie Library.

Experiments for laying dust were recently made with crude oil by superintendent Pettigrew of the Park Commission, Boston, Mass., on portions of the parkway. Mr. Pettigrew is quoted as saying that so far it worked very well, and the fact that it has been extensively and effectively used by railroads augurs well for the success of the experiment in the parks.

A park association has been formed at Elyria, O., and a constitution and by-laws adopted. Elyria has natural scenery and advantages which, if utilized in the direction of public parks, the association believes would redound to the welfare of the city. With this end in view, conditions of membership have been made very liberal, and all citizens are invited to join.

An act of the last Congress, appropriated \$23,000 for the benefit of Rock Creek Park, Washington, D. C., and extensive improvements are about to be undertaken by the Park Commission. It is expected that a road will be constructed through the entire length of the park while minor changes beautifying the surroundings are contemplated.

The Houston & Texas Central R. R., is falling into line in the way of improving its city and station grounds. At Corsicana, Texas, landscape gardeners have been at work on the Houston and Texas Central park and the work done indicates that it will be one of the prettiest spots along the line of the road. Bulbs and plants have been planted in numerous beds, and the park has been cleared of all unsightly matter.

Mayor Van Wyck of New York City has disapproved the Bulkley bill, passed by the Legislature, for planting trees in the streets of the city. In an interview the Mayor has said that the ideas embodied in the bill were good, but that its provisions allowed too much latitude to the Bureau of Forestry which was to be established under the supervision of the Park Department. Also the indiscriminate planting of trees in the public thoroughfares would do more harm than good.

The following will be of interest: The old "Physic garden" at Chelsea, London, which was leased to the "Apothecaries company" in 1673 and presented to it by Sir Hans Sloane in 1722, is to be placed under a committee of societies and the garden is to be maintained for promoting the study of botany, with special regard to the requirements of general education, scientific instruction and research in systematic botany, vegetable physiology and instruction in pharmacy, as concerns the culture of medicinal plants. New offices, lecture rooms and laboratories are to be provided. The old "Physic garden" was one of the oldest, if not the oldest, botanical gar-

dens in the world and is of considerable historical importance.

A New Orleans daily prints the following: "In Minnesota a law just passed authorizes park boards in cities to plant trees when petitioned by property owners concerned, and to assess the cost, not exceeding 12½ cents a front foot, on the property improved, this to include the expense of maintaining the trees for three years and replacing any that may die. The system is said to have been tested in Minneapolis for fifteen years, and 15,000 vigorous, well protected trees along the streets prove its success. The outlay has been remarkably small. What a beautiful city New Orleans would be within ten years if live or water oaks were planted along its streets." It is a sign of the times that such suggestions are found in the daily press. Keep agitating and working and the city will grow in beauty without a doubt.

An official statement that has been prepared shows that the entire expenditures for improving the fine system of parks of the city of Milwaukee, Wis., has been \$703,374.41. The total cost of the purchase of the entire park system is \$1,055,644. The purchase price and the cost of improving and maintaining the parks on the various "sides" of the city is about the same. The cost per acre for improving and maintaining the various parks is \$1,754.05. Including the purchase price of the lands, the cost per acre for improving and maintaining the various parks is \$4,384.08. The cost per acre for improving and maintaining East side lands, including purchase of the same is \$4,250.55. The cost per acre for improving and maintaining West side lands, including purchase of the same is \$4,005.33. The cost per acre for improving and maintaining South side lands, including purchase of the same, is \$4,000.36.

The Michigan Legislature is considering a bill which is to give Michigan one of the most extensive public parks in the country. The bill provides for setting apart a total of 738,560 acres of land in the Counties of Lake, Newaygo, Oceana, Mason, Wexford and Manistee. These lands are to be withdrawn from settlement and set apart and dedicated as a public park and pleasure ground forever. It is to be a place of public resort for the enjoyment of the people, and for the propagation and preservation of game, birds and fish, and also to preserve the growing timber therein. The bill provides that the park shall be under the exclusive control of a commission of five members, to be appointed by the Governor, who shall make and publish such rules as it may deem necessary for the management of the park, and appoint a superintendent, who shall guard all the timber, mineral deposits, game, birds, fish, etc., from injury by fire, theft, or wanton destruction.

The terrace of Bushnell park, Hartford, Conn., is to be remodeled in white marble, the commissioners having decided upon a plan that will make the foreground of this park most attractive at a minimum cost. This includes the making over of the terrace in marble, and on the front between the steps placing a handsome recessed panel, commemorative of some characteristic scene of colonial life. In the front will be the Corning fountain, then the terrace, then the state house—all being on the axis of the state house. The Corning fountain will be decorated with figures of Indians. The terrace will represent colonial times. The state house will give nineteenth century life and development. It is contemplated for the panel to take as the historic colonial incident the departure of the expedition against the Pequots. This will give opportunity to introduce Hooker, Stone, who went as chaplain, Colonel John Mason, the warrior, the Indian scout, the river, the canoes and the women of the period. Mr. J. Massey Rhind, sculptor, of New York has the matter in hand.



CEMETERY NOTES.

It has been voted at the town meeting of Brookline, Mass., to appropriate \$2,000 for the improvement of Walnut Hills cemetery.

* * *

Among the acts of the recent session of the legislature of Pennsylvania was: an act for the protection of the public health, prohibiting hereafter the establishment or maintenance of additional hospitals, pest-houses and burial grounds in the built up portions of cities.

* * *

The opening of a grave in a town cemetery by order of town officers for the purpose of removing a body from a lot which has not been paid for to another part of the cemetery which is free is held, in State of North Carolina vs. McLean to be within a statute making it a felony for any person to open a grave and remove a dead body therefrom without due process of law or the consent of specified relatives

* * *

There is a fine vein of humor in the following from the Cottage City, Mass., *Herald* in a note relating to Vineyard Haven "While the selectmen are slowly and carefully deliberating on a plan to organize and protect their cemetery, made beautiful by nature, the cows are still having their innings and doing their best to desecrate the graves, attracted by the fine growth of early grass."

* * *

At the annual meeting of the Marion, O., Cemetery Association, the reports showed a good financial standing. The receipts for the year were \$7,129.97 and the expenditures \$3,962.33. The total available assets April 25, 1898 were \$28,598.53, and on April 10, 1899, \$31,766.17, a good sign of prosperity. The same officers were elected, most of whom have served for several decades.

* * *

In regard to the proposal to establish a cemetery in the crater of the Punchbowl, an extinct volcano in the vicinity of Honolulu, the *Hawaiian Gazette* says: "Everything looks beautiful inside the crater. The Kiowa trees were growing well. These and other trees were planted there by the direction of the late King Kalakaua. The lantana flourishes, of course. The view in any and every direction from Punchbowl is well-known to all for its charm. A walk from the city to the place would not be a trying undertaking, and the road is better than ever."

* * *

The Mayor of Moline, Kan., issued a proclamation last month appointing a certain day on which to clean up and repair damages to graves and headstones; also to set out shade trees and otherwise beautify the Moline cemetery. All citizens in the city and adjoining country, interested in keeping the cemetery in good repair, and beautifying the graves of our beloved dead, were invited to meet at the cemetery by 9 o'clock A. M. on the said day, with shade trees, spades, rakes, and other necessary tools with which to do the required work.

* * *

Notwithstanding that a cemetery is an unusual place for a fire Kokomo, Ind., had such a conflagration recently in the city cemetery which swept over nearly three acres of ground and

destroyed everything in its pathway, including hundreds of markers and marble slabs marking the resting places of the dead. Nearly all the pioneer residents of the city were buried there, but since the opening of a new and larger cemetery the place has been neglected. Each year it has been permitted to grow a luxuriant crop of weeds, and it was the dry vegetation of last year that fed this fire.

* * *

The annual meeting of the St. John, N. B., Rural cemetery (Fernhill) was held April 3. Except in the sale of lots which showed a decrease over last year of \$438 an increase was shown in all other directions. The perpetual care fund now amounts to \$12,289.79, and last year 34 perpetual care contracts were executed making a total of 127. The total receipts for the year were \$6,600.55 and expenditures \$7,177.08. A resolution was passed calling upon the directors to report at the next annual meeting upon a scale of fees for perpetual care of lots to meet the gradual depreciation in value of money and to secure the best results.

* * *

The annual report of Forest Home Cemetery, Milwaukee, Wis., shows total receipts for year ending March 31, 1899, to be \$88,416.43, which include: Sale of lots \$21,334.30; sale of graves, \$2,578; interments on private lots, \$2,344; cremations \$1,175; care of lots \$20,832.11, and foundations for monuments, etc., \$2,201.20. The disbursements amounted to \$65,984.35, which included: care of cemetery, \$11,114.27; work done by order on owner's lots, \$10,875.68; work on foundations and monuments, \$1,128.85; repairs and improvements \$3,398.49; salaries, etc., \$10,491.95. The reserve fund now amounts to \$117,376.99; perpetual care fund, \$20,754.08. There were 717 interments and 47 cremations during the fiscal year.

* * *

At the annual meeting of the lot holders of Magnolia Cemetery, Charleston, S. C., on May 4, 1899, Mr. Geo. W. Williams, chairman, made his 43rd Annual Report. The receipts from sale of lots the past year were \$3,597.57 and the trust fund for the care of the grounds, roads and lakes now amounts to \$37,949.57. The perpetual care fund is \$29,454.30. The receipts from the sale of 2735 lots in the cemetery since 1850 amounts to \$184,450 and the number of burials to 11,000. Some \$130,000 have been expended in the improvements of Magnolia since its organization and it is now one of the best kept cemeteries in the South. Numerous monuments, costing in the aggregate some \$200,000, many of them of good taste and beauty, adorn the grounds. A park of some five acres is laid out and will be improved by planting camellias, azaleas, roses and ornamental trees. Mr. Geo. W. Williams, chairman, is the only survivor of the original Board of Trustees.

* * *

The legislature of California has passed an act, approved March 2, 1899, supplemental to an act entitled "An act to authorize the incorporation of rural cemetery association," approved April 28, 1859. This act authorizes such association to erect, purchase, or lease buildings and furnaces and other works for cremations of human bodies; also, to erect or lease buildings in which shall be entombed only the ashes of cremated dead; to make provision for the care of the burial places and ashes of the dead; also, to provide for the cremation of the unclaimed dead and bodies liable, if interred, to spread disease. Section 3 provides that in case of epidemics or the prevalence of contagious diseases, or otherwise, the proper authorities of any county, city and county, city or town, may order the unclaimed or unknown dead, and the dead who die in public institutions under the control of any county, city and county, city, or town, and the dead commonly buried at public expense, cremated, and their ashes

interred, or otherwise preserved in receptacles in columbariums, or interred in burial places, and human bodies, and parts of bodies, used in medical or other schools (except specimens to be preserved) shall not be cast into the waters of the state, nor on the ground, nor in receptacles for refuse matter, nor in vaults, nor in sewers, but shall either be buried as deep in the ground as is by law required for dead bodies, or cremated, as in this act provided. But the remains of a person shall not be cremated by compulsion, under the provisions of this section, if he or his family, or any member thereof, or his church or spiritual adviser objects. A violation of any of the provisions of this act is a misdemeanor, and it shall be in force from the day of its passage.

* * *

The bids for removing the 3,500 bodies from the old St. John's cemetery, Clinton, to the new St. John's cemetery, Lancaster, Mass., showed a remarkable range. The eighteen bids enumerated, ranged from \$16,293 the lowest, to \$38,834 the highest. The contract was awarded to Messrs Cooney & Coughlin, of Chelsea, Mass., at \$16,500. In connection with this removal the board of health orders that the contractor shall provide a sufficient number of water-tight metallic boxes or cases, and no body shall be removed excepting in such a case; also, that whatever is removed shall be wrapped in a cloth thoroughly saturated with a solution of bichloride of mercury and chlorinated lime; also, that all metallic boxes shall be disinfected at least once a day—the whole work to be at all times subject to the inspection and under the control of the board of health.

* * *

The Buffalo, New York, City Cemetery Association has advanced the price of burial lots in Forest Lawn cemetery from 50 cents to \$1 per square foot. The price had not been changed in 30 years. An act passed by the Legislature May 2, 1887, authorized the board of trustees of the association to set aside a trust fund from the proceeds of the sale of lots, the income of which was to be devoted to the perpetual preservation of the cemetery and the care of lots. In a few years there will be no more land to sell and the income will be limited to the fees for opening graves, etc., and will be insufficient for the perpetual care of the cemetery, and the price is raised in order to swell the perpetual care funds, "so that when our income from the sale of lots is cut off, an average interest of 3 per cent. on the perpetual care fund will suffice for all the needs of the cemetery," says the secretary.

CLEANING ASPHALT STREETS.

In a recent report to the Department of State, United States Consul Erdman, at Breslau, Germany, gives the following interesting account of the methods pursued in that city for the cleaning of asphalt streets: The treatment of asphalt streets here in Breslau is entirely different from methods employed in the United States. For instance: One man has charge of four squares in front of the consulate. His tools for keeping the streets clean are as follows: An iron hopper wheelbarrow, a shovel, a broom and a rubber scraper about 3½ feet long. The rubber is fastened in a viselike wooden clamp and is about 4 inches wide, ¼ inch thick, and very stiff. This man during the day is continually going over his four squares, taking up the litter and keeping the streets thoroughly clean.

Early in the morning, after having cleaned the street, he takes his wheelbarrow, loaded with very fine, sharp sand, and scatters the same with his hands or a small shovel lightly over the streets, to prevent slipping. Should it be a rainy day, he repeats this process several times during the day. Once a week two sprinkling cars are sent out alongside of each other, so that they cover the whole street at one time with water, washing the same thoroughly. Immediately following the sprinkling cars come four one-horse roller brush sweepers, about two feet in diameter,

sweeping the water and slime into the gutter, when the same is piled up and carted away. Then the man who has charge of these streets comes along with his wheelbarrow and sprinkles sand all over the street. In spring or autumn, when the streets are often sloppy and wet, the washing is done several times during the week.

I am informed the washing is done for the purpose of removing the slime which the asphalt seems to leave, and to keep the street from being slippery; also for the preservation and hardening of the asphalt. All streets are kept in excellent condition, the shopkeepers or tenants not being permitted to put sweepings on the pavement or street. These must be taken up and put in a box kept for that purpose.

The city has wire baskets fastened on lamp-posts, against houses, fences or trees, in which the public may throw waste paper while walking along. It is very rare to see any waste paper on the streets, as the citizens in general take pride in keeping the streets clean. The householders have to sweep the streets in the center of the street regularly every morning before six o'clock. The litter is piled up and carted away by the city teams.

One of the most beautiful sites in the Arlington National cemetery, Washington, D. C., was that selected for the last resting place of the dead soldiers recently brought from Cuba and Porto Rico and whose bodies were not claimed by relatives. It is on high ground overlooking the Potomac River on the south side of the mansion which was at one time the home of Robert E. Lee. A handsome monument will be erected to mark the last resting place of the heroes who died in the service of their country. Colonel Moore said of this spot: "If the parents and relatives knew what good care would be taken of these graves they would not ask to have the bodies sent home to be buried in many instances in the small cities, only to be disturbed by the march of progress. If these bodies are buried at Arlington the graves will be taken care of as long as the government stands, and on each Decoration day the people will decorate their graves." Some 336 soldiers were buried with most imposing ceremonies, and the flag of the country was hanging at half mast throughout the land in mourning for her heroes.

* * *

In view of the fact of the generally neglected condition of the cemeteries in the South, the ladies of the local chapter of the Daughters of the Confederacy of Savannah, Ga., cannot expect us to take the following resolution, strongly protesting against President McKinley's suggestion respecting the federal care of Confederate graves, seriously: "With full appreciation of the impulse expressed in that sentiment, we shrink instinctively, with hushed and holy sorrow, from yielding the slightest assent. The graves of the Confederate dead are our pilgrims' shrines. From their hallowed hearts eternally ascend mute protest; against all assaults upon constitutional liberty. The record these incomparable heroes made furnish the brightest pages in American annals, wrought out by men of loftiest mold. Only reverent hands should lay memorials over their consecrated dust. To the women of the South this sacred trust must be reserved through all generations."

* * *

All the data necessary for a complete directory of the old cemeteries in Boston has been collected by the Cemetery Commission, and is now being arranged in the office and the catalogue is about completed. The burying-grounds have been surveyed, the tombstone inscriptions copied and the plans of the grounds have been worked out, showing where the stones are located. All this information will be compiled into a catalogue system like that at the Boston Public Library. The name of the interred is written on one side of the card and a true copy of the tomb inscription is written on the other side.

SELECTIONS FROM THE
SELECTED NOTES AND EXTRACTS.
 SELECTIONS FROM THE

Destroying the Mole.

A subscriber inquires if the mole is strictly carnivorous, and also how to destroy them.

It is customary to consider them carnivorous, though as recorded in a previous volume, they have been known to live entirely on vegetable food from necessity. Just like human beings, they have a preference, and in all probability roots are seldom touched for food. Ground mice are very destructive, and should be blamed for much that is now laid at the door of the mole.

From various reports, it is evident that the same method of destroying moles will not always answer. Some people have success with traps consisting of steel prongs set to spring downward when the mole passes beneath them, the trap being placed over a recent run. A Kentucky correspondent claims to have caught five and six a day with such traps. Others recommend poisoning meat and placing it in their runs. Bisulphide of carbon is also recommended. It is poured into a run, the entrance being immediately covered, while the fumes extend for a considerable distance, killing the animals it may reach.

The greatest success of others is to take notice of the time when the moles usually work, set a boy with a spade to watch the ground and dig up where any disturbance of the soil occurs. This is a sure way, and not so expensive and tedious as it may seem without trial.—*Mechans' Monthly for May.*

* * *

Evergreen Trees.

Evergreen trees are valuable for screens, for wind-breaks, for a background against which to group trees with highly colored leaves or branches, and for winter decoration. Too many should not be used together near the buildings, as they give a dark effect and often present an unhealthy appearance.

The best time to plant evergreen trees is in the spring, during April or May, just when the buds are ready to push; or if fall planting is preferred, it should be done in October or November. Great care must be taken that the roots do not become dry by exposure to sun and wind. It is best to select, for their removal, a moist or rainy day.

Austrian pine (*Pinus Austriaca*) is of a compact growth; it is cone shaped, with

a broad base. The leaves are dark green and nearly six inches long. The branches are equal around the tree, and well distributed. They need plenty of room for good development. This tree can be most safely removed when not more than three feet high.

Red cedar (*Juniperus Virginiana*) is one of the hardiest and most easily grown evergreens; but the principal objection to this tree, is that it is often badly attacked by the fungus (*gymnosporangium Macrospus*), which spoils much of its attractions.

Scotch pine (*Pinus sylvestris*) is of more open spreading growth than the Austrian pine. The branches and foliage are not so heavy, and the leaves are of a lighter green. The Scotch pine grows quite rapidly, and if carefully handled can be reared with very good success.

Dwarf pine (*Pinus Montana*). This tree forms a low, broad, dense, growth. The trunk is divided at the base into several ascending, smooth branches. The leaves are dark green. This tree grows quite readily when transplanted, and it is considered one of the best for hot and dry locations.—*New England Florist.*

* * *

Palmetto Blooms.

The cabbage, saw and blue palmetto are now in bloom in South Florida. The orange, lemon and peach trees are in bloom and so are the wild lupines. The air is laden with the wonderful fragrance of these beautiful flowers, that are to be seen everywhere. Bees are darting hither and yon, loading themselves with honey for their hive homes. One would think that where it is almost perpetual summer the honey bee would not be as industrious as in the colder climates, but this little worker is as active here as if he were compelled to make provision for a long, dreary and cold winter. Just now the bee is taking advantage of the palmetto bloom and storing much of the very best of honey from those flowers.

The cabbage palmetto is a tall tree, perhaps standing fifty feet high. The great bunch of flowers hangs from the extreme top and is several feet long. A sweet, nectar-like fluid, almost pure honey, is dripping from the flowers. This fluid certainly is a nectar, a drink fit for the gods.

The saw palmetto, the most common, is everywhere present. Its stalk of flowers is about two feet long and wonderfully sweet and fragrant. The saw palmetto is

so called because of the saw-like edges of its leaf stems.

The blue palmetto, growing by the side of the saw, has not sharp, prickly, but smooth stems. Its bloom is as grand and fragrant as either of the other kinds.

The palmetto is a member of the palm family. It is thought that there are at least 1,000 species of palms and palmettoes scattered over the world. At least 600 are definitely known and classified. Humboldt computed the number of flowers upon a single plant at about 600,000. Upon an acre there are often a hundred palmettoes growing. A moment's calculation will show that when the palmetto is in bloom there are thousands of flowers everywhere and the air must be laden with healthful fragrance.

I believe our Northern friends could procure the seed and have palmettoes growing in boxes about their houses. It is doubtful if they would bloom in the northern climate, but the plant is ornamental wherever grown.—*Peter Prindle, in Southern Florist.*

* * *

Notes on Hardy Plants.

The majority of hardy perennial plants and shrubs should be set out in the spring, although many are strong enough to withstand the winter, if planted in the fall. Good protection, however, should be given if planted then.

The perennial phlox is a great acquisition to our hardy, summer blooming plants, being fine as individual specimens, with their large bunches of finely colored flowers, or as a background to smaller plants. They begin blossoming in July and last until late in the fall.

Hardy herbaceous plants should be cultivated, that is hoed, watered, mulched and trained, just as much as any of the more tender plants. This advice may seem unnecessary to many, yet some flower growers never so much as hoe these plants after they are once set out. To be sure, they do care for themselves, in a great measure, but, at the same time, are very grateful for any care that may be given them.

A hardy perennial that can never be over-praised is the grand new plant *Rudbeckia Golden Glow*. This is one of the most decorative of our summer blooming plants. It grows to a great height and nearly all summer is covered with its double, golden yellow flowers, very much like chrysanthemums. These are borne on long, wiry stems, thus making them fine for cutting. The plant delights in a sunny, open situation, and will absorb a great amount of water.—*From Vicks Magazine.*

Park and Cemetery.

ESTABLISHED 1890.

An Illustrated Monthly Journal.

Devoted to the advancement of Art-out of Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

The regular contributors to PARK AND CEMETERY are among the most eminent Landscape Architects, Landscape Gardeners and Horticulturists in the United States, whose practical articles make the journal one of great value to any one identified with landscape work.

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Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

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Minneapolis, Minn., President.
WM. STONE, "Pine Grove,"
Lynn, Mass., Vice-President.
F. EURICH, Woodward Lawn, Detroit, Mich.
Secretary and Treasurer.

The Thirteenth Annual Convention will be held at New Haven, Conn.

The American Park and Out-Door Art Association.

CHARLES M. LORING, Minneapolis, Minn.
President.
WARREN H. MANNING, Tremont Building,
Boston, Mass. Secretary.
E. B. HASKELL, Boston, Treasurer.

The next meeting of the Association will be held at Detroit, Mich.

The American Society of Landscape Architects has been organized, with the following officers: J. C. Olmsted, president; O. Parsons, Jr., vice-president; W. C. Laurie, treasurer, and D. W. Langton, New York, secretary.

Mr. E. Baker, well known as a botanist and horticulturist in the South, will take the place of superintendent Fonta in Audubon Park, New Orleans, during the absence of the latter gentleman, who shortly leaves for France, his native country, on a visit which may occupy eighteen months.

Mr. Cyrus Phipps was again elected superintendent of Franklin Cemetery, Franklin, Pa., at the recent annual meeting of that association.

Mr. G. D. Baltimore, C. E., of Troy, N. Y., engineer of the Oakwood and Forest Park cemeteries of Troy, and the Fern Dale cemetery, located between Johnstown and Gloversville, has been retained in a similar capacity by the Pine View Cemetery Association, of Glens Falls, N. Y. Mr. Baltimore is now at work laying out the new tracts recently purchased by that association.

Plans have been prepared by Mr. Warren H. Manning, landscape architect of Boston, for the new South View Cemetery at Randolph, Vt. Mr. Manning in collaboration with Mr. W. C. Whitney, architect, has been at work on the plans for the house and grounds of the Minnetonka Pleasure club, Lake Minnetonka, Minn. The contracts for the building will be let immediately and the members hope to have it ready for use by June. The house is to be erected immediately on the Lafayette hotel site and a part of the foundation work will be utilized. The house will have a frontage of 80 feet, a depth of 90, and contain on the ground floor a large dining room and kitchen beside a spacious club room. A veranda will encircle the house and a portion will be screened in as a tea room.

Mr. James A. Burns has been appointed superintendent of the Rural cemetery, Albany, N. Y., to succeed the late Marion Baudolph. In 1866 Mr. Burns, when a boy of 12 went to work in the cemetery, under the superintendency of James W. Green. Since that time, a period of 33 years, he has been in continuous service there, and for a number of years has been assistant superintendent. Much pleasure is expressed in his appointment by the lot owners who have appreciated his work and his uniform courtesy.

The Atchison, Topeka & Santa Fe R. Co. is falling into line on the subject of improving their station grounds, and have recently appointed Mr. A. Reinisch of Lawrence, Kas., as landscape gardener. Parks are to be laid out at their railway stations and improvements carried out to make the properties attractive.

The meeting of the Rock River Valley Branch of the Illinois Horticultural Society, a very interesting one, was held at the residence of George Powell, near Sterling, last month. In the course of the proceedings Mr. George D. John read a paper on, "Should Horticulture be taught in our Public Schools?" The author took a negative view of the subject on the grounds that the public schools were established for the purpose of giving the child a good knowledge of the common branches which all practice as a rule every day in all business and other avocations of life, so that horticulture and other studies may find a foundation upon which to build. A good discussion was had upon the paper, but published reports give the balance of argument in favor of the views of the author.

The Horticultural Society of Chicago have made preliminary arrangements for probably the largest and most comprehensive horticultural exhibit ever attempted in this country. It will be given in the Auditorium building, the rent of which

and expenses for the week commencing Nov. 6, labor and other items will amount to \$20,000. Some \$5,000 has already been promised towards a guarantee fund and as soon as this is sufficient to cover expenses, the lease will be drawn up with the Auditorium managers, and all arrangements for the exhibits completed.

BOOKS, REPORTS, ETC., RECEIVED.

Oakwoods cemetery, Chicago. The descriptive pamphlet recently issued by the Oakwoods Cemetery Association of Chicago is a fine example of cemetery printed matter. It is profusely and beautifully illustrated and contains the essential information to interest and attract attention.

Another highly artistic production is that of Woodlawn cemetery, New York City, a small pamphlet contains most beautifully produced half tones, one to a page with a few words only of printed matter executed in tint inks. This is issued in addition to the annual report for 1898 which is gotten up in the style which has become standard with Woodlawn cemetery.

Report of the Board of Metropolitan Park Commissioners, Boston, Mass., January 1899. Illustrated with photo-gravures and detail contour map of the Metropolitan District of Boston.

Fifty-first annual report of the Directors of Swan Point cemetery, Providence, R. I. February 7, 1899. Together with the Charter, By-laws, Rules and Regulations and a catalogue of proprietors. Beautifully illustrated with full page half tones.

The University of Nebraska. Twelfth annual report of the U. S. Agricultural Experiment Station of Nebraska.

Proceedings of the Western New York Horticultural Society, Forty-fourth annual meeting held at Rochester, N. Y., January 25 and 26, 1899.

Transactions of the Massachusetts Horticultural Society for the year 1898.

Transactions of the Indiana Horticultural Society, 1898. This is a report of the 38th annual meeting, which was held in Indianapolis, Ind., Dec. 6-8, 1898. The book contains a number of instructive papers and committee reports, and the discussions afford a fund of invaluable information on practical lines.

Preliminary announcement, Twenty-seventh annual meeting of the American Public Health Association to be held at Minneapolis, Minn., October 31, to November 3, 1899.

Report of Board of Park Commissioners, Wilmington, Del., 1898. This report is always attractive. The present issue contains some beautiful half tones and reproductions of pen and ink drawings.

Annual report of the Directors of the LaFayette Cemetery, Philadelphia, Pa., for year ending December 31, 1898. Mrs. Catherine Betson, superintendent.

Annual report of the Board of Cemetery Commissioners, City of Cambridge, Mass., 1898.

Constitution and By-Laws of the Elmwood Cemetery Company, Sherbrooke, P. Q., Canada.

The Industrialist, for April, a journal issued ten times a year by the Kansas State Agricultural College at Manhattan, Kas. This journal which is edited by the faculty and printed by the college is now in its 25th volume. The college offers courses in agriculture, engineering, household economics, architecture, and allied departments of education. The journal contains some valuable and interesting articles which speak volumes for the educational and progressive status of the college.

FORESIGHT, a handsomely gotten up pamphlet giving a description of the city of Tacoma, Washington,—the city, the university and its residence park. It is copiously illustrated with half tones artistically arranged. It also includes a map of the university grounds and residence park attached. This park has been laid out by Mr. E. O. Schwagerl, the Pacific coast landscape architect, to whom we are indebted for the pamphlet.

The Steam Road Roller in Parks and Cemeteries.

Mr. William Salway, Superintendent of the Cemetery of Spring Grove, Cincinnati, O., writes as follows on the subject of the Road Roller:

"I think it is due you to say that your admirable publication the 'PARK AND CEMETERY' is doing excellent work. I find that it is not only subscribed for, but it is read, the many ideas and suggestions which it conveys are of inestimable value to its many readers, which makes it worth many times its price. It is seldom that I contribute anything to its columns, but would like to make known some of the advantages of the Steam Roller.

Seven years ago we began to investigate the merits of the different machines then on the market, and finally selected a ten-ton roller from the O. S. Kelly Co. of Springfield, O.

At first we used the roller for merely rolling new metal and the general surface of the roads, and frequently before applying the new stone would break up the old surface with the spiked wheels, but we have since found many more uses to which we have applied it. In extending our improvements we found it necessary to remove about 80,000 yards of tough hard pan, it was of such mixture that it could not be ploughed, and to blast it was impossible with anything like satisfactory results. It occurred to me that I could possibly use the steam roller by making it stationary, and by means of a spool attached to one end of the axle, a steel cable could be used to draw a gopher plow through the hard pan so that it could be broken in pieces ready to load into carts and scrapers. On applying to the manufacturers they furnished the necessary assistance in putting on the spool and cable, and the results are so eminently satisfactory that we feel our experience

 * SITUATIONS WANTED, ETC. *

Advertisements, limited to five lines, will be inserted in this column at the rate of 50 cents each insertion, 7 words to a line. Cash must accompany order.

Wanted, a position as Cemetery Superintendent, with several years' experience; best of references as to character and ability; am now in charge of Incorporated Cemetery. Address American, care of PARK AND CEMETERY.

A position wanted by a Scotchman as Cemetery Superintendent; 21 years' experience as landscape gardener and superintendent of one of the leading cemeteries of the country; thoroughly competent to manage, improve and superintend the care of a first-class cemetery. Address C. care PARK AND CEMETERY.

Situation wanted by experienced young man as superintendent; to take full charge, or assistant in first-class cemetery; can prepare new grounds. Address J. A. L., care PARK AND CEMETERY.

may be useful to others. We use the cable for pulling heavy weights, such as removing large stumps of trees after they are grubbed out, which all engineers know is a difficult task with the ordinary appliances, in cases where large trees have died in the middle of sections and where a team of horses could not go, we have put down plank and drawn the stump by cable, the steam roller standing on the avenue 300 feet away from the hole where the stump was.

During the past winter the Harrison Granite Company erected in the cemetery a mausoleum for the heirs of Charles Fleischmann. It is a copy of the Parthenon, the roof being in three pieces, two side stones and a ridge stone of unusual size, and these were removed from the railroad to the cemetery lot by the use of the steam roller.

We realize that the first cost of a steam roller seems to most cemetery and park boards very great, and they are in doubt as to their being justified in making the expenditure, but could they know the value of such a machine they would not hesitate to purchase one. I do not know how we could manage without ours, it really seems as indispensable as the telephone, and I would advise all park and cemeteries that do not have a steam roller to obtain one.

The use of the steam roller on our roads has made a surface equal to asphalt, and the steep grades that formerly washed by the heavy rains are seldom effected now.

Since our roller was made the manufacturers have added several valuable improvements.

Landscape, Garden and Plant Photographs.

The Publisher of PARK AND CEMETERY announces the following photographic competition for 1899.

List of Premiums.

NO. 1. LANDSCAPE AND GARDEN EFFECTS. A first premium of Five Dollars and a second of Three Dollars is offered for the best series of not less than four photographs of picturesque landscape and garden effects. These may include park or rural scenery, city or suburban out door art in gardening.

NO. 2. TREES, SHRUBS AND PLANTS OF THE OPEN AIR. A first premium of Five Dollars and a second of Three Dollars is offered for the best series of six photographs of trees, shrubs and plants. These may include wild trees or shrubs, or any plant grown in the open air, and may be in single specimens or groups. All photographs in this class should carry descriptions, including approximate dimensions.

NO. 3. GROUPINGS AND EFFECTS. A first premium of Five Dollars and a second of Three Dollars is offered for a series of six photographs of picturesque groupings of plants and shrubs, or suggestive spots of wild plant life, in woodland, park or home grounds. Rock or water gardens may be included in this section. These photographs should also have enough descriptive matter attached to make it possible of reproduction in nature.

For photographs retained by the publisher that are not awarded prizes 50 cents each will be paid. The competition will remain open until July 1st.

Suggestions.

Care should be taken to keep backgrounds plain to avoid confusion in picture. Figures of persons, garden utensils, and all objects liable to cause detriment to the picture or its object should be carefully kept out. The photographs must be mounted singly on cards with white backs and must not be less than five inches by four inches.

Instructions.

The photographs may be of objects in the possession of either the sender or others; but there must be no question as to the right of photographing or using them. There is no limit as to number, and the publisher shall have the right of engraving and publishing any of the chosen photographs. They may be printed on any good paper that shows the subjects clearly, and that will make good half tones.

The name and address of the sender, together with the name and description of the objects shown, should be plainly written on the back of each photograph.

All communications relating to the competition must be addressed to R. J. Haight, 334 Dearborn Street, Chicago, and the class for which the photographs are intended should be marked on the parcel, which must also be labelled "Photographic Competition."

THE CHAMPION IRON CO.,

KENTON, OHIO,

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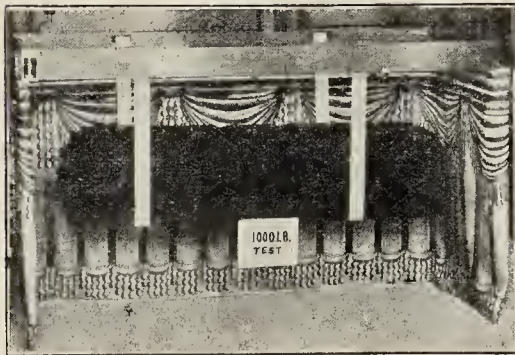
IRON FENCES FOR
Public Grounds and Residences,
CEMETERY FENCES AND
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Settees and Vases, Ornamental Crosses, Etc.

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Simple, Practical, Indispensable, Easily Operated.
Convenient to Handle. Indorsed by Everybody.

OAKLAWN CEMETERY ASSOCIATION.

WILKES-BARRE, PA., April 19, 1899.

Messrs. Osborn & Co., Milford, Ill.

DEAR SIR: Your lowering device is O. K. and works like a charm. We used it on a steep side hill, and the automatic coupler worked splendidly.

Yours truly, Bellett Lawson, Supt.

O. S. OSBORN & CO.,
MILFORD, ILL.

M. Y. CAMERON, Auburn, N. Y., - State Agent.

Trade Literature, Etc.

How to Spray. When to spray and what pumps to use. The Goulds M'fg. Co., Seneca Falls, N. Y.

The catalogue of the Rochester Machine Tool Works, L'td., Rochester, N. Y., is full of information and illustrated descriptions concerning their products. They are making a specialty of power mixing and spraying machines, which are a necessity where large plantings are to be cared for. These catalogues will be mailed to interested readers on application.

Aquatics, Water Lilies, Lily Park Gardens and Greenhouses. George B. Moulder, Smiths Grove, Ky.

Spring, 1899. The Storrs & Harrison Co., Painesville, O.

The Lawn Mower Catalogue of Dille & McGuire M'fg. Co., Richmond, Ind., contains excellent descriptive and illustrated matter of the various styles of lawn mower they manufacture, together with prices. Their high grass "Diamond" mower was officially used at the World's Fair and made a good record. They now construct a ball bearing Lawn Mower, made in four sizes from 14 inches to 20 inches, with the parts as carefully finished as a bicycle. A catalogue will be mailed to interested enquirers.

Pinehurst Nurseries, Pinehurst, N. C. Broad leaved evergreens and herbaceous plants and seeds. A large assortment of forest grown shrubs, etc.

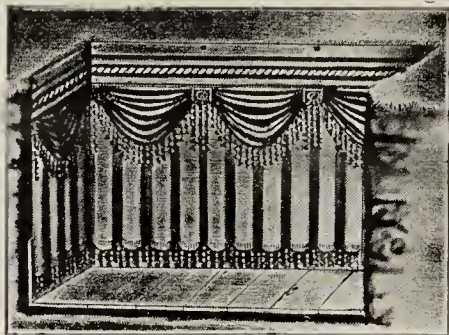
Lovett's Catalogue, spring 1899. J. T. Lovett, Little Silver and Red Bank, N. J. Seeds, bulbs, plants, trees.

Vaughan's Catalogue for 1899, Chicago. Seeds, bulbs, plants, and everything for the lawn and garden.

Choice Hardy Trees and Plants, No. 42, Fred'k. W. Kelsey, 150 Broadway, New York.

Supplemental Catalogue of Healthy and Hardy trees, shrubs, vines, etc., season 1899. Mount Airy Nurseries. David G. Yates & Co., Philadelphia, Pa.

Mr. S. H. Curtis, vice-president and secretary of Harlington cemetery, Waverly, Ia., in the course of a communication speaks of his effort to find a paint for iron cemetery fences and enclosures, that would retain its body and gloss for a reasonable length of time. Last year he made a trial of the Donkey paint made by the Kansas City Roofing Co., Kansas City, Mo., and is enthusiastic over results. He highly recommends it to cemetery superintendents for such work as he suggests.



**THE BAKER
Waterproof Grave Linings**

GRAVE CANOPIES.

Write for cuts and prices.

BAKER BROS. & CO., Tiffin, O.,

AGENTS FOR THE
American Safety Gasket Lowering Device.
(Cut shows waterproof lining in grave.)

The elm-leaf beetle and other pests have made such sad havoc with the foliage of shade and other trees that a Spraying Outfit has been and is a necessity and has been adopted and used with the best of results in several cities and towns. It has been found, that, with such provision at comparatively little expense, the shade trees can be sprayed and the foliage kept in perfect condition. An outfit specially for this work is made by the Goulds M'fg. Co., Seneca Falls, N. Y., and consists of a small, noiseless gasoline engine driving a brass fitted pump. These are so connected and mounted upon base as to be easily placed in spring wagon or removed therefrom. Further information can be obtained by addressing the company as above.

The value of kerosene as a material for spraying has been generally appreciated by horticulturists and others for some time, but the difficulty and uncertainty of preparing and using the various emulsions of kerosene has prevented its general use. The Deming Company of Salem O., set to work experimenting for a machine that would make its own emulsion while in the act of spraying. The result is the "Weed" Knapsack Kerosene Sprayer, the "Success" Bucket Kerosene Sprayer and the "Peerless" Barrel Kerosene Sprayer. The amount of kerosene is easily regulated by an indicator on the top of the kerosene tank which controls the percentage of oil. The Deming Company's illustrated catalogue containing complete formulas for spraying, in addition to descriptions of their very complete line of pumps and nozzles, sent on application.

Fairmount Park, Philadelphia, is infested with poison ivy, in relation to which the Philadelphia *Enquirer* says: "The first cases of ivy poisoning in Fairmount Park for the present season have been reported from Valley Green. Two ladies who were in attendance at the Grant statue unveiling ceremonies were badly affected, one so seriously as to threaten blood poisoning. When asked what the Park Commission did last year and what it expected to do this year for the protection of visitors from ivy poisoning, Secretary Thomas J. Martin said: 'The removal of poisonous vines from the Park comes under the same appropriation as the cutting of the grass and the mowing of the lawns. But \$8,000 was set aside last year for all this work. It would take at least five times that amount to extirpate the ivy from the Park, for it is found all over its confines. If persons who are poisoned would only come to us and tell us where they received the infection, we would pay especial attention to those particular spots.'"

POWER MIXING AND SPRAYING MACHINES
For Parks, Cemeteries and Private Grounds.

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WE BUILD THEM.

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ROCHESTER MACHINE TOOL WORKS, LIMITED,
ROCHESTER, N. Y.

CATALOGUES ON APPLICATION.

TREES Evergreens, Hardy Shrubs, Azaleas, Rhododendrons, Japan Maples, Roses, Vines and Choice Fruits. **Low Prices.**
CATALOGUES SENT. **FRED W. KELSEY, 150 Broadway, N. Y.**

F. & F. NURSERIES Springfield, New Jersey.
Wholesale Growers **TREES** and **PLANTS** in full assortment—**CATALOGUE FREE.**

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Records. Specimen pages and Price List sent on application to



R. J. HAIGHT, Publisher,
334 Dearborn St., CHICAGO.

CREMATION IN SIAM.

If there is any time when the Siamese can be said to hold sports, it is at a notable cremation, says a writer in *Harper's Weekly*. Ordinarily the dead of Siam are burned at a ghat common to all who cannot afford the considerable expense of a private conflagration, and when the wood of the funeral pyre has been consumed the body is well roasted and the attendant vultures are given a chance to clean the bones. Those who can afford it build their funeral pyre within their private walls, where festivities are held during the burning, and invitations issued to friends, that they may come and behold the honor paid their dead. The bodies of those intended for private cremation are embalmed, and usually kept for some time—often many months. One Siamese gentleman, when inviting me to the proposed cremation of his brother, informed me that the distinguished deceased had been awaiting combustion for a year. The extent and character of the festivities on such an occasion depend entirely upon the length of purse of the deceased's remaining relatives. On the appointed day the guests assemble to witness the simple ceremony of the yellow robed priests of Buddha. Subsequently the nearest female relative fires the pyre and then, while the flames crackle and the late lamented hisses and pops like a green pippin on a spit, his grieving family and friends grow merry over the cakes and wines, while men hired for the occasion perform at several games, and even, on rare occasions, do some little running and jumping. The game nearest approaching one of skill is a sort of fence play with short sticks fastened to both arms.

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THE VERY BEST OF GARDEN & LAWN
H O S E **TRADE MARK**

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THE GUTTAPERCHA & RUBBER MFG. CO. 96-98 LAKE ST. CHICAGO.

DON'T SPOIL THE TURF!

Managers of Cemeteries and Parks know how difficult it is to produce a nice, even, firm turf and should guard against its being broken from any cause. Heavy hauling for the erection of monuments, the removal of earth, grass, etc., and the transplanting of trees, etc., is at times necessary. The ordinary wagon will cut in, "rut" and ruin the turf. A wagon equipped with the broad-tired

ELECTRIC STEEL WHEELS WILL NOT DO THIS.

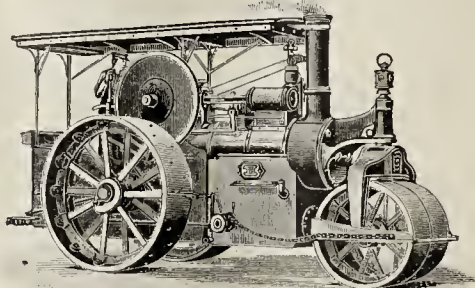
These wheels are made with either direct or stagger oval steel spokes and we have such a variety of sizes that we can fix any wagon. We make them in all heights, from 20-in. to 60-in. They all have wide-faced tires, ranging in width from 2 in. to 8 in., as ordered. They can be slipped right onto the wagon already in use and immediately convert it into an ideal park and cemetery dray. They bring the wagon down where it is easy to load. A still better plan would be to use one of our

ELECTRIC HANDY WAGONS

for this purpose. They are fitted with the above wheels either stagger or direct spokes. Best seasoned white hickory axles. All other wood parts of seasoned white oak. Front and rear hounds made of steel—neater, better and stronger than wood. Guaranteed to carry 4000 lbs. anywhere. Catalogue fully describing these wheels and wagons sent free on request.

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THE O. S. KELLY CO.,
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STEAM ROLLERS FOR DRIVEWAYS.

J. E. BOLLES' IRON AND WIRE WORKS,
 DETROIT, MICH.

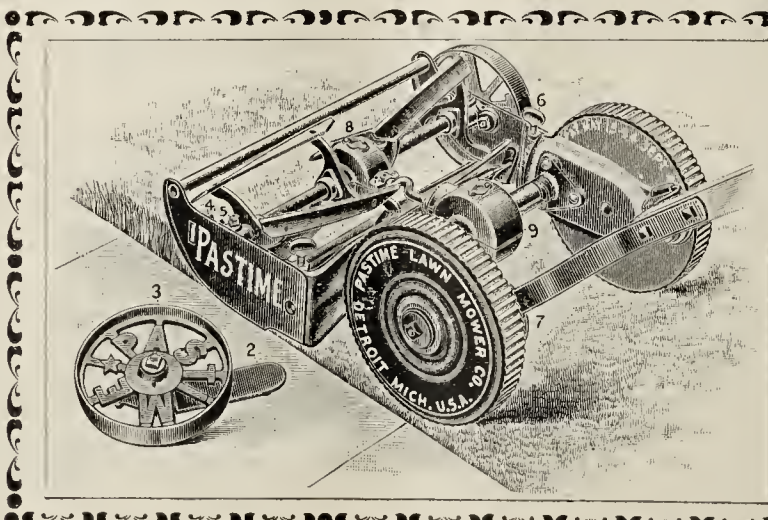


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Wrought Iron Settees
 FOR PARKS.

The cut shows the "Detroit" Settee, the one adopted by this city and our favorite pattern for Parks. Send for our new 48-page "Pocket Edition," 5 P., and mention the "PARK AND CEMETERY."

J. E. Bolles' Iron and Wire Works, - DETROIT, MICH.



Reduced Prices for Season 1899.
Pastime Mower & Trimmer
 CONVERTIBLE FROM MOWER TO TRIMMER
 IN 5 SECONDS.

It leaves no Ridges. It trims to 1-4 of an Inch of any Object.

It can be Sharpened by the User.

SPECIAL PRICE TO CEMETERIES.

GRASS CATCHERS WHERE REQUIRED.

N. B.—We have the best Weed Extractor in the market.

PASTIME LAWN MOWER CO.,
 Detroit, Mich.

PARK AND CEMETERY.

** A Monthly Journal of Landscape Gardening and Kindred Arts. **

VOL. IX. Chicago, June, 1899. NO. 4.

CONTENTS.

EDITORIAL — Gardening and Forestry at the Paris Exposition — Chicago Parks and Automobiles — Memorial Day—Coming Convention of the American Park and Outdoor Art Association—Small Parks—Bicycles in the Cemetery—Monuments in the National Military Park.....	71, 72
*Philadelphia's Tribute to General U. S. Grant.....	73
*The Arboretum at Rose Brake.....	74
Pinus Palustris.....	75
*The Parks of Detroit, Mich.....	77
*A Lovely Home in England.....	80
*Lake View Cemetery Skaneateles, New York.....	81
Improvement Associations.....	83
Programs of Convention of American Park and Outdoor Art Association and Association of American Cemetery Superintendents.....	84
*City Park; Mannheim, Germany.....	85
*Garden Plants—Their Geography, XLII.....	86
Park Notes.....	87
Cemetery Notes.....	88
Selected Notes and Extracts.....	89
Reviews of Books, Reports, etc.....	90

**Illustrated.*

IT is to be hoped that our commissioner for the Paris Exposition will not overlook the matter of securing to American landscape architects the work of laying out the grounds surrounding and connected with the United States buildings. It might be a very interesting invasion of the established ability of our sister republicans in questions of embellishment, to show them how American gardeners can provide for immediate effects in their selection of planting material, and its disposition in decorative gardening. In the department of Forestry and Fisheries our commissioner has appointed Dr. Tarleton H. Bean as director. Dr. Bean is a Pennsylvanian by birth, and was associated with the Forestry Commissioner of that state for many years. He was also in the government service for a long period, finally attaining the position of Chief of the Division of Fish Culture. From the time of the Centennial Exhibition he has had a varied and extensive experience in Exposition matters, both at home and abroad, and should

be eminently qualified to direct the very important department to which he has been appointed.

IT would be difficult to assign a reason for the peculiar regulation just passed by the South Park Commissioners of Chicago prohibiting the use of the boulevards and parks to automobile vehicles. If their desire was to attract more of the drastic criticism to which they have often subjected themselves, their effort has well succeeded, and they are met with the righteous opposition of the friends of the electric carriage. Chicago people will presently be calling emphatically for modern blood in South Park officialdom.

MEMORIAL DAY received far greater public recognition this year than ever before, and the observance partook of more seriousness. This generally desirable condition was the result of the late Spanish war, which brought the horrors and bereavements consequent upon war, close home to the present generation, and it is to be earnestly hoped that the conditions which became so obnoxious to the higher sense of the American people in the past few years will never recur. Memorial Day should never be allowed to degenerate into a hoodlum holiday. Many notable exercises were carried out at a number of the cemeteries, exercises which embraced both Federal, Confederate and Spanish war dead, and in some cases the memorial features were united in one program. The cemeteries were beautiful in their rich late spring effects, resonant with nature's harmonies, and lending their soothing influence to the new fraternity of soldierhood which the late war has graciously evolved.

DETROIT is to be congratulated this year upon being the city of the annual convention of the American Park and Outdoor Art Association. This meeting occurs on the 27th, 28th and 29th of the present month, and of which more detailed particulars will be found in another column. It has been observed that the effect of this convention and its proceedings have been very stimulating in park affairs in the cities in which it has been held. The intense interest taken in the objects of the association has drawn to it a mem-

PARK AND CEMETERY.

bership of intelligent people, and it follows that in the cities which are honored by its meetings, prominent and active citizens take pleasure in promoting successful proceedings, in that this assures profitable and practicable results in furthering their own park affairs. Not only is this true of public improvements in landscape work, but organizations and private citizens, alive to the possibilities of improved surroundings, take advantage of the convention to gather information, make acquaintance with the masters of the art who may be present, and otherwise be strengthened and encouraged to go ahead in the great work expressed by the term art out-of-doors, which is destined to do so much to improve conditions of life everywhere. It is to be expected that the Detroit convention will again be productive of far reaching results, redounding to the success of the association in its noble missionary work, no less than to the city in which it conducts its public business. Every municipality in the country should send a representative to receive experience and benefits far outweighing the expenses incurred, which in point of fact no money could purchase.

THE civilization of to-day might well take some suggestions from that of the past in many directions. One that is especially called to mind at the moment is the apparent neglect of the small park or breathing spot in the building up of our cities and towns. In many foreign towns, indeed in many of their pretty hamlets, the thoroughfare has been enlarged about the public building, or advantage has been taken of certain irregularities of plan or contour, so as to reserve a point of vantage for the wayfarer, or a point of beauty for the lover of nature. In many places it looks as though the park were arranged before the town. Contrast this condition with what has prevailed in our own country; where the real estate owner begrudged every clod of earth to make a wider street, and the trader thought the grass plot about a public building a crime against commerce, because of its value as capital in trade. Our vast resources and opportunities has blinded us to the lessons right before our eyes, and we are now paying heavily to learn the lesson. The small park fever abroad in the land should have been attended to before, when its expenses would have been light.

THE impossibility of being able to exercise a constant vigilance over the bicycle rider, and to restrain and curb the lawlessness of many of them is leading to a curtailment of privileges in many cemeteries. Rules seem to be dead letters to some cyclists, and their facility of movement a passport to any desecration they may desire

to commit. Much discussion was had at the outset of the bicycle fever on the question of discriminating in our cemeteries in favor of the man driving the horse, but the experience in many places has been to prove that the man who can afford to drive a vehicle through the cemetery possesses a responsibility which many cyclists seem never to realize. On the other hand the cyclist assumes privileges for his wheel which has never and can never be accorded to him, if the care of the cemetery for its lot owners and the community is the duty of its officials.

THE appropriation of \$65,000 by the Illinois legislature for the erection of regimental monuments, markers, and one state monument on the battlefield of Shiloh, directs attention to the necessity of improvement in the character of such monuments, both as to sculpture and architecture. This is a subject which has often been touched upon in these columns, but is of such importance to the good name of this generation, that it cannot be urged too often or too vehemently; because apart from the very serious consideration of art in the matter, political jobbery has run rampant over nearly every righteous suggestion that such public opportunities offer for the recognition of either past or present efforts of man to benefit his times. To-day it is an oversight of ignorance, we must use the term, of any legislator who promotes a bill involving art issues to omit to incorporate in his bill a method designed to secure merit in the work. It is of no use trying to disguise the fact that at present, many, perhaps by far the most, of our manufacturers and producers will sacrifice future reputation, and run great risks for the present, by making the almighty dollar first above every other consideration involved in any public undertaking which may fall to them. And yet we rant about patriotism. But apart from the matter of morality involved, there should be no more dallying with this question. The state has appropriated public money for a public monument on a battlefield made public by the country, and every other consideration but that of getting the best the money will afford should be subordinated to the question. At the suggestion of *The Monumental News* some time ago, the Central Art Association of Chicago offered to pass upon all monuments of a public character submitted to them for a report, free of charge except for transportation expenses, and we would urge all who may have any influence in such matters to contribute some effort towards insisting that this coming monument to the dead soldiers of Illinois, shall in itself show not only a money value, but reflect at least some of the intelligence of a state which has produced a Lincoln and a Grant.

PHILADELPHIA'S TRIBUTE TO GENERAL U. S. GRANT.

AMID the salvos of artillery, the rhythm of martial music and the cheering of the people, the ceremony of unveiling the statue of the hero of Appomattox, in the presence of the nation's executive, members of the cabinet and 20,000 spectators, was successfully made on the 27th of April.

There has been much delay in this, for the press gave an account of the successful casting as far back as May, 1896, since which time the ceremony has been postponed on several occasions in order to find



a befitting and appropriate time.

The day for Philadelphia and its citizens was an eventful one; music played upon the air, bathed in God's golden sunshine and the dipping of the battle scarred flags, was a mute and fitting salute, in reverence to the silent general of the past, and his widow, son, daughter and granddaughter present.

The statue has been judiciously located at the picturesque intersection of the East Park River drive and the Fountain Green drive, where the rock face range of the Fountain Green arches serve to make a fitting background, in consonance with the lazy flowing waters of the Schuylkill on the left and the rolling green lands on the right.

As Miss Rosemary Sartoris drew aside the veil, horse and rider were disclosed to public view, the former the work of Edward C. Potter, the figure by Daniel C. French.

Clad in the full uniform of a general, spurred and top booted, and bearing upon his shoulders the long cloak or cape suggested by his son, Colonel Fred Grant, the figure stands pre-eminently as the thoughtful, dignified soldier. Again that familiar sugar loaf hat, beneath which the bearded face modeled to a realistic degree, serves to intensify the pose and portray the passiveness, the sphinx like character of the man, the soldier; the logical solver of strategical problems. In the execution of the work Mr. French has given splendid evidence of his ability. Life and feeling are therein vested, the pose, and balance admirable. The auxiliary details serve but to strengthen the documentary requirements, but aside from these, the figure illustrates all the possibilities of the



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GRANT MONUMENT, FAIRMOUNT PARK, PHILADELPHIA.

sculptor's art by giving us good portraiture, bearing in expressive qualities the latent forces of the man.

The height of the statue from the ground, or first base to the rider's hat, is 15 feet 1 inch, the plinth being 5 feet 6 inches wide and 12 feet six inches long. The pedestal, which was designed by Architects Frank Miles Day and brother, is of pale pink Jonesboro granite. Its total height from the ground proper to the bronze plinth of the statue is 15 feet 5½ inches. The pedestal rests upon two steps rising from the ground, and on this the die, a plain granite block, bearing upon its face a wreath encompassing the simple legend "Grant," with crown and dental moulding above.

The contract was given by the Fairmount Park Art Association in January, 1894, at a total cost for pedestal and statue of \$32,675. *W. P. L.*

THE ARBORETUM AT ROSE BRAKE.

A hundred years ago the little arboretum of Rose Brake was a part of the natural forest of this region. The old oaks and tulip-trees still standing here, some of them eighty and a hundred feet in height, and girthing from fourteen to nineteen feet, four feet from the ground, must have seen many generations of men pass away beneath their shade.

Rose Brake is situated about a quarter of a mile in a southerly direction from the village of Shepherdstown, in Jefferson Co., West Virginia. This village was settled in the early part of the eighteenth century and is one of the oldest towns in the Valley of Virginia. It lies on the banks of the Potomac amid picturesque scenery, loved of artists, who frequently come to spend the summer in the environs.

Twelve years ago, when the writer began to improve the little farm of Rose Brake, it consisted of sixty-two acres of good ground, partly under cultivation and partly in wood and marsh-land. The former owners had merely fenced in and cleared the undergrowth of the grove of about eight acres which sloped from the high ground on which the dwelling is situated, in a westerly direction to the county road running south from the village. This grove had been pastured by sheep and cattle so that nothing but the largest trees had been preserved from their depredations. There was no shrubbery and no growth of vines, wild flowers or saplings. Ledges of bare lime-rock cropped out in all directions and a smooth turf of blue grass growing close up to the trunks of the trees, which stand far apart as comports with their size and dignity, gave a park-like appearance to the place.

The first improvement effected by the present owners was to turn out the grazing cattle and give

a chance for the native under-growth to spring up to diversify the aspect of the grove, and to clothe the bare rocks with verdure. Virginia creepers and other vines were found to be indigenous and only needing a chance to convert many bare and unsightly places into beauty. Shrubs were planted in groups here and there against the stone walls and many small trees set out where there was sufficient space.

The ground of the grove is rolling, and in the main consists of two low hills, running east and west, with a winding valley between there. There are two approaches to the dwelling. One winds through the valley on the northern side of the domain, while the other takes the southern side and is a shorter and more direct approach to the house through the shrubberies that form the southern boundary of the pleasure grounds. An irregular avenue of large oaks and tulip trees outlines these carriage roads. There are no walks in any part of the grounds in front of the house except an informal footpath which defines the short cut across the grove and adjoining field to the village. The collection of shrubs and other plants has been formed gradually, until the little arboretum now boasts of more than five hundred varieties of hardy plants. The idea has been to mass the shrubs in an irregular belt around the borders of the grove, with a few groups of small trees and evergreens, here and there, on rising ground or in other conspicuous positions which best display their beauty. Rocky places have been planted with the native ferns and wild flowers, as the results of many delightful excursions to the cliffs of the Potomac and the woods and marsh-lands of the neighborhood, and hundreds of plants have thus been naturalized in the wilder parts of the grounds.

But the glory of the place is in its roses which we have planted in every situation where roses may be coaxed to grow, and which transform the pleasure grounds in May and June into a fairy land of bloom and beauty. Here at the side of the house and in the garden proper, which is behind the house, are formal beds for tender teas and the choicer garden varieties; groups of Lord Penzance sweet-briers and many wild and single roses clamber over the rocks through the grove, or climb the trees or throw a veil of beauty over stump and bush. *Rosa Wichuriana* trails at will over barren places; *R. multiflora* converts a young mulberry into a shady bower; arbors and arches and trellises are covered with climbers, and an irregular hedge of hybrid perennials forms the northern boundary of the grove.

The clay sub-soil is mulched with wood's earth and a rich black marl from the marsh mixed with barnyard manure, and in this composite soil the roses flourish. Early in May they begin to bloom

in this climate; the procession led off by the old-fashioned cinnamon rose which is naturalized in the rock-brake north-east of the house to which we give the name of the Rose Tangle. Here, too, are many hundred-leaved roses, fine for making pot-pourri and rose water. They were planted many years ago, by a former occupant of the place. Here, also, is a flourishing *Hermosa* which the writer remembers in earliest child-hood, and single damask roses and immense cabbage or Provence roses, still furnishing quantities of flowers, date farther back than the memory can trace. Every year we add a few more to our



TULIP TREE AT ROSE BRAKE.

Rosery, so that we now have nearly one hundred varieties of this charming family, which often give us flowers as late as the first of December, so that we have roses in bloom, out-of-doors, seven months of the year.

Next to the roses the pæony is our favorite plant for ornamental effect. Large beds of these grand flowers are planted on the lawn at the side of the house, and in the borders we have many groups of the improved kinds. Tree-Pæonies from Japan are being tested here, and indeed there is no group of these plants which has not some representative in our gardens.

We are unfortunately unable to succeed with rhododendrons, azaleas or any of their kindred, as they will not live in our soil or resist the drouth of our summer season. We have discovered by much sad experience, that this beautiful family can

not be colonized at Rose Brake. But, to make amends, almost all other hardy plants do very well with us. We have a great number of flowering peaches, apples, plums, and lilacs, spiræas in twenty varieties, many weigelas, wistarias and magnolias, and very many rare varieties of deciduous trees, evergreens and shrubs, seldom seen in private collections.

The object of these little talks on our work at Rose Brake will be to show the amount of wholesome pleasure to be derived from ornamental horticulture and land-scape gardening by people of very moderate means, without green-houses or gardeners. Indeed, we can boast of but one man and about half a boy of all work to assist us in our gardening operations. So that all the trees and other plants have been set out with loving personal care of the mistress of the place, and after much thoughtful planning. The writer must admit, however, that she has been obliged to curb and restrain her hobby lest it should run away with her. And, for the benefit of those who may be tempted to become as great enthusiasts as herself in this direction, she wishes to state in the beginning that they need not be deterred by the fear of the expense, as she thinks she can prove satisfactorily that very beautiful results can be made to follow very small outlay of time and capital. She has never laid out more than thirty dollars in any one year on the purchase of material for planting, and many years not half that sum has been expended. The amount of pure pleasure and interest in life, and enjoyment of the beautiful picture the place has gradually come to present at all times of the year, is incalculable. Indeed, there are few delights so pure and lasting as the satisfaction that results from the creation of a charming home. I shall be glad if I can inspire many of the readers of *PARK AND CEMETERY* to imitate our example and thus get the best out of their country life.

In future articles some of our many experiments will be described more in detail, with accounts of the rarest trees and other plants that we possess as well as our mistakes, failures and successes.

Danske Dandridge.

PINUS PALUSTRIS.

Pinus palustris of Miller is synonymous with *Pinus australis* of the younger Michaux. It is commonly known in the south by many popular names but best perhaps as the Southern Pine, the yellow pine, or the long-leaved pine. In the north it is frequently seen as small specimens at Christmas time when its long leaves upon five to six years old plants, enables it to be effectively employed by the florists in church and hall decoration. It is one of the characteristic pines of the southern pine barrens

and is found commonly associated with *Pinus Taeda* the Loblolly Pine; *Pinus serotina* the Marsh Pine, *Pinus heterophylla* the Cuban Pine; *Pinus glabra* the Spruce Pine or *Pinus echinata* the short leaved pine.

The natural habitat of the yellow pine extends from the extreme southeast of Virginia to the 27 parallel of latitude in Florida, and westward from central Georgia and northeastern Alabama to southern Mississippi and New Orleans. Over a large part of its distribution it follows the orange sand of the south along the sea coast, where it is often intersected by the salt water inlets and extensive cypress marshes. Along the coast in its southeastern range it is found with *Pinus Taeda* and further south with *Pinus Cubensis*. With its peculiar life history and the crude methods of forestry adopted in the south it is continually being reduced in area.

In most localities the loblolly frequently rivals and even predominates, and in the more fertile uplands live, laurel-leaved, water, Spanish, willow, upland willow, white, black, Turkey and post oaks; evergreen Magnolia, Cypress, Tupelo, sweet and black gum and southern bay, are intermixed with it. It grows to a height of one hundred and ten feet with a straight columnar trunk seldom more than three feet in diameter. After its fifth year it grows rapidly. The lower branches for three-fourths its height soon fall and with the spreading branches give it a narrow, open, gnarled head, hemispherical to broadly cone shaped in outline.

The reddish-brown, furrowed bark falls off in flakes.

As an element of scenery it is rugged, contrasting and in picturesqueness or when exclusive or upon the sterile sand plateaus that are too sterile to support little else but pines, it is of a simple character. Partly by virtue of its habit, but largely the treatment of the forests, it often has virtually no good undergrowth. Contrasting with the Cuban pine that inhabits an imperfectly drained and compact sand which often supports the *Sabal Adansonii* as an undergrowth—the yellow pine is well suited to a light, drier and well drained sand. Such undergrowth as broom sedge *Myrica cerifera* (the true species—not *Carolinensis* which is commonly known as *cerifera*) and post oak are usually low and stunted and intermixed with the young seedlings of yellow, or if seed trees are near by and especially if the forest is somewhat dense—seedling loblollies occur.

Yellow pine is perhaps the most beautiful species of the south but with its great and many virtues from a commercial standpoint is assuredly becoming more restricted in area. Aside from its timber qualities for which it is harvested at the rate of over a billion board feet annually, it offers cheap, and ex-

cellent material for railroad ties and lightwood and yields enormous quantities of pitch, turpentine, etc. For each mile of railroad 3,200 ties are required. Upon an average ten ties are obtained from an acre. With an average duration of from five to six years it is readily comprehended what a demand is created for the 3,000 miles of southern railroads alone. By tapping—a process known as “boxing”—the trees in orchard give a decreasing supply of turpentine for five, six and even seven years, and in districts where the trees possess sufficient recuperative power—after a rest of several years the harvesting is continued, but in the southernmost districts the vitality is sapped by this process and after four or five years the orchards are abandoned. This boxing process saturates the wood with resin thereby rendering it highly inflammable. The colored natives chop the trees into small sticks locally known as “light wood.” Occasionally fire starts in these orchards and once aflame they are almost certainly doomed to destruction. While worked as a turpentine orchard the ground is frequently pastured and to offer good herbage the leaves are annually set fire—thereby not only destroying the young plants but burning the more fertile top mould. When hogs are pastured the chance of yellow pine following itself is still further lessened in that the hogs devour the sweet seeds as rapidly as they fall and even uproot the young plants for the soft roots.

All the artificial barriers are assisted by the encroachment of invading species. Yellow pine requires from four to five years to establish an immense and long root system and during this time it seldom if ever grows over six inches in height, appearing at this stage with its tuft of leaves—usually eight to fifteen inches long, like a huge caricatured chrysanthemum flower. After this age it grows astonishingly rapid in height, frequently two to three feet in one season. Obviously the young plants of the florists are five or six years of age.

Contrariwise the loblolly pine, an inferior species in almost every particular starts its upward growth from germination onward and at five years of age is frequently several feet in height. Furthermore the loblolly will germinate and grow in a far denser shade than the yellow pine.

In form, color, texture and general aspect the southern pines are often enhanced by a dense drapery of Florida moss (*Tillandsia usuroides*.)

Emil Mische.

Great opportunities will be offered at the Paris Exhibition next year for visiting American landscape architects and horticulturists to see what their European brethren are doing.

THE PARKS OF DETROIT, MICH.

Detroit, the scene of the coming convention of the American Park and Out-door Art Association is justly accorded the distinction of being one of the most beautiful cities of the United States. Nature has been very lavish of diversity in her scenic efforts about this city, which revels in a wealth of landscape and waterscape, of wonderful attractiveness in themselves, as well as in the setting provided for the progressive and prosperous city planted in their midst. Detroit also rejoices in having been the centre of great historic events in the final establishment of the republic, which naturally largely increases the interest attaching to the city, while it also imposes an added responsibility upon the municipality to see that the advantages, natural and historic, bequeathed to it, shall not be injured by any inadequate appreciation of the responsibilities placed upon its citizens by such conditions. In the very nature of things Detroit should be both ambitious and progressive, and all its public functions should receive inspiration both from its admirable location and its historic bequests and associations.

The following notes on its park system are intended to serve only to introduce the accompanying illustrations.

Detroit has a park area of 903.337 acres, distributed among 24 parks. The largest park is Belle Isle, which is an island in the Detroit river

and comprises 700 acres. This park was illustrated in these columns some time since. The next in point of acreage is Palmer Park, which covers some 133½ acres, and was the gift of Senator Palmer to the city. Then there are Clark park with 24.731 acres; Voigt park, unimproved, 9.601 acres; Grand Circus, 5.566 acres; Perrien park, 5.180 acres; Cass park, 4.966 acres and the remainder are of smaller areas.

The total receipts for the year ending June 30, 1898, including balance from previous year was \$153,530.03, and the total expenditures for the same period, \$143,926.41. Of this amount there was expended for the maintenance of Belle Isle Park, \$52,025.40 and for improvements \$1,576.91. Palmer Park, absorbed \$2,746.09 for maintenance, and \$18,415.17 for improvements. The amount appropriated for the year 1898-9 was \$113,350, a serious reduction from the available amount of the previous year.

The plate of views of Palmer park gives its characteristic scenery; the centre picture shows the casino, and that on top right hand corner, an end view of the old family log house of Senator Palmer, the preservation of which is part of the conditions of the gift of this beautiful tract of land.

The Water Works park, an illustration of some of the principal features of which is given, is situated on the Detroit river on a main avenue or river drive. The Hurlbutt Memorial Gate stands at the



entrance to the park. It is tastefully laid out, forming an attractive beauty spot, and it gives an excellent example of what may be done with the surroundings of city property.

West Grand Circus Park, the illustration of which needs no comment, is that portion of Grand Circus park, lying west of Woodward ave. It makes a beautiful break in this fine avenue and reminds one of such charming spots occurring at intervals in some of the well developed foreign cities.

The beautiful driveway, Belle Isle Park, speaks for itself. In this illustration one can judge of the grandeur of the trees, and is naturally led to think of the "primeval" forest brought to the doors of civilization, with all the fascination of wild nature without its fearsome discomforts.

Belle Isle Park is for many reasons the park of Detroit. Its physical relations to the city, that of an island in the busy river, so close to the city as to be readily available for its citizens, and yet possessing the requirements of, one might very well say, an ideal park. The island picturesquely situated was originally called by the Indians Mah-nah-be-zee, or the Swan. The French when occupying the territory called it Isle St. Clair, from its position at the entrance of Lake St. Clair.

Another incident connected with the island is that it was so infested by rattlesnakes at an early day, that the English commissary department, both for convenience and to rid the place of these pests, placed a drove of hogs on the island, which increasing so much, led the French afterwards to call it Isle au Cochon, or Hog Island.

It retained the latter name until on July 4, 1845, when at a picnic party held there, it was renamed Belle Isle, in honor of the ladies present.

Its history has always been interesting. It was considered as belonging to the Fort at Detroit both when under French and English control.

The first individual title to the island, that of Lieut. McDougall, who bought it of Chippewa and Ottawa Indians, is dated 1769. The purchase price was eight barrels of rum, three rolls of tobacco, six pounds of vermilion and a belt of wampum, considered equivalent to \$1,000. From McDougall it passed to Wm. McComb, to whom the title was confirmed by the United States in 1809. In 1817 it was sold to B. Campau, a well-known name in Detroit, for \$5,000, and 110 years from the date of its first sale it was purchased by the City of Detroit for \$200,000.

A writer says: "The Island has always been a beautiful spot even in the wildness and comparative solitude of its early days; but when it was acquired by the city for park purposes, a plan of improvement was prepared by Frederick Law Olmsted, and carried out under

his direction. Thus its natural beauties were developed and emphasized, and the island supplied with the necessary adjuncts of a public park."

It is furnished with every feature for recreation, amusement or pleasure, and every year sees additions and improvements completed or begun. Its large area and diversified landscape makes it popular with all classes, and there is ample access from the city, both by bridge and ferry. Besides the Detroit river, there is considerable lake area, well dis-



tributed over the island, with connecting canals making boat exercise most attractive. Besides this, bathing facilities are abundant and well provided for by the authorities.

In addition to the other attractions of Belle Isle is a Zoological department, which however is only in its infancy. There is also a large greenhouse plant.

The following from the horticulturist's report in the annual publication gives some idea of the plan pursued in planting in the smaller parks: "In the small parks throughout the city the arrangement of the groups was governed by several conditions. In some cases a collection of plants was used as a barrier to prevent people making foot paths across the lawns. In other cases they were used as a screen to hide objectionable views or to intercept the dust from the streets, and an aid in the protection of the verdure of the parks. Many of the parks were too small to carry out any landscape features, yet it was possible to so arrange plantations that all the boundaries of the park were not visible from any one point of view, and thus to a certain extent, hide their smallness. No one park can be said to be complete. Some parks need only a few plants to more fully round out certain clumps. Yet many especially the newer parks, need much, not only to produce landscape effects but a suitable amount of



BELLE ISLE PARK DRIVEWAY.

shade. The planting on the Boulevard was arranged largely to produce vistas. This is especially true

of those plats between double driveways. Also some attention was paid to the massing of plants of the same flowering period, and grouping varieties of the same genus."

The policy of the park commissioners of Detroit, as set forth in their printed report is: "That the parks shall always be open to all citizens on absolutely equal terms, and none shall be given special privileges thereon or permitted to make use of them for any purpose not practically common to all and consistent with the proper use of the parks."

From a perusal of the charges for boat hire and other amusements and privileges for which charges are usually made in our public parks, it would appear that every encouragement is given to outdoor recreation and enjoyment, for the prices are certainly most reasonable and enticing.

are certainly most reasonable and enticing.

A LOVELY HOME IN ENGLAND.

In some of my former notes I have referred to the Isle of Wight, England, and besides that I am about to do so again now, it is likely that it will occur again later on, for besides that it is endeared



ST. CLARE CASTLE, ISLE OF WIGHT, ENGLAND.

to the English because of containing Osborne, one of the residences of the Queen, it is most certainly entitled to the name it bears, which is *the garden of England*.

One of the prettiest and well planned grounds of the many that I saw was that of St. Clare, about 1½ miles from Ryde, on the northern shores of the island. While not able to obtain photographs of the grounds, to show their tasteful arrangement, I was fortunate in getting one of the castle, as the mansion is termed, showing the front entrance, a view of which is herewith presented. And I wish your readers could see the tower which the tree on the right obscures, and could see the stars and stripes floating from the flag staff, which sight greeted me two years ago. I found that the present owner had but little use for this one of several homes and had rented it for the summer to an American family, and they were keeping their flag afloat.

It will be observed how prettily vines have been guided about the walls of the dwelling, and how the planting of shrubbery close to the walls gives to the dwelling the appearance of springing from them naturally. I think a dwelling never so pretty as when low growing shrubs are close to its walls as they are here. And is not the building perfectly embowered? Not too much shade, but just enough to make of the whole a lovely picture. It suggests what it should be and what it is, an ideal home. The large trees on the right are English elms, and for many years crows built in them

regularly and were not to be disturbed. The large evergreen on the left I failed to observe closely at the time of my visit, but I think it is our red cedar, *Juniperus Virginiana*. The clustering shrubs at its base are chiefly of laurels, bays and other broad leaved evergreens which, unfortunately, we can do but little with here, but some are rhododendrons and other of our native plants.

The grounds surrounding the castle are not as extensive as those of many others, but by careful planting, and the preservation of many of the fine old English oaks native to the place, it gives the impression of being much larger.

The castle stands on an eminence, perhaps 300 yards from the sea, and from it to the shore one is led by winding paths through groves of trees and past beds of flowers.

I found here as elsewhere in England much use made of our *Magnolia grandiflora*. It flowers freely, but there is not heat enough to ripen its seeds.

Among other American trees I observed the Red Oak, *Abies Menziesii*, *Amelanchier Canadensis*, *Pinus ponderosa*, *Ulmus fulva*, *Pinus insignis*, *Cupressus Lambertiana*, *Sequoia gigantea*, *Garrya elliptica* and rhododendrons, *Yucca gloriosa* and others.

The climate of the Island suits our Pacific Coast evergreens nicely, and it was a treat to see the



GATEWAY AND WALL IN KITCHEN GARDEN.

beauty and vigor of such sorts as the *Pinus insignis* and the *Cupressus*.

As in most all English places the vegetable garden is quite apart, though not far from the garden and lawn. At St. Clare it is divided by an eight feet high wall. But this vegetable garden is a treat to see. It is laid off in squares for convenience

sake. The main path, through the centre of it, is shown in the illustration as well as the arched entrance and gate leading from the vegetable to the flower garden. I am told that Queen Victoria thought this gate so pretty that she had a similar one erected at Osborne. The rose on the right hand side of the gate is the lovely Reve d' Or, a climbing tea, not unlike Gloire de Dijon. On the left is a yellow Banksian; if I have not made a mistake a glimpse is had of the peach and plum trees trained to the wall. Every portion of the walls is occupied in this way, the trees being peach, plum, pear, cherry and apricot. A good deal of care is given to the pruning of them, and good crops of fruit are borne. Besides the division of the garden by the paths, espalier trees—trees trained fan shape, make further divisions.

The vegetable and fruit in this garden were all that could be wished, and this garden had been used as it was then for over 50 years, kept up by stable manure every year and by rotating the crops.

Emerging from the kitchen garden the entrance to the pleasure grounds is past a large planting of rhododendrons. These plants are so large that a path through them is arched by their large limbs; I think some of them were 20 feet high.

The soil of the grounds while loamy on the surface, has a stiff clay for subsoil, and it seems just what roses delight in judging from the luxuriance of those seen. The many semi-tropical plants flourishing there, the verdant lawn, grand old trees, the statuary showing here and there among the shrubs, combined to make a picture which will abide by me many a day.

Joseph Mechan.

LAKE VIEW CEMETERY, SKANEATELES, NEW YORK

Present indications point to a general improvement in the conditions of the small cemeteries over the land, a matter upon which all who have taken active interest in the promotion of so good a work, may well congratulate themselves. While the sentiment is becoming generally diffused, there are many localities where an enlightened public opinion encouraged certain citizens to undertake improvement in neglected burial grounds, who can already feel greatly gratified at the progress made. Among these may be mentioned Lake View Cemetery, Skaneateles, New York, and the following account and comment on efforts and results, contributed by Mr. Geo. H. Wicks, superintendent of the cemetery, are interesting and suggestive. Two views are also given.

At this time of strong effort all over our country to awaken interest in the care of cemeteries, and to improve the old "God's Acres" which are

scattered here and there, it is a pleasure to point to one in the state of New York as an example of what can be done in the improvement of old cemetery grounds.

Lake View cemetery in the town of Skaneateles, N. Y., which originally occupied half an acre, has been enlarged from time to time in the last century, until now its area is about sixteen acres. For many years both the original and the added pieces of land were left to run up to weeds and brambles, making the location of graves hard to find, and many were lost. Now, while much credit is due to the originators of the idea of improvement, it has not been until the past ten years that anything like



SOLDIER'S MONUMENT, LAKE VIEW CEMETERY,
SKANEATELES, N. Y.

a business like and systematic plan of permanent improvement has been inaugurated.

While the commissioners have tried the best they could to institute the "Lawn Plan," it will probably remain impossible to carry it out fully, on account of the careless manner in which monuments, headstones, etc., were allowed to be put up, and the walks and drives originally laid out. Especially is this the great difficulty in the older parts, where the dilapidated condition of things as found when steps were first taken to improve them, was most discouraging. Some of the old residents who

moved away years ago, when they return now and then to visit the graves of their ancestors, find it difficult to locate them, for the old board fence and the bunch of bushes have disappeared; and as they walk through the nicely kept grounds, they hardly recognize the spot where in their young days they used to gather strawberries on Sunday afternoons, when in old times it was customary for boys to take a walk to the "Graveyard."

Small white signs with black letters give you the names of walk or driveway; the walks are named after flowers, and the drives after trees; the signs stand only about eight inches high and are fastened in the sod by an iron rod. Modern wrought iron scroll frames on iron tripods contain the rules and regulations of the grounds. Iron hitching posts are set here and there along the driveways, with stone paving around each one; flower-beds are found at intervals in some space or triangle made

dated map, there was not a mark of a pen as to records or accounts. New maps have been made, books opened for lot records, interment index, trust fund record, record book of receipts and disbursements, lot deed record book, commissioners book of minutes, new forms of deeds for lots and trust deeds for trust funds.

When we consider that to all this work was added the recording of about 2,300 burials the number when the work began, now increased to about 2,500 with name, age, date of death, etc., and the trouble taken to get these particulars, it is easy to understand how a great deal of credit is due to the present superintendent, Mr. Geo. H. Wicks, who more for the love he bears for his old home, than the pecuniary benefits derived, has performed all this work.

The last report of the cemetery commissioners, with its records, accounts, and statement of financial standing would reflect credit on any cemetery, and the foregoing details, show that a little devotion and harmony in the community, with the desire for improvement, can be made to work miracles in the way of results of organized effort.

Funerals in Arabia.

One of the strangest and most affecting sights in an Arab town is that of the funerals, which may be met at any street corner. The body is merely wrapped in a mat of esparto grass and carried either on a bier or on men's shoulders. The

mourners lounge along, some in front and some behind, crooning verses of the Koran in melancholy tones, which haunt one for days afterwards. This wailing, however, is nothing to that which goes on at the house of the deceased.

When I was staying in the country near Tunis I heard it kept up during a whole night in a neighboring village, and I can conceive of nothing more desperately depressing than these strains of lamentation wafted through the darkness by the breeze. My dog stood it even less well than I did, and he felt constrained to join in the doleful chorus until I was half tempted to put a bullet through his head. Perhaps the strangest of all the funerals I saw was at Bizerta. It was that of a baby, which was being carried to the grave in an esparto basket. —*The Sketch.*

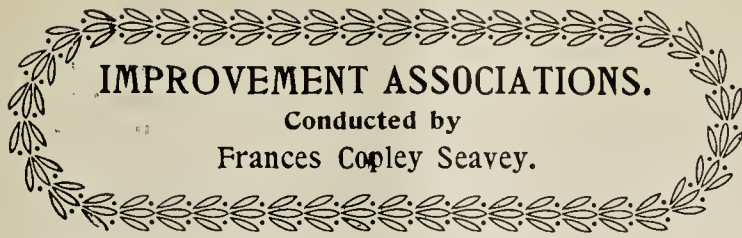


VIEW IN LAKE VIEW CEMETERY, SKANEATELES, N. Y.
A beautiful landscape marred by too much stonework.

by walk or drive crossings. Trees are nicely trimmed; lots are kept in order by yearly payments, and by an increasing Trust Fund; many fine monuments are to be seen, while just within the main entrance stands the soldiers and sailors monument, built on lines not usually found. This memorial was designed by John D. Barron a citizen of the place, and an artist. It is built of Onondaga Grey Limestone, capped by a bronze figure of a soldier, and is 71 feet in height including the figure.

The Receiving Vault is also built of Grey Onondaga Limestone and has a capacity for twenty bodies. A sexton is employed by the year, and other help is engaged as needed, and in the summer many hands are often required.

While the transformation of the grounds has been going on the business part of the cemetery has not been neglected. Prior to 1890-91, aside from a small memorandum book, and an old dilapi-



Leave the World a pleasanter place than you found it.

MORE AND BOLDER, SUGGESTIONS.

If each Woman's Club in these United States would for one year give its attention to leaving the world a pleasanter place to the eye than they found it, by looking after the exterior decoration of their own homes as well as of every home reached by their influence, the country would be transformed—transmuted is a better word, because the same materials would have been used in producing an entirely different effect.

Should the members of any one Improvement Society paint their houses and plant their grounds to the end of producing an harmonious whole, that is, consider each place in relation to its surroundings instead of as an independent unit; the street, or neighborhood, or village so treated would, if the work was done according to good art, be nearly unrecognizable.

To secure satisfactory results in either case, the advice of artists in color and in planting must be followed.

Such advice is essential in the choice of the colors and shades and combinations of paints to be used on the several buildings, and in the style of planting adopted for the various grounds.

Far better results will be attained by letting one artist direct the work for an entire neighborhood, because each place will then be more completely considered in relation to every other place, and the colors of the houses and the distribution of the plants will be in accordance with a plan which will have as a basis—breadth. And breadth, in the artistic sense, is of the first importance in every picture whether made on canvas or on greensward.

Where such a scheme is carried out, neighboring houses, while not of the same color, will either harmonize or agreeably contrast in hue, and will amicably agree with their setting of foliage.

It would be a very pretty bit of work for a Landscape Gardener and he must needs have a very "pretty taste" to develop such a scheme successfully.

But what an improvement it would mean over the hit-or-miss color effects and the unrelated planting now found everywhere.

Should this plan become general, we might all live in pictures.

In hamlets, villages or towns, and in small cities, the homes of those in very moderate circum-

stances, those who are "the poor" of large cities, could be included in the treatment so that their occupants might also live in pictures. Life for many, a very great many, people is rather humdrum and for all such, to live in a picture, and to be made to understand that they are doing so, must add a zest and to the sensitive, a thrill, to living.

And such things are worth while. They count in squaring the benefits of wealth. There is no better way for the rich man to help his less fortunate brother than by making his home life pleasanter. It is an inexpensive work in comparison with many modes of charity and it strikes to the root of American institutions.

The home life of our country is the acknowledged basis of its excellence, it lies back of the school, and it is worth while to do all we can to make it pleasant. This is true even when the matter is considered from a selfish point of view, for every attractive, well cared for home, no matter how humble, enhances the value of every other home in its vicinity. Not only that, but pleasant, attractive, well cared for homes are sure to be better in a sanitary sense than those untidily kept. So that not only is the value of the richer man's real estate increased by his efforts to better conditions for his neighbors—even his remote neighbors—but his personal comfort and health, and the comfort and health of his entire family are also increased.

Then too, the laboring man who sits under a pleasant arbor to smoke his pipe when his day's work is done makes a better citizen than the one who spends all his leisure sitting around the saloon.

And if a pleasant garden makes life more agreeable to the man of the house how much more does it stand for in the life of the house mother and the little people. If you doubt that it means much to them, you have but to carry a basket of simple flowers through a street of tenement houses in the first city you enter. You will feel like an angel come from Paradise as you hand out the fragrant Sweet Peas or bright faced Pansies to the dirty little children who will flock eagerly around, and as you note the contrast between the fresh country air and the stifling atmosphere and squalid surroundings. Probably those same children have never seen a young lamb or a little calf frolic on the green grass. There are plenty of them who never see *anything* pure and lovely.

Can such surroundings develop a love of civilized habits of life? The pity of it, that any child must grow up without knowledge of green trees, fresh grass and the daisy chain!

We would better do all in our power to make every home within reach of our influence, our means, or our hands as pleasant as possible, for even the

we may not hope to balance the thousands that are dens of squalor, filth and vice.

An informal Flower Mission might very well be made part of the summer work of each Improvement Society. There need be no irksome machinery about it, but let it be understood that each member who visits the nearest city will carry flowers for distribution among tenement house children. The regular Flower Missions in large cities are usually only able to supply the Hospitals and various public institutions. Improvement Societies are formed to benefit homes, and it is proper that their blossoms go into the city homes of those to whom the simplest flower is a treasure, a wonder and too often even a curiosity.

If out of this custom there should grow another—that of each year bringing some of those pale human flowers that bud amid the malodorous air of tenement districts to gain color for their cheeks and minds by a few weeks' visit to the country in summer, who shall say, that would be outside the province of that modern outgrowth of a true love for one's fellowmen—the Improvement Association.

Surely the names of such should be inscribed abreast of that of Abou Ben Adhem.

May *their* tribe increase.

F. C. S.

ASSOCIATIONS.

The American Park and Out-door Art Association.

Program for Detroit, Mich., Meeting, June 27, 28, 29, 1899.

The Hotel Cadillac (rates \$3.00 per day and upwards) will be the headquarters of the Association, and general sessions will be held in the ordinary and Turkish room of the hotel.

Tuesday, June 27.

9:30 A. M. The Convention will be called to order by President Charles M. Loring, who will deliver his address to the meeting. Hon. William C. Maybury, Mayor of Detroit, will welcome the association to the city. The reports of the Secretary and Treasurer will be presented and acted upon, together with other business. The following papers are assigned to this morning's session.

"Boston Common." E. J. Parker, President Quincy Boulevard and Park Association, Quincy, Ill.

"The Relation of Reservoirs to Public Parks." F. L. Olmsted, Jr., Landscape Architect, Brookline, Mass.

1:30 P. M. Boat ride, Steamer Sappho, to the "Venice of America," St. Clair Flats. On the return trip there will be a short session on board the boat, at which the following paper will be presented:

"The Parks and the People." R. J. Coryell, General Superintendent of the Detroit Parks.

8:30 P. M. Talk in Art Museum by Prof. A. H. Griffith, Director, on "A City's Debt to its Citizens."

Wednesday, June 28.

9 30 A. M. The election of officers for the ensuing year will be held at this session. After the election the following papers will be read:

"Utilization of Vacant City Lots for the Poor." John McGregor, Detroit, Mich.

"Finger Boards and View Points." Charles W. Garfield,

President "Michigan Fruit Grower," Grand Rapids, Mich.

"Out-door Art in School and College Grounds." Prof. W. J. Beal, Michigan Agricultural College, Lansing, Mich.

1:30 P. M. Trolley ride to Water Works Park. 3:30 P. M. Trolley ride from Water Works Park to Log Cabin at Palmer Park. 8:00 P. M. An evening with the stereopticon. The following papers will be given, illustrated by lantern slides of pictures taken in different parts of the country:

"Park Landscapes." George R. King, Cambridge, Mass.

"The Improvement of Factory and Home Grounds." This subject will be illustrated and presented by J. Horace McFarland, of Harrisburg, Pa., J. H. Patterson and E. L. Shuey of Dayton, O.

Thursday, June 29.

9:30 A. M. Closing Session. Reports of Special Committees, action thereon, and other business. The papers assigned to this session are:

"Interesting Children in Our Highways and Public Grounds." W. W. Tracy, Detroit, Mich.

"Park Nomenclature and Accounts," G. A. Parker, Superintendent of Parks, Hartford, Conn.

During the morning of Thursday opportunity will be given to obtain a bird's-eye view of Detroit and vicinity from the top of the Majestic Building. 2:00 P. M. Drive on Boulevard and around Belle Isle Park. 7:30 P. M. Informal banquet at Skating Pavilion on Belle Isle Park, with band concert later in the evening. 10:30 P. M. Return to Detroit by ferry.

* * *

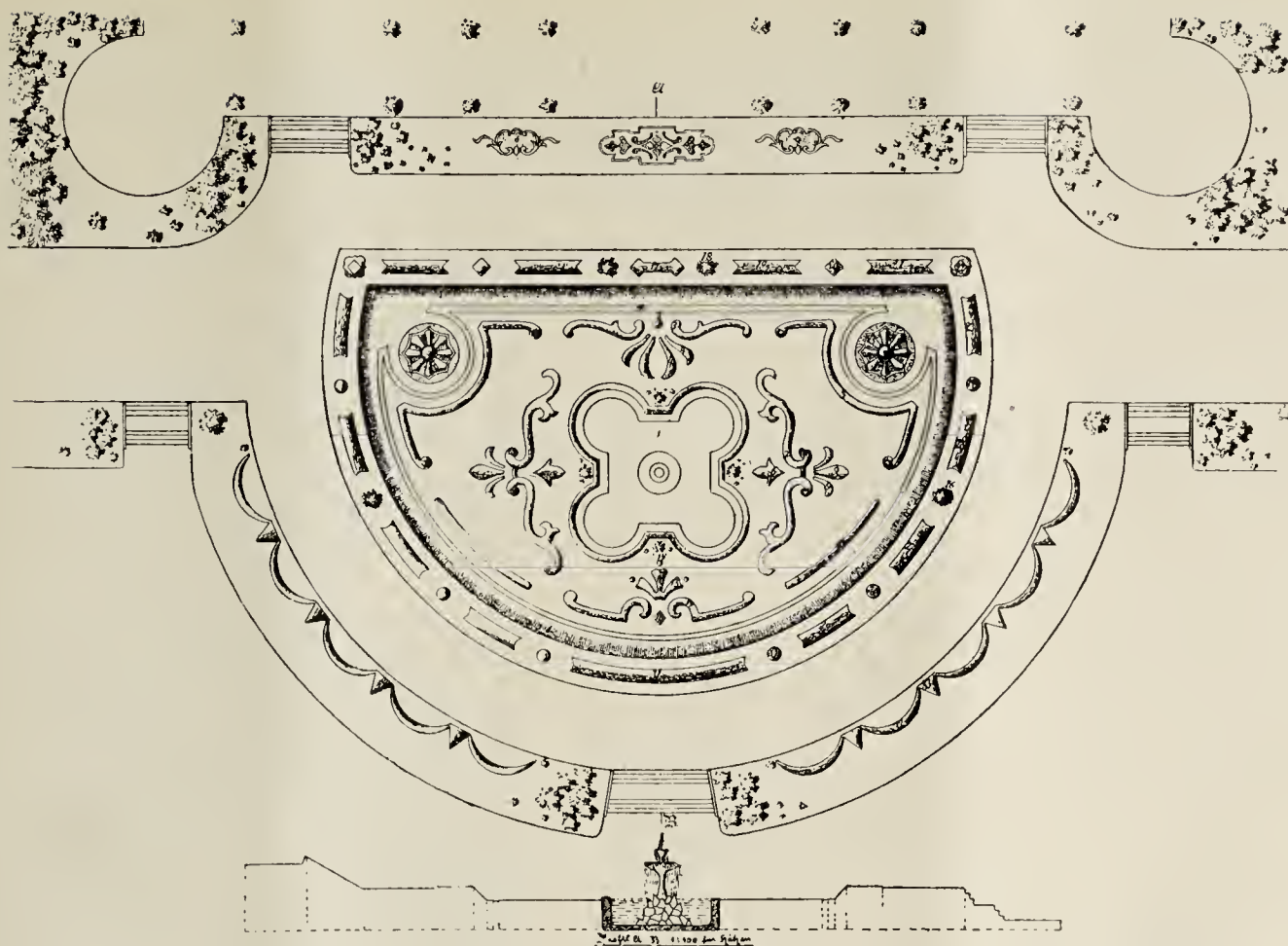
The New Haven Convention of the Association of American Cemetery Superintendents.

ANNOUNCEMENT.

The thirteenth annual convention of the Association of American Cemetery Superintendents will be held at New Haven, Conn., on Sept. 5, 6, 7 and 8, with headquarters at Warner Hall, 1044 Chapel street. Street cars from the railroad station pass the hall. The hotel accommodations are ample, and the local committee assure the members that everything will be done for their comfort and the interest of the association. The rates are: American plan, \$2 to \$4 per day; European plan, \$1 per day and upwards. First-class furnished rooms at headquarters can be secured at \$1 per day without board. Members desiring to secure quarters in advance will please communicate with Mr. F. A. Sherman, Superintendent Evergreen Cemetery, New Haven.

F. A. Sherman, Chairman.

In the church of St. Andrew, Dowlish Wake, near Ilminster, England, which was erected in the thirteenth century, is a monument to the memory of Captain Speke, the celebrated African explorer. It is a sarcophagus of serpentine marble, and upon the top is an inlaid brass cross. Around it, also inlaid in brass, is the following inscription: "Sacred to the memory of John Hanning Speke, second son of William and Georgina Speke, who died Sept. 15, 1864, aged 37 years." Over this is a circular arch, upon which are carved the emblems of the Nile—an alligator and hippopotamus. Above is the bust of the deceased, encircled by a lotus wreath. In the recesses are military badges, and a quadrant encircled by a belt, upon which "A Nilo Præclarus" is engraved. Immediately around this monument are other memorials of the Speke family, the earliest of which, a brass, is dated A. D. 1484. This part of the church was originally a chantry chapel and a piscina may still be seen in the south wall.



FORMAL GARDENING IN CITY PARK, MANNHEIM, GERMANY.—From *Mollers' Gartner-Zeitung*.

1 Basin surrounded by a border of Ivy. In the four hollows of the basin stand singly: *Musa Ensete*, *Canna*, *Phormium*, *Eulalia*, *Hemerocallis*. 2. *Fuschia*, Golden Fleece, bordered by *Lobelia Erinus Schwabenmadchen*. 3. *Mesembrianthemum cordifolium* fol. var., with border of *Alternanthera amoena*. 4. *Iresine Lindenii*; border of *Santoline Tomentosa*. 5. *Begonia superflrens Erfordia*; border of *Gnaphalium lanatum*, *Canna*, dark foliage. 6. *Geranium*, Madchen aus der Fremde; border, *Alternanthera amabilis aurea*. 7. *Coleus Verschaffelti*; border, *Alternanthera amabilis aurea*. *Dracena indivisa*. 8. *Mesembrianthemum cordifolium* fol. var.; border, *Alternanthera amabilis aurea*. 9. *Coleus Hero*; border, *Alternanthera amabilis aurea*. 10. *Ageratum*, blue flowering; border, *Alternanthera paronychioides nana compacta aurea*. 11. *Acalypha mosaica*; border, *Echeveria secunda glauca*. 12. *Begonia semperflorens Vernon*; border, *Gnaphalium lanatum*. 13. *Centaurea candidissima*; border, *Alternanthera amoena*. 14. Variegated Agaves; border, *Lobelia Erinus Crystal Palace*. 15. Cone shaped carpet bed. 16. Ornamental walk. 17. English Geranium; border one row of *Coleus Hero* and one row *Gnaphalium lanatum*. 18. *Taxus baccata* trimmed into pyramidal shape. 19. *Heliotrope*, pearl blue; border, *Pyrethrum parthenifolium aureum selaginoides*. 20. In centre, *Dracena indivisa*, *Strobilanthus Dyerianus*, with *Pilea muscosa* for covering the ground; border, *Echeveria secunda glauca*. 21. *Heliotrope*, Madame de Bussy; border, *Pyrethrum parthenifolium aureum selaginoides*. 22. Vase containing mixed flowering plants and ornamental grasses, etc.; border, *Alternanthera paronychioides*. 23. *Geranium*, Meteor; border, *Lobelia Erinus Schwabenmadchen*. 24. *Canna*, Franz Buchner; border, *Geranium*, Mad. Salleroi. 25. *Calceolaria Rugosa Gloire de Versailles*; border, *Iresine Wallisi*. 26. *Taxus baccata* in pyramidal form. 27. Dark Begonias; border, *Lobelia Erinus Kaiser Wilhelm*. 28. *Canna*, Queen Charlotte; border, *Iresine Wallisi*. 29. *Geranium*, Ruhm von Donzdorf; border, *Alternanthera paronychioides major*. 30. *Lobelia Cardinalis Queen Victoria*; border, Mad. Salleroi geranium. 31. Carpet pattern. 32. Blue *Ageratum*; border, *Gnaphalium minimum*. 33. *Geranium*, Bijou; border, one row of *Acalypha mosaica*, and one row *Gnaphalium lanatum*.

CITY PARK, MANNHEIM, GERMANY.

Mannheim has not been left behind in the industrial gain that has shown itself all over Germany in the last decade and even in horticulture a great step forward has been noticed in this city. The city parks have been enlarged from year to year and are kept in fine condition.

One of the most popular places for a great part of the citizens of Mannheim is the Ducal gardens, designed about 100 years ago by garden director Feyher-Schwetringen, and at this time containing a number of giants among its forest-like plantations.

A part of this garden was remodeled in 1882 by the well-known firm of Siesmager Bro., Frankfort or Main at the request of the Mannheimer Park Society. This section has been named City Park; it contains about 15 acres of land and has become one of the most attractive places in the city of Mannheim. For the last two years this pretty garden has been managed by Mr. W. Hensel.

A year ago the whole design of flower-beds was changed by Mr. Hensel and laid out on the plan shown above, a description of which is also appended.

GARDEN PLANTS—THEIR GEOGRAPHY—XLII.

EBENALES.

THE CHRYSOPHYLLUM, DIOSPYROS AND STYRAX ALLIANCE.

For the most part this is a tropical and subtropical group of trees and shrubs consisting of 11 tribes, 53 genera, and 885 species. They are often remarkable for the hardness of their wood, and many bear edible fruit. A few of the species extend to the warm temperate regions, and about a score are available for cultivation in northern gardens where they flower handsomely and form a striking feature. The term *Ebenus* upon which the alliance is founded, now applies to a Mediterranean genus of Legumes, and it would seem more consistent if the tribes were known as Diospyrales.

Chrysophyllum one of which is the West Indian "Star Apple," has 60 species. Two or three forms are found in South Florida, *C. monopyrenum* seems to be a true native, but it is doubtful if the typical *C. Cainito* can be considered so. A variety called *microphyllum* however forms a small tree there,



CHRYSOPHYLLUM CAINITO.

and in common with several other species is remarkable for the beautiful golden silky pubescence on the underside of the leaves. *Sideroxylon masticodendron*, *Dipholis salicifolia*, and *Mimusops Sieberi* have been reported from the same region. The latter forms a large tree which always has its heartwood decayed when it attains to great age.

Diospyros includes a large number of trees known as "Ebony," "Ironwood," "Persimmon," "Marble wood," etc. There are 160 species two of which are natives of North America, and two of the temperate parts of Asia, one of which the "Date plum" is probably naturalized in southern Europe. *D. Virginiana* is very similar to this Asiatic *D. Lotus*, but both vary to some extent in the size of their fruit and in other ways. Some trees are sterile, but generally at southern points when given room they form quite handsome round headed trees, covered in autumn with golden or reddish very astringent

fruit about the size of medlars, like which they require to be almost rotten before they are eatable. Varieties are sometimes found whose fruit is of much larger size than is common and some districts in South Carolina, such as the vicinity of Sumter,

DIOSPYROS VIRGINIANA.—The "Persimmon Tree."
Garden and Forest.

Claremont, and the Cooper river, have been famous for them. Some effort should be made to perpetuate such forms and perhaps raise hybrids between them and the Japanese *D. Kaki*. *D. Texana* is a shrub or small tree with diæcious flowers and smaller black astringent fruit. The Japanese trees have a considerable range northward in the Islands



DIOSPYROS KAKI.—16th.

and if they are not confounded with forms of *D. Lotus*, some of them should be harder than the forms of *D. Kaki* in our gardens. The cultivated forms yield a really fine and agreeable fruit, but are not hardy except at southern points. They have been introduced to most temperate countries and the Japs dry the fruits in the manner of figs. *D. pentamera* is the "black myrtle" of Australia. *Fas. MacPherson.*

PARK NOTES.

Ground has been broken for the erection of the Richard Smith Memorial, Fairmount Park, Philadelphia. This is an arch, adorned with commemorative sculpture, and to cost \$500,000.

* * *

The Niedermeier state park bill passed the committee of the whole in the Michigan legislature, on June 3. It dedicates the submerged and swamp lands along the great lakes as a state park for hunting and fishing purposes. An amendment was adopted which excepts such portion of the St. Clair flats as shall have been improved to the extent of \$25 prior to June 1.

* * *

The end of Coney Island as one of the lions of New York is in sight, and the first steps toward abolishing Coney Island's sphere of pleasure, and establishing in its stead a public park, were taken at a recent meeting of the Board of Public Improvements, when a resolution, which to the above effect was introduced by Controller Coler, was unanimously adopted.

* * *

According to present plans, an innovation in Park music is to be tried by the West Park board of Chicago. Instead of having instrumental music alone, the commissioners will invite the leading singing societies of the city to participate in the series of thirty concerts which will be given. Sunday school classes and choruses of children from the public schools may also be invited to participate and sing patriotic songs.

* * *

A Pittsburgh local paper says: "If Superintendent Falconer can get what he is after at any thing like a reasonable price, the Phipps' conservatory, at Schenley Park, will have another addition, as it is understood that Mr. Phipps is always willing to see the conservatory keep pace with the growth of the city and to have it the best in the whole land." It is understood the new addition will be devoted to the culture of ferns.

* * *

There has been a proposition before certain of the park commissioners of Chicago to erect a \$100,000 statue of Admiral Dewey in Lincoln Park. There is a strong public sentiment, however, in favor of creating a much needed small park in a crowded district and naming it after the great admiral. Were the question put to the naval hero, it were an easy matter to guess the reply, and while small parks are so badly needed in many of our large cities, the proper solution of such question lies in the quotation "the greatest good to the greatest number."

* * *

The Essex County, N. J., Park Commission has under consideration, with a fair prospect of its being adopted, the plan of constructing a boulevard along the banks of the Passaic river from Newark to the Passaic county line. It now behooves the Passaic county authorities to take the matter into consideration, to see if the boulevard could not be extended to Passaic City. This would make an uninterrupted driveway to carriages, automobiles and bicycles all the way from the city of Paterson to Newark along the banks of the river.

* * *

The work of improvement on the parks and boulevards of St. Paul, Minn., received quite an impetus last year, and the commissioners were in receipt of several valuable donations of property, links in the ultimate completion of the park plan. The total expenditures for the fiscal year ending March 1st last were \$45,264.62, of which \$17,656.17 was spent for improve-

ments, and \$27,607.01 for maintenance. 3,676 trees and shrubs were planted at cost of \$673.86. The maintenance extended over 302 acres of parks. The total area of park land is 1,160.09 acres. The total expenditures on parks since 1891 and including that year, amounts to \$478,409.38. The average yearly expenditure for twenty-five years has been \$28,498.28. The City Council had charge of the parks from 1873 to 1891, and the Board of Park Commissioners since 1887.

* * *

Joliet, Ill., is working on its first park with some enthusiasm, but the *Joliet News* has the following to say on the subject, which might be taken as a lesson for other places: "Real estate men in Joliet have never had an experience with public parks and to be sure can be overlooked somewhat for their lack of enterprise. In other cities where parks were surrounded by desirable property, the lesson was soon learned. We have seen some of these things and fully understand that the thing for the real estate men to do is to conspire together, organize, subscribe liberally, as the profits will admit and whoop up that park lively. The city will do something in time, but the conditions in Joliet are such just now that it wants to be done at once. The small subscribers are doing fine. They help liberally and cheerfully, and the real estate men give good indications, but the season keeps moving. The help is too slow. More fire, more energy, more injun is needed."

* * *

In both the Botanical and Zoological gardens of Bronx Park, New York City, rapid progress is being made. In the Zoological Park, comprising 261 acres in the southernly part of the tract, the *New York Post* says: "The winter-bird house is ready to receive its cage-work and boilers. Near this, ground has been staked out for the great flying cage, of steel pipe and wire netting, which will be the largest in the world. It will enclose three trees—one oak and two hickories—each about fifty feet tall, and a large pool will be made within it for the use of aquatic birds. Close by, also, the excavation of ponds and the construction of three islands for the ducks' aviary have been completed. A number of the enclosures have already been laid out. Four of the nine bear dens are nearly finished, with the exception of the sleeping dens. A bog in a narrow valley, in one of the wildest parts of the Zoological Park, has been excavated to form a pond of about two acres, which will be the home of a colony of beavers. A natural basin in a granite ledge near the reptile-house has been enlarged to form a crocodile-pool 100 feet in length. The Zoological Park will probably not be open to the public till fall."

* * *

An editorial in the *Chicago Tribune* has this to say of the London park system, in relation to the very rapid development of park areas in European cities: "The most remarkable movement of all in this direction has taken place in British cities within the last fifty years. London best illustrates this activity. Its parks, commons, and open spaces number nearly 250, ranging in size from half an acre to nearly 500 acres, and comprise about 5,500 acres. Many of these have come into existence and the majority of them have passed under public control during the last fifteen years. The Metropolitan Public Gardens association, the Kyrle society, and the London County Council have been especially active in promoting this general development. During its ten years' existence the County Council has added more than a thousand acres to the public spaces of the city and has taken the greatest pains that instead of being mere show places these should be used for active forms of recreation. Not hundreds but thousands of grounds for cricket, football, hockey, and tennis are laid out in these areas, and it is the deliberate policy to provoke and provide for the widest activity in outdoor sports. This policy is, of course, greatly aided by the Saturday half holiday which is generally observed in Great Britain the year round."



CEMETERY NOTES.

The Cemetery Trustees of the City of Boston, Mass., have called for proposals for erecting a chapel and gateway at Mount Hope cemetery.

* * *

The mayor of Battle Creek, Mich., has signed an agreement with the Quakers of the vicinity to transform the latter's cemetery into a park. This is the end of a bitter fight which has existed here for years.

* * *

A contract has been awarded for the construction of a stone administration building for Oak Hill cemetery, Evansville, Ind. The bids varied between \$9908.50, the lowest and which secured the contract, to \$11,000, the highest. It is to be built from designs by Messrs. Harris & Shopbell, architects, and completed by September 1.

* * *

At a recent meeting of the Ballston Spa Cemetery Association the directors voted to have the trees sprayed in the cemetery and the brambles cut down along the rear fences in an effort to eradicate the worm pests. Contributions from lot owners and others to meet the necessary expenditure were asked, and it is to be hoped that this excellent suggestion met with generous response.

* * *

The cemetery committee of New Britain, Conn., held a meeting recently and accepted a design for the mortuary chapel by Briteo & Bacon, architects, New York. The design selected is modelled after the Pantheon and is a handsome piece of architecture.

* * *

The trustees of Oak Hill cemetery, in the progressive village of Herkimer, N. Y., have published the following scale of prices in connection with care of lots, etc. Tax on lots for general purposes; Lots 10 × 25, .50; lots 12 × 25, .75; lots 14 × 25, \$1. Private care of lots: Small lot, \$2; medium lot, \$2.25; large lot, \$3. For use of vault to lot owners; For adults, \$2; for children, \$1; for other than lot owners, \$5. For opening ordinary graves for children \$2 and \$3; graves bricked up with stone cover, \$18, children's \$12 to \$15.

* * *

One of the syndicate cemeteries in the East is that recently acquired at Coxsackie station, New York, and which is to be devoted to the interment of valued animals and birds. For this purpose the Dell Wood National Cemetery Association has been organized, and the ground purchased comprises 110 acres, near the line of the N. Y. C. R. R., at the above place. The prospectus states that this cemetery will be conducted on the "Lawn System," and the price of lots according to location will range between one and three dollars per square foot.

* * *

Another syndicate cemetery, to which attention has been directed for some time past, has been dedicated at Somerton Hills, N. J. The new cemetery is situated in a picturesque region, about 30 miles from Philadelphia, on the New York Division of the Reading Railroad, and the tract of about 230 acres is in process of planting and development. A number of special features are proposed among others a specially designed funeral car. At the grounds a spacious granite station and office

building has been erected, and plans are being considered for a receiving vault which will soon be erected.

* * *

The 45th annual report of the Cambridge, Mass., Cemetery for year ending Dec. 1, 1898, shows total receipts of \$19,086.37, a decrease of expected revenue of \$413.63. The city appropriated \$20,000 at the beginning of the fiscal year. Among the receipts were: Burial and tomb fees, \$3,842; care of lots, \$3,258.01; sale of lots and graves, \$8,672.55. The total expenditures were \$19,832.66. Twelve monuments were erected and 100 headstones. Number of interments for year 564 making a total in the cemetery of 22,206. The report records a growing tendency to provide for perpetual care, and 22 lots were added to the list, which has reached 323. An additional cost of 75 cents per square foot is stated as the price for which the city will insure perpetual care. The fund now amounts to \$43,273.78.

* * *

The committee on cemetery of the South Bend, Ind., Common Council have recommended the acceptance of the Wurzer & Co., proposition to provide a cemetery on the Rezeau Brown farm, three miles north of the city, the only condition being that the city enter into contract to not take stock in any other outside cemetery and agree to bury the paupers of Portage township there. The proposition was accepted by a decisive vote. This would seem to settle the cemetery question of South Bend, which has been under discussion for some 4 years. The site is a beautiful one, situated on the St. Joseph river, with charming river scenery and the tract contains some 139 acres of level and rolling ground. The old cemetery which was donated to the city nearly 70 years ago, is now surrounded by dwellings and streets and cannot be extended.

* * *

The following paragraphs occur in the by-laws of the Elmwood Cemetery Co., Sherbrooke, P. O., Canada: "Proprietors of lots who wish to erect thereon any enclosure or monument of any kind shall first notify the trustees or officers appointed by them, and if required shall submit a drawing or plan of such intended erection, and no erection shall be permitted to be made which shall have met with the disapproval of the trustees then in office." "The trustees shall have the right to make such regulations for the care of the cemetery, and for the use of its driveways, walks and common property, and for the arrangement of the grounds as they may deem best, and from time to time to alter the same, provided they be consistent with the free access of all lot holders to the property owned by them, during the hours of daylight, which hours shall be defined by regulation of the trustees."

* * *

The report of the Transactions of the Cremation Society of England, recently received, shows a marked increase in that country of the cremation method of disposing of the dead. At Woking, the principal crematory, 240 cremations were carried out, an increase of 40 per cent. over the previous year. At Manchester 62 bodies were incinerated, 12 at Glasgow and 27 at Liverpool. Several municipal corporations have taken out parliamentary powers to provide for cremation, while the corporation of Hull, is now building a crematorium. The English Society has been in existence for 25 years, but had an uphill struggle to secure the approbation of the government in its efforts. In the conclusion of his speech at the annual meeting, the president, Sir Henry Thompson, called attention to an important question: "whether cremation, while of course remaining optional for all in every ordinary case of death, should not sooner or later become imperative in all cases of death caused by contagious disease in its worst forms, such as small pox, scarlet fever, diphtheria and malignant cholera, at least—at all events in the chief centres of population."

SELECTED NOTES AND EXTRACTS.

Hardy Trees in Beds.

In many parks and public gardens it is the practice to cultivate a few of the hardy trees for associating in flower beds, borders and shrubberies; the system does not appear to be so popular in private gardens. The Ailanthus, Rhus typhina, Paulownia, Catalpa, the common Fig tree, and Golden Elder are some of the best for the purpose. Dwarf single stemmed trees, pruned every year to an eye, will furnish vigorous growth of unexpected beauty. There is no more useful plant than the Ivy. The tree forms are used for margins to large borders, for grouping on the turf near shrubs, and in shady places where few plants thrive. The English and Irish varieties are largely planted on dry banks and as a carpet under large trees. The broad-leaved section of Saxifrages, the Acanthus, Rheums, &c., are planted by the outlines of shrubs, and contrast well with them.—*C. Jordan in The Garden.*

* * *

Pruning Vines in Summer.

The chief art in gardening consists in not allowing our plants to have their own wilful way, but to make them behave as we want them to do. Vines, generally, make desperate attempts to get to the top of a bush or a tree that they twine around, and the lower portion is nothing but a series of naked stems. When we set them to trellises, we want this proceeding reversed. We desire as many branches close to the ground as at the extreme upper portion of the pole or frame on which they are supported. The educated gardener understands how to do this. The grower of grapes under glass has to know how to do it as otherwise he would have grapes in the apex of the roof and nowhere else. He applies the same principle to the growth of flowering vines out of doors as to his grapes under glass, or to the grapes in the out-door garden, for that matter, with equal results. Indeed, there could be few better methods of learning whether one has a real gardener or only a wolf in sheep's clothing, than by noting whether he allows the honeysuckles to grow in crow's nests under the coping of the piazza front, or whether the branches are of equal strength from apex to the ground.

And yet, the art is very simple. It is simply to pinch out the apex of the strong growing shoots that want to get up still higher, and leave the struggling shoots at

the base alone. The growth force, suddenly checked by the topping of the upper shoots, has to be expended somewhere, just as the sudden stoppage of water being forced through a pipe may burst that pipe. It is diverted to the lower and weaker shoots, which become, before the season is over, as strong as the upper ones.

In the hands of a good gardener, a grape vine trellis will have fruit over every part of its surface,—and have as fine fruits at the apex as at the base. But how rarely do we see these masters of the art; and how simple the art is, after all!—*Meehan's Monthly for June.*

* * *

Plant Enemies and How to Fight Them.

No one should attempt to garden these days without a good syringe and a supply of various insecticides. Not only do we have to make a continuous and determined fight to secure good fruits and vegetables, but the plant enemies have also invaded our flower gardens, and many of our most popular and once easily grown flowers are now rarely seen in perfection. The rose, especially, is a favorite victim of many insects and fungous diseases. But with me the most dreaded of all is the fungous known as the black spot which not only ruins the crop of flowers by causing the foliage to drop, but greatly lessens the vitality of the plants, making them much more liable to winter-kill and to start a weak puny growth the next spring, thus falling a ready victim to the disease again. To successfully combat this plague requires prompt and thorough treatment. Bordeaux mixture is the remedy, and the plants should be thoroughly sprayed with it before the leaves start in the spring, and once or twice every week thereafter during the entire growing season, using care to destroy all diseased leaves.

The cosmos borer is very destructive to cosmos, dahlias and asters, frequently destroying all the plants, or so damaging them as to cause them to produce very inferior flowers. I was at a loss to know how to deal with this pest for some time, but finally found the following to be a complete remedy, if used in time: Take one level teaspoonful Paris green to three gallons of water, and pour around the base of the stalk so as to soak the ground for two or three inches deep, commencing when the plants are only about a foot high

and repeating the application once every week until the plant is about grown.

The black flower beetle is a most disgusting and troublesome pest, and seems to be spreading over the country. It resembles the common blister beetle (indeed, is a species of blister beetle), but it is smaller and jet black in color. It feeds on the open flowers of the hollyhock, aster, and a few others but those mentioned are their favorite food. One bug will in a little while disfigure and utterly ruin the finest flower. When disturbed they drop to the ground, and the best way to get rid of them is to take a shallow pan of water into which a little kerosene has been poured, and gather the bugs into it by shaking the flowers gently over the pan.

The kerosene will kill them instantly. One should look the plants over twice each day, while any bugs are to be found.—*From Vicks Magazine.*

* * *

Hardy Ferns.

There are several kinds particularly pleasing to the writer, though all—even the pestiferous Brake of the Old World—come in for some share of admiration. The marginal shield fern (*Aspidium marginale*) is an attractive evergreen of medium growth. It is more rugged in appearance, and does well in situations inclined to rockiness. *Polypodium vulgare* is also suitable for a rocky soil—in fact, it will gain a good foothold on dry banks where but little else will thrive. It much resembles the Christmas fern, *Aspidium acrostichoides*, on a smaller scale, this latter is too well known to require recommendation, thriving anywhere in dryish soil. The hardy maiden-hair may in a measure be considered as beautiful as that other species which we cherish in our houses, though much different in character. It enjoys light soil. Many other excellent kinds might be mentioned, but we will pass them after naming a few others more fond of moisture. Their fronds are more delicate and graceful. Perhaps the finest when located to best advantage is *Onoclea Struthiopteris*, or *Struthiopteris Germanica*, as it is quite frequently called. In its native haunts, its graceful fronds bending symmetrically out from the center, may be seen 5 or 6 feet in height. I have noticed the king fern, *Osmunda regalis*, quite 5 feet in height, though the growth is not calculated to attract everyone, being very open and unlike most native ferns. Clayton's flowering fern and the cinnamon, both *Osmundas*, somewhat resemble each other, the former being rather prettier in its more open growth.—*S. Mendelson Meehan, in the Florist's Exchange.*

Park and Cemetery.

ESTABLISHED 1890.

An Illustrated Monthly Journal.

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Correspondence solicited on subjects pertinent to the columns of the journal.

Officials of Parks and Cemeteries are requested to send copies of their reports.

Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

Association of American Cemetery Superintendents.

ARTHUR W. HOBERT, "Lakewood,"
Minneapolis, Minn., President.
WM. STONE, "Pine Grove,"
Lynn, Mass., Vice-President.
F. EURICH, Woodward Lawn, Detroit, Mich.
Secretary and Treasurer.

The Thirteenth Annual Convention will be held at New Haven, Conn., September 5, 6, 7, 8.

The American Park and Out-Door Art Association.

CHARLES M. LORING, Minneapolis, Minn.
President.
WARREN H. MANNING, Tremont Building,
Boston, Mass. Secretary.
E. B. HASKELL, Boston, Treasurer.

The next meeting of the Association will be held at Detroit, Mich., June 27, 28, 29.

Christian Wahl, who has been president of the board of Park Commissioners of Milwaukee, Wis., and a member ever since its organization in 1889, is now succeeded by Henry Weber.

The following is a suggestion for the public broadening out of the superintendents. In the annual report of the school committee of the City of Lynn, Mass., for the year ending Dec. 31, 1898, occurs the following: "This report would not fairly note the service of the year without due recognition of the valued and interested action of Mr. William Stone, superintendent of Pine Grove cemetery, whose standing invitation to enjoy the beauties of the cemetery has been accepted by scores of classes and teachers, to observe his marvellous display of indigenous and exotic

trees, shrubs, flowers and peculiar plants, and to receive his clear explanations of their habitat, growth and uses."

A Correction.

In a note in the publishers column of the May issue, speaking of a paint for cemetery enclosures, etc., the address of the manufacturers was erroneously given as the Kansas City Roofing Co. It should have been The Kansas City Roofing & Corrugating Co., Kansas City, Mo.

Landscape Gardener Ulrich of New York and over a hundred men have been busy for weeks beautifying the grounds of the Greater America Exposition at Omaha to be opened July 1 and continue until Nov. 1, 1899. To the beautiful floral adornments of last year will be added over 250,000 new plants. Rare tropical flowers and plants are being used in abundance.

The New Haven, Convention of the A. A. C. S.

The following list of subjects has been sent in to the Executive Committee for papers and discussions at the Thirteenth Annual Convention to be held in September at New Haven, Conn. Members and others interested are invited to examine the list and select subjects for papers or discussions, and inform the secretary.

1. How to become a proficient Cemetery Superintendent.
2. Why labor in cemeteries on Sunday?
3. Funeral attendance at the grave; appliances for lowering caskets; protection of mourners.
4. Proper treatment of cemetery woodlands.
5. Influence of modern cemeteries.
6. Subdivision of sections and lots.
7. Difficulties confronting a cemetery superintendent.
8. Beauties and benefits of modern cemeteries.
9. Ground covering—use of shrubbery and vines on lots.
10. The park idea in cemeteries.
11. Cemetery advertising. How far is it permissible? Commissions.
12. Ideal management and care *versus* income.
13. Should monuments and markers be set by the cemetery?
14. The most satisfactory system of pumping water; variety of pumps; method of distributing water.
15. Winter work in cemeteries.
16. How to make single grave sections compare favorably with other sections.
17. How far should perpetual care be extended to get best results? How best to ascertain rates?
18. Perpetual or annual care provisions for poor or sick cemetery employees.
19. Are charges made by cemeteries commensurate with value given?
20. If annual planting or embellishments of lots is discouraged or reduced, can the interest of lot owners be maintained?
21. Buildings, enclosures and equipments for cemeteries.
22. True art in cemeteries *versus* the sham.
23. Comparison between cemeteries and parks.
24. Influence of our surroundings.
25. Insects and pests injurious in cemeteries (moles, mice, chipmunks, skunks, etc.)
26. Wide roads *versus* narrow roads.
27. Characteristic beauty of trees and shrubs in winter. Any subject not mentioned, and desirable for discussion, is welcome.

The Housing Problem is the subject of a very valuable and interesting symposium in the last number of the Reform Club's

excellent periodical, *Municipal Affairs*. Dr. E. R. L. Gould, Mr. John Lloyd Thomas, Mrs. Harriet Fayes and Mr. Edwin L. Shuev, all specialists in this line, contribute articles. Other papers are by Henry DeForest Baldwin, "Municipal Problems"; M. N. Baker, "Municipal Co operation *vs.* Municipal Consolidation"; Edwin A. Greenlaw, "The Office of Mayor in the United States"; and Dr. F. B. Kelley, "The Teaching of Civic Patriotism." The department of Book Reviews contains several brief analyses of recent works upon city affairs. Under Leading Articles, the busy citizen will find short summaries of the principal articles that have appeared within the past quarter. The Bibliography which has been such a valuable feature of preceding numbers is continued and brought down to date. Address Reform Club, 52 William Street, New York. 25 cents per copy.

LANDSCAPE GARDENING as applied to Home Decoration. By Samuel T. Maynard, Professor of Botany and Horticulture, Massachusetts Agricultural College.

The object of offering this book to the public is with a view to enabling it "to properly care for the ornamental trees, shrubs or plants that they may be able to procure, and to so group and combine them with the lawn, the dwelling and other buildings, and with the surrounding conditions as to make not only a beautiful home picture but also to harmonize with any homes or estates adjoining or near by, that the beauty may be as wide spread as possible." One hundred and thirty-four pages are devoted to discussions of general topics concerning landscape gardening, and the remaining pages of the 312 to a list of trees, shrubs, insect and fungoid diseases. It is at once evident that to condense the principles of landscape gardening into 132 pages, wherein are detailed in a clear, truthful text, suitable as a practical guide for amateurs, the writer should be a master of the classics on the subject and the English language, lest it become posthumous or a narrowed dissertation of manners without the explanation expressed or inferred of the principles dictating the manners set forth. The author frequently touches upon the common minor errors in practical work, but as a whole covers the ground assumed cursorily and quite unsatisfactorily. The broad principles underlying a true practice, especially as to the arrangement of forms and colors, are conspicuous by their absence, and is further noticeable by the illustrations revealing a bland disregard of the common canons of the art involved. On page 16 is a sketch showing the arrangement of buildings upon one side of a lot. The ground plan of the house itself is of the plainest outline, with a single walk offering entrance alike to the residents and tradesmen, with no indication as to the disposition of such necessary adjuncts as laundry yard, service yard or outbuildings, and in fact the "greater extent of lawn," which the locating of the house upon one side of the grounds is supposed to provide, is compromised with the kitchen by the planting represented. And the planting shown indicates no unity of expression throughout the estate by a continuity of outline or an artistic arrangement in general, but on the other hand displays a spotty disarray of disconnected trees and shrubs.

Under architecture, on page 18, although not absolutely wanting, is very meagre in ideas upon the arrangement of rooms in an artistic and practical manner and the outlines and locations of houses. In illustrating a border mound, on page 103, the soil is given 100 per cent grade, which every engineer knows will not withstand washings of ordinary rains. Numerous errors of spelling are noticeable in the plant names, which can be overlooked, but ought, nevertheless, to be accurate in a book purporting to be a guide for amateurs. Many of the illustrations are electrotypes from nurserymen's catalogues; several are reproduced from photographs, and we find none of the sketches worthy of emulation as designs. Throughout there appears to us a lack of good arrangement in topics; a want of lucid conveyance of, and scantiness of principles; but contrariwise there appears a perfunctory treatment that raises the text into prominent presumption in assuming the title of a work on landscape gardening. *M.*

The Henry Shaw Medal.

The Director of the Missouri Botanical Garden, St. Louis, desires to call attention to the fact that in June, 1893, the Board of Trustees of the Garden founded a gold medal to be known as "The Henry Shaw Medal for the introduction of a valuable plant," and to be awarded each year, when practicable, for a new plant of value for cultivation, exhibited in St. Louis, as a part of the premiums or prizes to a flower show or exhibition provided for in the will of the late Henry Shaw; provided that the judges or other persons making awards at such exhibition shall certify that said medal is "awarded for a plant of decided merit for cultivation, not previously an Article of North American commerce and introduced to such commerce by the exhibitor during the year in which said award is made."

Numerous plants worthy of the award of this medal are each year introduced into the American trade, and the undersigned will at any time gladly furnish detailed information to their introducers, as to the time of holding the flower show at which they may be exhibited in competition for the medal. This year the medal will be offered as a part of the premiums placed in the hands of the St. Louis Florists' Club for award at their annual Chrysanthemum Show, to be held in St. Louis, November 14-18, 1899.

St. Louis, Mo. *William Trelease.*

There will be an exodus of botanists from the University of Chicago this summer. Five instructors in the department of botany will leave the university at the close of the present school year to accept positions in other institutions. They have all been enrolled as graduate students and instructors for three or more years and have recently been granted the degree of doctor of philosophy. Miss Florence Lyon, who is the only woman graduated from the department, will go to Smith College at Northampton, Mass., to become an assistant to Professor Ganong. J. F. Roberts has accepted a position in the Shaw Botanical Garden in St. Louis, and will begin his duties in the autumn. Otis W. Caldwell, who received his degree a year ago, has been appointed head of the biological department of the new Southern Illinois Normal at Charleston. He will have entire charge of the work in science. W. D. Merrell goes to Rochester University, where he was graduated only a few years ago. He will be placed at the head of the botanical department of his alma mater. W. R. Smith, a graduate of McMaster University of Toronto, Canada, returns to his alma mater after two years' graduate study at Chicago to become head professor of botany there. The places left vacant by the departure of these five scientists at the university will be filled by recently appointed fellows in the science department. The department at Chicago is in charge of Dr. John M. Coulter, former president of Lake Forest University.—*Times-Herald, Chicago.*

To Destroy Snails and Woodlice.

A correspondent in the *American Florist* asks some one to tell him what will destroy snails and woodlice. He has been using slaked lime, but it does not kill. A reply is given as follows:

"Where slaked lime, frequently applied, fails to banish snails, they should be trapped by means of fresh pieces of cabbage or lettuce leaves, on which they feed freely and are easily caught at night with the aid of a lantern. To get rid of woodlice take one part Paris green, one part oatmeal and three parts brown sugar. Mix these ingredients thoroughly and scatter lightly along the sides of the benches. The woodlice will soon disappear, but care should be taken to place the poisonous mixture well beyond the reach of children and domestic animals."

Killing Poison Ivy.

Mr. I. N. Hill, Superintendent of

Dell Park Cemetery, Natick, Mass., in speaking of the evil effects of poison ivy, says that he had a patch in his grounds that he sprinkled with fine salt when wet, which resulted in killing it out. This is a simple remedy well worth trying.

BOOKS, REPORTS, ETC., RECEIVED.

Eighth annual report of the Board of Park Commissioners of the City of St. Paul, Minn., for the year ending March 1, 1899. Illustrated with full page halftones. An interesting feature of this report for which Mr. Nussbaumer, the superintendent, should be credited, is the amount of detail given concerning the names, number and distribution of plants and trees over the system.

The Kensico Cemetery, New York, annual report to the lot proprietors for the year 1898, with rules and regulations. This report is an excellent specimen of cemetery literature, both in illustrations and general appearance.

Transactions of the Cremation Society of England. No. 12.

Special list of unique and useful Trees and effective Shrubs. Fred'k. W. Kelsey, New York.

U. S. EXPERIMENT STATION BULLETINS:

MASSACHUSETTS AGRICULTURAL COLLEGE, AMHERST. No. 61. The Asparagus Rust in Massachusetts.

MAINE AGRICULTURAL EXPERIMENT STATION, ORONO. No. 51. Feeding Stuff Inspection; No. 52. The Spraying of Plants.

UNIVERSITY OF NEBRASKA, LINCOLN. No. 58. Annual Forage plants for summer pasture.—Twelfth Annual Report of the U. S. Agricultural Experiment Station.

The Marcus & Amherst Cemetery Association, Marcus, Ia., has issued circular No. 2, dated May, containing four pages of matter particularly interesting to its lot owners, and displaying a very exemplary progressive spirit. It gives the last annual report, an explanation of the financial methods of the association and certain of its more arbitrary rules and regulations, with reasons therefore. Such literature is sure to bring good results in our smaller cemeteries, and large ones too for that matter.

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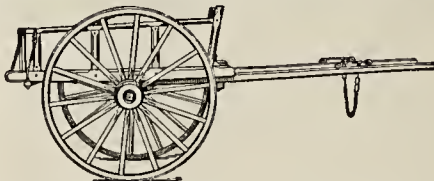


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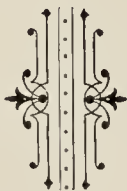
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THE STEAM ROAD ROLLER IN PARKS AND CEMETERIES.

It is often the fact that implements and other devices especially designed for certain operations, find a broader field for their utility than that for which they were originally designed. This experience is quite well illustrated in the case of the steam road roller, whose efficiency for the construction and maintenance of roads and roadways, wherever it could be worked without difficulty, has been thoroughly proven.

The first cost has of course been prohibitory of their use in our smaller places, but the variety of work that can now be accomplished by them in the cemetery and park, and that in so thorough a manner, makes it possible to spread the cost so as to present an economical aspect when the question of such a purchase comes up, in localities having a fair amount of such work to perform.

The illustrations show the steam road roller in two capacities,—road making and hauling.

Mr. Salway, superintendent of Spring Grove cemetery, Cincinnati, O., who had been using the machine for rolling the new metal and the general

terial found in making improvements. With such a suggestion, there are numerous opportunities in park and cemetery work where the road roller may be adapted to overcome difficult operations at an immense saving of labor, and moreover it is com-



ROAD ROLLER AT WORK IN SPRING GROVE CEMETERY, CINCINNATI, O.

paratively cheaply operated, as we know from experience.

The illustration showing the hauling of the large roof stones for the Fleischmann mausoleum in Spring



HAULING HEAVY STONE FOR FLEISCHMANN MAUSOLEUM, SPRING GROVE CEMETERY, CINCINNATI, O.

work of road making and maintenance, in the course of his experience found many new uses for it. It became especially efficient by blocking it and using it as a stationary engine, with the aid of the plow, in breaking up hard-pan and other refractory ma-

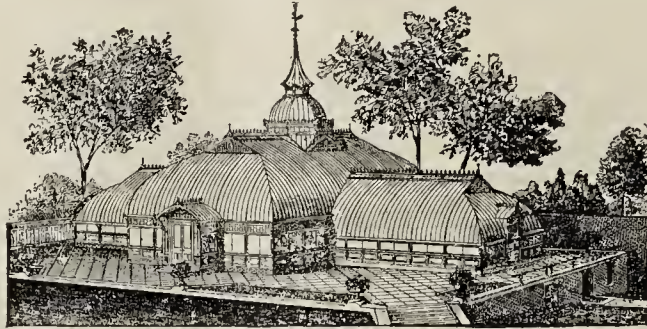
Grove cemetery, offers another suggestion, which can be multiplied as an argument for its great usefulness in park and cemetery work.

The machine seen in the illustration is that manufactured by the O. S. Kelly Co., Springfield, O.

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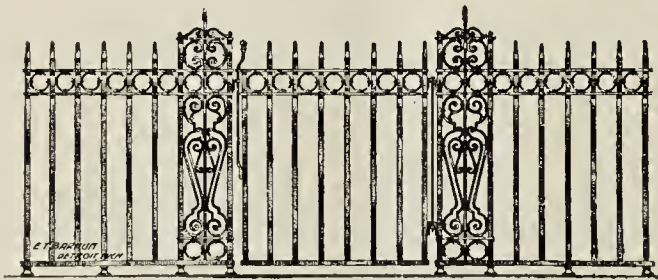
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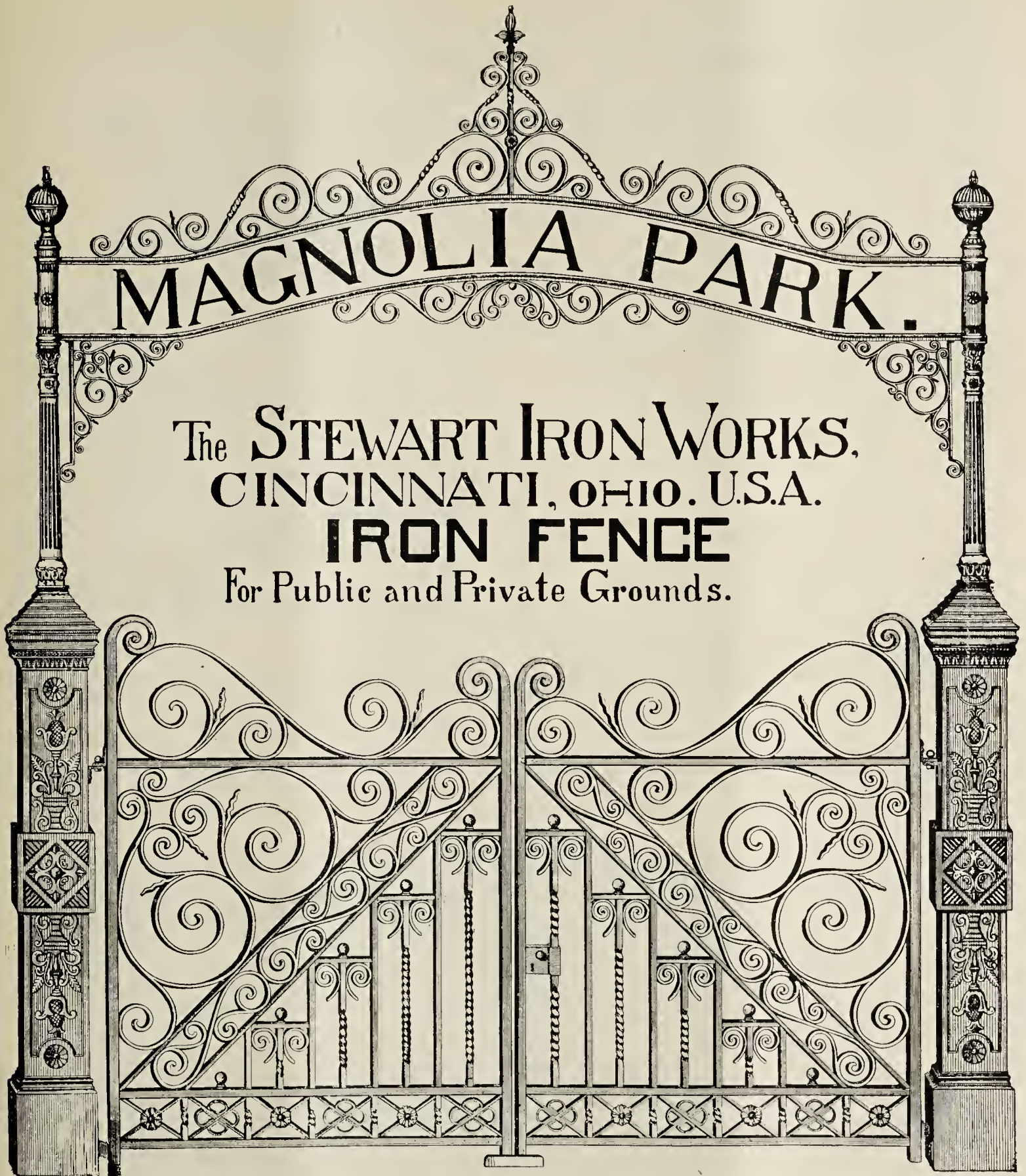
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.. EPITAPHS ..

W. A. Salladin, Canandaigua, N. Y., some time since sent old epitaphs found in and around Canandaigua, N. Y. These are three wives of one man and are side by side; the stones are of slate:

In memory of Martha,
wife of

Moses Goodell
who died

Jan. 17, 1813, aged 42 years.

In memory of Phebe, wife of Moses Goodell,
who died

Aug. 11, 1814, aged 37 years.

In memory of Betsy, wife of Moses Goodell,
who died

Nov. 20, 1815, aged 49 years.

Henry Williams

21

1827

Amiable.

In memory of Jesse Wood
who died

Mar. 27, 1816 in his 49th year.

Mortals read this and learn your fate
And then prepare e'er its too late
For rich and poor both bad and good
Must share the fate of Jesse Wood.

Sacred to the memory of Nathan Barber from Windsor, Conn., who departed this life Sept. 27, 1815 aged 22 years.

Where e'er I lived or died it matters not
To whom related or by whom begot
I was, now am not, ask no more of me
'Tis all I am and all that thou shalt be.

In memory of Elizabeth wife of Mr. William Hannay, who died Sept. 8, 1809 in the 63rd year of her age.

Lord she was thine and not my own,
Thou has not done me wrong,
I thank thee for the precious loan,
Afforded me so long.

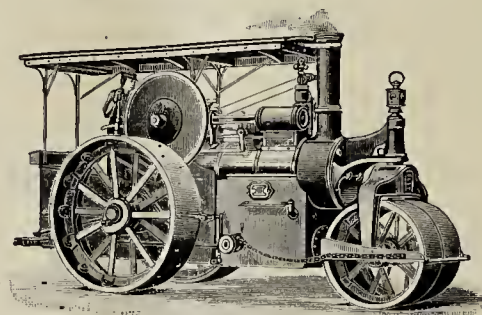
In memory of Timothy Ryan, who died May 12, 1814 in the 66th year of his age.

A thousand ways cut short our days,
None are exempt from death
A honeybee by stinging me,
Did stop my mortal breath,
This grave contains the last remains,
Of my frail house of clay
My soul is gone not to return,
To one eternal day
Friends one and all both grate and small,
Behold where I do lie,
Whilst you are here for death prepare,
Remember you must die.

Erected to the memory of Bathsheba wife of John Cooper and sister of Addelyda Decker who died Jan. 27, 1823, aged 16 years and 6 months.

Adieu my friends dry up your tears
Hear I must ly til Christ appears
When the just is judged I hope to bee
One of that happy company
Fairwell my husband kind and dear
I must go hence and leave you here
Don't mourn for me for I must go
To leave you in this world below.

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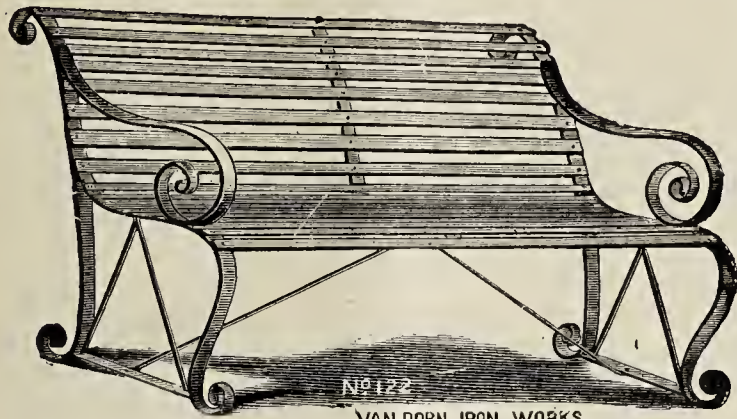
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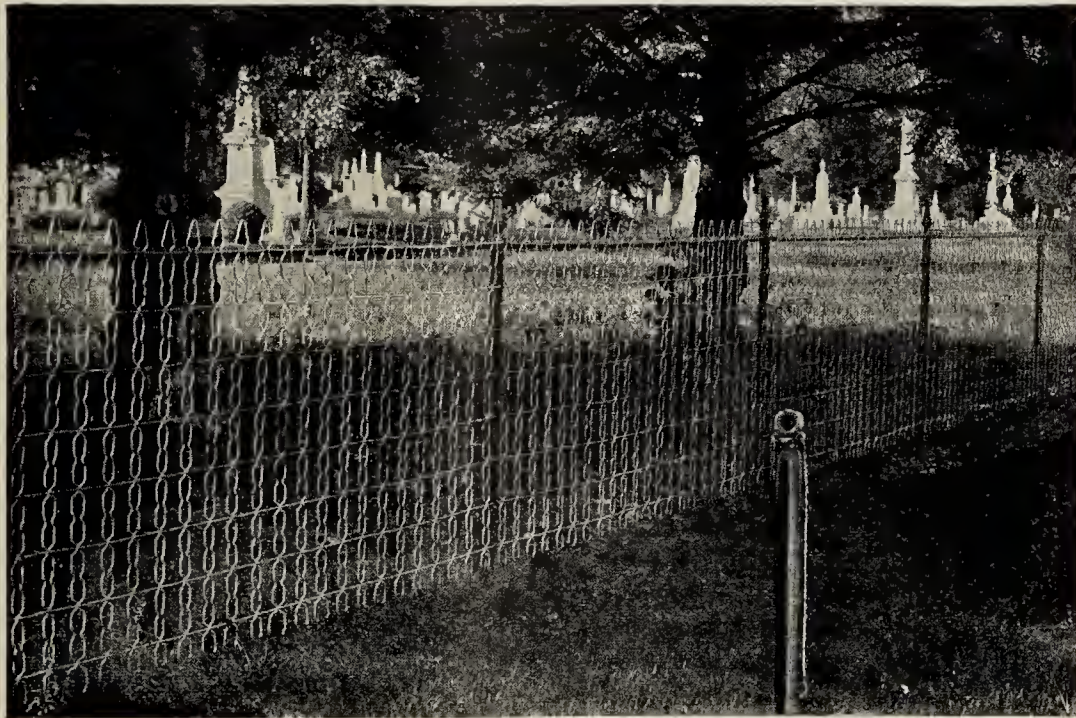


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NO. 2. TREES, SHRUBS AND PLANTS OF THE OPEN AIR. A first premium of Five Dollars and a second of Three Dollars is offered for the best series of six photographs of trees, shrubs and plants. These may include wild trees or shrubs, or any plant grown in the open air, and may be in single specimens or groups. All photographs in this class should carry descriptions, including approximate dimensions.

NO. 3. GROUPINGS AND EFFECTS. A first premium of Five Dollars and a second of Three Dollars is offered for a series of six photographs of picturesque groupings of plants and shrubs, or suggestive spots of wild plant life, in woodland, park or home grounds. Rock or water gardens may be included in this section. These photographs should also have enough descriptive matter attached to make it possible of reproduction in nature.

For photographs retained by the publisher that are not awarded prizes 50 cents each will be paid. The competition will remain open until September 1st.

Suggestions.

Care should be taken to keep backgrounds plain to avoid confusion in picture. Figures of persons, garden utensils, and all objects liable to cause detriment to the picture or its object should be carefully kept out. The photographs must be mounted singly on cards with white backs and must not be less than five inches by four inches.

Instructions.

The photographs may be of objects in the possession of either the sender or others; but there must be no question as to the right of photographing or using them. There is no limit as to number, and the publisher shall have the right of engraving and publishing any of the chosen photographs. They may be printed on any good paper that shows the subjects clearly, and that will make good half tones.

The name and address of the sender, together with the name and description of the objects shown, should be plainly written on the back of each photograph.

All communications relating to the competition must be addressed to R. J. Haight, 334 Dearborn Street, Chicago, and the class for which the photographs are intended should be marked on the parcel, which must also be labelled "Photographic Competition."

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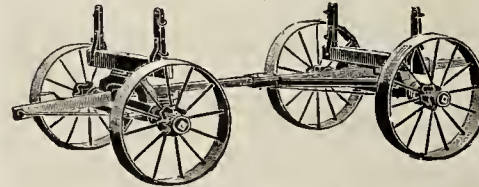
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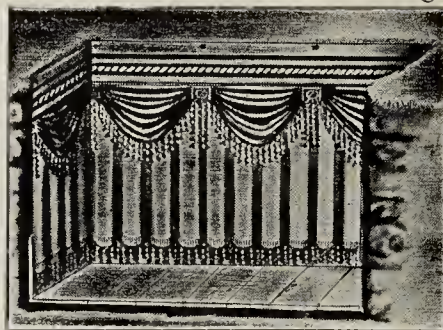
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PARK AND CEMETERY.

✻ *A Monthly Journal of Landscape Gardening and Kindred Arts.* ✻

VOL. IX. Chicago, July, 1899. NO. 5.

CONTENTS.

EDITORIAL—The Detroit Convention of the A. P. and O. A. A.—The Duty of the Press—Planting on the Lawn Plan—Belle Isle Park, Detroit—Improving the Single Grave Sections.....	93
*The Detroit Convention of the American Park and Outdoor Art Association.....	94
The Relation of Reservoirs to Public Parks.....	99
The Parks and the People.....	100
The Fall Grass Pest.....	101
*Improvement Associations ..	102
*The Witch Hazel.....	103
Program of Annual Convention of the American Association of Cemetery Superintendents.....	104
*Garden Plants—Their Geography, XLIII	104
Park Notes.....	106
Cemetery Notes.....	107
Correspondence.....	108
“The Man with the Hoe”.....	108
Selected Notes and Extracts.....	109
Reviews of Books, Reports, etc.....	110

**Illustrated.*

GIVE and take is fair play, but seldom is its principle worked out so equably as at Detroit in connection with the recent convention of the Park and Outdoor Art Association. If the discussion of the many important features of park and landscape gardening afforded the local authorities an opportunity to absorb valuable information that must be of great service to them in their work, the visitors to the fair city of the straits must have taken away with them many helpful suggestions from the clean streets, the numerous and well kept small parks, the handsome residential surroundings, and other accessories found in this favored community that go to make up the city beautiful.

THE secular and religious press of this country can do no better work than to espouse the cause of the American Park and Outdoor Art Association, and give wide publicity to its efforts to encourage public interest in the educational

value of parks, and the helpful influences of beautiful surroundings. Homes, schools, colleges, railroads, public institutions, factories, etc., are being appreciably affected by the good work of this association. Public interest in out-door art is growing throughout the land as never before, and as it means much to the general welfare that the people's taste should be properly directed, the powerful influence of the press of every class ought to be exerted in so important a step in our moral progress. As has been the case in some other directions of our development wherein the press has, in a measure, left the work of popularizing a movement to the individual apostles of the cause and waited until it was well on its feet before espousing it, the same apathy seems to have held sway among our editorial brethren in the rapidly expanding idea of the external improvement of our homes and the neglected spots of our urban districts. It is better late than never, and the cause now rapidly developing of adding increasing pleasures to life and thereby greatly uplifting the moral tone of the race, is one of such undeniable importance, that all interested, and that means, when the work is clearly understood, every healthy individual, will welcome every helpful suggestion or admonition that our generally well informed and right-intentioned press can offer. The cause is so many sided that we know of no line of press professionalism that cannot find a peg upon which to hang a moral or point a way: it is inextricably woven with the domestic pleasures and recreations; it will tend to cleanse the political life because intercourse with nature is both edifying and exalting, and it involves the principles, either elementary or advanced as the case may be, of one of the oldest of professions, now progressing in this country to the position of one of the most widely effective and important in its relation to civilization.

IN endeavoring to carry out the landscape or lawn plan in our modern cemeteries one very important essential that is too often lost sight of, is the provision of space between lots for at least a limited amount of ornamental planting. A continuous sward, unbroken by copings or other

lot enclosures is beautiful to look upon just so long as there are comparatively few monuments and a sufficient number of trees on the sections to diversify the landscape, but the time soon comes when a monument and several markers are to be found on every lot, and it is then that the absence of shrubbery makes itself apparent and the result is a collection of monuments, good, bad and indifferent in design, with only here and there tree trunks to break the monotony. Ornamental planting along the edges of the drives is commendable, but unless it is carried into other parts of the sections and made to serve as screens or as settings for monuments the best results are not realized. Where original plans do not provide space for such planting the owners of large lots should be induced to have a certain amount of planting done. The great variety of low growing trees and flowering shrubbery especially adapted to such purposes affords opportunity for making a selection at a comparatively small outlay. When properly set such shrubbery will make a pleasing back-ground for a monument that would otherwise be common place, and by diversifying the landscape will assist in beautifying the entire surroundings and add an ever increasing interest.

SPEAKING of Belle Isle Park, Detroit, to which so much attention has been recently given, it would be difficult to conceive how a city could do more for the pleasure and comfort of its people than Detroit has done in this charming island resort. Superintendent Coryell's paper, which appears on another page, gives a broad insight into the details of park work as related to Belle Isle, and offers suggestions which will be useful to park superintendents elsewhere. The presence of other park officials at the convention recently held in that city, is already bearing fruit. The commissioners of Lincoln Park, Chicago, who were represented there, has already moved in the direction of naming the trees and shrubs in such a manner as shall be both instructive and useful as well, while it is also intended to introduce ice-water drinking fountains, a method of cooling drinking water which has been highly appreciated in Belle Isle Park.

IT is exceedingly gratifying to note a better sentiment unfolding itself in relation to the care of that section of the cemetery devoted to single graves. The care or rather in many cases the want of care, in connection with the single grave sections of the majority of our cemeteries has been a subject of frequent criticism in these columns, because we could see that the time was rapidly approaching when under the lawn plan system of cemetery management, these sections would de-

mand for physical reasons, proportionately as much care as the more favored plots. And it is now pretty clearly understood even among the ultra-conservative financial managers, that an unsightly single grave section is a blot on the cemetery and consequently a financial detriment to the contiguous sections. But it should also be clearly understood by cemetery managers that there is a more or less positively aggressive sentiment in favor of a higher consideration for those less favored among us. When enlightened governments are trying to solve the great problems pertaining to the pensioning of the deserving aged, it shows distinctly that old ideas are passing away, and that to keep abreast of right thinking on humanitarian questions means successful progress. Rather than neglect, more care should be expended in such sections in our cemeteries and the result would recommend the effort and redound sooner or later to the success of the association keeping to the front. The following points the moral: "The cemetery commissioners of Grand Rapid, Mich., have decided to beautify the potters' fields of the cemeteries of that city and mark all the graves in a decent manner. The grounds will be sodded and the grass kept green."

THE DETROIT CONVENTION OF THE AMERICAN PARK AND OUTDOOR ART ASSOCIATION.

The third annual meeting of the American Park and Outdoor Art Association brought together a representative body of park and cemetery officials, superintendents, landscape architects and others interested in the laudable work of the association. The sessions were held in the Turkish parlor of the Hotel Cadillac, and the program arranged for the occasion provided for three well filled days, June 27th, 28th and 29th. Mayor Maybury's address of welcome acquainted the visitors with some interesting facts concerning the history of the city's parks and its forestry. He said that "Belle Isle" Park had no competitor and that "keep off the grass" signs were not in vogue in any of the city's parks. President C. M. Loring and Secretary Warren H. Manning read their respective reports. The following is a summary of the

SECRETARY'S REPORT.

It was thought wise by the Council that the papers presented at the last meeting and the Constitution and By-laws should be stereotyped so that copies of them could be obtained at any time. A list of these papers is prepared with their prices and it is to be hoped that members will purchase and distribute them freely and so help on the good work in which we are engaged.

A considerable correspondence was carried on in the interests of a resolution that the Interstate Park at the Dalles of the St. Croix be completed, which resolution has since been acted upon favorably by the Wisconsin legislature.

The attention of secretaries of Park Commissions is called to the Library of the association, and they are again requested to keep us upon their mailing list. We also wish all literature

pertaining to Out-door Art. During the past year ninety-eight members have joined, two annual members have become life members, and two honorary members have been elected. Our total membership is two hundred twenty-five, three members having resigned and four died, namely, Mr. Adams Earl, Lafayette, Ind.; Mr. Hugh L. Cole, New York; Mr. Thomas H. Sherley, Louisville, Ky., and Mr. Chas. H. Woods, Minneapolis, Minn.



CHARLES M. LORING.
President American Park and Outdoor Art
Association.

Your secretary suggests that the Publication Committee and the Council consider the advisability of issuing the annual report in parts at different times during the year.

Mr. E. J. Parker of Quincy, Ill., suggests that our association offer prizes to property owners for the preparation of the best designs of home grounds, also to pupils for the best designs of school grounds and your secretary has given much study to the methods that should be followed

when funds for this undertaking are available.

Another member, Mr. G. A. Parker of Hartford, Conn., suggested to the Council that the Association endeavor to secure the appointment of a special census agent to gather complete park statistics throughout the country. When Col. Bingham, one of our members, presented this matter to Mr. Merriam, director of the forthcoming census, it was found that no immediate action could be taken, which thus gives time for us to more thoroughly and forcibly present the matter to those in authority.

A summary of information showing progress during the past year along the lines of work in which the Association is interested was then given under the following headings: Parks, Forestry, Women in Out-door Art Work, Village Improvement, Playgrounds, Roads and Paths.

The opening paper had as its subject "Boston Common," a carefully prepared sketch of the early development of that famous park, by Mr. E. J. Parker, president of the Quincy Park and Boulevard Association, Quincy, Ill. "From the early days of the town this tract of 45 acres has been the free and undisputed property of its inhabitants." Until as late as 1855 it was the only park in the United States. The preservation of its large parade ground has taught a useful lesson to the landscape architects of the United States, and like preservations have since been made in many of our municipal and government parks. The Common illustrates in many ways the plain and severe ideas of the Puritan and the crude designs of early municipal park work."

Frederick Law Olmsted, Jr., of Brookline, Mass., followed with an instructive paper on "The Relation of Reservoirs to Public Parks," illustrated with stereopticon views of preliminary plans and of finished work. A summary of this very suggestive paper may be found on another page in this issue. Mr. Olmsted made a forceful plea for the cooperation of expert landscape architects with

hydraulic engineers at the very beginning of their work in establishing new reservoirs.

The afternoon saw the beginning of the hospitalities in the way of enjoyable outings, which were arranged and admirably carried out by the Commissioners of the Parks and Boulevards of the city of Detroit. From 2 o'clock until 7 the party was entertained on the excursion steamer Sappho. A ride on the Detroit river afforded a view of the city's water frontage, of Belle Isle Park, Lake St. Clair, the government canal and the improved portions of the St. Clair Flats, aptly styled "The Venice of America." On the return trip R. J. Coryell, general superintendent of the Detroit parks, read a paper on "The Parks and the People," in which he told in an interesting manner what the city of Detroit had done for its inhabitants and how thoroughly they appreciated the privileges. This was followed by a general discussion of park tactics. General Brinkerhoff, of Mansfield, O., and Mr. Garfield, of Grand Rapids, Mich., spoke of the educational value of parks; Mr. Warden, of Cincinnati, made a strong plea for civil service methods in the employment of park labor, and Mr. Parker, of Quincy, Ill., vigorously denounced the "advertising sign board" nuisance which has become a disfigurement to the landscape in city, town and country. Resolutions were adopted condemning this practice and authorizing the appointing of a committee to take some action towards regulating the placing of sign boards, etc. Luncheon was served on the boat and stringed instruments furnished music for those who wished to trip the light fantastic toe.

It was considerably later in the evening than the appointed hour when the party reconvened at the Detroit Museum of Art to listen to Director A. H. Griffith's address on "A City's Debt to Its Citizens." The speaker urged the importance of a city properly commemorating the more important historical events and persons by the erection of tablets, statues, etc. After the address a pleasant hour was spent in viewing the paintings, sculpture, and numerous objects of art and curios with which the museum abounds.

At the morning session of the second day, Mr. W. A. Peterson gave an interesting talk on the causes that led to the destruction of so many trees and shrubs during the past winter. He expressed the opinion that the excessive rains of last fall caused a late growth, which was very naturally affected by the frosts. He cited instances of rapid top growth with little or no root growth, from which disastrous results are sure to follow.

Mr. Charles W. Garfield, of the *Michigan Fruit Grower*, Grand Rapids, Mich., an able exponent of

outdoor art, gave an entertaining and suggestive talk on "Finger Boards and View Points." Mr. Garfield told how extensively finger or sign boards are used in Europe on the roads in public places, and how much they enhanced the pleasure of the tourist by directing attention to places of interest that would otherwise be passed by unnoticed. On some of the old German estates are boards giving minute descriptions of many of the trees. The placards in the forestry department of Kew Gardens were the most comprehensive he found anywhere. In Switzerland finger boards are numerous and they give interesting and valuable information. In contra-distinction, he noted the paucity of such information along our country roads that should be furnished by city or township boards of commissioners or supervisors. He commended the work of the association in agitating the removal of objectionable advertising signs and urged securing the co-operation of railroads and small municipalities in the needed reforms.

Mr. Garfield's remarks evoked an interesting discussion and brought out some valuable information. In Boston, Cleveland, Detroit, and other places many of the trees and shrubs are marked with metallic signs, giving the common and botanical names.

In answering the question, How to prevent depredations? Mr. Parker suggested giving care-

takers special police powers and they soon take care of the hoodlums and other depredators. One

THE PUBLIC PROTECTS WHAT IS
PROVIDED FOR PUBLIC USE.

of the signs in Kew Gardens was commended.

Mr. Laney told of the good results accomplished in Rochester, N. Y., by distributing a specially prepared circular at the schools and on the street cars. The circular briefly relates the care and expense involved in maintaining the parks, requests visitors not to pluck flowers, etc., and certain extracts from the law regulating certain offences.

Mr. F. L. Olmsted, Jr., told of the interest taken by the children in the school gardens in Cambridge, Mass., and how they had improved some of the small triangular parks.

"Outdoor Art in School and Public Grounds" was the subject of an interesting

paper by Prof. W. J. Beal, of the Agricultural College, Lansing, Mich., of which an abstract will be given in the August number.

Inclement weather having interfered with the program, the outing arranged for the afternoon was postponed and the sessions continued. Mr. W. W. Tracy, of Detroit, read a paper on "Interesting



ICE WATER DRINKING FOUNTAINS, BELLE ISLE PARK, DETROIT, MICH.

Children in Our Highways and Public Grounds." The discussion which followed this paper showed a unanimity of sentiment, with that of the writer of the paper, in aiming to get the people to realize that they are all part owners of all public property. They should be educated to the knowledge that wild-flowers are short-lived and are seen at their best as nature gave them to us.

The paper by Mr. G. H. Parker, superintendent of Kenev Park, Hartford, Conn., on "Park Nomenclature and Accounts," was read by the secretary. Mr. Parker emphasized the meagerness of our vocabulary of Nature's language; we must look for Nature's Rosetta stone in the heart and not in the mind. More definite and comprehensive terms would make park reports more satisfactory reading. He suggested appointing a committee to take up this matter, as well as park accounts.

Mr. Zimmerman of Buffalo, N. Y., read a paper on "The Care of Roads and Drives." He said "That keeping the roads clear of dust not only added to the pleasure of driving, but greatly reduced the cost of maintenance."

At the evening session, Secretary Manning read the paper prepared by J. Horace McFarland, of Harrisburg, Pa., on "The Improvement of Factory and Home Grounds."

"It told what had been accomplished in the way of beautifying the lawns and walks of the printing establishment at Harrisburg—an old school building—whose bare, dingy walls had been covered by a beautiful growth of *Ampelopsis Tricuspidata*. The poorly kept grounds were graded and sodded, and from an unsightly condition are now the admiration of the community. No garish sign is on the building that invites

the criticism of some, but the unique appearance of the building attracts far more appreciation. There is the best evidence that this decorative work is appreciated by the employes. The work done in the establishment is largely of a horticultural nature, and the employes show an increasing interest in trees, plants, vines, etc. The paper compared two well-known Pennsylvania railroad corporations—one did nothing to beautify its depot, shop and track surroundings, where the other has gained a reputation for what it has accomplished in the way of beautifying its property. The effect upon employes is marked, and even the prosperity of the two systems is in a sense indicated in their measure of prosperity. Whether cause and effect can be logically connected or not the circumstances led to a belief that the judicious adornment of industrial sites and buildings of whatever nature, going hand in hand with fairness between employer

and employe, is a thoroughly economical and truly profitable proposition.

Mr. McFarland proposes to offer a series of prizes another season to stimulate an interest in home adornment.

Mr. E. L. Shuey, of Dayton, O., followed with his interesting lecture, illustrated by stereopticon



SCENES AT PALMER PARK, DETROIT, MICH.

views, showing what had been accomplished at South Dayton, O., through the efforts of the National Cash Register Company. Several views of Mr. McFarland's vine-clad printery and surrounding grounds were also thrown upon the screen. "Beautiful factory surroundings," said Mr. Shuey, "are destined to solve many of the problems that now seem difficult to meet. The principle actuating this company is a firm belief that the best way to make money is to spend it in beautifying the home and factory environment. Better work and more of it is the result of such expenditures." PARK AND CEMETERY will illustrate some of the pretty scenes shown in connection with this entertaining lecture, in a subsequent issue.

Mr. George R. King, of Boston, a professional

the fact that such features should control the design of the park, while it is necessary to provide an adequate system of roads, buildings, etc. They should be arrayed in such a way as to make these dominating features of the landscape accessible without interfering with their beauty. The most attractive feature in many of our own parks, whose commissioners have not been so unwise as to destroy this source of beauty, is the interesting undergrowth of flowering shrubs and herbaceous plants in our woods. Too often the woods of our parks are second or third growth, with comparatively few individual trees that are notably fine. The greatest mistake that park commissioners make on acquiring new land is in cutting out the shrubs and burning the surface in the woods, so as



THE AMERICAN PARK AND OUTDOOR ART ASSOCIATION AT THE LOG CABIN, PALMER PARK, DETROIT, MICH.

landscape photographer, read an interesting paper on "Park Landscapes," illustrated by lantern slides. He said the best designers always seek to secure, preserve, and emphasize the dominant natural features, to which features their permanent value and attractiveness are due. The lantern slides illustrated the more important views of this kind in most of the well known parks of America. Starting with the Boston and Metropolitan Park systems, Mr. King gave his audience glimpses of the beauty spots and other interesting features in the parks of New York, Brooklyn, Philadelphia, Buffalo, Rochester, Washington, Minneapolis, St. Paul, Louisville, San Francisco, and other places. These dominant characteristic features were referred to for the purpose of bringing attention to

to get turf. In this way they destroy an immense number of attractive plants that can never be replaced without great expense.

The third day was devoted entirely to sight-seeing. In the morning trolley cars conveyed the party to Water Works Park and to Palmer Park, where Mr. Palmer's famous log cabin, with its quaint furnishings and pleasing surroundings was much enjoyed.

In the afternoon the party was given a park phaeton ride over a portion of the boulevard system and around Detroit's beautiful island park—Belle Isle. As nightfall brought the pleasurable day to its close the party gathered in the skating pavilion, where a banquet was served, followed by speech-making and vocal and instrumental music.

The following officers were elected for the year 1899-1900:

President, Chas. M. Loring, Minneapolis, Minn.
Secretary, Warren H. Manning, Boston, Mass.
Treasurer, O. C. Simonds, Chicago, Ill.

Vice-Presidents, Thomas H. MacBride (R. H. Warder, retiring), Iowa City, Iowa; Louis Woolverton (P. H. A. Balsley, retiring), Grimsby, Ont.; J. C. Olmsted, Brookline, Mass.; E. J. Parker, Quincy, Ill.; Lewis Johnson, New Orleans, La.; M. L. Moore, Toledo, O.

The next meeting will be held in Chicago.

The following resolutions were adopted:

Resolved, That a committee of three persons be appointed by the President, to take into consideration the matter of offering prizes, in our different cities, for the improvement of grounds about manufactories and homes—both front and back lots—and especially about the homes of artisans; to formulate rules governing the distribution of prizes, and to offer suggestions for planting.

Committee: Prof. W. J. Beal, Agricultural College, Michigan; E. L. Shuey, Dayton, O.; Dr. W. W. Folwell, Minneapolis, Minn.

Resolved, That a standing committee of five persons be created to consider the best way of checking abuses of public advertising; to recommend to the members of this Association such national, state and local legislation as may correct this abuse and to prepare and distribute, from time to time, printed matter, to influence the public opinion in this direction.

Committee: Dr. P. M. Woodworth, Chicago; F. W. Kelsey, New York; Charles W. Garfield, Grand Rapids; J. C. E. Hanford, Detroit, Mich.; F. L. Olmsted, Jr., Boston.

It is a well known fact, that Spain is the only European country which has not made some public provision, either at home or in her colonial possessions, for the protection and restoration of her forests. The hillsides and mountains of Spain have been so denuded of native timber and growths as to impair the value of her lands for agriculture, thus placing Spain at a disadvantage with other European countries, which have made provision, by scientific planting, for restoring the losses of their forests occasioned by natural forces and commercial uses.

WHEREAS, The United States has recently acquired, by treaty and purchase, possessions from Spain, and has occupied the island of Cuba; therefore, be it

Resolved, That the attention of our citizens generally, should be called to the importance of creating forest reserves on the islands of Cuba, Porto Rico, the Phillippine Archipelago, and also in the Sandwich Islands; and, be it further

Resolved, That the Secretary of this Association be and he is hereby instructed to send a copy of this resolution to the American Forestry Association.

* * *

Following are the names of those attending the convention: John C. Olmsted, Mrs. John C. Olmsted, F. L. Olmsted, Jr., Brookline, Mass.; C. M. Loring, Mrs. C. M. Loring, Harry W. Jones, J. A. Ridgeway, Minneapolis; Warren H. Manning, George R. King, H. P. Kelsey, J. Woodward Manning, Boston, Mass.; M. L. Moore, J. D. Robinson, Wm. Beatty, Toledo; R. H. Warder, Wm. Salway, Cincinnati; Lewis Johnson, Mrs. Lewis Johnson, S. W. Clark, Mrs. S. W. Clark, New Orleans; W. W. Parce, C. C. Laney, Rochester, N. Y.; C. D. Zimmerman, Wm. Scott, Buffalo; W. A. Sinclair, E. L. Shuey, Dayton, O.; Cyrus Peck, Newark, N. J.; R. Brinkerhoff, Martin B. Bushnell, Mansfield, O.; O. C. Simonds, P. M. Woodworth, M.

D., I. J. Bryan, R. J. Haight, PARK AND CEMETERY, Edwin A. Kanst, Wm. A. Peterson, M. Schrader, J. D. Brownell, Chicago; Charles W. Garfield, Mrs. Charles W. Garfield, Grand Rapids; John L. Bennett, Philadelphia; Thomas B. Meehan, Germantown, Pa.; Nelson Bogue, Batavia, N. Y.; Lyman R. Love, Kalamazoo; Frederick W. Kelsey, Mrs. A. B. Stanard, New York City; Edward J. Parker, Quincy, Ill.; W. J. Beal, Michigan State Agricultural College; Henry C. Fruck, Grosse Pointe Farms, Mich.; L. E. Holden, Cleveland, O.; John P. Fiske, Frank Eurich, Will W. Tracy, Mrs. H. A. Cleland, J. C. Eaton Hanford, Edward C. Van Leyen, R. J. Coryell, P. H. A. Balsley, M. P. Hurlbutt, F. W. Higgins, A. W. Blain, Detroit.

THE RELATION OF RESERVOIRS TO PUBLIC PARKS.*

A considerable part of the waste in the management of municipal undertakings is due to lack of proper co-operation between different departments of a city government. It is to the lack of such co-operation between those in charge of parks and those in charge of a reservoir that I wish to draw attention. The value to the public of a sheet of water with a proper setting is well recognized and is evinced by the sums of money spent on park lakes. All reservoirs have the sheet of water, but most of them lack the proper setting to the manifest depreciation of their recreative value. A building stone may be beautiful in color and texture, yet it will give greater enjoyment if its color and texture are absorbed in the general effect of a well designed building. In the same way if the water surface of a reservoir be given an outline and setting such as to bring out its full recreative value the reservoir and its enclosures may act as a park as well and thereby give a double return upon the tax payers investment. One of the greatest obstacles to the pleasing treatment of distributing reservoirs lies in the fact that they are often perched on narrow hill tops so that any breadth of framing landscape is impossible. In such cases any attempt to simulate a natural pond is foolish and a frankly architectural treatment should be adopted.

Where the space is not so restricted, and where the ground rises above the water on some sides, the choice of treatment is wider and the chances for going astray are more varied. The outline of such a reservoir is determined in its general features by the topography but in detail by numerous engineering considerations. These were illustrated by a typical example in several stages of development. The resulting outline is almost always irregular in its general form but is bounded by a series of straight lines and circular arcs so hard, formal and precise in character as to call attention to the lack of any formality or symmetry in the outline making a disagreeable combination of formal execution with informal plan.

The combination of tangents and radial curves is apt to produce an outline ugly in itself as well as more conspicuous than an outline of irregular lines.

The formal paving of reservoir banks to protect them from waves is in some cases an unnecessary expense as well as being ugly and serving further to render precise and definite a shapeless outline. The bottom must rise steeply to the water curb because vegetable impurities grow in shallow water, but in cases where the water level of the reservoir remains nearly constant, as happens in many distributing reservoirs this steep slope

*Summary of a paper read by Mr. Frederick Law Olmsted, Jr., before the Detroit Convention of the American Park and Out-door Art Association, June 25, 26, 27, 1899.

may be eased off just below the water surface so as to form a gently sloping beach of gravel which will stand without any paving. This is in effect nature's method of meeting the problem of wave erosion and there is no cleaner shore than a beach of moving sand or pebbles kept stirred up by the waves.

The grading of reservoir embankments is briefly touched upon with an example in which at the suggestion of a landscape architect hill-like ridges not leaving a level top were substituted for the usual straight dikes connecting hills around a reservoir site without any increase in cost. The case of Fresh Pond in Cambridge, Mass., was then taken up with maps and illustrations. A pond with some boggy and some steep margins was there made into a reservoir. The mechanical method of running a roadway right around the edge of a reservoir was adopted, regardless of the natural growth on the headlands, which were cut away to the great injury of the scenery. In a plan for further development prepared by landscape architects a path was substituted at the base of the headlands and the drive carried up to their tops instead and a number of other changes and improvements suggested.

As to planting on margins of a reservoir, the objection is often made that the leaves dropping into the water tend to discolor it and give it a bad taste. As a matter of fact the best water-sheds for collecting drinking water are those covered by woods and in most cases surface water gets into the distant collecting basins of a water system after soaking through dead leaves to such an extent that the small amount which can fall from a few trees round the distributing reservoir is negligible. Moreover shrubs growing along the edge of a reservoir offer a net work of twigs which stop the dead leaves blowing along the ground from neighboring trees and actually reduce the number of leaves getting into the water which vastly improve the appearance of the shores. The upshot is that since a reservoir can be made to serve the subordinate purpose of being a park as well as holding water it is apt to be a waste of the tax payers money not to take full advantage of the fact and put the expert adviser of the park commission into consultation with the hydraulic engineer in charge of the reservoir at the beginning of his work.

THE PARKS AND THE PEOPLE.*

The natural environments of a park determine its character; if these environments are preserved, protected and re-enforced, the character of that park is positive and pronounced, so the various park systems, and the several parks in any one system, vary as to their makeup and differ in their impressions. In consequence, what I may say may be applicable to none, certainly to but few. There is one feature in all the parks that is the same and that is the people, and to the landscape gardener, they are the most desirable, yet the most refractory plants that he uses in making up his effects. The adjustment of their rights, the extent of their privileges, the provision for their enjoyment and the curtailment of their shortcomings is the greatest problem which perplexes those who are vested with park management.

The size and location of a park must enter largely into the determination of this problem. If the area is

small and in the heart of a populous district, the park can merely be a resting place, and necessarily the liberties of its visitors must be restricted so that the beauties that lends to its attractiveness may not be destroyed. It, in a certain sense, is a picture to be viewed, not handled; but a park of an extended area has a larger scope and its visitors are allowed more freedom.

It is of the latter class that I wish to speak. To such parks I would wish to attract the public; to invite them to make it their summer home; not to go once annually to see its beauty, but to use it constantly. This end must be one of the cardinal purposes of the park. That they may be made attractive and beautified and that they may be enjoyed, is the ambition of all park managers, but the various accessories that aid in and promote the comfort of the visitors are creatures of slower growth and generally do not keep pace with other improvements.

As fast as the park is improved, it should be put into use. Seats should be provided; in places desirable for that purpose, picnic tables may be placed; drinking fountains and toilet pavilions should be convenient to all principal places.

Our Belle Isle Park is very extensively used by parties spending nearly the whole day there; frequently taking both dinner and supper with them; this is brought about largely because their comfort has been in a measure provided for. Nature has furnished an unexcelled forest, and an unsurpassed river, whose cold water makes balmy the heated winds. The provision of a few accessories, somewhat inexpensive in character, makes the requirements complete; the most noticeable of these are the ice-water fountains. Heretofore tanks were used, but they are now being supplanted by brick cisterns containing about two tons of ice, which cools the water as it runs through coils at the bottom, thus making an inexpensive and sanitary arrangement, as far as their care is concerned. For use on Belle Isle Park, including the casino, 2,600 tons of ice are annually stored and used, at a cost of about \$1,200.

That all may take full advantage of the park, provision should be made that conveyances are provided at as low a rate as possible. The people of ample fortunes have lawns and grounds in which they may take all the pleasure a park may afford, but the majority of the residents of a large city are greatly restricted in opportunities for breathing the pure, fresh air. To these people, the use of the parks are dedicated. In every way possible, provide that its beauties and attractions are within their means. If one of the objections is distance, furnish a conveyance at the lowest rate consistent with its cost. Make a place that the grocer's or peddler's horse may be secured and fed. We call them "hitching bays" and have them placed wherever experience has shown their want, and it is found that their presence is a constant invitation to their use.

Shelters from storm is another convenience that should be provided, that the picnickers and pleasure seekers may make an intended visit in threatening weather without a fear of discomfort.

Detroit has found it advisable to maintain a phaeton system besides the renting of a bicycle livery, boating and pony privileges. The latter is a creature of circumstance, but it certainly is a feature in our park. Many visitors feel safer with the ponies than with a team of horses, and it is a cheap and pleasant way to visit the several portions of the Island. The phaeton

*Paper read by Mr. R. J. Coryell, Gen. Supt., Detroit Parks and Boulevards, before the Detroit Convention of the American Park and Out-door Art Association.

service cannot be maintained so cheaply and efficiently by others as it can by the Park Commission. Should the horses not be required for that purpose, they are at work at some thing else, and are in constant use throughout the year, so by care in their management, it is possible to pay more than expenses at a charge of three cent fare from the car line to the casino which is a mile away and a ten cent fare around the Island, which is a five mile drive.

The question of park amusements is a more serious one, as it is difficult to tell where to draw the line. In the main, to be in keeping with nature, the amusements should be confined to those that are more closely allied to nature. I would classify the bathhouse with amusements and consider it a legitimate one. That should also be run on a cost basis. With us, the charges are 10 cts. for dressing room, 5 cts. for locker, and hook room free, a bathing suit and towel free. All suits and towels are washed and well dried and all sanitary precautions are taken. The boating privilege may be classed with amusements. The cheapest boats are 10 cts. per hour; those with cushions and upholstering are higher. Swings and teeters are provided for the small children and are legitimate for the reason that it gives them enjoyment, but merry-go-rounds, and the like, for the use of which charges are made, should be excluded, as the temptation to spend money should be kept at a minimum.

Base ball, lawn tennis, cricket, etc. with us are allowed and arrangements are contemplated for all athletic games. We have a field on which eventually all of the sports will be confined. Do they belong to a park? Yes! under conditions of ample room, a separation from the distinctive park features, and on the plea that under an organization that has the authority to compel proper behavior, athletic sports are beneficial, and the Park Commission is generally the only municipal authority that is in condition to handle these things.

There are several things that may be educational, that may be within the province of park work. I have had several talks before the school teachers and students of our city schools and since then I would be inclined to put the zoological department under this head including the birds and squirrels that are at large. There are many children in large cities that do not have the least idea of the habits of animals outside of book lore. A chance remark that I made at a school of the warfare between the squirrels and bluejays at Belle Isle Park has traveled through the various schools of the city and has created a new interest in the minds of our juvenile visitors.

THE FALL GRASS PEST.

It is rare to find a person who has charge of a lawn that has not had trouble with fall grass, *Paspalum sanguinale*. This great pest on northern lawns, for pest it is without a doubt, makes its appearance about midsummer, growing from seeds it has sown the previous season, as it is but an annual. Its growth is rapid and rank, crowding out all weak grasses it encounters. For a little time the lawn presents a beautiful green appearance, but with cooler nights and the perfection of its seeds the plants disappear, and then becomes plain the destruction it has caused. All weak grasses met with in its progress will be found to be smothered

out, and with the decay of the fall grass appear patches of bare soil, to the great disfigurement of the lawn.

It is more with the hope of getting suggestions from your readers how to combat this grass than it is that I can give any, that I have broached the subject, but there are some things can be done from which some benefit may come. I have been told of a proprietor of a place who plowed up a lawn overrun with this grass and kept it cultivated for two years, that every seedling of the grass might be hoed out.

There are three things I have found helpful. The first is to stimulate the desirable grasses to make a heavy growth, that they may resist the intruder. Heavy manuring in the early winter will do this, and perhaps a dressing of wood ashes in the spring. Some decry the use of manure as introducing weeds, but as against the great benefit from its use, I do not think this worth considering. With manure there is a rank growth of root and top, which very fortunately the fall grass cannot overcome.

The second thing is the rooting out of this grass as soon as it is well above ground to be seen and handled. This is not the great task many imagine. A few boys armed with short table knives, and under the care of a man, will go over considerable ground in a day. Nurserymen have gangs of boys managed in this way, to clean out weeds from their seed beds and find it profitable. A day succeeding a good rain should be chosen. Two lines are stretched through the lawn, to be shifted as desired, the space between the lines to be cleaned from one end of the lawn to the other.

The spurious grass is easily distinguished, and after a rain is not hard to get out.

The third plan consists in getting rid of the grass by mowing it before it goes to seed. It is hard to get rid of it completely in this way, as there are usually some prostrate stems which the mower cannot reach, and in fact mowing is apt to make the plant throw out prostrate shoots. After the first mowing, an iron rake is used, to bring to the surface these prostrate stems, when the mower is passed over these again. In this way there are not many branches go to seed, but I confess that I have never entirely succeeded in subduing this grass in this way.

Joseph Mechan.

* * *

[In response to the suggestion in the above timely article it would be of great value if our readers would give any successful experience they may have had, or know of, respecting the destruction or avoidance of this truly vexatious pest of our lawns. ED.]



IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

PRACTICAL SUGGESTIONS.

No line of work that can be appropriately undertaken by Improvement Associations is of greater immediate value to a town or to a village than cleaning, setting in order and planting its Railway station grounds, and the private premises and public ground fronting or, as is more frequent, *backing* on its railway rights of way.

Rightly done, such work begins at once to sow seed if not, indeed, to bear fruit, for it is noticed by the passing traveler, and the visiting stranger; is spoken of far and wide by commercial travelers, and never fails to be remarked by trainmen.

Villagers can not know what train carries men who are on the lookout for suitable sites to which to send their families for the summer or for new homes in which to locate, perhaps permanently. It is a common thing for commercial travelers to make homes for their families in towns that are conveniently placed for their business routes. The general appearance of a place is what these men note first, and their first impressions are gained by preliminary views obtained from the windows of a railway train and on alighting at a railway station. It is like entering the hall of a dwelling—one is either attracted or repelled by the first glimpse. This first impression is not readily overcome and if it is good, the greatest point is gained. In the matter of railway station grounds and railway rights of way, an agreeable impression is well nigh indelible because of its extreme rarity—the usual one being dust, dirt and din. In small places the din is comparatively slight so if the other senses are soothed by pleasant sights, sweet odors and grateful shade, the hearing may be lulled into forgetfulness or at least into inattention.

Outside of the suburbs of large cities on a few roads and at summer resorts, the first view from trains of railway towns in general is actually repulsive. Has not every one noticed that as soon as a railway enters the corporation limits of towns and

villages everything turns its back? The notion seems to prevail that anything in the way of fences, buildings and gardens is good enough to front railroad land. Few recognize that this is really the most important highway, the main thoroughfare, the route by which not only one's friends, but one's enemies enter; that in these days the expected and the unexpected guest usually arrives by the all rail route. Besides the great majority of the passing public must judge of the tastes, habits, manners,—in short of the civilization of the inhabitants, by what is seen from the car windows.

That the traveling public does so pass judgment, is known to every traveler. Almost all passengers



THE RAILWAY STATION GROUNDS AT VALENCIENNES, FRANCE.

pay more or less attention during daylight to the country traversed, and every attractive place is remembered the more so, as was before noted, because of their rarity.

It is a fact that railway rights of way as they pass through the country are like flower brocaded ribbons; it is only when the corporation limits are entered that disorder, squalor and all unsightliness gather around to offend the senses and the taste of the unwary passenger. The towns and villages that should be like gems set along this brocaded belt, are really its chief blots.

Improvement Associations can use their influence to induce railway officials to improve their station grounds, can ask their co-operation in making such improvements, or can undertake the work themselves, and in either case they will find no line of effort gives greater or quicker returns.

The simplest, most effective and only appropriate style for such planting consists of strictly hardy material that will practically take care of itself when once it is established, any thing else is too expensive to maintain as well as otherwise objec-

tionable. As for the vegetable curiosities sometimes introduced under the guise of carpet bedding—they should not be tolerated, it is unfortunate that expert practical growers ever allow their ingenuity and skill in this way overshadow taste to the end of perverting the floral morals of the public. Most of the results of such efforts should be relegated to a Chamber of Horticultural Horrors accessible to the element that supports dime museums and out of the way of true lovers of legitimate gardening and landscape beauty.

The work of improving the appearance of public ground and private premises facing the railway rights of way is just as important, perhaps even more so, as improving the station grounds proper, and is rather more difficult of accomplishment. This is especially true of private grounds, for there are more individuals to be dealt with.

Railway corporations are popularly supposed to be soulless yet they are always awake to their own interests and can usually be relied on to exhibit a fair degree of public spirit, which is more than can be said of the average individual.

In the outset as many old buildings and fences as possible should be removed and after that the greatest immediate good will follow a generous use of vines. A Virginia Creeper, *Ampelopsis Quinquefolia*, set against the base of every building no matter how old and dilapidated, and at intervals along every fence will alone do wonders in altering the appearance from passing trains, but the effect will be greatly improved by using a variety of hardy vines such as *Clematis paniculata*, *C. Jackmanni*, *C. Virginiana*, *C. graveolens*, Trumpet Creeper (*Bignonia radicans* and where hardy, *B. grandiflora*), Bitter-sweet (*Celastrus scandens*), wild Roses and wild Grapes.

Small trees and shrubs should also be freely introduced to shield the grounds from the passing public as well as to screen unsightly objects.

By this means a double good will have been accomplished, the general appearance of the place will be raised to a higher plane, and individual back yards transformed into habitable gardens, while the chances are in favor of other good results following in the wake of this, as of every kind of unselfish movement.

F. C. S.

THE WITCH HAZEL,
Hamamelis Virginica.

This peculiar shrub, or small tree is of the Hamamelaceae family. It differs from Hazel-nut, filbert, or cob-nut, which are all of the Corylaceae family.

The Witch Hazel is common in damp woods all over the United States and its peculiarity of pro-

ducing flowers in the autumn is the same irrespective of climates. From the shores of Lake Michigan, south, the bushy, many angled little tree will clothe itself in light yellow flowers after the leaves



WITCH HAZEL
Reduced in size

From *Vick's Magazine*.

have fallen from all the trees of the forest surrounding it; and although Gray and Wood are good authorities, and both say, in their botanies, that "the Witch Hazel blooms from November to January," observation has shown the writer that the blooms begin to open in September before the leaves are cast. In October the leaves fall and still more flowers appear, and in November every leaf will have been stripped from the tree and the full flush of blooms will clothe the branches from end to end. The flowers are perfect, or merely polygamous and in clusters on the curiously and sharply angled branches, and the stamens and petals show plainly how they are inserted in the calyx. Now, after November the stamens appear deadened, but the petals retain their golden hue, which is the reason our botanists have for saying it blooms till January.

By a right combination of circumstances the Witch Hazel in yellow blooms will be covered with snow and the Holly ice, when side by side with it is bright with berries. Until after January the flowers cling to the leafless branches, and then another curious phenomenon appears. At this stage the fruit, or seed is edible, and hangs on the branches until spring. The little fruit consists of an oblong, woody case, about half an inch in length, inclosing two hard nutlets somewhat resembling the seeds of an apple. These seeds are expelled with a snapping sound, and any one curious to witness the phenomenon may stand near the Witch Hazel on a warm, dry, sunny day, and see it sow its seeds. The case splits nearly to the base, and after the seeds have been sent bounding, the appearance of the seed cases is like the wide



The Flowers of *Hamamelis*.

PARK AND CEMETERY.

open mouth of a serpent. It is an interesting experiment to cut the branches, with the embryo fruit and keep them in a warm room until the expulsion sends the seeds bouncing around the room. Arboretums may well be adorned with these interesting trees native to our forests. Parks are interesting when adorned with shrubs and trees of marked and unusual features, and such is the characteristic of Witch Hazel. The foliage is obovate or oval, wavy-toothed and straight vined, slightly downy and alternate, not unlike the Filbert or Hazel-nut.

Among the belated flowers, Asters and Golden rod, it is charming to the senses to come suddenly upon the wildling Witch Hazel in bloom. The sweet perfume invariably makes the proximity of the tree known, and it is curious to note the manner in which the light yellow blossoms cling to the tree. They are almost without stems, and are set in neat little nests up and down and all around every limb, seeming to nestle against the cold, after the leaves have fallen. *G. T. Drinnan.*

ASSOCIATION OF AMERICAN CEMETERY SUPERINTENDENTS.

Program of the Thirteenth Annual Convention, New Haven, Conn., September 5, 6, 7 and 8, 1899.

Headquarters will be at Warner Hall, No. 1044 Chapel Street, and all meetings will be held there.

Tuesday, Sept. 5.

MORNING SESSION, 10 A.M.

Meeting called to order. Prayer. Reception of New Members and Roll Call.

Address of Welcome by his honor, Cornelius T. Driscoll, Mayor of the City of New Haven.

President's Address. Report of the Secretary and Treasurer. Communications. Appointments of Committees. Question Box. Informal Discussion.

Recess for Lunch.

AFTERNOON SESSION, 2 P.M.

1. Paper.—"Difficulties Confronting Cemetery Superintendents," by G. C. Nailor.

2. Paper.—"Influence of the Individual Superintendent in his Cemetery," by J. A. Thorne.

3. Address. By E. C. Beecher, of the New Haven City Burial Ground.

Discussion.

4:30 P.M. Visit to the New Haven City Burial Ground.

EVENING SESSION, 8 P.M.

4. Paper.—"Influence of Modern Cemeteries," by N. C. Wilder.

5. Paper.—"Some of Our Lot owners at Home," by Sid J. Hare.

6. Address. By Hon. L. P. Deming, of the Fair Haven Union Cemetery.

Discussion.

Wednesday Sept. 6.

9 A.M. Visit to the Crypt under Center Church.

MORNING SESSION, 10 A.M.

Roll Call.

7. Paper.—"How to make Single Grave Sections Compare Favorably with other Sections," by F. D. Willis. Nomination of Officers.

8. Paper.—"If Annual Planting or Embellishment of Lots is Discouraged or Reduced, can the Interest of Lot-owners be Maintained?" by T. McCarthy.

9. Address. By Rev. J. F. Corcoran, of the St. Lawrence

and St. Bernard Cemetery Associations.

Question Box. Adjournment. Discussion.

2 P.M. Visit to Cemeteries, East Rock Park and other Places.

EVENING SESSION, 8 P.M.

10. Paper.—"Beauties and Benefits of Modern Cemeteries," by George H. Scott.

11. Paper.—"Should Monuments and Markers be Set by the Cemetery," by Timothy Donlan.

12. Paper.—By Hon. Henry T. Blake, of the New Haven Park Commission.

Question Box. Discussion.

Thursday, Sept. 7.

9 A.M. Visit to Yale University Buildings.

MORNING SESSION, 10:30 A.M.

Roll Call.

13. Paper.—"Funeral Attendance at Graves, Appliances for Lowering Caskets and Protection of Mourners," by H. J. Diering.

14. Paper. By W. H. Barton, Pres. Dale Cemetery, Sing Sing, N. Y.

Election and Installation of Officers.

Discussion.

AFTERNOON SESSION, 2 P.M.

(In the hands of Executive Committee.)

Reading of Papers and Communications.

Unfinished Business.

3 o'clock. Adjournment.

Shore Dinner.

Friday, Sept. 8.

10 A.M. Train for Hartford, to visit the cemeteries and other places of interest.

Note:—

The following subjects have been suggested for discussion:

1. How to become a proficient Cemetery Superintendent.
2. Why labor in cemeteries on Sunday?
3. Proper treatment of cemetery woodlands.
4. Subdivision of sections and lots.
5. Ground covering—use of shrubbery and vines on lots.
6. The park idea in cemeteries.
7. Cemetery advertising. How far is it permissible? Commissions.
8. Ideal management and care *versus* income.
9. The most satisfactory system of pumping water; variety of pumps; methods of distributing water.
10. Winter work in cemeteries.
11. How far should perpetual care be extended to get best results? How best to ascertain rates.
12. Perpetual or annual care provisions for poor or sick cemetery employees.
13. Are charges made by cemeteries commensurate with value given?
14. Buildings, enclosures and equipments for cemeteries.
15. True art in cemeteries *versus* the sham.
16. Comparison between cemeteries and parks.
17. Influence of our surroundings.
18. Insects and pests injurious in cemeteries (moles, mice, chipmunks, skunks, etc.)
19. Wide roads *versus* narrow roads.
20. Characteristic beauty of trees and shrubs in winter.

GARDEN PLANTS—THEIR GEOGRAPHY—XLIII.

EBENALES.

THE CHRYSOPHYLLUM, DIOSPYROS AND STYRAX ALLIANCE.

Achras in 1 or 2 species is West Indian and Central American, but is reported to promise very well in the most tropical parts of the United States—that is at the mouths of the Colorado, Rio Grande, and at the extreme South of Florida. A number of plants formerly included in this genus by botanists are now transferred to others, and many of the genera have undergone a general shaking up. Several sub-tropical *Sideroxylons*, and *Homorgyne*

cotinifolia—(Mimusops A. Cunn.,) may be sought for among these, while *Argania sideroxylon* a low spreading evergreen said to be a native of Morocco, has been known to stand under the shelter of walls in the south of England.

Lucuma in 2 species are Chilian. They have



HALESIA DIPTERA.—From *Gardening*.

edible fruit, are kept in South Florida gardens, and are nearly related to *Sarcosperma*.

Bumelia, "Ironwood etc.," of the southern states has about 20 species of trees and shrubs, 5 of which are native from Virginia and S. Illinois, southward and westward to Arizona. The rest are tropical.

Several of the East Indian "buttertrees" (*Bassia*, etc.,) and Palaquim or *Dichopsis*, one of the good "rubber trees" long known as *Isonandra gutta* belong the alliance.

Symplocos has 160 species in Asia and Australia with one species in the southern Atlantic States. This *S. tinctoria* is known as "Horse Sugar" and is found mostly in the Pine barren regions, in the southern part of which it is sub-evergreen, grows to 15 or 20 feet high and bears racemes of little whitish flowers. When well developed it is a pretty little tree, hardy in cultivation for 200 or 300 miles beyond its natural northern limits. The Japanese species *S. Japonica*, *S. paniculata* and *S. crataegoides* are also in cultivation, and are well worth growing. The latter species is an especial favorite with those who have tried it.

Halesia has 5 or 6 species with several varieties in North America, China and Japan. *Pterostyrax* is included by authors nowadays. The native "snowdrop trees" are very handsome and although they assume a shrubby form at the north, *H. tetraptera* is hardy to Lake Erie and should not be omitted from any good collection. *H. diptera* is still more showy, later to bloom, but not found wild north of Georgia; it is very handsome in gardens as far north as Central New Jersey, and does well in the shade. I do not mean that it fails to endure further north, but it loses some of its luxuriance.

The other species, are not so much grown.

Styrax has 60 species in tropical and temperate Asia and America, and in southern Europe. They are deciduous, or in the tropics evergreens with white or whitish flowers in fascicles or borne singly. There are four or five forms found from Virginia southward and westward to Texas, and another in California. They are but little grown, although well worth keeping in collections. The Asiatic species fare better. *S. obassia* is quite a good shrub. *S. officinale* is found in Mediterranean countries. *S. serrulatum* in East Indian; and along the northeast frontier becomes a handsome tree of 40 or 50 feet high. *S. Japonica* is a variety of this species found planted here and there in the states, where at the south the best I know of is a tree of about 20 feet. Further north it is a beautiful shrub occasionally with pinkish buds which is a color to conjure with in this group. From the lower lakes, and the southern New England States—southward, this handsome small tree or shrub should be met



STYRAX OBASSIA.

with more frequently—for its small persimmon-like foliage permits its profuse and pretty flowers to be seen to fine advantage.

Besides the species referred to above there are a few trees from South Africa and Australia which may possibly be useful to southern California where water can be had. *Royena lucida* grows to 50 feet high, and the wood is a good deal used for wagon building. A similar species was in the Government greenhouse collections at Washington years ago. *Euclea undulata*, and *Sideroxylon inerme* are other South African trees whose wood is of some use. Australia furnishes *Sideroxylon Australe* known as the "native plum." *James MacPherson.*

PARK NOTES.

In the matter of erecting a monumental memorial to the late H. B. Plant in Jacksonville, Fla., it has been wisely suggested to create a beautiful park in his memory.

A resolution has been carried by the board of Aldermen of Pontiac, Mich., calling for a special election on the question of bonding the city for \$15,000 for parks.

The contract for the construction of an archway under the Lake Shore Railway at the entrance to Edgewater Park, Cleveland, O., has been awarded to C. N. Griffin, the lowest bidder for \$65,397.

The council of Gibson City, Ill., recently voted to allow \$1 for every \$2 subscribed by private citizens, up to a limit of \$300 for park improvement. The subscriptions rapidly accumulated and the committee hopes to have on hand soon \$1,000.

Weed Park, the gift of Dr. Weed and wife to Muscatine Ia., was dedicated on July 4. It contains 63 acres, picturesque in detail and situated on the Father of Waters, affording magnificent opportunities for park effects.

The Singer Company has presented to the city of Elizabeth, N. J., the handsome fountain which ornamented the company's park for many years, and which must be removed for the factory extension. The fountain will be placed in the centre of Jackson Park.

Indignant citizens of Minneapolis are attacking the Park board for granting permits to housemovers, whereby in the course of their housemoving they injure the trees en route. Where the elms arch over, great injury has been done to their large branches.

The project for a national military park about the battlefield of Petersburg, Va., is being favorably considered by the War Department. A bill for the purpose was introduced into the last congress but was not acted upon, and it will again be introduced next winter.

Labor has had a great success on the eight hour day question in Peoria, Ill. All the laborers at Glen Oak Park, in that city, have been granted by the park commissioners the same wages for the day of eight hours as they had been receiving for a ten hour day previously. This gives the men 18 $\frac{3}{4}$ cents per hour, instead of 15 cents as heretofore.

In accordance with the will of the late Daniel Striker, of Hastings, Mich., there was unveiled on Decoration Day a memorial fountain in the courthouse square of that city. This is a feature of urban decoration which is at once both appropriate and useful, and the example of such donors should be more widely followed.

Mr. James Lawrence of Groton, Conn., has recently given to that town a handsome watering trough. It is constructed of Milford, N. H., granite, and is as ornamental to the village, as it is useful to the citizens. It stands about eight feet in height, and has conveniences for man and beast. The trough in front, for horses and cattle, is seven feet long. A bronze tablet bears

the following inscription: "Given to the town of Groton in memory of James Lawrence and his wife Elizabeth Prescott, by their son, James Lawrence, May 1899."

The deed for the Campau property on South Division street, Grand Rapids, Mich., has been delivered to the officials of that city, the gift of Martin Ryerson of Chicago, for a public park in memory of his grandfather, Antoine Campau. There were two deeds passed in the transaction, one from Mrs. Ryerson to her son, and one from him to the city of Grand Rapids. The value of the property is stated to be \$25,000. The deed reserves the piece of ground marking the site of the old homestead, upon which Mr. Ryerson is to erect a monument to Antoine Campau. This little plat will remain the property of Mr. Ryerson so that he can arrange it around the monument to suit himself. Mr. Ryerson carried out his very estimable intention of giving the property to the city without any cost whatever, and not a cent was paid by the city in any of the legal transactions involved.

According to the fourth annual report of the superintendent of parks, Indianapolis, Ind., for 1898, Indianapolis, now possesses a park area of 1,204 acres, brought about by purchases of some 1,100 acres in 1898. This has improved the rate of park area per capita from 1.508 per acre to 160, placing the city in the leading rank. There are 13 park areas now under care, the principal of which are: Riverside Park, 953 acres; Brookside Park, 82 acres; Garfield Park, 99 acres, Greenlawn Park, 27 acres and Military Park, 17 acres. Of the remaining areas none exceeds 8 acres. The park system of Indianapolis is of so comparatively recent inception, that only a beginning in the way of improvement can be said to have been made, but it would appear that the most advanced ideas are being brought to bear as opportunity and finances permit. For the year 1898 there was appropriated for park purposes \$395,924.33 of which \$300,000 was for the purchase of lands. There was expended \$352,760.49 for all purposes, leaving an unexpended balance of \$43,163.84. Mr. J. Clyde Power's report contains some edifying remarks on the trees suitable to his locality for park and street planting.

A national park and forestry reserve association is about to be formed in Chicago with the object to start with of inducing the government to reserve some 7,000,000 acres of land in northern Minnesota. The area includes all the lands surrounding the head waters of the Mississippi river, which, with its historic associations and wondrous wealth of natural resources of forest, lake and stream, will form one of the most attractive of national parks, and within moderately easy reach of a large number of people. It is proposed to gather a party of prominent men of the country, who are known to be strong advocates of government forest preservation, to visit the region, and afterwards plan a campaign to secure government action. The region comprises parts of the counties of Crow Wing, Aitkin, Wadena, Hubbard, Beltrami and Itasca. It is the continental divide for the waters of Hudson Bay, the Mississippi and the St. Lawrence, and has an elevation ranging from 1,300 to 1,500 feet above sea level. The area includes some 1,000 lakes, full of fish, and the game is in a sense unlimited. The size of tract is practically 140 miles. The population of the area is given as 3,714 white and 3,330 Indian, and it is proposed to leave the Indians where they are, as they are peaceable, tractable, fine sportsmen and guides. The state of Minnesota has been steadily at work for years trying to create state reservations but the commercialism of the lumber and mining interests have opposed all efforts. The present movement hopes to secure the amiable support of these hitherto refractory parties and to enlist them as active supporters.



CEMETERY NOTES.

The contract, has been let for the erection of a chapel and gateway at Mount Hope cemetery, Boston, at a cost of \$19,500.

* * *

Several hundred dollars have been contributed by the citizens of Tusculumbia, Tenn., to aid the City Council in improving and beautifying Oakwood cemetery. The improvements have already begun.

* * *

Penn Yan, N. Y., has more graves in its cemetery than it has living inhabitants. The cemetery is 100 years old and on Aug. 24 the centennial anniversary of the first burial will be celebrated by the town. There are said to be 8,000 bodies buried there, which is more than the town's population.

* * *

Oakwood cemetery, the principal burying place of Waco, Texas, was seriously damaged as a result of the recent flood of rain. Graves have sunk from a few inches to two or three feet, monuments are leaning, head and footstones are ready to topple into graves, and the conditions are such as have never been seen before.

* * *

At Mt. Auburn cemetery, Boston, the building formerly used as a chapel is being altered into a crematory. It is to be constructed with all the latest improvements, and will be completed in October. The fitting up of a crematory at this noted cemetery is a source of satisfaction to those who prefer this manner of dealing with the dead, and it also indicates the progress of the cremation movement.

* * *

It would be astonishing if the citizens of Babylon, Long Island, were not heard in loud protest against the invasion of their district by a number of cemetery corporations. The list of cemetery associations that have secured the rights to lay apart certain parcels of land near Brentwood in the northern part of the town is as follows. The Beechwood, the Maple Grove, the Oak Grove, Pinelawn, the Laurel Grove, the Pine Grove, the Hollywood, the Elm. These associations were granted 200 acres at the recent meeting of the Board of Supervisors, and the town of Babylon was authorized to fix a fee of not more than 50 cents for each burial in either of the mentioned cemeteries.

* * *

The trustees of Elmwood cemetery, Detroit, Mich., at a recent meeting discussed a resolution providing that no more mausoleums or burial vaults will be permitted to be built within the cemetery grounds. The reason publicly given for the consideration of the above resolution, as explained by the Secretary, is that the number of these private burial vaults has increased so rapidly, during recent years, that the natural beauty of the grounds is already seriously impaired. It is desirable to preserve intact the natural features of the cemetery, producing as near as may be a park effect. This may be a giant stride in landscape cemetery practice.

* * *

Mr. Rutan, Architect, of Pittsburg, recently submitted plans and specifications to Mr. F. H. Buhl of Sharon, Pa., for a mausoleum, receiving vault and chapel to be erected in Oakwood cemetery to cost \$50,000. The structure will be of granite with white marble interior, and will be 65 by 30 feet in area. The chapel will be 40 feet long with three windows and vestibule.

There will be twelve public receiving vaults, six on each side of the corridor, and at the rear of the latter will be two private vaults, which are intended for Mr. and Mrs. Buhl. This work will be commenced as soon as the contract is let, and will be a donation to Oakwood cemetery so far as it goes in every detail except the two private vaults.

* * *

Dowagiac, Mich., is reaping the reward coming from improvements in its Riverside cemetery, in the increasing interest taken in the work by the citizens and the appreciative curiosity excited in the surrounding districts. Among the latest improvements are two fountains, one of which was installed from public subscriptions and the other from the cemetery fund. These are erected in appropriate sites in the grounds and are kept playing throughout the day, and form attractive features to lot owners and visitors. Increased interest is resulting in additional funds for care of lots from lot owners, and the work of the cemetery board is rapidly gaining the confidence of the citizens, a result invariably experienced under intelligent and progressive control.

* * *

The financial side of the cemetery question is seldom considered in our rural districts, or very few would be left uncared for. Back in the spring a new policy was inaugurated at Riverside cemetery, Albion, Mich., and a determined effort to redeem the spot was made with the result that an altogether different aspect attaches to the grounds. A local paper says: While all of the improvements have added greatly to the appearance of the cemetery the various owners of lots have a duty in the same direction to perform. That the expenditure incurred is not extravagance is shown by the fact that the sales of lots have already begun to increase and many people will want to purchase lots if the grounds are kept up in good shape. This will be found unquestionably true.

* * *

The fifty-seventh annual report of the Lowell cemetery corporation, Lowell, Mass., has just been published. The treasurer's report shows that \$8580.15 was expended for pay roll and the total receipts for the year were \$44,886.93, which with the balance from previous year makes a total of \$44,935.33. A balance of \$1510.33 is carried over. A paragraph in the treasurer's report reads as follows: "From a money-making standpoint the record for the past year is disappointing. The sale of lots amounted to but \$2580.81, as against \$5887.97 the year preceding, and an average yearly sale of more than \$5,000 for the period covering the last 14 years. The collections from lot owners, partially owing to a less vigorous enforcement of collecting, shows a falling off by \$641.64."

* * *

Judge Buck of the probate court of Minnesota has decided for the Woodlawn Cemetery Association in the contest over the will of George Plummer Smith. The contest arose over the fact that by the will \$10,000 was bequeathed direct to the association. Immediately following this bequest was another clause granting to Judge William Mitchell, as trustee of the association, certain real estate in this city, valued at about \$10,000, the proceeds of which should be used in the care of certain lots in the cemetery, and generally for the benefit of Woodlawn Association. It was claimed by the contestants, who are residuary legatees under the will, that it was not the intention of the testator to leave both the \$10,000 and the real estate, for as the money had gone direct to the association, the real estate was all that was still in question.

* * *

The first graveyard in the city of Hartford, Conn., has been rescued from obliteration by the widening of Gold street. In it the first settlers and their successors for six generations, in-

cluding in all some six thousand persons, were buried. It was purchased by the town in 1640, and its history preserves some curious traits of New England character. At one time it was rented for the pasturage of horses and calves, afterwards limited to calves and sheep, a practice which continued until into the present century. As the enclosure became too small for the increasing number of the dead, portions of it were sold off for the erection of churches and schools, as well for business purposes, and so some of the graves were obliterated; and it was thriftily provided that the lots should be cared for "at as little expense as may be to the town." Burials in this lot ceased early in the present century. The old tombstones have been replaced and repaired, and in a few years the cemetery will present an aspect worthy of the early Pilgrims and other pioneers whose bodies repose in it.

* * *

The annual meeting of the corporators of the Allegheny cemetery, Allegheny, Pa., was an important one in relation to proposed improvements. It was suggested that a portion of the endowment fund be spent yearly on the lots whether endowed or not. As a first step it was resolved to secure the consent of all lot-holders having iron fences around their lots to have them removed. A circular is to be sent but in any case the fences will be removed anyhow by April 1, 1900. The invested capital of the cemetery amounts to \$533,779.08, less the amount held in trust as the "lot owners' endowment fund," \$48,879.42, or \$483,899.66. During the year the gain has been \$12,149.45. The endowment fund was increased \$1,625. 85 lots were sold \$15,507.55. The total revenue was \$60,836.65, and total expenditures \$41,256.68. The total amounts received for interments, foundations, labor, plants, etc., was \$19,231.35, leaving the actual cost of keeping the cemetery \$22,025.33. President Clarke points out the fact in his report that if the cemetery never sells another lot the income will be enough to keep the cemetery in its present condition. The total number of proprietors is now 5,360. The total number of interments in the past year were 980, an increase of 96 over last year, making the total number of the dead on the grounds 41,437. Monumental structures costing \$40,000 were erected during the year.

* * *

The 23rd annual meeting of Stockholders of Magnolia cemetery, Charleston, S. C., was held on June 13. During the year new sections have been prepared for burial purposes, and the sale of lots amounted to \$3,179.10. The fund is in the hands of the trustees for the care of roads, grounds and lakes now amounts to \$37,949.57. The perpetual care fund is increasing and an earnest appeal was made on its behalf. Since the organization of the cemetery some \$130,000 have been expended in its improvement and preservation. One of the sights of Magnolia is the venerable oak under which Commodore Ingraham lies buried. The report contains the following note concerning it: "In the terrible gale of 1804, which did great damage in and around Charleston, this old oak tree, at the head of the lake near the superintendent's office, was literally torn to pieces. The huge body was split into several parts which were thrown in all directions of the compass, falling to the ground, stretching out from ten to twenty feet from main body of the tree, but not detached from the original trunk of the tree. From the ends of these shattered limbs have in the past century sprung up a half dozen trees, throwing out their broad, green, moss-covered branches, now covering a space of two hundred feet in circumference. The scars of the storm are still perceptible; this tempest-tossed tree has been carefully protected, and is well worth a visit to Magnolia to see." The history of the Magnolia Cemetery is an interesting record.

THE MAN WITH THE HOE.

An unseemly criticism on the beautiful poem on "The Man with the Hoe," has called forth a number of eulogistic paragraphs from some of our foremost literary men. Mr. C. S. Harrison of York, Neb., the well known horticulturist, contributes the following on the subject, and relating thereto, says: "I have seen that noted propagator, Jackson Dawson, wield the hoe as though it were a magician's wand."

You had better go slow,
On that man with the hoe,
It isn't the tool,
Which is making the fool,

Or spoiling the laborers face,
And marring its beauty and grace,
In stolidity clad,
So heavy and sad,

I love a good hoe.
I want you to know;

Its a magical wand in the hand of a king;
And beauty and joy from the earth it will bring.

It is comely and light,
And wielded aright,
The garden will smile,
In abundance the white;—

And beautiful flowers in the wake of the hoe,
Will spring up like magic. How sweetly they grow!

So comely and fair,
They fill all the air,
With the breath of their smile,
And your labors beguile.

And the fruits which abundantly grow in your garden,
Will yield up their treasures to you as their warden,

My hair has grown white,
But my spirits are light,
I look back on my life,
With its burdens and strife,

And think of the joy I have had with my hoe,
Where the roses, pansies and columbines grow.

But the foxtail and weed
Which so ruthlessly feed,
On the soil and the shower
Which belong to the flower,

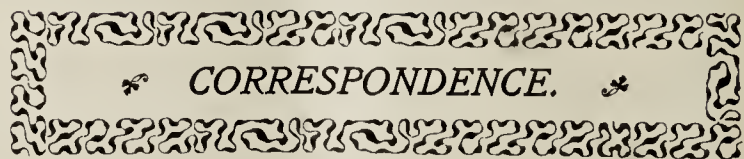
Well knowing their peril and danger,
Cry out in alarm, Hello, there you stranger!

Just put down your hoe,
Or the next you will know,
You will have all the tan,
And wear all the ban,
Of that Angclus man,

Oh no my Dear Sir, I am willing to wager,
It isn't the hoe and it isn't the labor.

These never you fear,
Its tobacco and beer
Which is marring the face
Of the laboring race.

C. S. Harrison.



A correspondent asks for information as to obtaining literature relative to the organization, etc., of societies having in view the encouragement of the beautifying of towns, etc.

In reply we would say: "There is no literature pertaining exclusively to this subject. The department in PARK AND CEMETERY devoted to Improvement Associations gave suggestions for organizing in the March number. Distributing this journal among interested people would create a sentiment in the right direction, but one or two persons must bring about the organization by their own personal efforts.

SELECTED NOTES AND EXTRACTS.

The Elm Leaf Beetle in Kentucky.

Specimens of the imported elm leaf beetle, *Galerucella luteola*, have been received from a section of Nelson County thirty miles south of Louisville, Kentucky, where it was found in such quantities that ten bushels of the mature beetles might have been taken from as many trees.

It is interesting to note that where the English and the American elm were growing side by side the European tree only was attacked, the native species being quite free from the pest.

The only effectual remedy is to spray the trees with a preparation of Paris green or arsenate of lead when the insects are in the larval state and as there are often two or more broods each season it will be necessary to repeat the operation at intervals.

Persons in authority in towns where this beetle is found should make every possible effort to have it exterminated in order to avert the injury which would come from its increase.

To this end it would be well to secure legislative aid by the enactment of such laws as would require owners of infested trees to take prompt action towards the destruction of the pest.—*Warren H. Manning.*

* * *

Kalmia, or Mountain Laurel.

The sides of old Lookout and all surrounding mountains have been clothed in festal May garments of wild Laurel, and a more beautiful wild flower has never yet been discovered. This genus of evergreen shrubs is common from Maine to Georgia and is usually found on mountain sides or dry waste places, and occasionally along streams.

It is generally supposed that this shrub cannot be transplanted from the woods, and the writer has repeatedly been unsuccessful in his attempts at so doing; but a good authority says this is a mistake for with proper precaution in preparing the soil, as nearly like that in which *Kalmia* usually grows, success is assured. The following few directions are to be closely observed: First, soil which is in a great measure leaf mould should be procured, than take up plants of small size, being careful not to cut the roots, and not to let them get dry; plant as quickly as possible after taking up, then cut back and it is said very few will fail to make

elegant plants which will flower freely the second year.

The flowers of *Kalmia latifolia* are boræ in large and showy clusters of rose color or white with crimson spots, flowers terminal; leaves are lance-ovate of bright rich green.—*Southern Florist and Gardener.*

* * *

Spraying.

It is marvelous what spraying has done and is doing for horticulture. The ravages of insects on fruit and foliage have no doubt discouraged many persons from planting certain desirable things. Putting aside the San Jose scale, which has already had more than its share of discussion in the past few years, the elm and most all evergreens have chiefly suffered—the former from the leaf beetle and the latter from red spider. The largest immunity from human attack is had by the spider. Evergreens get possessed by these minute creatures and become virtually smothered with them, dying gradually. I witnessed the destruction of one of the most beautiful hedges of Norway spruce, which had become so infested as to make it a menace to other near-by evergreens as well as an unsightly object. Spraying has placed greater responsibilities on the shoulders of the horticulturist, for by its means, if taken in time and properly used, almost all insects and fungi may be controlled. Kerosene emulsion is an effective spray against red spider, though where trees have been neglected many years, and have become bare of foliage and haggard, it is often most satisfactory to apply the axe and supply the brush heap to be immediately burned. Leaf-eating insects are always best reached by poison solutions, such as Paris green. It is becoming quite usual to use the latter in connection with Bordeaux mixture, making the spray against fungi as well as insects. The spraying apparatus should become tools for regular use wherever there are trees, and when this becomes an established rule, pests will be under fair subjection. Both sulphur and lime are known to be purifiers and are much used in greenhouses to check mildew and rot. But their use should be extended further to many outside cases. Root diseases, particularly among evergreens and small plants, are not infrequent, and an application of sulphur or lime will usually be found helpful. The English gooseberry has found ill-

favor in the United States because of mildew attacks on the leaves. Powdered lime sprinkled over the plant, as sulphur is used in greenhouses on rose leaves, has been found entirely effective. An important thing for the person who sprays is to learn that delays are dangerous. Spray early and at regular intervals. These pests do not come with a flare of trumpets, and signs of their presence should not be waited for. Spray anyhow, as prevention is always better than a cure.—*S. Mendelson Meehan.*

* * *

Sub-Irrigating Flower Beds.

The experiments that have been tried in introducing water freely below the beds of growing plants have proved conclusively the value of this kind of watering. The cross section given herewith shows how one may readily try this experiment for himself any time. Select the spot where a small bed is to be devoted to foliage or other plants, and sink an empty



keg in the centre just below the position of the coming roots. Fit an old piece of tin pipe, as suggested in the sketch, and your "irrigating plant" is ready for business. Not only can water be thus freely applied, but liquid manure also. The keg, it should be said should not be one that will "hold water."

* * *

The Linden Tree.

At the Arnold Arboretum lecture in Professor J. G. Jack's course he said respecting the Linden: "The linden has many names, in various localities it is called linden, lime tree and whitewood. The common name for the American species of the tree is basswood. One pleasant characteristic of the linden is its delicate sweet-scented flowers. Another peculiar feature is its bark, which is soft, white, and so tough and close in texture that the inner portion is used for fine matting. Although the basswood is the only native species to be found in New England, it is not at all common about Boston, and most of the trees seen here on the Common and elsewhere are of foreign origin. The basswood is the latest of the lindens to flower, its blossoms being seen about the first week in July, although there is one European species which puts forth its flowers almost as late. It is easy to identify a linden, no matter of what kind, for the bark of all has a peculiar odor and flavor."—*New England Farmer.*

Park and Cemetery.

ESTABLISHED 1890.

An Illustrated Monthly Journal.

Devoted to the advancement of Art-out of Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

The regular contributors to PARK AND CEMETERY are among the most eminent Landscape Architects, Landscape Gardeners and Horticulturists in the United States, whose practical articles make the journal one of great value to any one identified with landscape work.

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Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

Association of American Cemetery Superintendents.

ARTHUR W. HOBERT, "Lakewood,"
Minneapolis, Minn., President.
WM. STONE, "Pine Grove,"
Lynn, Mass., Vice-President.
F. EURICH, Woodward Lawn, Detroit, Mich.
Secretary and Treasurer.

The Thirteenth Annual Convention will be held at New Haven, Conn., September 5, 6, 7, 8.

The American Park and Out-Door Art Association.

CHARLES M. LORING, Minneapolis, Minn.,
President.
WARREN H. MANNING, Tremont Building,
Boston, Mass., Secretary.
O. C. SIMONDS, Chicago, Treasurer.

The next meeting of the Association will be held at Chicago, Ill.

The souvenir prepared by the commissioners of Parks and Boulevards of Detroit, Mich., and presented to the members of the American Park and Outdoor Art Association, at the recent convention held in that city, is a handsome memento of the occasion. In the main it is a pictorial representation of the excellent features of Detroit's park system, beautifully executed in all particulars, with sufficient text to convey the principal matters of interest.

The National Cash Register Co., Dayton, O., prepared a special souvenir number of the N. C. R. for distribution among the members of the American Park and Outdoor Art Association at their Detroit Convention. This company, through the intelligent philanthropic effort

of its president, Mr. John H. Patterson, has effected a remarkable work among its employees in creating an interest in the improvement of their home surroundings. The portion of Dayton, O., in which this work has been carried on has found a world wide reputation, and the influence exerted by this very successful demonstration of the effect of sustained energy in a good work, is already far reaching and is promising of a wide spread reform in the relation between employer and employee. The souvenir is replete with detail illustrations of the work of the improvement association, with descriptive text and much information relating to methods of procedure and the general scheme as it progresses, Lincoln, Neb.

The Department of Botany of the University of Nebraska has undertaken to make a complete collection of the poisonous plants of Nebraska, and asks everyone who is interested in this matter to give aid by sending samples, accompanied by notes, as to the poisonous qualities of the plants, with other information which may be helpful. Stockmen in particular are asked to give this matter their attention. Samples and correspondence should be addressed to Professor Bessey, Lincoln Neb.

We have received from Mr. Arthur F. Gray, landscape architect, of Boston, a copy of "The Ideal Watertown," the Young Men's Assembly special edition of the Watertown, (Mass.) *Enterprise*. The object of this Young Men's Assembly, which meets monthly, is the improvement of Watertown, and this special edition contains numerous illustrations with descriptive text, of possible public improvements and landscape embellishments leading up to the ideal in urban progress. The suggestions and sketches are furnished by citizens of professional standing, and are practical and possible, and as is stated in the columns, many supposedly ideal schemes promoted years ago by far seeing and public spirited men have become actual realities of the present. The work of the Young Men's Assembly of Watertown, Mass., can be imitated to advantage we might say, all over the land.

The June issue of *Municipal Affairs* is chiefly devoted to taxation and urban problems. Among its important articles are: Water supply in London and Philadelphia; Municipal government of Padua, Italy; The larger Transportation Problems in cities; Duration of Franchises; State Oversight of Police, and three valuable discussions on Urban Taxation.

In the last issue of *The Technograph* the annual publication of the engineering societies of the University of Illinois, there appear three articles of especial interest to readers associated with landscape work. They are: Parks and Boulevards," by A. C. Schrader, chief engineer for West Chicago Park Commissioners; "Notes on Landscape Gardening as applied to Parks and Boulevards," by James Jensen, superintendent of West Side Parks, Chicago, and Landscape Gardening—Past and Present," by Joseph Cullen Blair, asst. Professor of Horticulture.

The Illinois Agriculturist, for 1899, is issued by the Agricultural Club of the University of Illinois and is its annual publication representing some of the work done at the University, by the Agricultural students. Valuable material is also contributed by the professors and prominent agriculturists, of the State.

The single tax would also result in improving the appearance of the city in many ways. By untaxing buildings not only would new buildings be encouraged, but, the yearly fine being removed, the old and cheap buildings, which now disfigure the city, would be replaced by good-looking structures. As no one could afford to pay a tax on idle land which left no room for speculative profits: nearly all very valuable land, not used for parks, would contain valuable buildings; and the value of the buildings would be somewhat in proportion to the value of the land under them. The city would, therefore, lose much of its present ragged appearance. No extra fine being placed on fine-appearing buildings, their external architecture would be improved.

Under the single tax cities would also be better laid out and provided with parks.

If a city now wishes to improve its appearance and to lay out its streets with some evidence of design for the accommodation and convenience of the public, it can do so only after paying exorbitant prices for the land condemned. Under the single tax the land would have but little value and the change could be easily and cheaply made.—From *Municipal Affairs* for June.

HOW TO PLAN THE HOME GROUNDS.

By Samuel Parsons, Jr., Ex. Supt. of parks, New York City; Fellow of the American Society of Landscape Architects. With illustrations. New York: Doubleday, McClure Co. 1899.

The name of Samuel Parsons, Jr., attached to a work on out-door art, as the adornment of home grounds involves, should easily invite perusal and the book to hand will afford some very interesting and instructive reading, and moreover, will lend to further study of so important a theme. The author states that the purpose of the book is to set forth briefly some simple basic principles concerning the processes whereby home grounds can be made beautiful, and the statement cannot be made too emphatically at the outset, that it is always just as simple and just as difficult to lay out a small yard 25x100 feet as a gentlemen's great country place of many acres. Common sense and reasonable comfort may go hand in hand with art and beauty. The book discusses the selection of home grounds and site of house, roads, paths, lawns, flower gardens, terrace, plantations, trees, shrubs, herbaceous plants, vines and climbers, etc. And for larger areas of work, pools and streams, the use of rocks, residential parks and details, contracts and specifications, parks, cemeteries, seaside lawns, city and village squares and railroad station grounds, etc. etc. The book in its general tone bears the imprint of an adept in the matters discussed, and makes a valuable help in the cause now being ardently encouraged over the land.

SITUATIONS WANTED, ETC.

Advertisements, limited to five lines, will be inserted in this column at the rate of 50 cents each insertion, 7 words to a line. Cash must accompany order.

Roderick Campbell, for 21 years Landscape Gardener and Superintendent of the famous Forest Hill Cemetery, Utica, N. Y., is open to an engagement as Superintendent or laying out of new or the improvement of old cemeteries anywhere in the United States or Canada. Address **RODERICK CAMPBELL, Utica, N. Y.**

Wanted, a man of experience to act in the capacity of superintendent in building up and developing a modern lawn cemetery; married man preferred; good lodge house, healthy location, schools near by and reasonable salary, equal to \$600 per annum. Answer H., Lock Box 12, Chattanooga, Tenn.

BOOKS. REPORTS. ETC., RECEIVED.

Incineration and the Davenport, Ia., Crematorium. A handsomely gotten up illustrated pamphlet issued by the Davenport Cremation Society, containing descriptions of the plant, arguments on this method of disposing of the dead, rules and suggestions and extracts from the opinions of well known people on the subject.

Fourth Annual Park Report of the city of Indianapolis, Ind., for the year 1898. Illustrated with half tones.

From Wm. L. Bennett, Navarre, O., a photograph of a corner of quaint garden of the Zoar Commune, Zoar, O.

MICHIGAN STATE AGRICULTURAL COLLEGE EXPERIMENT STATION, LANSING, MICH., BOTANICAL DEPARTMENT:—Bulletins Nos. 1 to 8, inclusive, two programs for Arbor Day Convention of Trees in 1888; Convention of Trees in 1899.

UNIVERSITY OF NEBRASKA AGRICULTURAL EXPERIMENT STATION, LINCOLN, NEB. Press Bulletin No. 1. How to kill grasshoppers. By Lawrence Bruner, Entomologist.

The Tenth Annual Report of the Missouri Botanical Garden, St. Louis Mo., contains a biographical sketch of the late Dr. E. Lewis Sturtevant, a liberal contributor to the garden; a list of publications issued from the Garden in 1897, 1898; a list of the serial publications received at the garden library, and comprehensive indexes to the contents of the ten annual reports of the garden thus far issued.

From B. Chaffee, superintendent. A number of handsome photographs of characteristic features of Oakwood cemetery, Syracuse, N. Y.

From Oakwoods Cemetery, Chicago, a very fine photograph showing the corps of laborers and special cemetery police lined up in their distinctive uniforms.

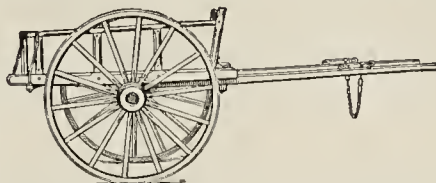
Trade Literature, Etc.

Wilfred A. Brotherton, Rochester, Mich., Michigan wild flowers. Special wholesale circular of bulbs, tubers and other plants for summer planting.

Wholesale catalogue and price list of American seeds of conifers, palms, trees, shrubs and herbaceous plants, etc., for fall planting. Pinehurst Nurseries, Pinehurst, N. C.

Dreer's mid-summer catalogue, 1899. Henry A. Dreer, Philadelphia.

HOBSON'S STANDARD HORSE CARTS.



Twelve Styles—Two and Four Wheel—Wide and Narrow Tires—Steel Axles. Low rates of freight from our Works—**Latam, Pa.**—to all points.

For the past ten years acknowledged by users to have no equal. Adopted by farmers, contractors, miners, gardeners, cemetery authorities, etc., wherever the best is wanted. Manufactured by

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 Special quotations and illustrated descriptive catalogue free on application to
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Landscape, Garden and Plant Photographs.

The Publisher of **PARK AND CEMETERY** announces the following photographic competition for 1899.

List of Premiums.

NO. 1. LANDSCAPE AND GARDEN EFFECTS. A first premium of Five Dollars and a second of Three Dollars is offered for the best series of not less than four photographs of picturesque landscape and garden effects. These may include park or rural scenery, city or suburban out door art in gardening.

NO. 2. TREES, SHRUBS AND PLANTS OF THE OPEN AIR. A first premium of Five Dollars and a second of Three Dollars is offered for the best series of six photographs of trees, shrubs and plants. These may include wild trees or shrubs, or any plant grown in the open air, and may be in single specimens or groups. All photographs in this class should carry descriptions, including approximate dimensions.

NO. 3. GROUPINGS AND EFFECTS. A first premium of Five Dollars and a second of Three Dollars is offered for a series of six photographs of picturesque groupings of plants and shrubs, or suggestive spots of wild plant life, in woodland, park or home grounds. Rock or water gardens may be included in this section. These photographs should also have enough descriptive matter attached to make it possible of reproduction in nature.

For photographs retained by the publisher that are not awarded prizes 50 cents each will be paid. The competition will remain open until September 1st.

Suggestions.

Care should be taken to keep backgrounds plain to avoid confusion in picture. Figures of persons, garden utensils, and all objects liable to cause detriment to the picture or its object should be carefully kept out. The photographs must be mounted singly on cards with white backs and must not be less than five inches by four inches.

Instructions.

The photographs may be of objects in the possession of either the sender or others; but there must be no question as to the right of photographing or using them. There is no limit as to number, and the publisher shall have the right of engraving and publishing any of the chosen photographs. They may be printed on any good paper that shows the subjects clearly, and that will make good half tones.

The name and address of the sender, together with the name and description of the objects shown, should be plainly written on the back of each photograph.

All communications relating to the competition must be addressed to R. J. Haight, 334 Dearborn Street, Chicago, and the class for which the photographs are intended should be marked on the parcel, which must also be labelled "Photographic Competition."

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We have the choicest Conifers and Flowers from the Rockies, among them probably the best Silver Pungens and Concolor in America.
C. S. HARRISON.

Entrance Gates.

The accompanying illustration of arch and entrance gates is from a design recently furnished by the J. E. Bolles Iron and Wire Works of Detroit, Mich., for the Realty Title & Investment Co. of Painesville, O. The following letter, received by the manufacturers, speaks for itself:

"We are much pleased with the arch recently purchased of you to be used as an entrance to our "Shorelands" allotment on Lake Erie. Besides being substantially made, it is much



admired for its artistic beauty. From a number of designs submitted, we had no difficulty in deciding which to adopt."

Any one in need of this class of work will do well to correspond with the above firm.

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NEW YORK CITY.

TESTIMONIALS.

Mr. Charles W. Garfield, Grand Rapids, Mich., writes: "Accept my sincere congratulations upon the excellent periodical you are making in the interest of a keener appreciation of the beautiful things of the world."

Mr. H. H. Noble, President Cypress Lawn Cemetery, San Francisco, Cal., says: "Your journal is doing a great work by educating the public to the appreciation of burying the dead in a beautiful park instead of a stone-yard."

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For Small Town, Village and Country Cemeteries.

The Combination Index, Interment Record and Lot Diagram Book

contains pages for Indexing Record of Interments, and Lot Diagrams. The Record of Interments is ruled for entering Number of Interment, Name of Deceased, Place of Birth, Late Residence, Age, Sex, Social State, Date of Death, Cause of Death. Date of Interment, Place of Interment, Section and Lot, Grave fee, Name of Undertaker, Name of nearest relative or friend, Remarks.

The Lot Diagram pages provides for keeping a record of all lot owners and simplifies the important matter of accurately locating the position of graves and the names of their occupants, substantially bound, with name of cemetery on front cover in gilt letters. Size of book, 9½ x 12 inches.

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"Simplex," 40 pages 9 x 12 for 960 names, \$1.50. "Simplex," 80 pages 9 x 12 for 1920 names, \$2.50.

The "Fatype" Index Books

A single letter Index; one initial letter appearing in the margin of each page. The rulings and printed headings provide for name and address of lot owners and corresponding pages in Interment Record and Lot Book. Suitable for small cemeteries where a separate book is preferred to having the ordinary Index bound in the Record of Interments or Lot Book.

2,000 names, \$1.25. 4,100 names, \$2.00.

Specimen Pages of the "Combination" or "Simplex" will be sent on application.

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PARK AND CEMETERY.

✻ *A Monthly Journal of Landscape Gardening and Kindred Arts.* ✻

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CONTENTS.

EDITORIAL—The Thirteenth Annual Convention of the Association of American Cemetery Superintendents—Horticulture at the Paris Exposition—Public Conveniences—Advertising Signs in the Landscape—Libraries in the Parks—Appropriateness of Public Statuary.....	111, 112
Public Value of a Botanic Garden.....	113
Tree Planting in September.....	113
*Clinging Vines.....	114
Russian Olive.....	115
Outdoor Art in School and College Grounds.....	116
Some Effects of the Cold Winter at Rose Brake.....	117
*Southern Vegetation.....	119
The Country School Houses.....	119
Improvement Associations.....	120
Michigan Notes.....	121
*Garden Plants—Their Geography, XLIV.....	122
Park Notes.....	124
Cemetery Notes.....	125
Correspondence.....	126
Program of Thirteenth Annual Convention of the American Association of Cemetery Superintendents.....	126
Selected Notes and Extracts.....	127
Reviews of Books, Reports, etc.....	128

*Illustrated.

THE thirteenth annual convention of the Association of American Cemetery Superintendents will be held in New Haven, Conn., September 5-8, and the program will be found on another page. The fact that the meeting has not been held in the New England States for several years, and that it is the home of so many of our leading landscape and horticultural experts, should attract a large gathering of prominent and influential men interested in the care and development of cemeteries. It is unnecessary to call attention to the wonderful advances that have been made in the improvement of our cemeteries, or to the fact that the credit for this must be largely accorded to the Association, but we would add, that this advance might have been broadened to take in other features of cemetery work, had but the trustees and other officials identified themselves with the aims of the organization. It is not yet too late, and we again urge the cemetery corporations of the country to appropriate funds for the attendance of at least their superintendent at the coming meeting, and it is also certain that the presence of any representative of the governing body will not only have an inspiring influence on others present, but will insure to

the immediate benefit of himself and the property he represents.

IT is evidently the intention of the U. S. Paris Exposition Commissioners to exploit to the best possible advantage all the desirable features of our American civilization, and in pursuance of this general idea a circular has been issued by the Department of Agriculture, Washington, on the subject of rural economy, calling for charts and photographs to be exhibited in portfolios each containing 24 sheets measuring 22 in. by 28 in. These illustrations are to comprise farm buildings, and the operations, methods and appliances of American Agriculture and Horticulture. The limited space at our disposal makes it impossible to give an adequate representation by means of samples and specimens in these departments, although such exhibits on as large a scale as permissible are being prepared; but to provide for proper representation suitable space has been set aside in the United States section for the display of photographs or other illustrations of Horticultural subjects. In circular No 7 issued from Washington relative to this, an invitation is extended for photographs or illustrations of "Public Parks and Cemeteries, Private Grounds and Home places: Views showing characteristic landscape features, ponds of aquatics, ornamental plantings of trees, shrubs and flowers, driveways, rustic buildings, lodges, etc. Ornamental planting along highways, about public buildings, railway stations, etc." These suggestions should be generously complied with, and if nothing else, such a display will make comparisons with European progress in these directions a grand lesson for future development.

THE construction of a public comfort building in a prominent part of Boston, at a cost of some \$15,000, is an excellent indication that some of our city authorities are waking up to a realization of the necessity of a properly distributed system of such structures in all large cities. It is, moreover, astonishing, considering the amount of travel indulged in by the American of average means, that in our progressive cities we have not kept up in this line of progress with the leading European cities. This criticism is equally due the officials of parks and cemeteries. There is a seri-

ous inadequacy of toilet accommodations in the majority of such places, and what is still more to be decried, is the lack of common decency displayed by most of the structures set apart for the purpose. Even in the majority of our finest parks no effort is made to invest the exterior of such absolutely necessary buildings with any architectural attractiveness.

THAT growing menace to our parks and boulevards and the landscape generally, the ever-present advertising sign-board, came in for well-deserved censure at the convention of the American Park and Out-door Art Association, and a committee was appointed to agitate possible reforms in the placing of these objectionable accompaniments of modern business methods. This is an encouraging sign of the far reaching influence of out-door art. There is no good reason why all the points of vantage in a beautiful landscape should be monopolized by the individual pushing his trade. It is conceded in this age that the landscape in a general sense belongs to the people, and most of the enlightened governments are exercising their functions to preserve the most celebrated natural beauties of their domains to the people, for all time. On general principles an advertising sign is an ugly blot on the face of nature, and both the advertiser and the civic authorities or property owners permitting such desecration are equally to blame. It is more than probable, let us hope, that the awakening of public sentiment to the proper appreciation of the beauties of nature, will be a strong factor in helping to relegate to the past a system of advertising so directly opposed to the principles of art out of doors.

IT has been prognosticated that the next century would be the humanitarian century, that is to say when the true meaning of neighborliness will be better understood, when there will be a more incisive sense of the duty one owes to his fellow, and the duty the municipality owes to its citizens, and there are many indications that the prophecy may find fulfillment. One is impressed, however, sometimes with the idea that in certain directions we are going too fast and too far, not making the foundations sufficiently broad nor of the best material; but after all, effort in the proper direction always has the right to back up for a fresh start, and it always gathers renewed strength for the final consummation. This reflection is induced by the activity of the Brooklyn park authorities in erecting their pretty little park houses, with the proposed addition of libraries thereto. This is a step of the most advanced order, and well becomes so progressive a locality as Brooklyn, it points a way for others to follow when experience has proved the advisa-

bility of the step. On the other hand there has been considerable criticism of the proposition, mainly on the ground that the park is for fresh air and recreation and that a library attachment will divert interest from the real reason of its existence. This does not cover the ground however, for rest amid beautiful surroundings is also a leading function of the park, and added to this an opportunity for rest with mental recreation, would perhaps increase the weight of argument, in favor of the park as an actual necessity in human progress.

ADOMINANT law concerning public statuary is appropriateness, and it is a gratifying feature of the present interest in such matters that several public monuments recently erected have been peculiarly appropriate, notably the statue of Benjamin Franklin on the scene of his labors in Philadelphia, and the statue of Burns at Barre, Vt., in front of the school building. The fact of the probable removal of several monuments proves the necessity of very careful consideration in this respect in relation to the future. It is so often forgotten that public statuary, while erected to fill a public desire to express gratitude for services, or as a commemorative object, is really set up for future criticism, for while the history of the monument may be of passing interest, and all its associations worthy of historic record, the appropriateness of its design or setting will either justify or condemn its permanence. An example of this is the reconstruction of the Beacon Hill monument, Boston, which was originally erected in 1790 to commemorate the events which led up to the American Revolution, and was afterwards pulled down. An association was formed to construct it once more on as near as possible its original site and after the same design, and this being done it has been transferred to the care of the state, and will be maintained. Perhaps a more difficult question of appropriateness is that involved in the placing of statuary in our parks. As a general proposition, park statuary *per se*, should partake mainly of the ideal, and in this line of art little encouragement has been accorded our sculptors. It is, however, certain that in the near future more of this class of work will be forthcoming. The establishment of art commissions in our leading cities, at least promises that we shall have artistic judgment brought to bear on all art offerings for public places, and it is also to be expected, that the refinement which is gradually becoming a ruling principle of our educated classes, will dictate in their gifts of statuary to our parks, and will result in the encouragement of ideal work among our sculptors, to the end that artistic embellishment of our public places may not only regale the senses but educate the mind.

PUBLIC VALUE OF A BOTANIC GARDEN.

A visitor appeared among the shrubs in the Arnold Arboretum a recent local holiday, to improve the opportunity, he said, to study the plants. He had a home in an outlying suburb which he was improving, and he took much pleasure in studying the shrubs and their fitness for his place. Botanical sequence he neither knew nothing of nor cared for, but the appearance of the shrubs as they are, he very much enjoyed. He made it a practice to come here two or three times a year to see what plants there might be and what were profitable for his use. The unusual beauty of Boston suburbs as compared with those of other cities he ascribed to the personal interest which many householders feel in their plants and their anxiety to know them themselves.

Could anything more eloquent be said as to the utility to the public of a botanic garden where ornamental trees and shrubs are to be found. This man's case is by no means unusual, and many will be seen doing the same as he, an illustration of the way in which any improvement in general surroundings is brought about. It is the personal knowledge and interest of everyone, not the favored few that accomplishes it, where everyone lends a hand and takes a personal pride in his home and street.

Such a state of things, however, is not brought about without an inspiration. A city in a beautiful region, becomes in time beautiful. In an ugly region, unless there is some saving grace, it remains ugly. Nursery localities are famous for their neat yards and well cared for shrubs. A beautiful park gives a tone to the whole vicinity. The eyes are the only means of gathering knowledge and nature or art must give the required inspiration. In Boston where suburban beauty has reached so high a plane, the surrounding country is most attractive, the people natural botanists, and the means provided by art for acquaintance with plants unusual.

Perhaps of all artificial sources of information, the botanic garden is most useful. This need not be so highly developed as the Arnold Arboretum where the public may stay a day, or the student for years where trees and shrubs from all over the world are tested and studied, acclimatized if possible and given over for distribution, and which is the centre of both science and art in woody plants. The best example of what may be done is the collection of ornamental shrubs which the devotion of Mr. John Dunbar has given to Rochester in Highland Park. Here are most of the shrubs useful to cultivation in that region, arranged with some idea of botanical sequence, but with the more important thought of making the place attractive and to show the capacity of the plant for beauty in its proper

place. The expense has not been great, the ground occupied has not been large and every inch is still of as much value as a pleasure ground. I have heard the trained gardener sigh for such a place in which to study. If he requires it, certainly the masses do, and they show their appreciation. Every large town might have such a collection in some form from which it would hardly be a loser.

A. Phelps Wyman.

TREE PLANTING IN SEPTEMBER.

With the approach of September the foliage of trees has so far accomplished its work that the loss of it at that time has been found to be of no serious loss to a tree. Taking advantage of this knowledge planters at the present time often start extensive work in the early days of September. They have two reasons for this, one is that it expedites work, the other, that trees so planted invariably live, which is not the case with those set at other times. There are some who prefer to wait a while before planting deciduous trees, but even these persons believe in the planting of evergreens. Indeed the close of August, should it be a fairly wet time, is thought to be a favorable time for evergreen planting. Had I a lot of both kinds to plant I would start evergreens in August, looking to the taking in hand of the deciduous stock later in September. By the close of July evergreens have completed their growth, and to be successful in their removal requires but the preservation of as much root as possible and the giving of them an abundance of water. It is almost impossible to foretell weather, other-wise if a cool, wet time in summer could be selected it doubly ensures the work. When an evergreen is set in its new position it should receive a deluge of water, first half filling the hole with soil. This almost liquifies the soil carrying it in and around all the roots, the weight of water setting it heavily about the roots so that when the water soaks away the whole ball is compact. It is this compact settling which is essential to the well doing of transplanted trees. There must be enough fine soil for the water to carry it under and around the roots. What a great compacter of soil lots of water is, is well illustrated by laboring men on city streets. Often it is necessary to dig a trench to lay gas or water pipe and after the pipe is laid the soil has to be all replaced in the trench. Watch the laborers pour water on the mass as it is thrown in! They will pour enough that the whole mass is as solid as before they dug it out, and pavements are relaid on the top with no danger of sinkage. Take a ball with the tree if possible, water it well, and almost at once it will make new roots and re-establish itself.

The latter half of September is a very favorable time for deciduous trees to be planted. The process differs but little from that required by evergreens. The stripping of the foliage is the chief difference. Take this off, then treat the tree as directed for evergreens. Pour in lots of water in the same way, to solidify the soil, then after all has well settled fill up loosely to the level of the ground with the rest of the soil.

The reason why early planting is generally more successful than that of any other period is this. The soil is warm, quite warm and this, with the moisture, causes new roots to form at once, and with these advanced, success is assured. Let any one who has not seen this, experiment for information sake. Take some tree in late summer, treat it as directed, stripping the leaves etc., planting and so on and then in about four weeks time dig it up again. If the planting has been as successful as the most of mine has, he will find a lot of new roots have formed from the old ones. The soil in late summer is really like a hotbed, and it forces out roots as a hotbed does.

With plenty of water at command I would prefer planting both evergreens and deciduous trees in early fall to any other season.

Joseph Mechan.

CLINGING VINES.

Vines have different ways of attaching themselves to solid bodies. English ivy, ampelopsis and ficus repens are three that cling by tendrils, that adhere with the greatest tenacity to solid bodies.

Tendrils are important and characteristic appendages to plants. Botanists say vines with tendrils have the property that is called the "instinctive intelligence of plants." A poetical botanist represents "the gourd and cucumber as creeping away in disgust from the fatty fibres of olives." It has been ascertained by experiment, that the tendrils of the vine, and some other plants, recede from the light and seek opaque bodies. The fact with respect to leaves is directly the reverse of this.

In the ivy and ficus repens the tendrils serve as roots, planting themselves firmly in solid substances. The aerial roots of the ivy and the ficus serve as examples of the botanical definition of tendrils as "transformed terminal buds."

Ampelopsis clings as closely as ivy and ficus, but by different means. The tendrils are terminated by disks, or suckers that adhere with remarkable tenacity to flat surfaces. Turning back the heavy drapery this beautiful vine, ampelopsis Veitchii, or Boston ivy, forms, one not familiar with its habits will be interested to see the web-foot disks, flat to the surface, holding the vine in place as firmly as

if glued. This power to cling and support itself recommends each of the three vines here enumerated. They need no staples, no wires, and very little training.

Ivy and ampelopsis are too well known to



Ampelopsis with Tendrils.

need description. They are popular in all sections, and cosmopolitan on the score of ability to resist the dust and heat of southern, and the most intense cold of northern cities.

The Boston ivy is always the freshest, cleanest mass of foliage to be seen, during the heated



The Receiving Vault, Metairie Cemetery, with Ampelopsis Veitchii.

term in New Orleans, when the dust and smoke affect vegetation seriously. High up, on church towers, and lofty walls, too high for the watering hose, ordinarily, to reach, this vine never suffers

from drought. The entrance to Metairie Cemetery, New Orleans, is a stone arch, rising from massive columns, and a stone wall extends on either side. The arch, the columns, and walls are densely covered with the ficus repens. No vine clings so closely

as many seasons, the hue darkens, and the margins of the leaves turn red before the fall of the leaf. In either case, it is a handsome vine. It was one of the first forms of vegetation to gladden the sight, after the destructive cold of the past winter.



Entrance to Metairie Cemetery, New Orleans with Ficus Repens Covering the Arch, Pillars and, Walls.

as this. The leaves are less than an inch in length, obvate and of a dark lustreless green. The numberless rootlets, or tendrils, bury themselves in the solid bodies where possible, and on unyielding stone, spread flatly like they were glued to the surface. At a distance ficus repens looks like dark green paint, so compact is it, over the surface. On nearer inspection the tender branches of the vine will be seen, and are quite delicate in appearance.

Ficus repens is hardy only in extreme southern limits, and was one of the vines, in New Orleans, killed by the unusual cold of February '99. It was never before hurt by cold in Louisiana. As a conservatory vine, few things can fill its place. For instance, in the Horticultural Hall, Mr. Fonta has it planted around the brick base, in places and trained in urn, palm-leaf and scroll forms. The rounded leaves lie so flat that each design looks as if done in metallic green paint.

The receiving vault of Metairie cemetery is heavily draped with Boston ivy. The arches and columns at the side are perfectly green; not an inch of exposed surface left. The pointed roof, and front are also covered with the vine, that in this city is green for ten months of the year.

In some positions and in some seasons, the leaves turn to scarlet in the autumn: but not always,

Its drapery of leaves put forth as early as March and at this writing the ampelopsis looks like a vine from the tropics so dense and luxuriant in green growth.

These three vines not only climb, as all vines do, but cling so closely by their rootlets, or tendrils, that no wind storms, heavy rains nor weight of snow ever displace or tear them down.

G. T. Drennan.

RUSSIAN OLIVE.

(ELAEAGNUS ANGSTIFOLIA.)

When the Mennonites came to Nebraska from Russia, they brought many things of value, and among others this tree.

It is a beautiful, hardy, thrifty, rapid growing tree, with silvery white leaves, which give a pleasing contrast with neighboring green.

Aside from the Berberis Repens of the Rockies, it is one of the most fragrant bloomers we have. It breathes its perfume on all the air—a delightful not a sickening fragrance. In the fall and winter it is covered with a white fruit about the size of a cherry, and for this reason it is called sometimes in catalogues the silver berry. The fruit is not edible, but it gives the tree a very striking and unique appearance, and hangs on till near spring time.

When a committee of the Nebraska Horticultural Society were chosen to select a list of hardiest and best trees for parks and forests, they placed this at the head of the list.

Franklin, Nebraska, is under the 100th meridian in the western part of the state; I was there 8 years, having charge of an experiment station, 15 years ago I planted a lot of several species of Poplar—many kinds of Willow, Honey Locust, Black Locust, Boxelder, Elm, Ash and many other trees, and among them a lot of Russian olives. Last winter I went out and visited the old place, taking careful note of the trees and their growth, and found to my amazement that the olive had outdone all the rest. While young it needs a little care to keep it straight, and then it grows into a fine shapely tree.

For lawns, private grounds, parks and forests this tree should not be forgotten. In cemeteries it

would prove very attractive. Its fragrance, glauca leaves and silvery fruit, cannot fail to draw attention.

A few were planted in the west years ago, and then people waited to see what it would do, and now it is being pushed forward and ever after it must hold a prominent place. Among deciduous trees, it is what the silver spruce and fir are among the evergreens.

C. S. Harrison.

OUT-DOOR ART IN SCHOOL AND COLLEGE GROUNDS.*

Prof. Beal opened his paper with a sketch of the condition of affairs pertaining to the subject as related to the State Agricultural College, Lansing, Mich., for the past fifteen years; or more properly speaking since any attention was given to such work as a duty of the institution. Prof. Beal then continues:

"With this example fresh in mind, I am firmly impressed with the idea that for lack of stability in management and in money very much cannot be expected of a college campus, as a model. It would be well in most cases, after adopting a good plan if two or more members of some firm of experience could at least be employed to advise the man in charge, in case changes of much importance were contemplated.

In these days colleges and universities grow so rapidly, that with few exceptions, no one can be relied on to predict what changes will be imperative during the next decade—to say nothing of later periods. More land will be added, buildings are to be enlarged, and many new ones erected, involving numerous changes in drives and paths, removal of choice trees and planting others.

In too many cases, a college president or some member of the trustees who delights to be called 'a practical man,' has some plans to be carried out. Many a Yankee thinks he can do well anything he undertakes, because he has been successful in securing some high position and in accumulating some money.

At a large and well-known university in a distant state there never was any attention given to graceful curves for beauty, but everything went in straight lines and straight rows and by couples. In time, the trees became much crowded and in places began to tower up forest like. What was to be done, remove a portion of them and let the rest spread themselves, instead of growing tall and slim? Oh no! One of the practical men among the trustees knew a thing or two on this subject and finally he was permitted and encouraged by the others to have the ends of the branches of many trees all cut severely back, remarking that they will look bad for a while, but in time they will be delightful to behold. The stubs called forth the animadversions of saint and sinner, scholar and day laborer alike for a few years till they became accustomed to the change, and nature had enobled the trees to make some amends.

The results you all can see in your minds' eye. The graceful elms, the stately ash, the ovoid maple, the

open-topped birch, the sturdy oak the conical evergreens were all reduced, as in a vise to the same rounded form."

After further touching upon the methods in vogue at the Agricultural College, the writer continued:

"The college campus consists of a number of acres of gently rolling land, where portions of the virgin forest were preserved, and numerous other sorts planted. Trees are now thick enough and large enough for illustrations.

Besides the students, great numbers of visitors see this campus each year, and there is no question that with all its imperfections, this natural and artificial mixture of trees and shrubs is exerting considerable influence for good on most who see it. I enumerate some of the evidences: If records had been kept, many pages of favorable remarks by visitors and students could be given. The university of Michigan had given little attention to planting. Within a few years two of the professors of botany have each visited the college twice for the purpose of taking notes regarding the botanic garden. They saw the advantage of a garden for systematic botany and for pharmacy. By these visits they caught some inspiration and made a beginning on their home campus, the Agricultural College donating several hundred sorts of plants.

A professor of one of the State Normal Schools also looked the ground over, and was pleased—especially pleased with clean labeled patches of over one-hundred kinds of weeds. He exclaimed, "How instructive! We must have something of this sort." I sent the Normal school some stock gratis. Later, they admitted they yet have much to learn, but are going to try harder than ever to keep a good supply.

Late last autumn another Normal School whose president was a former pupil of mine, wished to have a level piece of five acres of virgin forest looked over and prescription made for its care before it was spoiled. This was done and accepted in good faith, though it conflicted with their views which was to clean out all shrubbery, trim up the trees, get grass in and make it park-like.

This summer, I chanced to meet in our garden, the superintendent of schools of Owosso. He wanted a few hints on making selections and grouping bedding plants or their school yards consisting of four or five acres. A long conversation ensued. "Your bedding plants I suppose you want mainly for pupils to see?" "Yes," I continued, "Such plants are nice in suitable places, if well arranged, but they are costly. They are worth seeing for about three months of the year, and that comes during your long vacation. For the rest of the year you have bare spots of ground and the next spring, all must be done over again. Why not make free use of shrubbery, taking especial pains to introduce all natives to the state that promise well? Add a few trees in variety and some perennials, especially those that are of good size, hardy and worthy of study."

The superintendent acquiesced in the suggestions made and wanted me to visit the school grounds and help him.

*Extracts from a paper read at the Detroit Convention of the American Park and Out-door Art Association. By Prof. W. J. Beal, Lansing, Mich.

In speaking of Owosso, to the superintendent of schools of Ionia, he expressed a wish for help in devising the proper use of trees and shrubs.

These are some of the advances so far apparent.

Some years ago the State Horticultural Society made a start towards trying to induce teachers and children to plant flower gardens near the school house. In certain instances some measure of success was attained, but I think the main reason for the lack of interest was the fact that the long vacation often came in the summer, and that in many places there was a change of teachers between winter and summer. Again, most teachers didn't know how, nor care to undertake the work.

At college or university, it is probably best to give considerable attention to putting in woody plants on steep slopes, low and broken grounds in places not likely to be sought for new buildings. By this means a greater degree of permanence is likely to be secured. Nearer buildings, shrubbery and quick-growing trees can be used, till it is decided for certain where neighboring buildings are to be erected. We must remember that most of our country is still young and few have given any serious thought to out-door art. I look with considerable confidence to the land-grant colleges to educate young men in this line of work. Our people travel considerably and are ready to pick up ideas regarding home ornamentation, provided there are a good number of well kept grounds scattered about the country; a few in each state will exert a wholesome influence."

SOME EFFECTS OF THE COLD WINTER AT ROSE BRAKE.

The intense cold and damaging blizzards of last winter proved a severe test on the vitality of trees and shrubs at Rose Brake. We protect nothing as we wish this to be an arboretum of perfectly hardy plants, not an asylum for delicate nurselings.

When a plant does not prove adapted to our soil and climate, or will not thrive without excessive coddling, we let it go and replace it by something of sturdier habit. In this manner though we sometimes lose trees and shrubs with which we experiment, we gain in experience. We believe that there are enough hardy trees and shrubs adapted to the conditions of almost any locality in the temperate zone to form beautiful pleasure grounds without the aid of half hardy or tender plants. These latter are often very beautiful and desirable, but they require glass and more care than we are able to give.

Our winters are often very cold. It is an unusually mild season when the mercury in the thermometer does not go down below zero at least once, and last winter was the most severe and stormy we have ever known. So that all the plants now living here have been tested by extreme cold and icy

frosts which remained for days, enveloping the branches like a coat of mail.

Broad-leaved evergreens suffered more than any other class of plants at Rose Brake. The common evergreen *Euonymus Japonicus* lost the growth of several years. Some of these shrubs were five feet in height. All were killed to the ground, but not one was entirely destroyed. They are of slow growth and were planted on a dry sloping bank six years ago.

Another and very beautiful *Euonymus* from Japan was entirely unhurt. This shrub was obtained from Mr. John Saul of Washington, D. C., under the name of *Euonymus Sieboldii*. I have seen but one other specimen of this charming shrub and that was in Mr. Saul's own grounds. It is not quite evergreen although the leaves hang on the branches until severe cold weather. These large ovate acuminate leaves are lighter in color than those of the commoner *Euonymus*. They are smooth and thin with crenate edges and are not so lustrous as those of the evergreen species. The shrub is now over five feet in height and as much in diameter. It is of compact, bushy growth. In July it is covered with clusters of pretty cream-white flowers, making it a very desirable flowering shrub, as the blossoms are larger and more conspicuous than those of any other *Euonymus*, and stand out well from the leaves. It remains in bloom several weeks. But its chief beauty is in the fall when the blossoms are succeeded by dazzling scarlet fruit, making it, at that time, a very showy ornament of the lawn.

Magnolia grandiflora was the only one of our *Magnolias* that suffered from the cold. This was a young plant not more than four feet high and it was killed back to the ground, but is now making good growth.

A beautiful little *Osmanthus illicifolius* was almost destroyed and I fear it will never recover. This was a slender tree as yet only six feet in height, much like the American Holly in appearance. All its wood was destroyed and although a few root leaves have made their appearance, it will probably die.

A dwarf evergreen *Euonymus* called *E. pulchellus*, withstood the winter uninjured, but does not increase in size and seems ill-adapted to the soil and climate here.

Ilex opaca, the American Holly, was also uninjured.

The spotted leaved *Aucuba Japonica*, lives with us out-of-doors, without protection, but does not increase in size. Perhaps this is because we give it no especial care. It is a significant fact that it passed the winter unharmed.

Mahonia Japonica has rigid, thick compound

leaves, the leaflets having three or four strong spiny teeth on each side and are from two to three inches long. The young foliage is a curious shade of bluish gray, contrasting with the greyish green of the older leaves. Our single specimen of this rather rare shrub was killed back almost to the ground but the main stem is now thickly clothed with foliage and is doing well. Other Mahonias and Berberries in several varieties are unhurt.

The plant which produces the fruit out of which the jujube paste of the confectioners is manufactured was introduced to our arboretum about ten years ago. This plant is called *Zizyphus vulgaris*, or, in some catalogues *Zizyphus jujuba*. It shows its tenderness by losing much wood in several winters, and, although spoken of as a small tree, it does not grow taller than five feet with us. It was killed back last winter almost to the ground but is now growing finely and is quite a pretty and interesting plant. It is thorny, tree-like in growth and covered with small shiny leaves. It has bloomed several times. The flowers are small and inconspicuous and it probably will never set fruit in this climate, out-of-doors.

One of our favorite small trees is an *Acacia* received from Mr. Samuel Parsons of Flushing, Long Island, twelve years ago. He called it *Acacia nenu* and described it as bearing pink blossoms. It has *Mimosa*-like foliage, the leaflets of which fold together and go to sleep at night. It is a beautiful graceful little tree and was about fifteen feet in height. It was killed to the ground last winter and for a time we thought we had lost it, but it has now sent up vigorous new shoots that are already three feet in length.

Some plants that we would have supposed of doubtful hardiness escaped with their lives, while others about which we gave ourselves no concern, were injured. Thus *Cotoneasters*, which we thought quite hardy, were badly hurt, while some rare trees, such as *Stuartia pentagynia*, *Styrax Japonica*, *Parrotia Persica* and *Enkianthus Japonicus* were uninjured.

Callicarpa purpurea was badly frozen but is growing again from the roots.

Neviusia Alabamensis, though only found in a wild state in one locality in Alabama, has proved itself perfectly hardy here.

No *Spiræas*, out of a collection comprising twenty-three varieties, were materially injured.

Of evergreens, other than broad-leaved, we have about fifty kinds including Pines, Cedars, Junipers, Cypresses, *Arbor vitæ*, Spruce, *Retinosporas* and others; only one was much hurt, and that has now recovered. This single exception was a very pretty specimen of *Librocedrus decurrens*, which has usu-

ally done well with us and fruits every year. For some reason or other it was badly scorched.

That rare plant, *Fontanesia phylliræoides*, which grows here to the height of ten feet, had the tips of its branches injured and was late in putting forth its crop of leaves. This was also the case with all Paper Mulberries in this neighborhood. Indeed these trees seemed dead and did not leaf out until fully a month later than usual.

The *Vitex Agnus castus*, or Chaste tree, frequently, perhaps always, dies down to the ground in winter but comes up again every year in time to form a bush about five feet in height and to bloom profusely in August.

The beautiful vine *Jasminum officinalis*, or white flowering Jessamine is not so tender as many people imagine. Where ours is planted the dead leaves from some Oak trees are frequently drifted over it, forming a natural but precarious protection as high winds are apt to disperse this covering. Like the *Vitex*, this Jessamine sometimes dies to the ground, as it did last winter, but it is now growing finely, and is coming into flower. It does not reach a great height with us, but sometimes covers a trellis six feet tall.

Of *Deutzias*, *D. crenata flore pleno* was killed to the ground, but is making vigorous new growth. These *Deutzias* did not recover in time to bloom this year. Indeed the blossom buds are formed on the old wood.

Roses were in many instances, killed to the ground. Sweet briers, *Rosa Wichuriana*, *Rosa setigera* and *Rosa rugosa* seem perfectly hardy. *Chimonanthus fragrans* had become a large bush in our grounds and was badly hurt. The new growth it is sending forth is strong and vigorous and the foliage is quite tropical in appearance. *Paulownias* did not suffer much. They always lose their bloom-buds in severe winters. Indeed they very seldom bloom in this locality and only when an exceptionally mild season enables the buds to retain their vitality.

I have now enumerated all the plants hurt by the cold here, and, after all, the damage has been very slight. We have lost scarcely a single shrub. In the herbaceous borders we have been equally fortunate, with the exception of bulbs, which suffer so much from the ravages of field mice that it scarcely seems worth while to plant them.

We also lost a fine Lavender plant, the only one we have ever induced to live at Rose Brake.

I should also mention that a fine young Sweet Gum tree is dying, but this may be from some other cause than the severe weather as it never seemed to take very kindly to the soil.

Danske Dandridge.

SOUTHERN VEGETATION.

Among the finest "plantations" remaining in South Carolina, Magnolia Manor—the estate of C. P. Hastie, Esq., upon the banks of the Ashley River at Drayton, S. C., is an excellent type. The original mansion was burnt during the rebellion, but the beautiful lawn of St. Augustine grass, the wide avenue of stately live oaks leading from the highway to the mansion and fine old garden enhance in beauty each year. The home grounds of Magnolia are rich in flowers and vegetation—*ilex vomitoria*, *olea fragrans*, *olea americana*—each twenty feet high and *magnolia grandiflora*, *taxodium sempervirens*,



Magnolia Garden.—Magnolia Manor, Drayton, S. C.

nysa sylvatica and *liquidamber styraciflua* give it a luxuriant semi-tropical effect. As for roses such as Banksian, Marechal Neil, cloth of gold and most of the teas during their flowering period attract numbers of visitors wintering in the south.

The accompanying illustration gives but a scant idea of the reality. Bounded by liquidambers, sour-gums, bald cypress, etc., is a charming lake of fresh water. The photograph well illustrates the peculiar beauty of the Florida moss—as also the bank of Indian azaleas upon the opposite shore. On another part of the estate is a riverside walk shaded by live oaks and evergreen magnolias and enlivened by a border of profuse flowering azaleas.

Of the few remaining estates in South Carolina where the luxurious richness, dignified stateliness and impressive character typical of anti-bellum days is preserved—Magnolia is certainly the best with which we are familiar. *Emil Mische.*

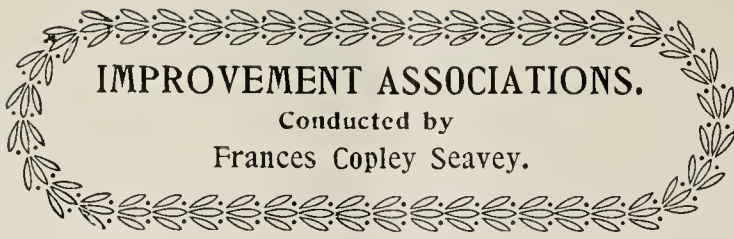
THE COUNTRY SCHOOL-HOUSES.

That the leaven of art out-of-doors is working throughout the country is evidenced by the following extract from a Des Moines, Iowa, agricultural paper, which says:

If the traveler from a distant country or state were to judge of the Western farmer by the appearance of the school houses alone, he would be forced to the conclusion that the patrons were mortgage stricken, debt-ridden creatures, men without taste or refinement, and who were taking the surest way to drive their children from the country to the town. The school house in winter usually stands out bleak and lonely on the wind-swept prairie, exposed to the full fury of the blizzard and exposed to the tornado and wind storm in summer. Usually it is without a tree or shrub or a flower; bleak, forlorn, desolate and suggestive of anything besides comfort. The sun beats down on it through the live-long summer day. The hot winds from the south make the children long for shade, the fish pond or the swimming hole. There is nothing to break the monotony, nothing to please the eye, everything is suggestive of the hard grind; without anything to awaken the imagination to relieve either the school work or life itself of this dreary monotony. The farmer will take pains to shelter his live stock with a grove, to place evergreens between his home and the winter's blast, to strew shrubs over his lawn, and train vines over his porch, but he leaves the school house in which his children spend so many hours in the most plastic period of their existence without anything to suggest that life is anything more than a weary round of toil. Brethren, these things ought not so to be. They need not so to be. There are enough readers of *Wallace's Farmer* in nearly every school district in the state to work a reformation, that would not only add a pleasing feature to the landscape, but do very much to make the lives of school children happier and to bind them to the farm instead of forcing them in disgust with country life to seek their fortunes in the towns and cities to their own great loss.

* * *

There is now a very encouraging movement among the educators in many of the states to improve the school grounds—to help in nature study.



Leave the World a pleasanter place than you found it.

A HINT.

Nearly every town and village and some country communities in the United States has some sort of a manufactory, if it is only a cannery, creamery or flour mill, the grounds and vicinity of which are usually far from attractive in appearance and oftentimes are in a condition that poisons the atmosphere of the entire neighborhood.

Public spirited owners of such places have exceptionally good opportunities for making their grounds agreeable to themselves and their employees, as well as for creating object lessons of wide-spreading influence towards pleasant and wholesome living. Such property holders should be active members of the local Improvement Club and if they are not, the present leaders should encourage them to get the right point of view of their position and into line in the good work. It has already been demonstrated that the condition of such employees has a direct bearing on their efficiency, and that it pays to help them by furnishing agreeable and sanitary surroundings while at their work, as well as to encourage them in making their homes attractive. The pioneer work in this direction done by the National Cash Register Company, Dayton, Ohio, is now so well known all over the country as to need no comment. While it will not always be possible to induce proprietors to do such wholesale work as they have done, it will frequently be found perfectly easy to suggest to local mill and factory owners that they do something towards the same end. It can hardly be questioned that such work may be classed as part of the legitimate labors of an Improvement Club, nor that they should use their influence, either as a club or through certain individual members—those blessed with the desirable qualities of tact, taste, discretion and an agreeable manner, in short those men and women who know how to “get along” with other men and women—to the end of the inducing the owners of such premises not only to keep them clean, sweet and neat, but to develop their latent beauties or, at least, to veil their unsightliness, by such simple tasteful planting as the conditions warrant, and these are often more promising than at first appears.

Trees for shade, vine draperies and screens (it being remembered that vines on a trellis make a shelter in the shortest possible time and may serve

a temporary purpose while shrubs are growing), shrubs for beauty and to shield unavoidable unsightly features, grass as a carpet and as an agreeable as well as a necessary foreground and basis for more pictorial planting, and hardy bulbs and perennials to give color when shrubs are out of flower, may all be easily and cheaply started and are inexpensive to maintain. This kind of planting will occur to everyone, but there is a class of decorative planting, not always possible to individuals which is in many cases especially adapted to the conditions supplied by mills and factories where an ample water supply is a necessity. It is water gardening.

Shallow pools or ponds arranged with supply and overflow pipes, and suitable in every way for growing hardy water plants can in some instances be made with but slight expense, in others the expense will be greater, according to the character of the soil, natural contour of the ground and other conditions. Conditions that demand an unreasonable outlay will however, seldom be met, especially when the generous returns in beauty, interest, variety and novelty are considered. Such a feature would have especial value in places where there are no near water views, neither lake nor river to add diversity to landscape. Probably in such localities no feature of planting would arouse so great an interest or give a greater impetus to the decorative work that improvement clubs are anxious to have taken up by the mass of the people. Full directions for making and stocking Lily ponds will no doubt be gladly supplied by any of the dealers in aquatics who advertise in PARK and CEMETERY.

The greatest advantage that mills and factories offer, however, are in the direction of growing tender water lilies, making even the curiously beautiful *Victoria regia* a delightful possibility for the residents of small places. It is pleasant to be able to say that I have before me a letter from Mr. Wm. Falconer, Superintendent of Schenley Park, Pittsburg, Pa., in which he says that the best way to heat ponds for tender aquatics is by allowing a “little streamlet” of hot water to flow into the ponds, and not by coils of steam or hot water pipes. This “streamlet” may stand for the waste from any establishment using steam, for by introducing that waste into a shallow pool or pond suitable for hardy water plants, the temperature is raised enough to make the conditions right for all tender aquatics. The amount of pleased interest this feature would produce in one season in a town where the great *Victoria* is a stranger, should compensate any mill owner who has had the public spirit and the kindness to go to the trouble and the expense to introduce it.

Such simple pleasures are a boon to the inhabitants of small places where there are no parks for the benefit of the public and would undoubtedly be appreciated by the better class of the population, while exerting a refining influence on all, from the mill employees and farmers delivering grain to the citizen driving by to show his children the lilies.

The planting of such a feature should not be limited to aquatics. To secure the best effects it must include semi-aquatic or bog plants for the damp situations along the shores of the pond as well as appropriate shrubs and herbaceous material in well arranged groups in the vicinity of the water, and these should be so placed that the water scene will merge naturally into and blend with the neighboring plantings whatever their character may be. The skillful introduction of water into a landscape brings with it the charm of life and motion, and it carries the thought not downward to its depths, but upward to the tree tops, the heights, the clouds, reflected on its surface.

Detroit Notes.

Elmwood Cemetery, Detroit, has a charming site with the natural advantages of good trees, and a varied ground surface presenting excellent opportunities for the development of fine water views that would add greatly to its landscape effects and which will probably be taken advantage of in good time. Its elaborate catacomb with niches for both caskets and ashes, is a novel feature in northern cemeteries being, if I do not mistake, the only one north of Mason and Dixon's line.

* * *

At Mt. Olivet, the large new Catholic Cemetery at Detroit, under the supervision from its inception of Mr. John Reid who is also superintendent of Mt. Elliott, a great work has already been done and is still going on in cutting out heavy timber, preparing the surface by cutting and filling, (fills of five and one half feet having been made over large areas); road making, drainage, establishing turf and getting the most possible good out of the native growth of trees, shrubs, vines etc., with which a large part of the ground is richly stocked.

Mr. Reid is justly proud of the work in general and perhaps especially—which is pardonable—of a plan of his own for draining the surface of the driveways, the novel feature of which consists in extra large sized gratings that are curved lengthwise to dip from the road bed and from the curb line, (there are no curbs in Mt. Olivet, the sward coming down everywhere in one of several graceful, sweeping lines to meet the road bed), but are depressed at the back, or sward edge so that when heavy rains wash down leaves or other material

and obstruct the gratings, the water runs out over the leaves into an overflow prepared for such emergencies and so into the basin, just as readily as though there was no obstruction. It is an excellent scheme and has proved as good in practice as in theory.

A large part of the land comprised in Mt. Olivet is heavily wooded and much of it will remain so for many years, but roads have been laid out through the woods, some of which are finished for a part of their length.

One of these, connecting parts of the ground already prepared for sale, dips into the woodland cutting off an island of native vegetation that is the delight of the genial superintendent who is a true devotee of natural beauty. This island comprises trees of various sizes and shrubbery that comes forward in irregular bays and promontories on the newly made adjoining lawn, the lower branches sweeping the turf as they previously swept the grassy woodland glade, only with fuller leafage from the admittance of sunlight. Just the sort of a plantation that every landscape gardener with a soul tries to achieve—usually with indifferent success as compared with such a model. Mr. Reid's ironical suggestion that "now all it needs is a nice belt of Petunias in front" was a shock almost great enough to jar one's confidence in the theory of man's inherent love of beauty.

* * *

Belle Isle Park, that Woodland paradise generously bestowed by nature on the clean, prosperous, beautiful city of Detroit, seems doomed to lose the picturesque stamps applied by the Creator. The commonplace features of so-called park decoration being introduced there are so out of keeping with the spirit and the character of the place as to be really distressing. On a glorious driveway encircling the island, a driveway that should disclose in turn glimpses into the heart of the woods and of the blue waters and splendid commerce of the wonderful river sweeping by, distant views of Lake St. Clair, and of the city on one side and the Canadian shore on the other, a space has been cleared on either side, between the road and the skirting woods, through which none of these fair vistas have been opened, for enormous beds of gaudy annuals—things that are almost as much injured by their environment as they themselves are out of place. Such desecration is a marked example of misapplied money and energy.

* * *

Woodward Lawn Cemetery, Detroit, is now in charge of Mr. Frank Eurich, the well known and popular secretary of the Association of Cemetery Superintendents. He has had and still has some difficult problems to solve there. Pioneer work

has its drawbacks but is in some respects less trying than taking up what is already under way, for though there is much to be done there is at least nothing to be undone. The site of Woodward Lawn was densely timbered necessitating immense labor to clear the ground, then deep fills occur and this has proved the destruction of big trees intended to be retained. This, however, is not the worst for, as is often the case in other directions, the living trouble is found greater than the dead. Twenty eight trees removed from one lot is a fairly good record especially when it is remembered that this means their removal "root and branch", but what are left are a still more difficult problem for, having been grown in a dense wood, they are excellent timber, but poor ornaments. If any one can supply an unfailing recipe for the production of branches along the bare trunks of trees of this character, they will win the everlasting gratitude of Mr. Eurich by sending it to him. At present he has hopes that many of his trees will "feather out" of their own accord merely from the free admittance of sunlight and air. Over at Mt. Olivet Mr. Reid, his neighbor, five miles removed, has taken out the tops of immense old oaks—covering the wounds with two coats of paint—and is calmly waiting the arrival of side branches along the bare trunks of his beheaded giants from this treatment. Now which one is right and to what extent? That is what an interested public would like to know. The tops of similar old trees on the Campus of Michigan University, Ann Arbor, have also been removed. One hears that in this case it was done because the trees were dying. The indications seem to point to their being slowly starved to death.

Mr. Eurich finds a wealth of planting material scattered over the densely clothed acres under his care and is eagerly making the most of it. He uses the native ferns that abound instead of evergreens for covering open graves. It is a pretty custom.

* * *

At Mt. Olivet there is a well stocked nursery that has been in existence a number of years. Here there is not only a large supply of the best hardy deciduous trees and shrubs ready for use in developing the ornamental planting now being done on a large scale, but also a splendid stock of exceptionally well grown, sturdy evergreens of the choicest species and varieties, retinosporas, junipers, arbor vitæas, spruces, and pines of the very best kinds and each beautiful according to its kind. It is a perfect mint of wealth to an artistic and ambitious planter. One lesson of the past severe winter is clearly taught in this nursery. Every retinospora squarrosa is brown and dead on the south side only, showing that it is only necessary to plant this variety on the north

side of some shade producing plant to secure its successful use. It was the hot sunshine of March that killed the handsome little specimens and not the cold weather.

* * *

Lack of time prevented an intended call at Woodmere where its famous Pepperidge trees and other good features were to have been viewed under the kindly guidance of Mr. Higgins. It is hoped that this is but a pleasure deferred. F. C. S.

GARDEN PLANTS—THEIR GEOGRAPHY, XLIV.

GENTIANALES.

THE JASMINUM, FRAXINUS AND MENYANTHES ALLIANCE.

The finer plants embraced under this heading form very handsome groups drawn from 22 tribes, 433 genera and 3,983 species. About one-half of the tribes may be represented in northern gardens by hardy plants, and in fact one-fourth of the tribes (mostly the smaller ones) are confined to temperate regions, but the great majority of species are



Jasminum Nudiflorum,—Gardeners' Chronicle.

sub-tropical and tropical. Trees, shrubs, climbers, herbs of varying habits, bog plants and aquatics, are all so well represented that it would be easy to furnish a good sized garden from among them and have abundant variety. Their blooming season extends from earliest spring to late autumn, nor is

this the only alliance of plants with these desirable qualities. It would often be much better to confine the attention to a single alliance when planting, than indulge the indiscriminate and heterogeneous "selections" copied and re-copied throughout wide sections of country until their repetition dulls the senses. There is abundant opportunity for distinction in grouping but scarcely anything in gardening has received less attention. It is the employment

shrub with deliciously night-scented white flowers, which, as they fall, are woven into wreaths for the hair by the Hindoo women. It will not bear frost.

Forsythia has two or three forms without much individual character, the variations, which are most obvious, being from upright to drooping growth. All are yellow early flowering shrubs from China and Japan and hardy to the lower lakes. The inky-purple foliage of these and other plants of the alliance is a distinct color tone in the autumn landscape.

Syringa "lilac," has perhaps eight or ten species from Eastern Europe and temperate Asia. *S. vulgaris* has developed a perfect host of garden forms during the last thirty years. Some of these are white, such as Marie Legraye, Frau Damman and Alba Grandiflora. Some are bluish, such as Cœrulea superba, Lemoinei, President Grevy and Alphonse Lavallee. Others are reddish lilac, such as rubra insignis, rubella fl. pl., Charles the Xth, and Souv. de Louis Spath. Then many shades of pinkish and purplish lilac occur, all of which may be found most minutely described in nursery catalogues. The original form is often found as a wildling on abandoned garden sites in the northern states, where it perpetuates itself by suckers, not by seed, so far as I have seen. The newer varieties are mostly imported as grafted plants, and the stocks are either the common form or privet. If the top dies, these inferior roots are by no means so desirable, but may delude people into believing the suckers they throw up are worth caring for. I would suggest planting new lilacs in a sloping manner, so as to bring the heads a little below the surface where they may be treated as layers and encouraged to make their own roots and so give a better chance to perpetuate them, for, it may be added, some of the plants of the alliance used as stocks are subject to borers. *S. persica*, with white and other varieties, is from the Afghan mountains eastward. *S. chinensis* is regarded as a garden form, Rothamagensis and some other of its variations possibly influenced by pollen from vulgaris.

The tree lilacs are later flowering, quite hardy, and, in fact, do best northward. *S. Emodi* is Himalayan and Chinese, with pink buds and whitish flowers; it has reddish leaved and a variegated form. *S. josikæa* has a good habit and bluish purple scentless flowers. *S. japonica* (of which there are 30-foot specimens in the states) has whitish flowers. *S. pekinensis* is also white and has a pendulous form. *S. villosa* has pinkish flowers, fading to whitish, and flowering earlier in June. At the south common lilacs fail, fungus growths cover their foliage.

James MacPherson.



Syringa Vulgaris. "Alphonse Lavallee."

of flowers and plants in proper proportions that makes them effective, a fact which may be fully realized by those who will study the disposition of the few colors used in Cashmere shawls and Scottish tartans.

Jasminum is a favorite genus of shrubs and climbers in more than 100 species distributed over most of the warm temperate and sub-tropical parts of the old world. There are many handsome and fragrant species found on the tropical mountains of Asia, growing to the tops of the trees. Some of these do well in the southern states, but such as *J. sambac* and its varieties are occasionally frozen to the ground—which is usually warm enough however to preserve the roots—from which they grow again in spring. *J. nudiflorum* yellow, and *J. officinale* white are the hardiest, but even they need a south wall to develop them properly north of Richmond, Va. There is a plant of the latter in a small garden behind the Trenton Savings Bank several years old which is 15 feet high, but smothered by the annual growth of mignonnette vine, the tubers of which are also hardy at the foot of the wall. At Santa Barbara, Cal., *J. Sambac* and many other tender species thrive excellently.

Nyctanthes arbor-tristis is a large East Indian



PARK NOTES.

Mr. Kilgour's offer to present the village of Hydc Park, a suburb of Cincinnati, with a fountain, to cost not less than \$1,000, has been accepted by the council of that village.

* * *

The board of trustees of the park system of Peoria, Ill., has appropriated the sum of \$102,610 for improving and maintaining parks and the expenses incidental thereto for the coming year.

* * *

Mrs. Emmons Blaine, whose recent munificent offer bestowing upon Chicago a teacher's school, is pursuing her plans to that end, and has purchased a beautiful site near the Academy of Sciences, Lincoln Park.

* * *

Mrs. Harriet H. Wilcox has again exercised her philanthropic impulses in another gift to Westerly, R. I., Already the donor of a memorial building and a public park, she now supplements her former gifts by a site for a high school building, adequate for all demands of the place. Westerly's gratitude should be commensurate.

* * *

Notwithstanding the agitation that has been carried on the past few years over the destruction of the Palisades on the Hudson River at Jersey City, the quarries still continue the work of destruction. It would seem that nothing but money will save the picturesque locality, and it is money that neither the legislature nor the citizens themselves seem able or willing to provide.

* * *

The park idea is growing very rapidly. Agitation on the subject is creating a strong sentiment in the village of Canastota, N. Y. Upon his return home after a three weeks trip west, the president of the village thus expressed himself: "I am strongly in favor of the project. Canastota should have a public park, most assuredly. I think the matter can be brought about successfully. I am willing to donate liberally."

* * *

By the will of Col. Orin W. Fiske, recently deceased, the town of Lexington, Mass., is bequeathed the sum of \$3,000. This is to be invested at interest and to run until it reaches \$4,000, when the income from this sum is to be devoted to the perpetual care of Lexington battleground, provided that a tablet be placed on said ground with an inscription to the effect that said gift was a bequest of Col. Orin W. Fiske.

* * *

The Quaboag Historical Society, Brookfield, Mass., is negotiating for the purchase of the old colonial landmark on Foster hill, which in early days was known as the old "Wait Tavern." The house has been standing more than 150 years. If the property is purchased by the society it will be fenced in, the grounds about the house properly graded and a suitable monument erected.

* * *

Suit was entered by the city of Louisville and the Board of Park Commissioners against the duPont heirs to condemn the Central Park property with a view to having it converted into a park for public use, a matter which has been before referred to in these columns. The style of the suit is city of Louisville and

Board of Park Commissioners against Thomas Coleman duPont and Antoine duPont, trustees.

* * *

Philadelphia has the unique distinction of possessing the longest asphalted thoroughfare or street in the world. Besides being the longest asphalted street in the world, Broad street is the longest street having an even width, which is maintained its whole length of eleven miles. It is also the straightest and does not vary an inch in directness except around Penn Square. The asphalted portion only runs seven miles of the eleven. The old York road which is a part of Broadstreet stretches beyond a distance of twenty miles, and has a road bed of fine macadam. This with Broad street makes a carriage drive of 31 miles with but one turn. Broad street is 113 feet wide—69 feet from curb to curb. It is determined to make Broad street a feature of great architectural beauty.

* * *

In setting apart \$75,000 for improving Jefferson Barracks, St. Louis, Mo., the War Department should follow the suggestions of those interested in including park features within the meaning of the term improvement. An excellent opportunity offers in this project to establish a system of improvement of our army posts which shall make them an ornament to the locality in which they are situated, and add to the art out-of-doors now so forcibly advocated. It is now proposed to have a general plan, along which the post shall be developed and by which the commanding officers shall all be governed. In general the post grounds will be thoroughly drained and converted into a park something like Forest Park, except that the needs of the military will not be lost sight of, and it will not be cut up with drives to any degree that will interfere with its usefulness as a military post. On the other hand, it will be improved for that purpose. Spaces will be provided in which a regiment of cavalry can be maneuvered, and everything will be taken advantage of that will add to the usefulness of the post as a rendezvous for the development of organizations.

* * *

In connection with the proposed national park located in Minnesota, of which mention has been made, the Minneapolis, Minn., *Journal*, calls attention to comparative figures in the study of the project. The proposed Minnesota National Park is 54 miles wide and 118 long representing 6,372 square miles or 4,078,080 acres. "The state forests of Austria comprise only 1,782,169 acres; less than half of the proposed Minnesota park. The state forests of Bavaria number less than 800,000 acres. The state forests of France contain 2,700,000 acres. The state forests of Prussia include 6,955,227 acres. The famous Black Forest of Germany is only 93 miles long and from 13 to 46 miles in breadth. The proposed park is larger than several American states. It is nearly six times as large as Rhode Island. It is nearly three times as large as Delaware. Connecticut could be superimposed upon the area of the proposed park and leave a margin of 1,527 square miles. It is about 1,000 square miles less than the area of New Jersey; it is more than three-fourths as large as Massachusetts, is two-thirds the size of Maryland and more than two-thirds of the size of Vermont and New Hampshire. The forest reserves wisely set aside by the government in the mountains at the heads of the rivers that flow through arid regions of the entire west contain altogether 46,000,000 acres. The proposed park would take out of the populous and fertile state of Minnesota one-tenth as much as is taken from the whole of the arid west." The *Journal* says: The attitude of Minnesota toward the scheme should be that of approval of the underlying idea, but of great conservatism and caution in putting it into practice. The present scheme is extravagant and impractical.



CEMETERY NOTES.

March 9, 1891, at its annual town meeting, Plymouth, Mass., voted for the erection of a Receiving Tomb in Vine Hills cemetery. At the last town meeting it was voted that the selectmen be given authority to build the tomb and pay for it out of the contingent fund. "The world do move."

* * *

A monument recently placed in a cemetery in Louisville, Ky., is of more than passing interest from the record which it preserves. It bears inscriptions to the memory of James Austin, a soldier of the Revolution; James Allen Austin, his son, a soldier of the War of 1812; James Grigsby Austin, his grandson, a soldier of the war with Mexico, and James Richard Gathright, his great-grandson, a confederate soldier, who was killed at Murfreesboro, Tenn., Jan. 1, 1863. All were privates.

* * *

The Catholic cemetery of St. Mary's Delaware, O., consists of 8 acres, lying south of Oak Grove cemetery from which it is separated by an alley. It is laid out unfortunately on the checker board plan, the lots being 20 feet square, with an 8 foot path on one side and one of 4 feet on the other, and a corner stone 4" x 4" is placed on each. The method of raising preliminary funds for the enterprise is interesting. The first lots were sold for \$20 each. The church issued bonds of that value, and each bond-holder was given a lot, and by this means some \$2,000 was raised at once, \$1,600 being paid for the land.

* * *

A private cemetery is in course of preparation at the Odd Fellow's Home, Springfield, O., in which the dead will be interred in artificial ground. East of the Home, in the grounds, there is a hill some 60 feet high, which falls off eastward into a basin, making a natural amphitheatre. In this hollow it is proposed to construct a series of terraces, each faced by a retaining wall, which are to be used alternately as walks and burial terraces. The first terrace eight feet wide is intended for graves, the next, six feet wide, for a walk, and so on until the entire depression is appropriated. Work has been commenced on the first two terraces.

* * *

The Grand Rapids, Mich., Cemetery Commissioners appear to be in earnest in respect to the proposed improvements in the burial of the poor of the city. A recent resolution provides that wooden markers shall not be permitted any more, and arrangements have been made for stone markers. The superintendent of Valley City cemetery has been instructed to place a temporary marker at each grave in the potter's fields there and level off the grounds preparatory to sodding, so that these parts of the cemetery may be cared for in a manner that will be entirely acceptable to those interested in graves there as well as the general public.

* * *

Round about the circle in Lake Side cemetery, Erie, Pa., wherein repose the remains of the late Capt. Chas. V. Gridley, U. S. N., are now set four of the bronze guns taken from the Cavite Navy Yard, Phillippine Islands, forwarded to the cemetery for this purpose by the U. S. government. It will be remembered that Capt. Gridley who commanded the Olympia under Admiral Dewey, died at Kobe, Japan, while on his way home from an illness contracted during the fighting in Manilla Bay. The guns are 11 feet long, cast in bronze, and weigh 6,000

pounds each. The circular plot is 74 feet in diameter, close to the bluffs of Lake Erie, and overlooks the lake and harbor entrance. To Mr. William H Platt, of the cemetery, we are indebted for a photograph of one of the guns, and a description of all.

* * *

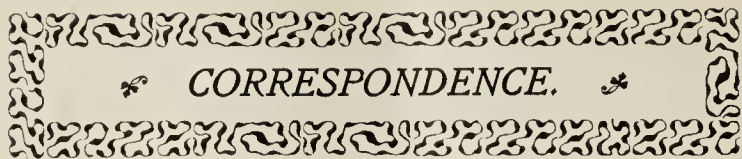
The annual report to June 5, 1899, of Woodlawn Cemetery, Canandaigua, N. Y., accompanied by a previous report giving some historical data, etc., shows an excellent financial condition. The receipts for the year were \$4,469.09, which included: Sales of lots, \$2,673.70; foundations, \$428.27; opening graves, \$691.75. Among the expenditures were \$1,897.13 for services and \$762.65 for expenses. The association was organized in 1884, since which time there has been a total expenditure of \$59,442.46. The total receipts have amounted to \$54,042.46, which include: Sales of lots, \$44,791.02; opening graves, \$4,522.73; foundations, \$3,270.65; vault use, \$180.25. There remains at date only an indebtedness of \$5,400.00. The trustees have decided to allow only iron flower receivers to be used on the graves for cut flowers, all other utensils are to be rigorously excluded.

* * *

That the lawn plan of cemetery development has established itself as a standard is exemplified in the report upon the laying out of Ridgelawn cemetery, Watertown, Mass., which is in progress from designs by Mr. Arthur F. Gray, landscape architect, of Boston, which were chosen by the Board of Health of the town. In his report Mr. Gray says: "The plan suggestive contemplates the use of the lawn system throughout, with park-like effects; this treatment is not only the most pleasing, but the most effective form of modern cemetery design." And further he says: "No curbs, whatever, should be allowed in the cemetery, and it would be well to have the marking stones confined to a few simple designs of low markers of approved form and design, as has recently been deemed advisable in Brookline, where such a plan has been adopted, and the designs of monuments also are submitted to the cemetery trustees for approval before erection." "All plantings should be controlled in like manner, and the decorative plantings of the grounds should be confined to such portions as the advisory landscape architect or gardener shall designate."

* * *

A shocking state of affairs has been revealed at the Cote des Neiges cemetery, Montreal, owing to the vigorous protests of the surrounding community. The cemetery officials can hardly be blamed for the evil, although such conditions could not possibly exist were the health authorities vigilant. It would appear that the cemetery gets no remuneration for the burial of the poor and such classes, and the number of free burials amounted last year to 2,000. The following description of the method adopted from a press interview with a cemetery official, will be convincing as an excuse for public protest: "We simply bury those bodies for charity, and from the large proportion of free burials we have to make the interments as simple and inexpensive as possible. The cemetery is owned by a private corporation, and it would simply be ruined if it had to provide a separate grave for every single interment. What we do is this: We have a square pit some twelve feet square and ten feet deep excavated and the coffin received of people for free interment, are placed in a row along one side. When the row is complete a few inches of soil is placed on the lids and another tier put in, and so on, until within three feet of the top of the pit, when the tier is covered up as far as possible and a second tier begun. When the pit is filled, a mound is levelled over the top and the limits of the mound marked out by stakes." During the filling process the pit is covered over with planks.



* CORRESPONDENCE. *

"How to start and carry on a Cemetery on the Lawn Plan!"

In reply to a correspondent who desires to know how to start and carry on a cemetery under the lawn plan, it would be well to suggest that he carefully study the rules, regulations and by-laws of any of the leading cemeteries conducted on that plan, the nearest to our correspondent being Oakland cemetery, St. Paul, and Lakewood cemetery, Minneapolis. In such study at present he will possibly be struck most forcibly by the number of paragraphs relating to features, hitherto permissible, but which now under the lawn plan idea are forbidden. Once get a good knowledge of what is not allowed in a modern cemetery and the field is open for a start. He will find that neither coping, fences, nor hedges are permitted; that the sections are simply lawns, the walks and divisions between the tiers of lots being grass paths only marked by the sunken corner post; that the head or foot stones at the graves are uniform in height, limited by the rules; that only one monument is allowed on any single lot; that ornamental planting and shrubbery are controlled by the superintendent and planted to create general effects and not for individual preferences, and in fine that the landscape features of the whole grounds are studied pictures, with such accessories as roads and buildings made to harmonize therewith. To transform an old cemetery into a modern one, is a very difficult and time-consuming task, the changes in which the above sketch will suggest, and it is highly advisable, when such a task is sincerely considered, to purchase any available adjoining land and engaging the services of a competent landscape architect, have it laid out on modern lines. With this as an example, an object lesson, the task of inducing the old lot holders to permit and assist in transforming their lots is made much easier. It may safely be said that no intelligent lot owner is so prejudiced as to be unable to appreciate the beauty of the lawn plan as compared with the old system of "do as you please." The suggestions conveyed in this brief sketch relate only to the physical features, which in the beginning are the paramount requirements; the source of information, referred to in the opening lines, will point to an understanding of the various rules and regulations designed for the operation and care of a modern cemetery, of whatever area may be in question.

* * *

A letter from Mr. William Stone, superintendent of Pine Grove cemetery, Lynn, Mass., relating to the coming convention of cemetery superintendents to be held at New Haven, Conn., reached us too late for available use. Mr. Stone who is a vice-president of the association, has been an ardent devotee of the cause it represents, as well as an enthusiast in helping nature to make more beautiful the characteristic features of the grounds over which he presides, and in making such work available for educational purposes. Mr. Stone advises all members attending the convention to develop the utmost energy towards making the meeting from all points of view, a profitable one.

* * *

Mr. Charles Nichols, generally termed Father Nichols, in token of regard by members of the Association of American Cemetery Superintendents, and whose devotion to the progress of the organization needs no comment, has devoted considerable time to the writing of personal letters to superintendents urging their attendance at the New Haven convention. Mr. Nichols' missionary efforts are certain to be productive of good results in the promotion of a livelier interest.

ASSOCIATION OF AMERICAN CEMETERY SUPERINTENDENTS.

Program of the Thirteenth Annual Convention, New Haven, Conn., September 5, 6, 7 and 8, 1899.

Headquarters will be at Warner Hall, No. 1044 Chapel street, and all meetings will be held there.

Tuesday, Sept. 5.

MORNING SESSION, 10 A.M.

Meeting called to order. Prayer. Reception of New Members and Roll Call.

Address of Welcome by his honor, Cornelius T. Driscoll, Mayor of the City of New Haven.

President's Address. Report of the Secretary and Treasurer. Communications. Appointments of Committees. Question Box. Informal Discussion.

Recess for Lunch.

AFTERNOON SESSION, 2 P.M.

1. Paper.—"Difficulties Confronting Cemetery Superintendents," by G. C. Nailor.

2. Paper.—"Influence of the Individual Superintendent in his Cemetery," by J. A. Thorne.

3. Address. By E. C. Beecher, of the New Haven City Burial Ground.

Discussion.

4:30 P.M. Visit to the New Haven City Burial Ground.

EVENING SESSION, 8 P.M.

4. Paper.—"Influence of Modern Cemeteries," by N. C. Wilder.

5. Paper.—"Some of Our Lot-owners at Home," by Sid J. Hare.

6. Address. By Hon. L. P. Denning, of the Fair Haven Union Cemetery.

7. Paper.—"Cemetery Advertising. How far is it Permissible?" By R. J. Haight.

Discussion.

Wednesday, Sept. 6.

9 A.M. Visit to the Crypt under Center Church.

MORNING SESSION, 10 A.M.

Roll Call.

8. Paper.—"How to make Single Grave Sections Compare Favorably with other Sections," by F. D. Willis.

Nomination of Officers.

9. Paper.—"If Annual Planting or Embellishment of Lots is Discouraged or Reduced, can the Interest of Lot-owners be Maintained?" by T. McCarthy.

10. Address. By Rev. J. F. Corcoran, of the St. Lawrence and St. Bernard Cemetery Associations.

Question Box. Adjournment. Discussion.

2 P.M. Visit to Cemeteries, East Rock Park and other Places.

EVENING SESSION, 8 P.M.

11. Paper.—"Beauties and Benefits of Modern Cemeteries," by George H. Scott.

12. Paper.—"Should Monuments and Markers be Set by the Cemetery," by Timothy Donlan.

13. Paper.—By Hon. Henry T. Blake, of the New Haven Park Commission.

14. Paper.—"Winter Work in Cemeteries." By Charles Nichols.

Question Box. Discussion.

Thursday, Sept. 7.

9 A.M. Visit to Yale University Buildings.

MORNING SESSION, 10:30 A.M.

15. Paper.—"Funeral Attendance at Graves, Appliances for Lowering Caskets and Protection of Mourners," by H. J. Diering.

16. Paper. By W. H. Barlow, Pres. Dale Cemetery, Sing Sing, N. Y.

Election and Installation of Officers.

Discussion.

AFTERNOON SESSION, 2 P.M.

(In the Hands of Executive Committee.) Reading of Papers and Communications. Unfinished Business. 3 o'clock. Adjournment. Shore Dinner.

Friday, Sept. 8.

10 A.M. Train for Hartford, to visit the cemeteries and other places of interest.

SELECTED NOTES AND EXTRACTS.

Hardiness of Privet.

The unusually severe past winter furnished many lessons from which we may profit. One of the notable effects was the killing back of California privet. In some localities the injury was slight, while in others the plants were killed almost to the ground. But the roots, with possibly a very few exceptions, were not injured at all, and no doubt some hedges got a much needed pruning. In great contrast, the common privet, *Ligustrum vulgare*, stands out unscathed and as bright as ever. Opinions will differ as to the beauty of this species in comparison with the more popular one, but it certainly makes a very nice hedge when regularly trimmed. What a pity the evergreen species, *L. japonicum*, is not thoroughly hardy. The leaves are persistent and remain on the plant throughout the winter, though the ones on the upper branches may be browned more or less severely. In an ordinary winter, the damage would be slight; and where protected from winter sun as well as from cold exposure, no doubt the entire plant would maintain its hardy, evergreen character. There is something about the slightly folded leaf that makes it peculiarly attractive; and the dark berries after blooming are also very ornamental.—*S. Mendelson Meehan*.

* * *

Lawn Plants.

The species of allamanda give wonderful results when grown for this purpose. Good sized plants which show no signs of flowering at present may yet be taken in hand and give excellent satisfaction before the summer is over. A good, rich, light soil is necessary, and if a tub is used for the plant, put enough drainage in the bottom so that the plant when knocked out of the pot will rest on the drainage. Ram the soil firmly around the ball, shorten the strong growths back and stand them in a partly shaded spot, syringing frequently. In a few weeks' time, the kinds grown under the names *Wardleana*, *Hendersoni* and *Schotti*, will give an abundant display of their wide, trumpet-shaped, yellow flowers. The varieties of *Hibiscus rosa-sinensis* are all well worth growing for this purpose. When grown in tubs they need liberal feeding, as they are strong growing plants; and as the flowers are produced on the young wood there has to be an abundant supply of this to have the plants at their best. When planted out as isolated speci-

mens on a lawn, and kept well watered the display of bloom from midsummer on will always be satisfactory. To grow on plants for this work, spring struck cuttings, even if they are now occupying 3 inch pots, should be shifted into 6 inch and plunged out in the full sun. They should make plants three feet high by the end of summer. The varieties known as *brilliantissimus* and *grandiflorus* are the best two singles among the crimson-flowered varieties. Then there are double red and double pink, both of which have very large flowers, but not so freely produced as the single kinds. The double yellow and double buff are not possessed of the same robust nature as the above named sorts, but are well worth growing. *Lucien linden* has irregularly shaped flowers, and has not proved satisfactory here. It may be supposed that these plants take up too much room in winter; they can, however, if kept dry, be wintered in a structure which is frostproof, although they do better if wintered without losing their foliage.—*G. W. O. in Florists Exchange*.

* * *

Plant Breeding.

Practical suggestions for plant-breeding by hybridization:

1. Select a large genus to work upon if possible. The species in large genera are apt to be more variable, more easy to cross, and they furnish a greater variety of possible combinations.
2. Confine attention to one or two genera. Most noted hybridizers have made their reputations in single genera. Nobody but Luther Burbank succeeds with everything.
3. Give high cultivation. High cultivation induces variability and often makes species easier to cross.
4. Plant together those varieties and species which bloom at the same time if there is any chance of natural cross pollination. Nature makes many crosses, and her work is better and cheaper than that of the best hired man.
5. Do not depend alone upon the first generation of hybrids. Subsequent generations are likely to show greater variation than appears in the first hybrids, and from these variations the desired forms may often be selected.
6. Do not breed for too many plants at once. Especially do not breed for antagonistic qualities. If possible confine attention to the improvement of a single quality.
7. Supplement hybridization by selec-

tion. Selection is often the more important of the two. Keep only the very best, and destroy all the others. The severest selection is best.

8. Do not neglect to fix any new variety when once secured. This may take more work than it did to produce the new variety, but unless properly fixed it is worthless and disappointing. Varieties propagated by buds require little or no attention to fixing. This should be borne in mind when selecting genera for hybridizing.

9. Be content with small beginnings. Small variations indicate the breaking of the type, after which much more rapid progress is possible. In fact small variations may be of more significance to the plant breeder than great ones.—*American Gardening*.

* * *

Wall Edgings.

When in one of the most remarkable of Surrey gardens recently I noted how singularly effective as covers or surface edgings on low stone walls bordering the carriage drive were such things as *Sedum acre aureum*, a mass of golden color then some 15 inches broad and ten feet to 12 feet long. Then would come an equal length of *veronica prostata*, a mass of blue, followed by a singularly effective length of *Thymus Serpyllum coccineus*, literally a mass of blood-red color and beautiful beyond description. A little further would be seen a huge mass of the beautiful blue *Lithospermum prostratum*; next, perhaps, *Golden Stonecrop* again, *Aubrietia Leichtlinii*, and so on, ringing the changes on these and other creeping plants with marvelous effect. How very possible is it by the employment of simple hardy creeping plants in this way to produce effects of great beauty. What a charm attaches to gardening of this description when it presents some break away from the common rut.—*A. D. in The Garden, London*.

* * *

Destroying Ants.

Make holes with a crossbar or convenient stick, from six inches to one foot deep and about fifteen inches apart, over the hill or portion of the lawn infested by the ants and into each hole pour two or three teaspoonfuls of bisulphide of carbon, stamping the dirt into the hole as soon as the liquid is poured into it. The bisulphide of carbon at once vaporizes and, permeating the ground, destroys the ants but does not injure the grass. One should remember while using this substance that it is highly inflammable and should not bring near it a flame or even a lighted cigar.—*Massachusetts Experiment Station, in Minnesota Horticulturist*.

Park and Cemetery.

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An Illustrated Monthly Journal.

Devoted to the advancement of Art-out of Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

The regular contributors to PARK AND CEMETERY are among the most eminent Landscape Architects, Landscape Gardeners and Horticulturists in the United States, whose practical articles make the journal one of great value to any one identified with landscape work.

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Officials of Parks and Cemeteries are requested to send copies of their reports.

Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

Association of American Cemetery Superintendents.

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Minneapolis, Minn., President.
WM. STONE, "Pine Grove,"
Lynn, Mass., Vice-President.
F. EURICH, Woodward Lawn, Detroit, Mich.
Secretary and Treasurer.

The Thirteenth Annual Convention will be held at New Haven, Conn., September 5, 6, 7, 8.

The American Park and Out-Door Art Association.

CHARLES M. LORING, Minneapolis, Minn.
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WARREN H. MANNING, Tremont Building,
Boston, Mass. Secretary.
O. C. SIMONDS, Chicago. Treasurer.

The next meeting of the Association will be held at Chicago, Ill.

The American Society of Landscape Architects.

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New York. Vice-president.
CHAS. N. LOWRIE, 156 Fifth ave, New
York. Treasurer.
DANIEL W. LANGTON, 115 East 23rd St.,
New York. Secretary.

Mr. O. C. Simonds, landscape gardener of Chicago, has recently been examining the park sites of Tenney Park, Madison and Lakeside Park, Fon-du Lac, Wis., preparatory to preparing plans for their improvement.

The fifteenth annual meeting of the Society of American Florists is in progress at Detroit, Mich., at time of going to press. A full and varied program has

been arranged, combining business and pleasure, and it is pretty generally certain that the sanguine anticipations of an enjoyable time will be realized.

The Michigan State Horticultural Society.

The summer meeting of the Michigan State Horticultural Society was held at Douglas, Mich., August 9-11. A considerable number were present, but in point of localities represented the attendance was disappointing. As the last winter's freeze and its disastrous effects on the fruit growing interests in what is known as the fruit belt of Michigan, was still painfully felt, the work of the meeting largely partook of papers and discussions relating thereto, and the presence of Profs. Taft of Lansing, and Waite of Washington, lent importance to the proceedings. Specially interesting to us was a paper by Mr. Thomas Gunson, Michigan Agricultural College, on the "Fruit-grower's Flower Garden," in which he grouped a goodly collection of trees, shrubs and plants for decorative effects in the door-yards. A resolution was passed committing the Michigan State Horticultural Society to the encouragement of outdoor art, both among the farmers and townspeople, and to the inducement of towns and villages to form Improvement Associations.

American Society of Landscape Architects.

The American Society of Landscape Architects, recently organized, have elected the following officers: John Charles Olmsted, Brookline, Mass., president; Samuel Parsons, Jr., New York, vice-president; Chas. N. Lowrie, New York, treasurer; Daniel W. Langton, New York, Secretary. In addition to the above and to complete the Executive Committee, are Downing Vaux, New York; O. C. Simonds, Chicago; Warren H. Manning, Boston. The objects of the society as stated in the constitution is "to promote good fellowship among its members and increase the efficiency of the profession." It will interest many readers to know the qualifications and conditions of membership, which is conveyed in the following articles:

4. Fellows shall be landscape architects or landscape gardeners in good standing. A landscape architect or landscape gardener in good standing is one who practices the art of arranging land and landscape for use and enjoyment, whose compensation is received directly from his client, and not directly or indirectly from labor, plants, or other material used in fitting land for use, or from persons supplying same. Fellows retiring from the practice of the profession and not engaging in business may be continued as Fellows by vote of the society. A Fellow shall be at least thirty years of age and shall have practiced the profession for five years.

5. Juniors shall be students who are preparing to practice the profession; they shall have no vote and shall not be eligible to office. A Junior shall be at least 21 years of age, and shall cease to be a Junior ten years after election.

6. Associates shall be persons who have performed notable service in advancing the interest of the profession; they shall have no vote and shall not be eligible to office.

OBITUARY.

William McMillan.

William McMillan, one of the first and foremost of the Park Gardeners of America, is dead. On the 8th of July he requested his daughter to write and say that he was not very well—that he had a numbness in the thumb and forefinger which prevented his writing personally—but it was expected that a months leave of absence would entirely restore his health. The notice of his death from apoplexy on the 11th of August fell therefore like a lightning flash.

William McMillan was a Highlander. He was born in 1830 and was a resident of the United States for 40 years. The early years of this period was spent at Orange, N. J., and only a short while ago he took great pride in showing me trees he planted; now grown to full maturity. He was a glorious man, warm, loyal to his convictions, unswerving in his honesty, and a most devoted husband and father. It was beautiful to see the love his family—down to his little tots of grandchildren bore him. He was Highland through and through, and hundreds of his Buffalo friends will I am sure join with me in believing that in Heaven itself he will receive—"just a Highland Welcome."

Mr. McMillan was catholic in his tastes as a gardener, and could barely tolerate the hotch-potches which are being made of many American parks. He favored every phase of gardening in its proper place and every relaxation for the people, but deprecated monstrosities, and hated jumbled superficiality. Although he greatly disliked to write, his pen was occasionally enlisted in condemnation of such things in a way that was sure to carry conviction to intelligent minds. He was the constructor of the Park system of Buffalo, N. Y., and was superceded after 27 years of the most faithful service in a way (many of his friends think) hardly creditable to Buffalo. The Buffalo Parks are the monument of William McMillan, and the least that can be done is to give one of them his name.

At or near the age of 68 this rugged Scotchman entered upon the superintendence of the Essex Co., Park system at Newark, N. J., and vicinity. It is extensive, and McMillan went at it with energy, but it is only natural to believe that his heart beat warmly for his older creations.

He leaves a widow and two married daughters.

He was a member of the St. Andrew's Society, and the Buffalo Society of Natural Sciences. *J. MacP.*

* * *

Henry Ross.

In a recent communication, Mr. Geo. W. Creesy, conveys the sad intelligence of the death of Mr. Henry Ross, the venerable Honorary Superintendent of Newton, Mass., Cemetery Corporation, which occurred Thursday, July 27th at the age of 77 years and 3 months. Mr. Ross had been in feeble health for a year past, and at the last annual meeting of the corporation held in June, he was retired from active duty and elected honorary superintendent, after a service of 38 years. His

 * SITUATIONS WANTED, ETC. *

Advertisements, limited to five lines, will be inserted in this column at the rate of 50 cents each insertion, 7 words to a line. Cash must accompany order.

Roderick Campbell, for 21 years Landscape Gardener and Superintendent of the famous Forest Hill Cemetery, Utica, N. Y., is open to an engagement as Superintendent or laying out of new or the improvement of old cemeteries anywhere in the United States or Canada. Address RODERICK CAMPBELL, Utica, N. Y.

Wanted, a man of experience to act in the capacity of superintendent in building up and developing a modern lawn cemetery; married man preferred; good lodge house, healthy location, schools near by and reasonable salary, equal to \$600 per annum. Answer H., Lock Box 12, Chattanooga, Tenn.

Wanted: Competent cemetery superintendent who can invest \$500 and take interest in new cemetery enterprise. Address E. W. Werick, Sec'y, 56 Erie County Bank Building, Buffalo, N. Y.

Obituary (Continued).

son H. Wilson Ross was appointed to succeed him. Mr. Ross was a man of considerable prominence in many ways, an authority in horticulture, and held the respect and consideration of all with whom he came in contact. His funeral was held the Sunday following his death, the interment taking place in the grounds of the cemetery; the chapel and conservatory were crowded to overflowing with family and friends and relatives, conspicuous among whom were members of the board of directors under whom he served. The pall bearers, cemetery superintendents, were: William Stone, Pine Grove Cemetery, Lynn, J. C. Scorgie, Mt. Auburn, Boston, and his assistant Wm. Allen, Chas. A. Stiles, Malden, J. H. Morton, Mt. Hope Cemetery, Boston. T. F. Mansfield, Mt. Peake, Waltham, J. Watson Taylor, Cambridge Cemetery, Cambridge, George W. Creesy, Harmony Grove, Salem, Mass. The trustees and entire cemetery force participated in the burial of this much respected cemetery official, and it is little to say but great in its significance that his loss will be keenly felt in the ranks of the fellow members of his calling.

BOOKS, REPORTS, ETC., RECEIVED.

One of the most elaborate park reports ever gotten out is that of the Annual Report of the commissioners of Lincoln Park, Chicago, which is also a history of the

park. In point of typographical excellence and the beauty and finish of the half tone plates, all of which are arranged and decorated before etching, can hardly be excelled. It is compiled by Mr. I. J. Bryan, secretary to the commissioners and is a cloth covered book, 12 in. by 9 in., containing some 190 pages, some 55 of which are full page plates, besides a greater number of smaller illustrations. It makes a valuable and artistic souvenir of Lincoln Park.

* * *

Following close on the above, as regards get up and beauty of finish, though of smaller size is the thirtieth annual report of the West Chicago Park Commissioners. This is an embossed covered pamphlet of 105 pages, having 30 full page plates, six of which are colored; and besides a number of small cuts. As park reports the above are examples of advanced work in this line.

EXPERIMENT STATION ACCURACY. A correspondence between Prof. Wm. P. Brooks, Hatch Experiment Station Amherst, Mass., and Mr. Andrew H. Ward, Boston, touching the relative merits of soda and potash.

The advance proofs of this pamphlet disclose a lively tilt on the above question between Prof. Brooks and Mr. Andrew H. Ward, who is an occasional contributor to PARK AND CEMETERY. Mr. Waid unquestionably holds the fort, and the discussion emphasizes the necessity not only of accurate information being supplied from the Agricultural Experiment Stations, but of caution on the part of the faculty when making public statements.

LANDSCAPE GARDENING. A treatise on the general principles governing outdoor art; with sundry suggestions for their application in the commoner problems of gardening. By F. A. Waugh, professor of horticulture, university of Vermont and state agricultural college. Illustrated. 12mo, 150 pp. cloth; Orange Judd company, New York. Price 50 cents.

In this work the author has devoted himself to the task of making plain the principles involved in landscape gardening, and to so discuss them as to make the practical work of out-door art more readily comprehensible to the gardener and amateur. The matter is presented in a very carefully condensed form, but it readily enables the reader to see the relation of each fact and principle discussed, to appreciate their relative importance, and what is a very valuable feature in such a manner as easily to be remembered. It is well and carefully illustrated, and the book will be undoubtedly useful to a large class of readers. As Professor Waugh says in his preface: "in all parts of the country, we find ninety-nine out of every hundred failures are to be traced to the evident fact that the gardener did not understand the composition as a whole,

Landscape, Garden and Plant Photographs.

The Publisher of PARK AND CEMETERY announces the following photographic competition for 1899.

List of Premiums.

NO. 1. LANDSCAPE AND GARDEN EFFECTS. A first premium of Five Dollars and a second of Three Dollars is offered for the best series of not less than four photographs of picturesque landscape and garden effects. These may include park or rural scenery, city or suburban outdoor art in gardening.

NO. 2. TREES, SHRUBS AND PLANTS OF THE OPEN AIR. A first premium of Five Dollars and a second of Three Dollars is offered for the best series of six photographs of trees, shrubs and plants. These may include wild trees or shrubs, or any plant grown in the open air, and may be in single specimens or groups. All photographs in this class should carry descriptions, including approximate dimensions.

NO. 3. GROUPINGS AND EFFECTS. A first premium of Five Dollars and a second of Three Dollars is offered for a series of six photographs of picturesque groupings of plants and shrubs, or suggestive spots of wild plant life, in woodland, park or home grounds. Rock or water gardens may be included in this section. These photographs should also have enough descriptive matter attached to make it possible of reproduction in nature.

For photographs retained by the publisher that are not awarded prizes 50 cents each will be paid. The competition will remain open until September 1st.

Suggestions.

Care should be taken to keep backgrounds plain to avoid confusion in picture. Figures of persons, garden utensils, and all objects liable to cause detriment to the picture or its object should be carefully kept out. The photographs must be mounted singly on cards with white backs and must not be less than five inches by four inches.

Instructions.

The photographs may be of objects in the possession of either the sender or others; but there must be no question as to the right of photographing or using them. There is no limit as to number, and the publisher shall have the right of engraving and publishing any of the chosen photographs. They may be printed on any good paper that shows the subjects clearly, and that will make good half tones.

The name and address of the sender, together with the name and description of the objects shown, should be plainly written on the back of each photograph.

All communications relating to the competition must be addressed to R. J. Haight, 334 Dearborn Street, Chicago, and the class for which the photographs are intended should be marked on the parcel, which must also be labelled "Photographic Competition."

THE SELECT NURSERY

YORK, Nebraska, has a choice collection of Evergreens, Shrubs and Flowers for Parks and Cemeteries.

We have the choicest Conifers and Flowers from the Rockies, among them probably the best Silver Pungens and Concolor in America.
 C. S. HARRISON.

and not to any lack of his skill in carrying out the details. The average gardener needs no instruction in laying out flower-beds, in mowing lawns, nor in carrying for shrubbery; but he does need very much a better appreciation of the demands of unity, variety, character, propriety and finish."

GINSENG ITS CULTIVATION, ETC. By Maurice G. Kains; 12mo, 64 pp; Orange Judd company, New York. Price 25 cents.

This book is a complete working treatise for the grower of ginseng—a crop which is attracting great attention among farmers and gardeners. It discusses in a practical way how to begin with either seed or roots, soil, climate and location, preparation, planting and maintenance of the beds, artificial propagation, manures, enemies, selection for market and for improvement, preparation for sale and the profits that may be expected. The book-let is concisely written, and profusely illustrated.

RECEIVED.

From Joseph L. Carpenter, Wilmington, Del., a photograph of a remarkable specimen of a white oak tree. This will be illustrated in an early issue.

From C. A. Noble, Catskill, N. Y., photographs of the Lotus Pond, Catskill, Rural cemetery.

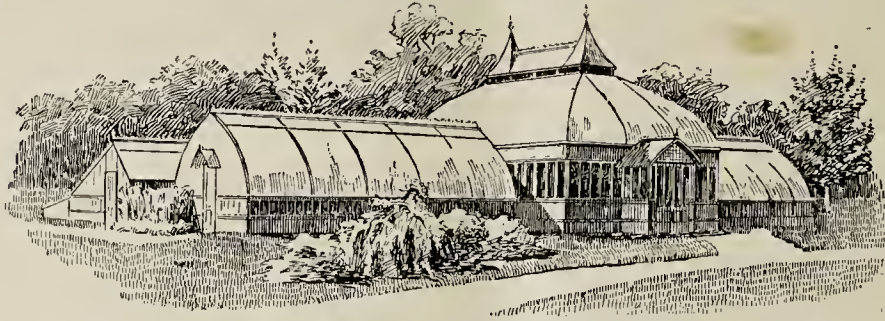
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MICHIGAN WILD FLOWERS FOR SUMMER PLANTING. JUNE TO SEPTEMBER.

Early spring flowering Bulbous and Tuberous, Trilliums, Bicucullas (Dicentras), Sanguinarias, Ranunculus, Isopyrums, Dentarias, Cardamines, Podophyllums, Calthas, Claytonias and Liliums.

Special descriptive wholesale catalogue.

WILFRED A. BROTHERTON, Rochester, Mich., U. S. A.

FOLDING CASKET LOWERING DEVICE.

This Cut represents the new *Folding Casket Lowering Device*, with beautiful canopy top. The device is constructed of fine three-ply veneers. The hollow space on under side holds the grave lining on automatic rollers so that the entire grave can be lined completely covering all earth in ten seconds of time. The canopy covers the entire grave. All can be adjusted in three minutes. The entire weight is about 85 pounds. The construction is so simple that a child can control one thousand pounds with perfect safety. *No Cog Gear* to annoy but controlled by *Two Friction* brakes directly at a point where needed. *All can be quickly folded into a small space.* The Device is not only an ornament but makes a beautiful pedestal for the casket to rest on while appropriate burial ceremony may be conducted, the casket is thus slowly, solemnly and noiselessly lowered into the grave by the funeral director as it appears more into a bed of flowers, adding beauty materially to the solemnity of the occasion. Thousands of testimonials can be shown of its complete workings.



This Device was used at the funeral of Ellen May Tower, the Red Cross Nurse who died in Porto Rico, and was buried with Military honors by the State of Michigan.

All folds and occupies a space 18 x 18 inches by 7 feet 8 inches, which is less space than an ordinary Oak Casket, except in length. No cogs or gearing in Device, but controlled by Two Friction Brakes with screw pressure. Canopy top folds into a space 45 inches long and about as large around as a man's hat.

FOLDING CASKET LOWERING DEVICE WORKS,

OVID, Mich., U. S. A.

E. B. VORHEES, President and Treasurer.
W. J. MARTIN, Secretary.

COPY OF TESTIMONIALS.

OFFICE OF JOHN REID, SUPERINTENDENT OF MOUNT ELLIOT CEMETERY.

Hon. E. B. Voorhees, Ovid, Mich.

Dear Sir: I am under the impression that I am not the only Cemetery man who was to some extent prejudiced against Lowering Devices after seeing others used. But your Lowering Device so completely fills every detail required in lowering caskets into the grave, that one is astonished at its quiet, graceful, almost human self-action. The mechanism is perfect and simple, and I fail to see how an accident can occur. It fills a long felt want in cemetery management, and I think no cemetery of any pretensions should be without them.

DETROIT, MICH., Aug. 14, 1899.

Yours respectfully,
JOHN REID, Superintendent.

Folding Casket Lowering Device Works, Ovid Mich.

Gentlemen: I presume you would like to hear from us in regard to the Device we purchased of you. We like it very much and think every Cemetery should own one. We came near purchasing one last year, now I am glad we waited for we think by so doing we have secured a better Device.

FORT PLAIN, N. Y.

Very truly yours,
WM. C. RAPP, Superintendent Fort Plain Cemetery.

(From Allentown Daily Leader, Allentown Pa.)

RELIEF TO PALL BEARERS.

A Device which lowers caskets into the grave, automatically, is a great improvement in the way of making interments. The management of Greenwood Cemetery have purchased a Safety Casket Lowering Device manufactured by E. B. Voorhees, Ovid, Mich. The Superintendent, David Griesemer, examined all the lowering Devices on the market and found the one he bought to be by far the BEST and MOST satisfactory. Its especial recommendations are the satisfactory way in which Caskets are lowered, there being no tilting or letting one end down faster than the other.

PARK AND CEMETERY.

✻ *A Monthly Journal of Landscape Gardening and Kindred Arts.* ✻

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CONTENTS.

EDITORIAL—The New Haven Convention of the Association of American Cemetery Superintendents—Association of Park Superintendents of New England—Protection of the Public in Parks and Cemeteries—Landscape Work in the Cemetery.	129
*The Thirteenth Annual Convention of the Association of American Cemetery Superintendents.	130
Annual Planting or Embellishment of Cemetery Lots.	135
*The Burns Monument, Barre, Vt.	136
The Care of Trees on the Streets of Cities.	137
*Horticultural Hall, Philadelphia.	140
Park Nomenclature and Accounts.	141
The Toad.	142
*God's Acre.	143
Improvement of the House Lot.	145
*Garden Plants—Their Geography, XLV.	147
*Improvement Associations.	148
Park Notes.	151
Cemetery Notes.	152
Selected Notes and Extracts.	154
Reviews of Books, Reports, Etc.	155

**Illustrated.*

MARKED and very encouraging feature of the convention of the Association of American Cemetery Superintendents held this month at New Haven, Conn., was the number of cemetery officials, other than superintendents, present and interested in the proceedings. This has been urged for years past in these columns, for the work of the superintendent is intimately connected with that of the other officials, and while the title of the association is not inviting to such officials the constitution expressly provides for their participation in membership and the work of the association. The number of trustees and other officers present at New Haven is strong evidence of their growing appreciation of the good work accomplished,—a recognition of the importance of the participation on the part of all cemetery officials in the efforts of the superintendents, and of the influence of the association on the progress and improvement of modern cemeteries. At this convention as on former occasions a strong effort was made to change the title so as to make it a more inviting and comprehensive one, but as on such former occasions, it failed. Another good move, however, the appointment of an advisory committee to devise ways and means for furthering the laudable objects of the society received favorable consideration; by this

it is expected to increase the membership and so correspondingly broaden its sphere of usefulness. Altogether the New Haven convention will undoubtedly mark the beginning of more aggressive effort in the direction of extending the work of the association and thereby tend to improve the conditions of our cemeteries throughout the land.

THE formation of the Association of Park Superintendents of New England as an auxiliary to the American Park and Outdoor Art Association suggests that the cause of art out-of-doors is gathering strength. The organization consummated at Providence, R. I., this month begins its career with a membership that represents the principal cities in that section. The society has as its very laudable objects the professional improvement of its members and the encouragement of social intercourse among men interested in park work. The meetings will be devoted to the reading and discussion of papers, and the field inspection of parks in New England and other states.

WE have been devoting much necessary attention to the development of the public park as a place of rest and recreation from the standpoint of physical requirements, and truly remarkable progress has resulted. The acreage of lands made beautiful in and about our cities and towns for park purposes during the last ten years would astonish the average reader, to say nothing of the vast sums of money expended in the work. But it matters nothing as to what extent such public improvements are carried out nor the money spent to produce these results, if park management ends with their establishment; for unless a park is properly policed and rendered absolutely safe for the well-behaved citizen, it does not fulfill its purpose. It has been somewhat astonishing the past summer to note, through press reports, the number of complaints of vagrancy, molestation and general hoodlumism that have been made in different sections of the country, which points to the conclusion that more stringent methods must be adopted by park officials to insure the comfort and safety of those using the parks for legitimate purposes. One of the most marked weaknesses of our communal system is the flagrancy with which our

laws for minor offenses are violated, and the disregard generally evinced for our neighbors rights. Park officials should see to it, that their police force is both sufficient and efficient, and all misdemeanors threatening the repute or welfare of our parks should be prosecuted without fear or favor.

* * *

The foregoing remarks apply with equal force to our cemeteries. The liberal policy generally prevailing of permitting almost unrestricted access to our beautiful burial grounds prevents close discrimination in respect to those using the privilege, and the consequence is frequent trespass and annoying pilferings and damage. It is a very difficult matter to secure sufficient evidence of such peccadilloes to make successful prosecution assured, but when it is possible, the penalty should be such that recurrence of similar misdeeds could never be expected. In neither the park nor the cemetery should there be the remotest chance of insult, inconvenience or loss,—the very name and nature of the grounds should be a perfect safeguard against any such possibilities. In many states cemetery employees are empowered to act as special police within their grounds, and this law should become general. When such special police fail in their duties, it is a reflection on the cemetery authorities.

THE following comment in the *Minneapolis Journal*, the result of an interview with a well-known educator and a prominent member of the American Park and Out-door Art Association, in regard to Graceland cemetery, Chicago, is worthy of attention for its value as an incentive to cemetery superintendents: "No cemetery in the country, to which the hand of man has been applied, approaches closer to the state of cultivated nature, when considered from the artistic point. The superintendent has introduced objects which are to be met with nowhere else." This is a strongly suggestive commendation. It is in trying to bring about effects in landscape work which shall approach the conditions of cultivated nature, that the most enduring results will be achieved. It, however, requires an intense sympathy with nature herself, devoted study of her methods and means, and a consequent knowledge which will permit of the proper use of the material she so abundantly offers, so as to enable the qualified man to reproduce her pictures appropriately to the requirements of the situation he controls. It is this sincere study and sympathy in the work which in degree will effect every cemetery and make it to favorably contrast with others. Beautiful effects may be created in the smallest areas, just in proportion to the intelligence, as outlined above, which may be brought to bear on the work.

THE THIRTEENTH ANNUAL CONVENTION OF THE ASSOCIATION OF AMERICAN CEMETERY SUPERINTENDENTS.

The Thirteenth Annual Convention of the Association of American Cemetery Superintendents, held at New Haven, Conn, Sept. 5, 6 and 7, and Hartford, Conn., Sept. 8, was by far the most largely attended gathering in the history of the organization. At least seventy-five members were in attendance, many of whom were accompanied by their wives and daughters. The weather was all that could be desired, the papers and discussions covered a variety of interesting subjects and the enjoyable entertainment provided by the local cemeteries combined to make the convention in the City of Elms and its Sister City one long to be remembered.

The business sessions were held in Warner Hall, and on the opening of proceedings prayer was offered by the Rev. E. S. Lines of St. Paul's church, and the visitors were cordially welcomed to the city by the Hon. Cornelius T. Driscoll, mayor of New Haven.

After the usual preliminaries of roll call, admission of new members, etc., President Hobert read his annual address from which the following paragraphs are given:

"It is not my purpose to tire you with a lengthy account of the work of the association and the good it has accomplished in the past, as that is already familiar to you all, but rather to make a few recommendations which I think will be of permanent value."

"Our association is one which has exerted a powerful influence for good in matters pertaining to cemetery work and management, it has been the leading power that has caused the great and beneficial changes in methods of constructing and maintaining modern cemeteries and we must all strive to maintain its present standard. To do this it will be necessary for all interested to assist, when called upon for a contribution to our programme, instead of declining on the grounds of incompetency or lack of time, each must respond with his best effort, thus encouraging other timid ones to take part."

"There are also to-day many good men engaged in cemetery management who have not seen fit to give us the countenance of their presence who are not members of our association, and some of whom believe, or affect to believe, that individual is equal to or better than concerted effort. I cannot too strongly urge upon these men to join us; our work, so well begun, is far from finished, and on behalf of our Association, I extend to each and all who are yet without the fold, a cordial invitation to come unto us, and be of us, and with us in the good work yet to be done."

"I think that by well directed efforts that we should be able to increase our membership very materially and be assured of a regular attendance of not less than one hundred. There are large cemeteries in all the eastern cities not represented in our association and there surely must be some way of reaching them."

"Nor must our efforts for the good of the association be confined to work among members alone, but we must make it a part of our duty to bring the ideas conceived at these meetings directly to the attention of the trustees or directors of our respective cemeteries, also to our lot owners, thus showing them the value of our work and the wisdom of having a representative attend each meeting."

"It would be of great help to us all if our members would report progress made during the year, especially in the way of abolishing old methods and the adoption of new ones. Let us know how many fences have been torn down, and how much curbing has been removed, and also how many mounds have been leveled and walks graded up and sodded. There are many things similar to the above which would prove encouraging and of value to cemetery officials who are striving to rid their grounds of just such excrescences as these."

"It has been suggested to me that in the past few years the Executive Committee has degenerated into merely a programme and entertainment committee, and that it might be a good plan to have another committee appointed (or elected), to be known as the Advisory Committee, whose duty shall be to consider ways and means of promoting the work of the association and increasing the membership."

"I am afraid that our members for some reason do not give the association the prominence which it deserves before their trustees or directors, else they might take more interest in the work we are doing. There are improvements which all concede should be made, and such as are found in all modern cemeteries and that should become features in all grounds, but which are not likely to be, unless we take it upon ourselves, as members of this association, to bring the best thoughts that the meetings give us directly to those in control of the cemeteries which we represent."

"From the present outlook it would appear as if our country had once more entered upon an era of general prosperity; signs of improvement and increasing confidence grow on every hand. Under these improved conditions our respective cemeteries will undoubtedly share in the general prosperity, purchasers will feel that they can select larger and better lots, thus giving us more means with which to carry on our improvements, and let us hope that the managers or trustees in control will feel better able to send representatives to our meetings."

Several of the suggestions made in the address were acted upon at a subsequent session.

The annual report of Secretary and Treasurer Eurich stated that twelve new members had been admitted, two deaths had occurred and several names were stricken from the list for non-payment of dues. The membership, exclusive of those added at New Haven, was 147. The receipts for the year were \$792.14; disbursements, \$780. Included in the latter is the cost of printing and binding a selection of the best papers read before the conventions during the past ten years and printed under the title of "Modern Cemeteries." A large edition of these books was issued and are on sale by the Secretary.

Difficulties confronting Cemetery Superintendents, by G. C. Nailor, Superintendent Riverview Cemetery, Wilmington, Del., was the first paper on the program. Mr. Nailor did not attempt to enumerate all of the difficulties, many of them being the outcome of local conditions that must be disposed of by means that seemed best to the superintendent. The superintendent in charge of a cemetery conducted on the modern lawn plan knows little of the difficulties that confront the man who has to superintend grounds that have been established a half century or more. To educate the lot owner out of

the old ideas and get him to grasp the beauties of the new is often a difficult task but one that can be accomplished. The sad circumstances under which the superintendent becomes acquainted with his lot holders are peculiar and the future relationship that must exist depends very largely upon the manner in which the superintendent conducts himself. A word of sympathy to a bereaved lot holder will lessen the possibilities of future difficulties. In cemeteries where the superintendent, in addition to his other duties, is expected to attend to office work and conduct the financial affairs on an economic basis, he assumes marked responsibility and becomes the main spring that drives the entire business. Having been assigned to our duty, it should be fulfilled even if the way does seem dark.

Frank Goodwin, a young boy of Jamestown, N. Y., sent a voluntary contribution on the subject of Sunday Funerals. His plea for a proper observance of the Sabbath was listened to with much interest. "It is the self-respecting citizen who is the real power, and when he realizes his duty in this direction Sunday funerals will gradually be discontinued," was the conclusion held by the writer.

Mr. Edward C. Beecher of the New Haven City Burial Ground read an interesting historical paper on "The early Cemeteries of New Haven." This paper covers a period of over 250 years and is such a valuable contribution to the historical cemetery literature of our country that it will be published with illustrations in a subsequent issue of PARK AND CEMETERY.

Other papers read during the afternoon and evening sessions were as follows: "The Influence of Modern Cemeteries," by N. C. Wilder, Spring Grove Cemetery, Hartford, Conn.; "Some of our Lot Owners at Home," by Sid J. Hare, Forest Hill Cemetery, Kansas City, Mo.; "How to Make Single Grave Sections Compare Favorably with Other Sections," by F. D. Willis, Secretary and Treasurer Oakland Cemetery, St. Paul, Minn., and "Sepulture and Civilization," by Hon. L. P. Deming of the Fair Haven Union Cemetery.

The subject of Mr. Willis' paper is one of peculiar importance in every cemetery. He said:

"From the view point of an observer the subject of these notes appears to be one of the most difficult problems which confronts the superintendent.

"In the improvement of the lot sections only the tastes of one person or family have to be consulted, guided or controlled for each lot containing an average of six or more graves. In the single-grave sections the same question is met for each grave. Perhaps the conflicting ideas of two or three families must be consulted and harmonized.

"In addition to the above may be noted the indiscriminate flower planting on and the decoration (?) of the graves with the favorite playthings of the dead. As this planting and decoration seldom last many years, their influence is but transitory and

may be dismissed as a factor in the final appearance of the ground.

"Single graves are usually used by people who are poor or in exceedingly moderate circumstances. Generally very sensitive in all matters which concern their dead if any rules or regulations are adopted for the single graves which are not applicable to lot sections they feel that discrimination is made on account of wealth and that they do not enjoy the same privileges as their more fortunate brothers.

"To accomplish the best results the co-operation of all of the officials of the cemetery is absolutely necessary. A few simple rules must be adopted and enforced.

"The height of markers should be uniform throughout the cemetery preferably level with the surface of the ground.

"Single-grave sections when filled should be sodded level. No gravel walks should be permitted. The grass walks may be indicated at the avenues by markers or corner posts set level with the surface.

"The graves of any given length should be uniform in width, thereby avoiding the jumbled appearance which stones frequently have where the graves are of varying width.

"The planting of trees and shrubs should be governed by rules similar to or the same as those for lot sections, viz.: nothing should be planted which would interfere with the next neighbor. This rule would prohibit all shrubs and trees which throw up suckers or root sprouts.

"As the single graves yield the smallest revenue and require the greatest labor during the first few years after burials of any part of the cemetery, it is always a serious problem how much should be expended in their care until the final settlement of the graves, the filling, sodding and finishing of the section after which no extra or special care is needed. And if the right course has been pursued from the beginning the single-grave sections will then compare favorably with other sections."

In the discussion that followed this paper it was found that a number of cemeteries were conducting their single grave sections very closely in line with the suggestions of the writer.

At the close of the evening session light refreshments were served by the local committee and a pleasant social hour was spent.

The program included sixteen papers all but two of which were read. Rev. J. F. Corcoran of the St. Lawrence and St. Bernard Cemetery Association of New Haven, in his excellent paper on "Sunday Funerals" said "The key note to the solution of this question seemed to hinge on the word necessity, for when imperatively necessary the reasons against Sunday funerals are not cogent but when unnecessary as they usually are, the very same reasons have full force."

Admitting the reasonableness of Sunday funerals under certain conditions the paper gave convincing reasons why it is the duty of Christians to discourage them. "To say the least they are not in keeping with the Lord's Day and should therefore be abolished."

"If annual planting or embellishment of lots is discouraged or reduced, can the interest of lot owners be maintained?" This question was answered in the affirmative by T. McCarthy, superin-

tendent, Swan Point cemetery, Providence, R. I., whose suggestive paper will be found on another page.

This subject always provokes discussion pro and con, the growing sentiment however favors moderation in the restrictions, with a tendency towards having all planting done under the immediate supervision of the superintendent.

Mr. C. M. Loring, of Minneapolis, Minn., one of the founders of Lakewood cemetery of that city and who is often spoken of as the father of its park system, in a brief address outlined the policy of "Lakewood" where perpetual care is provided for the entire cemetery. The single grave sections are as well cared for as the lots of the well-to-do lot owners. In his experience it did not seem advisable to allow individual planting on lots. Mr. Loring took occasion to advocate the enactment of state laws that would prohibit operating cemeteries for profit.

The reasons why cemeteries should advertise and several mediums best suited to the purpose were discussed in a paper on "Cemetery Advertising" by R. J. Haight of Chicago. Secretary Eurich read the paper on "Beauties and Benefits of Modern Cemeteries," written by George H. Scott, Chicago, who could not be present. The beauty of a modern cemetery consists of its properly laid out grounds, its perfect drainage, gracefully curving well made and well kept roadways, the careful grouping and planting of trees and shrubs, its well made lawns, its sylvan groves and quiet nooks, its lakes and generally well-cared for appearance; the serenity of such a place causes one to conclude with the poet that:

"If there is peace to be found in the world,
A heart that is humble, might hope for it here."

The benefits of a modern cemetery are manifold, they come alike to the superintendent, the lot holder and the visitor. The character of the surroundings leave their restful impress upon all who come within their influence and do much to banish from the meditative mind all fear of death.

An interesting paper on the Public Parks of New Haven, by Henry T. Blake, president of the New Haven Park Commission, was read by Mr. Burton Mansfield. It will appear with illustrations in a subsequent issue of PARK AND CEMETERY. In a brief paper on "Cemetery work during the winter months," Mr. Charles Nichols, superintendent Fairmount cemetery, Newark, N. J., said that the most difficult work at this season is the digging of graves in the frozen ground, which is only accomplished with much labor. In the single grave sections in this cemetery the ground is covered to a depth of about six inches, with leaves which afford

protection from frost and save labor in digging graves. Tents are erected to protect the workmen from the driving storms of rain and snow and also to keep the graves dry before interment is made. Workmen are provided with rubber coats and boots. Mr. Nichols said that efforts were still being made to discourage the custom of removing hats during funeral services at grave during cold weather. This is the source of many colds and sickness that frequently results in death. The proper exercise of horses in winter when their ordinary work cannot be done is important and the comfort of the workmen should also have attention.

Mr. H. J. Diering, Supt., Woodlawn cemetery, New York, in his paper on "Funeral attendance at the grave, appliances for lowering caskets, and protection of mourners," urged the importance of having cemetery workmen properly attired especially when attending to funerals. In a cemetery where there are a number of funerals daily he favored the use of straps as a means of lowering caskets for reasons of economy in time and money. The protection of mourners while at the grave demands serious consideration. At Woodlawn shelter tents afford protection from sun or storm, cocoa matting in the tents and around the grave overcomes the possibility of exposure to dampness and camp chairs for the immediate members of the family greatly adds to their comfort during the funeral ceremonies. Such attention to lot owners is appreciated and results in commendation for the cemetery.

W. H. Barlow, president of Dale cemetery, Sing Sing, N. Y., read a paper that he had originally prepared to read before the trustees of his cemetery. It gave a very graphic description of cemeteries visited by Mr. Barlow while on a recent trip to the Pacific coast.

The officers elected for the year 1900 are as follows:

President, William Stone, "Pine Grove," Lynn, Mass.; Vice-president, George M. Painter, "West Laural Hill," Philadelphia; Secretary and Treasurer, H. Wilson Ross, "Newton," Newtonville, Mass.

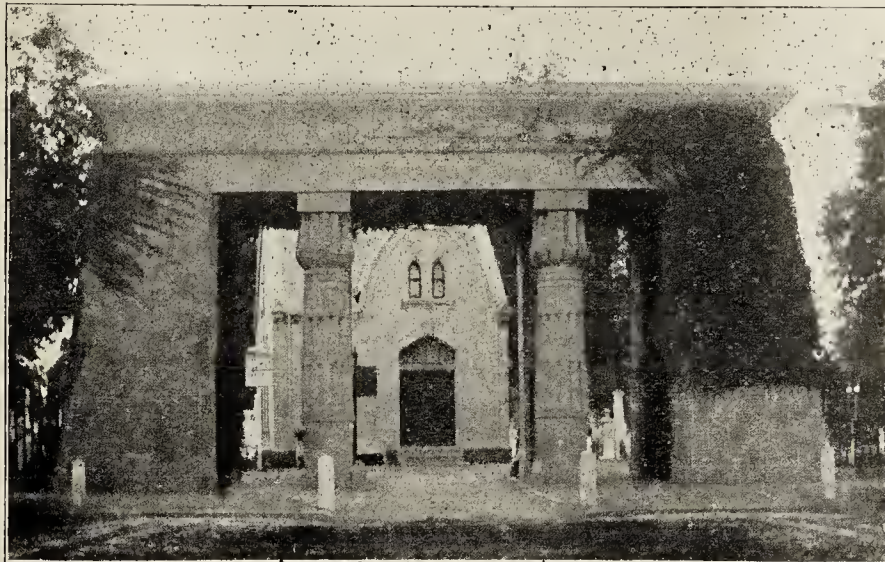
Advisory Committee appointed for three years, two years and one year respectively: Frank Eulich, Detroit, Mich.; Wm. Salway, Cincinnati, O.; Mathew P. Brazill, St. Louis, Mo.

The next annual meeting will be held at Cleveland, O. Messrs. J. C. Dix, Frederick Green and T. C. Carroll of that city, constitute the Executive Committee.

Appropriate resolutions were adopted on the death of Mr. Henry Ross, of Newton, Mass., for many years an honored member of the association.

The beautiful Elm City, rich in place and objects of historic interest, afforded most delightful opportunities for outings that were thoroughly enjoyed by the visitors. The local committee composed of the officers of the several city cemeteries made the most of the time allotted by the program to sight seeing and entertained their guests in a

manner that will long be remembered. The pilgrimage to the Grove Street cemetery had an added interest after listening to Mr. Edward C. Beecher's historic address on "The Early Cemeteries of New Haven." This burial place was incorporated in 1797 and within its sacred walls lies the dust of many whose names are illustri-



ENTRANCE TO NEW HAVEN, CONN., CITY BURYING GROUND. CEMETERY ESTABLISHED IN NOVEMBER, 1797. ENTRANCE BUILT IN 1845.

ous in the history of this country.

Mr. Beecher's paper and illustrations of some of the monuments to be seen here and under the old Center church on the Green are reserved for a later issue. An afternoon carriage drive afforded an opportunity for seeing Evergreen, Mapledale, St. Lawrence and other cemeteries, the residential portions of the city and the parks. "Evergreen," the principal protestant cemetery occupies 60 acres, entirely within the city limits. It was established nearly 50 years ago on the mutual plan, a board of five trustees being elected annually by lot holders. The present treasurer and secretary, Mr. James D. Dewell and Mr. Benj. R. English have held their respective offices for 32 years. The grounds are not conducted entirely on the lawn plan although an effort is being made in this direction. There are fountains with adjacent reservations for ornamental planting; some very fine trees, and single grave sections were especially noteworthy, the ob-

PARK AND CEMETERY.

jectionable features so common in such sections being conspicuous by their absence. The objective point of this exceedingly pleasant afternoon ride was East Rock situated in a beautiful mountain park and reached by circuitous roads through some of the most rugged scenery. The Farnam and English drives which traverse this mountain park are enduring monuments to their public spirited donors.

East Rock has an elevation of 362 feet and affords magnificent views of the surrounding country, the shores of Long Island twenty miles away being plainly visible. On the summit of the Rock rises the Soldiers monument, a massive granite column over 100 feet in height, a spiral stairway to the top of the column extends the range of vision and makes even more impressive this magnificent view. The return drive was by Hillhouse avenue and other beautiful thoroughfares arched with noble elms.

An early morning visit to the Yale University buildings was a rare treat. In the afternoon a five mile trolley ride brought the party to Lighthouse Point on the East Shore, where after spending an hour on the beach, a shore dinner, with a tempting menu of sea food, was served and heartily enjoyed. Ex-Lieut. Gov. Dewell presided as toast-master and after some very happy addresses the long to be remembered New Haven meeting came to a close.

Suitable resolutions were adopted thanking the New Haven cemeteries and the Cedar Hill Cemetery Company, Hartford, for their hospitable entertainment and many courtesies extended the association.

On Friday morning special cars were attached to one of the regular trains on the N. Y. N. H. & H. R. R., and the party went to Hartford as the guests of the officers of Cedar Hill cemetery of that city. A luncheon was served at the Hotel Hartford, on the arrival of the train, after which Bushnell Park, State House Park and the Capitol were visited. The latter occupies a commanding site overlooking fifty acres of undulating park lands, within a short walk of the very center of the city. An hour was very profitably spent in viewing the beautiful building and its surroundings. Trolley cars conveyed the party through the city to Cedar Hill cemetery. Here for several hours the visitors roamed at will over the 260 acres discussing the many features that go to make up a modern cemetery. Cedar Hill is beautifully situated and very appropriately named.

On either side of the main entrance are the office building and waiting home forming the Gallup Memorial Gateway; a driveway thirty-six feet in width and nearly one thousand in length, protected on the north side by a compact belt of Norway Spruce and other evergreens, and on the opposite side by a more sparsely planted row of maples,

bordering a lake, leads to the sections used for burial purposes. This portion of the grounds is said to be the highest land around Hartford, on clear days it is possible to obtain views of Mt. Tom, 38 miles distant. The largest and probably the oldest white oak tree in the country is an object of interest here. The grand old monarch of the forest has a trunk exceeding six feet in diameter and a spread of branch of more than 100 feet. The tree is said to be nearly 500 years old and although it has long since stopped growing it is in a good state of preservation.

The original plans for Cedar Hill provided for large sections with ample room between lots for ornamental planting, thus affording a proper setting for monuments as well as giving character to the grounds. There are many imposing monuments, and a large memorial chapel at the entrance for those who wish to have funeral services at the cemetery. The well-known landscape gardeners, Strauch and Weidemann were connected with this cemetery in its early days and it is the last resting place of the latter, who died in New York some years ago.

Again resuming the trolley cars the party returned to the Hotel Hartford where they were tendered a banquet by the officers of Cedar Hill cemetery Co. The Hon. Miles B. Preston, Mayor of Hartford extended a cordial welcome to the visitors, several speeches were made and the very enjoyable convention came to a close.

* * *

Among those in attendance at the convention were: W. O. Roy, Montreal, Canada; R. D. Boice, Geneseo, Ill.; Wm. Stone, Lynn, Mass.; John F. Boerckel, Peoria, Ill.; Edward G. Carter and wife, Chicago; John R. Hooper, Richmond, Va.; Geo. W. Creesy and wife, Salem, Mass.; W. A. Mortow, Hillsboro, O.; C. D. Carroll and wife, Cleveland, O.; Chas. M. Chamberlain and wife, Maspeth, L. I.; C. A. Stiles, Malden, Mass.; James C. Scorgie, Cambridge, Mass.; Sid J. Hare, Kansas City, Mo.; O. C. Simonds, Chicago; J. C. Dix and wife, Cleveland, O.; Jno. T. Mellor, Jersey City, N. J.; Wm. Harris, Alleghany, Pa.; James Currie and wife, Milwaukee, Wis.; James Warren, Jr., Providence, R. I.; Wm. Salway and daughters, Cincinnati, O.; Lucius P. Deming, New Haven, Conn.; Edward C. Beecher, New Haven, Conn.; A. B. Forrest, Raleigh, N. C.; James D. Dewell, New Haven, Conn.; Burritt Chaffee, Syracuse, N. Y.; Wilfred Ford, Westville, Conn.; D. B. Snow, Benj. R. English, Burton Mansfield, New Haven, Conn.; Charles D. Parmelee, Fairhaven, Conn.; Geo. A. Harvey and wife, Belleville, Ill.; R. J. Coryell, Detroit, Mich.; Wm. H. Barlow, Sing Sing, N. Y.; J. D. Brownell, Chicago; F. A. Sherman and wife, New Haven, Conn.; Geo. C. Van Atta, George Markley, Newark, O.; Burton H. Dorman, Bridgeport, Conn.; G. Scherzinger and wife, Fon du Lac, Wis.; E. C. Abdil, Danville, Ill.; W. H. Gladden, New Britain, Conn.; Thos. Wightman, Pittsburg, Pa.; David Woods, Pittsburg, Pa.; G. C. Nailor, Wilmington, Del.; Robt. Scrivener and wife, Hartford, Conn.; Eugene V. Goebel, Grand Rapids, Mich.; N. C. Wilder, Hartford, Conn.; J. G. McArthur, Pittsfield, Mass.; John J. Stephens and wife, Columbus, O.; John H. Scofield, Stamford, Conn.; Wm. T. Leckwood, Tarrytown,

N. Y.; Edward A. Sloan, Ironton, O.; T. H. Wright, Covington, Ky.; George M. Painter and wife, Philadelphia, Pa.; H. J. Diering and wife, New York, N. Y.; Mrs. Emma E. Hay, Erie, Pa.; Henry Bresser, Toledo, O.; F. E. Haskell and wife, Portland, Me.; Timothy McCarthy, Providence, R. I.; John M. Boxell, St. Paul, Minn.; H. Wilson Ross, Newton Centre, Mass.; James H. Morton, Boston; Arthur W. Hobert and wife, Minneapolis, Minn.; Levant L. Mason, Jamestown N. Y.; Augustus Reinhard, Orange, N. J.; Frank M. Floyd and wife, Portland, Me.; Perry W. Goodwin, Jamestown, N. Y.; Thomas White, Fairhaven, Mass.; S. C. Penrose and wife, Wilmington, Del.; John C. Reid, Detroit, Mich.; John R. Wilhelm, Defiance, O.; W. H. Druckemiller, Sunbury, Pa.; John Gunn, Whitinsville, Mass.; N. T. Bulkeley, Danbury, Conn.; B. B. Morehouse, Cortland, N. Y.; T. Elsasser, Philadelphia, Pa.; W. H. Davis, Newark, O.; Mr. Schrader, Mystic, Conn.; C. M. Loring, Minneapolis, Minn.; R. J. Haight and wife, PARK AND CEMETERY, Chicago.

ANNUAL PLANTING OR EMBELLISHMENT OF CEMETERY LOTS.*

"If annual planting or embellishment of lots is discouraged or reduced, can the interest of lot owners be maintained?"

This is a very delicate and debatable subject and is governed so much by local customs, prejudices or financial interests, that I had better go slow; in fact, a man should be as careful in selecting his subject as he would be in selecting his ancestors.

That we all love flowers goes without saying, and if love and affection must have some outlet surely plants and flowers are the most appropriate and beautiful; and yet profuse mourning and floral displays are not always reliable evidences of grief, and both often attract public attention or curiosity or invite uncharitable comment. That flowers have been overdone might be assumed from the death announcements in the daily papers. "Please, or kindly omit flowers," "Burial private," etc., are evidences of reform among the educated and wealthy, which the poor would do well to imitate.

Now, if I understand it rightly, the aim of this association and the mission of a superintendent is to discourage all lavish expenditure in floral displays and other outlays which the poor can ill afford; hence we have discouraged the costly curbing, tall head stones, iron fences, railings, hedges, etc., of the old graveyard for the green turf and well kept cemetery of to-day, and no one will say that interest in cemeteries has suffered or decreased, except perhaps in the less frequent visits of lot owners to make repairs, etc.

For similar reasons annual plantings (by lot owners), being perishable and costly, should be discouraged, their utility and beauty, after the first frost and the bill goes in, is not so apparent, and often disturbs the family, and the happy relations that should exist between lot owners and the cemetery. The less bills they pay the less their minds are concentrated on their individual lots, and the more they admire the cemetery as a whole, and we are at peace with our people.

The hope of maintaining interest in the cemetery by lot owners annually planting is too precarious and as

fleeting as "grief and wealth." I imagine that I could make a cemetery beautiful if people would let it alone and not cover it with "spread-eagle flower beds," or a "granite yard of headstones." People do too much (especially the poor) who love and pay dearly to have their own way; in fact, it is only in the cemeteries of the wealthy that rules prohibiting the costly things that I have mentioned are enforced. If arbitrary rules are not in force, advice and precept may have good effect, although it were much better if trustees or superintendents of cemeteries adopted some standard of style or fashion as a guide for lot owners who usually follow or imitate what somebody else does.

The public did not tell the great masters of architecture, painting or music what they would like. No! these great men created and made something that was pure and good and the public appreciated it, and the taste and demand increased for that which was the highest, purest and best. To this end the cemetery through its directors or superintendent takes the place of the individual lot owner by embellishing the entire cemetery rather than the individual lots, and thus making pleasant the visits of the living by beautifying the last resting place of the dead.

In the cemetery under my charge there are not a dozen flower beds or borders planted or paid for by lot owners, still I imagine that the interest of the community and lot owners is annually increased and maintained. Even the interest of my critical and obstinate brother superintendents we hope to maintain. It is small credit to us if we cannot maintain an increasing interest and perfection in our cemeteries as the years roll by without annual planting.

That we should anticipate the possible desire of future lot owners by planting reserved spaces and surroundings with hardy trees, shrubs and plants leaves little or nothing for the lot owner to do, and, as your lots are your "stock in trade" and your principal source of income, they will please and show to the best advantage, and their value must be increased, as the purchaser can see for himself, and not have to draw on his imagination or the advice of the plant agent or florist, or to cemeteries that cater to every source of income.

Of course cemeteries must make money, and no matter what talents or virtues a superintendent may possess, his usefulness is often measured by his ability to make money. Still timidity or a penurious policy will not pay or maintain the interest of lot owners. The more you spend in beautifying the grounds or lots with hardy subjects the higher will (what you have to offer for sale) be valued; the more surely will you provide what the public need, what they demand and will have, even if they have to die to get it, and if your cemetery or corporation does not give it some other corporation will.

Devote our energies and means then to permanent works and plantings rather than to annual and perishable displays, and the interest of lot owners and the community will be increased and maintained as plantings and trees grow more beautiful and attractive year by year.

*Paper read at the New Haven Convention of the Association of American Cemetery Superintendents. By Timothy McCarthy, Providence, R. I.

THE BURNS MONUMENT, BARRE, VT.

On July 21, it being the 103rd anniversary of the poet's death, there was unveiled at Barre Vt., with ceremonies impressive and enthusiastic, a granite monument to the memory of the immortal Scotch bard.

The press gave considerable space at the time to a description, both of the occasion and the subject, but it is fitting that emphasis should be laid on the splendid results of the efforts of the Burn's Club of Barre, an association of some fifty members, and its effect on the community which so readily and cordially supported them.

This statue of Burns at Barre means a very great deal, and may be viewed from several stand-points. It stands for the homage which all true Scots naturally pay to the poet who has made Scotland's charms and Scottish character known throughout the world, and the beauty of it is that the main spring of his work was love for his creator and his fellow man, and an exposition of the "beatitudes," which has been a power in the world since his poems have been the world's property.

Then it will stand for patriotism and be an educating influence of wondrous effect. Burns'

character was essentially manly, throughout all his sufferings and misfortunes his manliness stands prominently forward. Sturdy manliness, spiritual refinement, high ideals—it is well to embody them in some form before every schoolhouse. In this sordid period of American history the study of Burns' writings must always be a bracing influence in every life.

The material from which the statue has been cut leads to the practical and suggests that it marks an era in the granite industry. Much has been written and said concerning the unsuitability of granite as a material to display the carver's art, and in a certain sense this was true in the past, and while more refined materials exist it will be true in the future. But with the introduction of the pneumatic tool and the modern appliances of the shop, new possibilities have arisen, and this statue of the poet Burns is a remarkable manifestation of such possibilities. On the pedestal there are four panels, illustrating scenes por-



THE BURNS MONUMENT, BARRE, VT.

trayed in the poets' writings, quite intricate in detail, requiring most delicate handling, which was very successfully accomplished. The work was executed by Messrs. Barclay Bros., Barre, who donated the statue; this was modeled by Mr. J. Massey Rhind, and the panels by Mr. King of Milford, N. H.

THE CARE OF TREES ON THE STREETS OF CITIES.*

I assure you it affords me a great deal of pleasure to respond to a call to speak on the subject of the clothing that an all-wise and beneficent Creator has so bountifully bestowed upon the whole realm of nature; and I thank you for the opportunity given me to address you on this occasion on the subject and in behalf of Nature's Giants, "The Trees."

Now, while the form of the question before us "The Care of Trees on the Streets of Cities," is at the same time both comprehensive and incomprehensive, inasmuch as the variety and treatment of trees on the streets of cities differ on account of location and climatic conditions; hence, one prescribed form, while eminently successful in one city would be inapplicable and unsuccessful in another perhaps. I will, therefore, confine my remarks to the care of trees on the streets of our own city, Philadelphia. And when we consider the fact that on the city plan there are over 2,000 miles of streets, and over 1,000 miles open and occupied, we have sufficient food for thought in the trees of our own city without going elsewhere.

The subject of trees on our streets, in its many and varied aspects, is quite an extensive one, and, as the time for its consideration to-night is limited, it will be necessary for the conveyance of a general and practical idea, to condense its consideration as much as possible. I will, therefore, proceed under the following headings:

1. The suitable variety to plant. 2. The selection of the trees. 3. How to plant and when. 4. Pruning at the time of planting. 5. After care and attention and general remarks.

In my opinion the most desirable varieties to plant in Philadelphia are as follows: *Platanus Orientalis*, or Asiatic Plane; *Acer Saccharinum*, or Sugar Maple; *Acer Platanoides*, or Norway Maple (Pyramidal type); *Acer Dasycarpum*, or Silver Maple; *Liriodendron Tulipifera*, or Tulip Poplar; *Populus Balsamifera*, or Balsam Poplar; *Tilia Americana*, or American Linden, and *Ulmus Americana*, or American Elm.

There are others that are less desirable for reasons obvious, a few of which I will enumerate: *Acer Pseudo-Platanus*, or Sycamore Maple; *Æsculus Glabra*, or Horse Chestnut; *Ailantus Glandulosa*, or Tree of Heaven; *Catalpa Speciosa*, or Indian Bean Tree; *Salisburia Adiantifolia*, or Gingko; *Tilia Europaea*, or European Linden, and some few others.

Having decided on the variety to be planted, the next in order is the selection of the trees. This is a very important matter, for we must not lose sight of the fact that nurserymen very properly select locations most suitable for the growth of trees, where the soil, moisture, both subterranean and atmospheric, and other climatic conditions harmonize, and are in every way adapted to the luxuriant growth and development of the trees they eventually offer for sale, consequently in bringing trees from the nursery to our streets, where they have to combat contra-conditions for an existence; and it is imperative that the trees be healthy, vigorous,

free from scars or wounds and insects in any form, and having an abundance of energetic fibrous roots with robust and straight stems. Having made the selection both in quantity and quality, how and when to plant is next in order.

Years back when the winter set in before the expiration of the autumn season, and the spring followed closely on the heels of winter, the spring season was preferable for planting, but now the seasons being erratic, and often vice versa to what they formerly were, I have found it profitable to change my tactics and plant in the fall season, with the exception of the Liquid-amber, *Liriodendron*, and one or two other varieties that have succulent roots, for which the spring season is the best. We will now consider how to plant. The streets of Philadelphia contain, generally speaking and in greater or less degree, matter that is not only deleterious to the growth of the tree, but in many cases kills the tree outright. We find ashes, gravel, blue clay and other sterile soil, seasoned with brick bats, tin cans, antiquated shoes, etc., etc., the whole being impregnated with gas and other noxious odors, all of which form a combination exactly opposite to what the tree has been accustomed to, and to which it must adapt itself or die. However, the several thousands of trees that have been planted on our sidewalks and other places under my direction bear evidence by their luxuriant growth and development that this difficulty can be overcome. On unpaved sidewalks the operation of planting is decidedly easier and less expensive than on paved sidewalks, for there is nothing but plain digging to be done, while on a granolithic pavement the crowbar takes the place of the spade and the operation is slow and tedious.

The rule I adopted four years ago, and which has proved successful, is this: On an unpaved sidewalk, where nothing obstructs, the hole for the tree should be dug three feet square and three feet deep and refilled with rich earth free from all deleterious substances. On a paved sidewalk, where the aperture is about two feet only, excavate till at least a full size cartload of rich earth can be deposited in the hole made, the depth being considered rather more than the width in this case.

In filling in the new soil about half a bushel of oyster shells should be mixed in, which will absorb and render harmless the gas which is poison to tree life, and which percolates through the sub-soil throughout the city from the numerous gas-mains, etc. Care must be taken to firm the earth as it is filled in, and in the performance of this operation the human foot is far preferable to the rammer, the elastic tread of the former produces a better firming effect, and excludes the air far better than the latter. In planting the tree carefully observe the surface mark on the stem and avoid planting too deep. My rule is to raise the tree one or one and a half inches above the mark of the nursery ground line, so that when the ground sinks to its normal condition, which it invariably will, however well firmed or rammed, the tree will then be at its proper depth. Before passing on it is necessary to add that an ordinance of councils requires trees, awning posts, etc., to be

*An address delivered at Horticultural Hall, Philadelphia, Aug. 1, 1899, by John C. Lewis, City Forester and Landscape Gardener.

placed not less than 14 inches from the outer edge of curb, so that collision with the hubs of wagon wheels will be avoided.

The next heading is pruning at the time of planting. It is unreasonable to suppose and expect that nature can maintain the luxuriant and symmetrical form of a tree produced by several years growth under the most favorable conditions. When that tree is brought into the city and subjected to contra-conditions nature will assert and strive to adapt itself to the existing conditions it is true, but without skillful assistance it will fail in the attempt and the tree will succumb. Pruning is necessary both in the branches and roots. In my opinion, as the root is the most important feature of a tree, it should receive the first and greatest attention. The ends of all trunk roots should be pruned off, broken roots removed, and any cancerous or fungoid growth, however minute its appearance may be, must be pruned away, the operation being performed with a sharp knife and not by shears. Of the use of shears I will speak a little later on. Now as to head pruning. Practice teaches us that the beautiful symmetrical form of the tree obtained by the patient and skillful assistance to nature by the nurseryman in the trees natural element, cannot possibly be maintained under adverse conditions. The only remedy, therefore, is to extend further assistance to nature by judicious pruning into a reduced symmetrical form natural to the true type of the tree according to its variety, thereby relieving the tree of a burden it cannot possibly carry, and assisting it to reproduce itself in a healthy form under its new conditions.

The results of the foregoing methods are to-day in evidence in several parts of our city, especially so on the sidewalks surrounding Allegheny Square, which is situated on Allegheny avenue and Belgrade street; John Dickinson Square, Third and Tasker streets, and Wharton Square, Twenty-third and Wharton streets. At each of these places the sidewalk pavements are granolithic, and the surrounding streets are surfaced with Belgian blocks and asphaltum respectively.

Continuing, we will consider the after care and attention of the trees we have now in our mind's eye planted. I do not in all cases agree with the practice of puddling the roots of trees immediately prior to planting, but prefer giving a liberal supply of water at the close of the firming. When the water has disappeared the soil should be filled in slightly above the surface line and leveled off without further treading or firming, and if the weather be dry the earth should be kept moist by an occasional watering. This applies to spring planting only, for rarely, if ever, is it necessary to water trees that are planted in the fall season. The infant forest giant has many enemies to contend with when ensconced on our sidewalk, aside from the underground conditions. The cart-driver frequently breaks off a branch to switch his horse; the small boy loves to swing around and around its bending stem; at night cats may be seen sharpening their claws in its bark, from which wounds are made; the boy with a knife (and what boy hasn't a knife?) is very fond of trying it on every tree, especially a young, newly planted tree

with tempting smooth bark; he passes, and older boys that are supposed to know better, do not hesitate to hitch their horses to the convenient sidewalk tree; the horse at once gnaws at the bark or young shoots, or both, and often leaves it irredeemably mutilated; and then the caterpillar pest, with which many portions of our city is infested at this present time, neglect for the want of watering, and several other adverse contingencies could be named, atmospheric gases and influences, etc., etc., and yet some people wonder why their trees do not thrive, and endeavor to compare their friends trees in the country with theirs on their sidewalk, failing to consider the wide difference of the conditions of the two.

Experience has taught me that the antiquated tree box, the wood or metal frame tree guard, is very little service to the tree, but rather, on the contrary, is injurious, as also the wooden stake or support, except perhaps in the case of the latter in very windy and exposed conditions. To guard the tree from the attack of its worst enemies, I find the half-inch mesh, galvanized wire cloth placed loosely around the stem and fastened with wire, to be not only economical but the most protective of all the several designs of so-called tree guards. This can be removed or enlarged at will according to the requirements of the tree. It is proof against the grasp of the swinging boy, the claws of cats, the edge of the jack-knife, the death dealing bite of the horse, and forms a comfortable rendezvous for the caterpillar to go into the cocoon stages of its existence, and, being easy of removal, this pest in this form can as easily be annihilated and the tree preserved.

We have now reached our last heading, "General Remarks." Referring back to the pruning question I recommended the use of the knife in preference to shears, and the reasons for my preference for the former are as follows: The drawing together of the tissues by the action of the shears bruises them, leaving a rough surface and causes decay, and this applies to branches as well as to the roots, whereas the knife leaves a clean smooth surface, and the liber or inner bark forms a callous covering from which new fibres start and form roots, thus supplying new feeders to the tree. In reference to the branches, the shears leave the ends rough and bruised, and death to the immediate part is the result. Decay sets in, and time will tell us whether one inch, one foot, or the whole branch succumbs to the operation. Whereas, if the knife is used the liber exerts itself and gradually envelopes the wound till it disappears from view. I do not by any means wish to disparage the use of shears for general purposes, for in this time of keen competition they cannot be dispensed with, for both shears and the knife can be used. The shears can do the trimming, but the knife alone can do the pruning. The operator can go over the tree, both root and branch, with the shears, trimming the parts an inch or so beyond the pruning point, and then follow with the knife and do the pruning expeditiously. The foregoing applies only to small trees, such as are usually planted on our streets. In larger trees both shears and knife are laid aside and the saw and broad chisel are used.

I have offered as evidence, in support of the methods here recommended for street tree planting, those trees surrounding the small parks named, and, in support of the enlarged method of pruning several thousand trees and many of the largest, are to-day in evidence in our beautiful Fairmount Park. I could there point out to you numerous amputations, some of which extended over twelve inches in diameter, that are now nearly covered with new bark, and thousands of others that are entirely covered, and but for my association with the trees themselves even I could not locate the parts pruned. After pruning all wounds from one inch and upward in diameter should receive a coat of paint, which will prevent the decay of the heart wood, and the kind used in my many years of practice is boiled linseed oil colored with lamp black. Why I prefer this and not coal tar put on hot, as some recommend, is because linseed oil is a vegetable production and therefore analogous to the tree, while coal tar is a mineral production and contains carbolic acid, which is injurious to plant life. It is optional whether lamp black is used or not, the only recommendation it has is that it turns to an invisible green color in a short time and thus hides the bareness of the amputation, and without which the wound in a large tree would be very conspicuous.

Among the many drawbacks incident to the life of a city tree is the contraction of its outer bark. The roots may take hold of the soil, which we can tell by external evidence in the growth and vigor of the branches, but sometimes a check occurs and the tree stands still. This, I find, is caused by being bark-bound, or, as we would say in reference to an animal, hide-bound. The reason that I ascribe for this is that vegetation in the city, especially in the more crowded parts, does not receive the full benefit of the nightly dew. The dew falls over the city as well as the country, but the smoke, heat and gaseous vapors arising from the city either absorb the dew or impregnate it to such an extent that it loses its life-giving properties and destroys its efficiency. Now, to remedy this bark contraction, I find scoring gives relief to the tree. This is performed by drawing the point of a sharp knife down the stem to the ground, leaving a furrow from top to bottom. The salutary effect of this scoring process will be discernible in a very short time by the renewed energy of the buds and twigs or infant branches of the tree. Having guarded the tree from all injurious attacks of all of its enemies here enumerated, there remains yet another to combat, namely, the caterpillar, the second army of which is now so strongly in evidence throughout parts of our city.

Doubtless all here present remember the disastrous state of affairs in the matter of tree life that existed in our city four or five years ago, caused by the ravages of the tussock moth and its numerous progeny, the hairy caterpillar. To say nothing of the trees on the streets and in private grounds, our small parks and squares were not only denuded of the foliage and rendered shadeless, but were practically deserted by pedestrians and the rest seeking public, for in sitting on the benches or even passing through, the pest dropped down from the trees in such numbers that many persons carried

umbrellas to shield themselves from the rain, literally speaking, of caterpillars. And this occurring as early as the beginning of July, the thousands of citizens whose scant means or daily avocation prevented them from leaving the city during the heated term, were deprived of the life resuscitating advantages and health giving properties our public squares and small parks afforded them prior to the advent of the caterpillar, and which they now enjoy through the untiring energies of the bureau of city property. A tour of our small parks and squares will reveal the fact that less than 1 per cent of the thousands of trees owned and controlled by the city are leafless, and further, if the tour is made late in the evening, it would convey an idea of the appreciation shown by hundreds of thousands of our citizens and their families, of the provisions made by councils, and the carrying into effect of the same by the department, for the health, comfort and pleasure of our people at large. But to produce this has not been an easy matter. Time, thought and money have been expended, and the warfare must go on to preserve this state of affairs; and further, it is imperative that private tree-owners co-operate with the department by judiciously caring for their own trees, if they do not the pest remains, and year after year we will be subjected to its ravages. The destruction of the trees our fathers and grandfathers planted for us, to say nothing of those we have planted ourselves, goes on and the city is put to an unnecessary expense year after year.

I am gratified to state that many of our citizens have awakened to this fact, and frequently my office is visited by numbers desiring information on this all-important subject, and which is at all times cheerfully given. Time will not permit me to enlarge on this question of extermination, and sufficient to say that the means used by the department are three (3) and are as follows: Remove and crush or burn the cocoons whenever and wherever found, spraying with paris green in weak solution at the rate of one pound of paris green to four hundred gallons of water, or if necessity requires the strength is doubled. This, however, is the exception and not the rule. It is not the quantity of paris green used that renders it efficient, so much as the agitation and distribution of it. These are exterminators, while the third means is a preventative. The trees are girdled about six feet from the ground, with a device known as "Piller Catter, which consists of a cotton bandage to which an adhesive paste is attached. This prevents the caterpillar from ascending the tree and places it in a convenient position to be crushed. Now, while each individual tree owner cannot command the use of a steam sprayer, that cannot be used as an argument why his tree or trees are not protected from the caterpillar, for he can produce equal effects in a small way with an ordinary greenhouse syringe, as with a steam spraying machine, especially so if the number of his trees is limited to one or two, and those on his sidewalks, which are easy of access. With the aid of a tall stepladder, a syringe and a bucket of solution, a great number of the trees on our streets can be protected and preserved, and at a nominal cost.

HORTICULTURAL HALL, PHILADELPHIA.

Horticultural Hall, Philadelphia, is one of the few buildings left standing at the close of the Centennial Exposition in 1876. Standing as it does on an eminence overlooking a long stretch of the Schuylkill river, of easy access from the built up portion of the city and containing under its



VIEW IN INTERIOR OF HORTICULTURAL HALL,
FAIRMOUNT PARK, PHILADELPHIA.

spacious roof some exceedingly fine tropical plants, it is a favorite place in the winter season for those who delight to be among green trees and shrubs. I say trees, for there are veritable trees within its enclosure, seafortias, araucarias, arundos, camphor tree, cupressus and others are over fifty feet in height. These are giants for indoor growth, and intermingled with these specimens, are those of lesser growth, from tall shrubs to dwarfs of but a foot or so in height.

There are wings on each side of the building, reached by avenues, as shown in the illustrations. Then at about twenty feet from the ground is a gallery running entirely around the building, reached by a stairway at each end, the steps leading to it at one end showing in one of the pictures. The wings are used for different purposes. The one on the eastern side is devoted to ferns, chiefly; the one on the western, to economic plants, while that at the southern end is for the display of plants in flower. Special shows are held there in the spring. Azaleas, acacias, Indian rhododendron and other spring flowering plants are there. In late fall, chrysanthemums are the great feature, and that show more than any other seems to have the support of the public.

There are other houses detached from the building as well as many ranges of frames, mainly used for the production of budding plants for use in the summer display surrounding the hall, illustrations

of which have been given in previous issues. This display is a wonderful attraction to the public, almost from the time of planting till frost comes. There is a general desire for more of this style of display in other parts of the park, but the officials say care of the thousand and more acres of the park make such a hole in the appropriations that the means for artificial gardening are not at hand.

Well, the park as it is, is a great boon to the people. It is easily reached from the centre of the city, and to every one who goes there to see the flower gardening, there is a dozen go to wander under the shade of the fine old trees and sit under their stretching branches. And it is these people who should be first considered. They are nearly altogether working people or their families, through the week day it is the wife and children of some hard working man. On Sunday the husband himself is along, and how infinitely better it is for all to be there than to be panting for fresh air in the confines of the city!

Fairmount Park is eminently a peoples Park. There is abundance of room and shade, and thous-



ANOTHER VIEW IN HORTICULTURAL HALL,
FAIRMOUNT PARK, PHILADELPHIA.

ands on thousands of folks find room for themselves within its leafy bounds. Its boundary starts on the Wissahickon creek, at the northern boundary of the city, and extends through hill and dale to Fairmount Water Works on the Schuylkill, at the Green street entrance. Besides this immense park, Philadelphia has numerous small ones within its built up portion.

Joseph Mehan.

PARK NOMENCLATURE AND ACCOUNTS.*

There seems to be needed more definite terms in which to express the meaning of the variations in the earth's surface. Words of greater clearness to tell how we are influenced by natural scenery. While there are hundreds of words describing the difference, relations, proportions and correspondences of hills, rocks and water, yet we are in the A B C of nature's language, and the most advanced have only spelled out a few short stories.

The science of reading what is told in the modulation of the ground and its varied vegetation is not far advanced, and the art of the writing into a landscape thoughts and feeling is even less understood. The landscape painter has succeeded wonderfully well in giving meaning to the bit of landscape on canvas, but to make the ground itself speak to all who seek and listen is much more difficult. There is so much that cannot yet be interpreted. We must look for Nature's Rosetta Stone in the heart and not in the mind.

It would seem so far as if words for describing nature had been borrowed or transferred from other arts, with more or less appropriateness. It is only during the last century that an intelligent understanding of nature's forms and moods has been sought, and that form of beauty known as the modern park is hardly fifty years old, most of the parks having been born during the last twenty years.

Park work may become the greatest of all arts for it embodies them all. Like painting it depends on lines and colors. Like sculpture it is governed by form and proportion. Like architecture it is not found ready made but has to be builded. It influences the heart as music does, and thoughts and feelings can be written into the landscape more fully and clearly than in a book, for nature speaks a universal language. To illustrate, a raging tempest on the sea coast, beating against the rocks, produces similar emotion in the savage as in the philosopher, in the people who witnessed it years ago, as well as those who see it now, or ever will see it as long as human life exists.

While the active sublime impresses all, much of the quiet beauty, and many of the lesser expressions of nature are past unheeded, not because they mean less, and many times they have a far greater meaning than the terrible storm, but because we have not yet learned to see, we have not yet definite words and terms to tell what we see, not yet a language in which our thoughts can crystallize, and become gems to give pleasure to others. I think it can be truly said that not an acre of ground is without its own peculiar story to tell, and when known, will be found exceedingly interesting. If so, how much is waiting to be read.

At present we seem to be reading the head lines of the boldest and most pronounced type. We are still groping after the big letters of the alphabetical block of our childhood and putting next each other such letters as suit our fancy, with not much regard as to whether they spell a word or not.

We are just beginning to interpret that plot of ground which is to be made into a park, and to write into it that which will make every man, woman and child better and stronger for having been in its presence.

Beauty is of the mind and not of the body. It is more than skin deep, it is soul deep. He who only sees things, and makes something like what he has seen is a mechanic, while an artist is one who gives his thoughts and feelings a physical expression. If by harmonious sounds full of rhythm and meaning, he is a musician or an orator. If by line and color, a painter, if by form and proportion, a sculptor; if by the ornamentation of a building, an architect. If by the forming and planting of the ground, then a landscape architect, or it seems to me more suitable, a landscape artist.

Landscape art is the only one which is alive. It differs from all others in that its pigments are living, active organic life. Every part of our picture is in the midst of and under the constant influence of all of Nature's forces. This life and these forces make our work constantly changing, never twice alike. Its lights and its shadows, its forms, and substances in all its moods, are real. It is not merely a picture that looks like real.

A painting or statue, a song or a poem, an architectural building, or engineering structure, when done stay done, but landscape art is constantly changing, ever completing, yet always beginning some new beauty. It is a book in which something new is always being written, and when its language is translated into English, it should be by clear and well defined terms. How great this need is can be known by park reports and reports of landscape architects. While we cannot all be an Olmsted or an Eliot, and write masterfully, yet we may hunger after better told stories of park work.

To students of park reports I need not say how poverty stricken they are of all that relates to what the park is. They give financial statements, tell of the work done, and include some very fine pictures. But they do not tell what they have tried to write the ground, nor the interpretation of what is already there. This is done almost entirely for want of terms and words which specially mean just what would be said. In many reports there is clearly shown a desire and effort to tell these things. Who has not stood before beautiful scenery and been at a loss to express themselves. Why then should we expect those who write reports to coin words? Words do not come for the asking. They are born from the pent up necessity to give expression to an overflowing heart. Park language will be years in growing, yet the time has come when some words should be clearly defined and written into our vocabulary.

Take the word Park, what does it mean? What sort of a thing does that word bring before the minds of people? If we go to the dictionary we learn but little. If we go to the different plots of ground to which that word is applied, it will have a wonderful variation of meaning. From the half acre lot, which an enterprising speculator has cut into tiny house lots to the great forest, from the stately and beautiful to the gingerbread method of ornamentation. Now I do not intend to give definitions, only illustrations, and in my own mind, this

*Paper read at the Detroit convention of the American Park and Outdoor Art Association. By G. A. Parker, Hartford, Conn.

would be something of what the word parks means.

A park is a plot of ground, separated from other grounds, and all other purposes, except to preserve, develop and exhibit natural scenery so that such beautiful scenes may give rest and strength, peace and pleasure, to all who may come to it. I would use the same classification for parks as is used for the beautiful. The Grand, the Beautiful, and the Picturesque, each having an active and passive form and sub-divided. Most seaside and mountain parks belong to the grand, made so by their elevation and proximity to the ocean. Nearly all inland parks belong to the Beautiful; do not know of a purely picturesque park, and I doubt if one would be desirable even if possible, for the very nature of the picturesque, sparkling, sprightliness, is such that while every park should possess it in some degree, yet to have a park entirely so is of doubtful desirability.

And for my own use, I have divided public grounds outside of parks, into parkings, playgrounds, ornamental grounds and so on, and this method of classification however rude it may be, is of great help in my work.

That there can be terms and definitions much clearer, more definite and comprehensive than what are now used I believe all will agree, and that such terms would make park reports, park work and park progress much more satisfactory I am sure. Such words and terms cannot be forged at will, they must grow. Their growth should be watched by some one who will give guidance and record them as found, and if you agree with me in this, I would suggest that a Committee be appointed to watch out for the appearance of words and terms which seem to them desirable, and to present them for consideration at our annual meeting, and submit them to be published in the annual report.

It would take too much time to say all I would in regard to park Accounts, certainly it is that Park Boards differ widely in their method of keeping them, and render them of but little importance when used for comparison. When the United States Railroad Commissioners came into existence, they found the different railroads keeping accounts so as to make them of but little value for tabulating. They had only the power to suggest a common method of keeping accounts, and which has been adopted. I believe if this society would present a form of accounts applicable to park work, it would be generally adopted, and I would suggest this matter also be left to a Committee, and if you will allow me one more suggestion, it would be that a statistician be appointed whose duty would be to prepare a table each year to be published in the annual report of the progress of park work for the year. I believe every one of us would find such a table of great value.

The south of France is the flower garden of Europe. Flower farming is extensive in the Var Valley, and covers about 115,000 English acres, over 3,000 tons of flowers annually. Lavender is an English production, and is cultivated about Hertford, Surrey and several other districts. Its name, "lavandula," from "lavare," to wash, indicates its use, which was perfuming the baths of wealthy people.

The Toad.

Great and beneficial results are often accomplished through very humble agencies. Darwin established the claim of the earthworm to the gratitude of the tiller of the soil, and modern science is revealing thousands of hitherto unseen and unknown agencies working in the interests of man. Science now establishes what a few have long maintained, namely, that the almost universally despised toad is a faithful and efficient servant of the farmer.

From the earliest times, the toad has been associated in the popular mind with a host of vague and ludicrous fancies as to its venomous qualities, its medical virtues, or, most commonly, the hidden toadstone of priceless value. To these venerable creations of the imagination have been added others equally absurd, such as that touching toads will produce warts on the hands; that killing toads will produce bloody milk in cows; that a toad's breath will cause convulsions in children; that a toad in an open well will insure an unfailing supply of water, or in a cellar will bring prosperity to the household, etc.

The Massachusetts Hatch Station which has conducted an investigation of the habits and food of the American toad announces that a careful examination of the stomachs of a large number of toads showed that 98 per cent. of its food was animal matter, worms, insects, etc. "Eleven per cent. of the toad's food is composed of insects and spiders beneficial or indirectly helpful to man; 80 per cent. of insects and other animals directly injurious to cultivated crops; in other ways obnoxious to man." Properly speaking, the toad is a nocturnal animal, feeding as a rule continuously throughout the night. It eats only living and moving insects, caterpillars, etc.

It is estimated that a single toad destroys in a year insects and grubs which, had they lived, might have damaged crops to the extent of about \$20, and earning capacity of 10 per cent. per annum on \$200. The greatest common enemy of the toad is the ubiquitous small boy. Seventeen toads dead and more or less mutilated were once observed at Malden, Mass., lying on the shores of a pool. This was the result of a couple of hours' amusement on the part of two juveniles. Such boys should be—no, not killed—taken in hand by their parents or guardians and made to realize that in destroying toads they are destroying valuable property. The toad is a humble servant of man and is also a faithful friend, presenting a record which will compare favorably with that of almost any insectivorous bird.—*California Fruit Grower.*

GOD'S ACRE.

We print the following article as an earnest plea for the expression of Christian feeling in mortuary art. An ostentatious disregard of that higher beauty that comes of the subordination of every part to the whole should have no place in a Christian cemetery. No one objects to elaboration and magnificence when the general effect of the surroundings has received proper consideration. In our park-like modern cemeteries the beauty of the landscape should never be sacrificed to the eccentricity or the love of display of individuals, and while the erection of funerary monuments, both private and public, in the United States seems to be one of those many familiar customs which are experiencing the modifying influences of time, and the greater development of natural wealth and artistic knowledge, still the unrest and ingenuity which are forever inciting man to seek new arrangements and applications in his familiar methods are sometimes prompted by bad taste instead of good, so that all who have authority should be outspoken in condemning bad work, while at the same time keeping every movement towards a proper commemoration of the beloved dead, whether for the lowliest mound or stateliest mausoleum. In this country, the practice seems to be increasing of doing away even with the heaped-up sod over the grave; the top is kept nearly on the general level, and frequently covered with a growth of myrtle that indicates the spot by its lustrous green. The ostentation which led the early Americans, the Indian tribes, to indicate the social rank of the deceased by the height of this mound has not been practiced by the moderns, nor their customs of boxing the earth with grain seed as well as grass. It was not very long, however, among the Greeks before the rich began to add a monument of stone, —the stele, a sepulchral slab or column, and this finally grew into the famous tomb of that king of Caira the Mausoleum, which by its beauty and importance gave its name to all subsequent sump-

tuous tombs. The declaimants against luxury in all ages have found a favorite topic in this ostentation of mourning; and some modern religious sects, as the Society of Friends, or Quakers, limit strictly by formal regulation the height to which headstone or footstone shall rise, and the inscription thereon.

In this country, it is only within the last few years that the individual has begun to give way to the custom of erecting family vaults. The former practice, however, with the sanction of immemorial usage in its favor will probably long endure; even the urns containing the ashes of the cremated body are generally buried in the earth. In our colder climates and with our more practical dispositions most of the superstitions and ceremonies connected with these last resting places have disappeared. At any time it would scarcely occur to the Christian mourner to leave an opening leading from the outside door to the ear of the deceased through which he might hear the lamentations and the funeral chants of his friends, as if we may believe M. Theophile Gautier is the custom in the cemetery of Constantinople. But the care bestowed upon the preservation of these grounds is common to both Christian and Turk;—the beauty of the burial places on the Bosphorus, with their tombs of marble of Marmora and the sombre cypress trees, is striking.

The unsightly enclosures in American cemeter-

ies, of iron railings or of chains suspended from stone or iron posts, are gradually disappearing, the boundaries being now more generally indicated only by sunken posts of stone at the corners. That which may perhaps be defined as the progress of luxury or of refinement, led up to the introduction of the family vault, or mausoleum,—of greater or less size and importance—by the custom of erecting a shaft or other general monument in the centre of the family enclosure. In the vault, frequently built into the side of a hill, the bodies are either interred or walled up in niches; the individual name is placed over each and the family name, promin-



ANCIENT CELTIC CROSS, ISLAND OF IONA.

ently, either on the outside of the structure or in the interior.

The modern tendency is toward fullness of inscription, as well on the individual grave as on the general monument,—the name spelled out in full, the dates of birth and death, month as well as year given.

It is needless to say that the rhyming and otherwise grotesque epitaphs which have furnished such irreverent entertainment to posterity, are no longer common. In Paris and other European cities all inscriptions on tombs have to be submitted for approval to the civic authorities.

Something more even than the usual exceeding care which may be brought to the execution of any enduring work of art seems to be required in the execution of the simplest of these funerary monuments, whether headstone, shaft or mausoleum. The common errors in taste or design, the ignorant blending of architectural styles, the abuse of cheap statuary, even the poor workmanship in the stone-cutting, all seem peculiarly inexcusable in these silent grounds. It should not be considered enough to appropriate the general idea of a polished shaft, a Celtic cross, a Greek tombstone, a Roman or Byzantine vault and entrust its execution to indifferent designers and workmen,—the best technical skill and the most refined feeling can nowhere be more fitly employed. The beauty of careful and intelligent stone-cutting of artistic design only is just beginning to be properly appreciated among us, and the workman who thus maintains the dignity of an ancient art against the cheap and the machine made should be worthily encouraged. We

may not set up the tombs of our ancestors along the public highways, as did the Ancient Romans, with the object, as Varro reports, both of recalling to the passerby the fact of his mortality and of encouraging him in his journey, by leading him on insensibly from the contemplation of one fine monument to another, the mausoleum of our illustrious dead may not out-rival those of Hadrian and Augusta; but the best work of our ecclesiastical designers, sculptors and stone-cutters should certainly

be employed; we should be content with nothing less.

In many of the important American burial grounds, rural and urban, there may already be seen interesting examples of intelligent design. The artist, architect, the sculptor, the worker in stone have all individually or collectively, striven with varying success producing work worthy to be used to signify our reverence for the dead and our hope of immortality. A due restraining of architectural eccentricities in the more important tombs and mausoleums has gone hand in hand with a growing disfavor for the conventional angel or figure of Hope, Faith or other appropriate virtue, which are following

into oblivion the little woolly lamb, the cherub, and other devices that formerly adorned our grave-stones. The practice of introducing recumbent portrait statues is, as yet not so common as in Europe; in the best examples of these the mediæval symbolism and a certain discreet realism takes its place. The necessity of discreetness in this posthumous realism is made evident by such important misconceptions of the true spirit of funerary art as may be seen in the work of even the best



Designed by W. & G. Audsley, Architects.
THE "BRADFORD" CROSS, ROCK CREEK CEMETERY, WASHINGTON, D. C.

French sculptors; and, in general, it is recognized that, in these monuments the expression must be sober and restrained.

While it may be impossible to always secure the services of the best sculptors for portrait and ideal sculpture owing to the question of cost, it should never be impossible to obtain the services of the best designers for even the simplest work—money expended in securing the most appropriate design is money properly expended—as by such expenditure the final result is most successful.

One form of monument which is, at once, most frankly Christian and most in keeping, owing to simplicity and impressiveness, with natural beauty,

early Christian artists were wont to surround the head of the Saviour; but it may also be a symbol of the Eternity and the universality of the Christian faith, in either case it is a distinct feature of the Celtic cross and is interestingly entwined with the smaller circles which are pierced at the angles of the arms of the cross.

C. Lamb.

IMPROVEMENT OF THE HOUSE LOT.

There is a large field for the exercise of the improvement habit in the house lot, and on this subject Mr. Edward P. Adams, landscape architect, has written as follows: "The smallest place may be benefitted far more than it costs, by the addition of a tree or two with a few shrubs and hardy herbaceous plants, and will be, whenever it is the result of artistic designing and skilful treatment. Even when the house-lot is so narrow that there is scarcely room for a convenient walk on either side, a little planting in the right place will be a profitable expenditure of a little time and money. It is the object of the following to show how, in such small places, this can be done—to offer a few suggestions that will aid those who would try to benefit their town and themselves by the tasteful planting about their homes.

In planting, to make the most of our opportunities, the lawn, grass plot, or perhaps strips of green only—a most important feature,—should be made as large as possible by keeping the trees and shrubbery well towards the edge of the lot. Unsightly objects should be hidden, and the best views from the lower windows of the house framed in verdure. Few trees should be used on a small place, and these kept to the rear of the lot. A few evergreens at the back, especially if this be toward the north, with a birch or European ash in front, is a good arrangement. But most of the planting should be shrubs; and there need be no trouble for lack of variety.

Avoid hedges; arrange in natural groupings; strive to have in every group some beauty of flower, of berry or foliage, at every season of the year. In grouping, place the larger shrubs at the centre, with smaller next, and the smallest round the edges. Find out about the size each plant will be when, say ten years old, and allow room for this growth when planning the arrangement. Do not have too many plants; remember the lawn. Plan it all before you plant anything. Set sticks the height of the mature trees or shrubs in the places for each and all, according to your plan, and observe the effect from various directions in which they will be most seen. Improve the arrangement if you can. A specialist can see it all in the mind's eye, but this cannot be expected by an amateur; he had better use the sticks and take plenty of time in studying the arrangement.



THE "GOV. BALDWIN" CROSS, ELMWOOD CEMETERY, DETROIT, MICH.—Designed by Chas. R. Lamb.

is the "Celtic cross" of which we picture two very handsome examples, the Governor Baldwin memorial at Detroit, Michigan, and the Bradford cross at Washington, D. C.

The first shows the fine effect of such a monument and masses of foliage while the elaboration of the second proves that the form is capable of receiving added beauty to any extent. The proposition of the famous cross of Iona Island erected by St. Columbo in that cradle of Scottish Christianity, has been followed by the designer Mr. Charles R. Lamb, of New York, in the former of these monuments, though the size has been greatly increased, the circle which joins the arms of the cross is said to be a reminiscence of the nimbus with which

The selection of trees, and especially shrubs, will doubtless be more difficult to decide upon than anything else. Acquaintance with them is needed. Visits to the botanic garden, arboretum and the best nurseries will give a chance for study. Observe the plants in nicely laid grounds which you may see. Note what you like. Don't strive for fancy monstrosities of nature nor the latest importations. The well known and much used species are generally the best, and certainly the cheapest both to get and to keep. So much might be said in regard to the characteristics, the grouping and the arrangement of the different trees and shrubs, that the subject must be left for treatment by itself at another time. But to mention a few now, I should name as among the most useful, the Weigela, Lonicera, Forsythia, Spiræa, Althea, Hydrangea, Red-twigged Cornel, Japan Quince, the smaller Magnolias, Dwarf Horsechestnut, Purple Berberry, Hazel and Beech, fern-leaved Birch, Beech and Maple; and of the evergreens, white and dwarf Spruces, golden Arborvitæ, Junipers and Retinosporas. A selection of hardy herbaceous plants should be a feature in the planting of all small places.

As a rule it is best to set out young plants, not more than two or three years old. It may be a little disappointing at first to see such small shrubs and trees, almost like so many sticks set in the ground. We Americans are rather impatient with gradual growth. But young plants adapt themselves more readily to their new situations, are more easily transplanted, cost less to buy and to transplant, and in the end make a better showing than the older growths. Occasionally, it is desirable to transplant a good-sized tree, but to do it properly with a good prospect of its living is very expensive. Than there is a certain pleasure and culture in watching things grow, that we can have only with the younger plants.

Only nursery shrubs and trees should be used. Those taken from the woods are not likely to live, and are rarely well-shaped, owing to their shady and close situation. By continued transplantings the trees and shrubs in the nurseries have become prepared for transplanting again. Fibrous roots have been formed nearer the body of the trees, and they are, therefore, not so easily injured as are the wild ones whose long roots are necessarily severed in taking them up, and much of the fibrous roots taken away.

Select the trees and shrubs to suit the locality and the general design of the groups for which they are intended. Do not give the order to the nurseryman or a nurseryman's agent to furnish so many of each kind of shrub, etc. Perhaps the very size and habit of growth that he happens to have in most abund-

ance, and will therefore send, may be entirely unfitted for the situation and place in group for which you intend them.

In setting out—the best months for which, as a rule, are May and October—dig for each plant a large hole, and deep, star-shaped, or cross-shaped, that the growing fibers may be introduced into the firm and poor soil by degrees, and not all at once, as when we make a round or a square hole. Then, to make a bed for the tree or shrub, that the surface of the soil, after it has settled, shall be at the same line on the stem as was the original soil, partly fill the hole with rich loam (beware of undecomposed manure) and compress it sufficiently to prevent much after-setting. When the plant is in position and plumb, press with fresh, rich earth about the roots carefully but firmly with the fingers or with a pointed stick. Watering is often advisable in settling the earth. After this has settled away, finish filling the hole and neatly grade the surface. For the first two seasons a mulching of dry leaves should be placed around each plant and watered regularly every week or two during the dry weather; and in the winter the ground all around the body of the trees and shrubs should be deeply covered in a similar way as a protection from daily thawing and freezing.

After the planting has been done the surface of the lawn will need to be evenly graded and seeded, first placing a wide border of good sods, free from weeds, along the walks, and trimming to an uniform width and even line of walk. This part of the subject will afford an opportunity of more detailed study.

It may seem that what I have here mentioned is considerable to be done for the planting of a small house lot. But when it is borne in mind that the work here described will extend over a year or two of time, that good shrubs may be had for fifty cents apiece, and the cost of small trees will rarely exceed two dollars each, and that not many trees and shrubs are needed—only a frame, as it were, a frame of verdure for the lawn, a leafy screen on the border of the lot, an occasional resting place for the eye at the angles of the house and at the turns of the walk—it will not seem so much of an expenditure of time and money, especially if we consider the pleasure and honest pride, the culture to us and the benefit to others also, in the growth and result of this, our planting about our own homes.

M. Gambart has offered to present to the town of Fontainebleau, a monument in honor of Rosa Bonheur. M. Gambart bought many of her pictures, published the greater number of the engravings from them and was on friendly terms with her for many years.

GARDEN PLANTS—THEIR GEOGRAPHY, XLV.
GENTIANALES.

THE JASMINUM, FRAXINUS AND MENYANTHES
ALLIANCE.

(Continued.)

Fraxinus, the "ash," is familiar to almost all country residents of the sub-tropical and colder



Syringa Japonica, in Flower June 30.

parts of the northern hemisphere, where perhaps there may be 30 or more good species of trees and shrubs. They are so subject to variation that it may well be suspected names have been too much



Osmanthus Aquifolium. Var. *Ilicifolius*.

multiplied. The United States is credited with about a score of species, some with undivided and some with spotted leaves. *F. excelsior*, the European ash, is given a score or more of well marked

varieties, some of which are handsome weeping trees with green and golden bark. *F. ornus*, known as the flowering ash, is the type of a distinct section, of which there is quite a dozen forms, including *F. leariesii* from China, *F. florileunda* from the Himalayas, and *F. dipetala* from California.

Fontanesia has 2 species, *F. phillyreoides* and its varieties from Asia minor, and *F. fortunei* from China. They have a pleasing habit and good foliage.

Forestecria acuminata is a native of the southern states and northward on wet banks to Indiana. There are several others in the southwest.

Phyllyrea in 4 species and a number of varieties are handsome evergreens well adapted to the lower south.

Osmanthus has 8 species in Eastern Asia, North America and the South Sea Islands. The plant known as *O. fragrans* does very well in the lower south as a rule, but was frozen during the winter of 1898-99. For beauty, however, the native *O. Americana* is much superior to it. *O. aquifolium* is handsome, too, and very variable with variegated leaves of different shape and size. They endure mild winters at Wash-



Olea Europaea. In the Garden of Gethsamene.

ington, D. C., and have been kept with protection further north, but are only reliable from the Carolinas southward where they are useful evergreen shrubs.

Chionanthus "fringe tree" is in two species, *C. retusa* from China and *C. virginica* from New Jersey southward. Both are hardy fine shrubs or small trees.

Olea is the "olive tree" genus with 36 species in the warm parts of the world. *O. Europaea*, the Olive of commerce, is in cultivation to some extent in southern California and on one or two of the islands off the coast of Georgia. *O. verrucosa*, a shrub of 12 to 15 feet high, and *O. laurifolia*, a fine straight tree of 50 to 70 feet, are natives of South Africa; *O. Cunninghamii* is a smaller New Zealand tree likely to be of use in California, especially as the wood is hard, dense and durable.

Salvadoreæ is a small tribe of half a dozen species. *S. Persica*, a small evergreen tree, is



ACOKANTHERA SPECTABILIS.

found in the Eastern Mediterranean regions and in India.

Allamanda is in 12 species of Central and South American shrubs and climbers. *A. cathartica* (mostly called *grandiflora*) flowers beautifully plunged out during summer in pots and trained on verandas or fences. The variety called *Williamsii* is a dwarf form of this species, which has developed a semi-double form at the south. It promises to be a good sub-tropical plant, or at the lower south it may stand out altogether, the roots are quite persistent.

Acokanthera has 3 species in South Africa and Abyssinia. *A. spectabilis*, as shown in the cut, is depauperate, but when well grown is a very fine evergreen, with deliciously scented white flowers forming thyrses of a foot or more long at the end of the branches. They are very poisonous plants, as are many others of the allied tribes.

Vinca, in 12 species, are found in South Europe and Western Asia, and some species are common throughout the tropics. *V. rosea* is naturalized in South Florida. It has handsome white varieties with and without rose-colored eyes. I hardly know whether *V. minor* can be called adventive in the states or not. It is often found in old cemeteries and abandoned garden sites, but I doubt its ability to hold its own with the coarser native herbs. It is a useful evergreen covering plant under thin plantations of large trees, and, as it varies a good deal both in flower and foliage, it may be made great use of for covering dry banks, such as railway embankments. The variety with reddish flowers is rarely seen in cultivation, but often occurs in

Switzerland and less frequently in the south of England. The purple and white flowered forms flower with Forsythias, and a steep south bank planted properly with the two may be imagined. The "garish" flower beds cannot touch such a display! *V. major* and its variegated forms is well adapted to the south and California, but I have seen this species badly frozen in the English eastern counties. The Hungarian *V. herbacea* flowers more abundantly than either of the others.

Plumeria, the "frangi pani" of Spanish America, has 45 species enumerated. Several forms are in South Florida and South California gardens, and *Thevetia neriifolia* is found in a wild state at Key West.

(To be continued.)

* * *

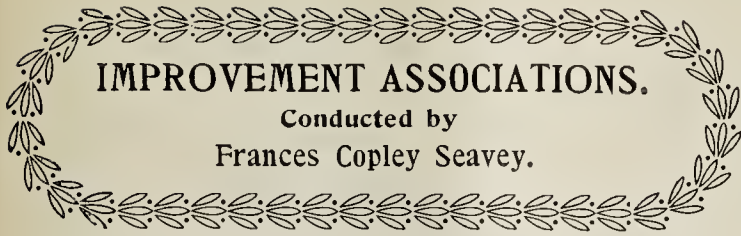
The following illustrations should accompany the text given in the July issue:



HALESIA TETRAPTERA, VARS.



STYRAX JAPONICA.
From Moller's Gartner-Zeitung.



IMPROVEMENT ASSOCIATIONS.

Conducted by

Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

CHURCH AND SCHOOLHOUSE GROUNDS.

It sometimes occurs that the care of church and schoolhouse grounds is the business of no one in particular and therefore stands a good chance of being let severely alone. Such neglected grounds should be taken firmly in hand by local improvement clubs, for their prominent position and character make them a focus of observation.

WHY TO PLANT.

In undertaking such work the first step is an outline of the work, and, as there is a reason for everything in landscape gardening, the necessary cue should not be far to seek. All such grounds contain unattractive features or views that may be screened by planting. Coal sheds and other outbuildings are a necessity, but their existence need not insist upon constant recognition. In every case they can be shielded by vines and shrubs to the advantage of the manners and the morals of the rising generation, the comfort of every one even remotely concerned, and the very material improvement of appearances.

WHERE TO PLANT.

If only one bit of planting is done, let it be to the end of veiling all outbuildings in sight whether on the plot being planted or on adjoining ground. Shade trees are necessary and should be massed on the sides of the plot where shelter from sun and wind is most needed, but in such shape and position that they will become adjuncts to the center of interest, viz., the building, instead of being placed too near it, or dotted about, so that when grown they will completely hide it. The bulk of the planting should be massed at the sides, flanking a central space and framing, as it were, the principal feature of the picture, which, in the case of church or schoolhouse, is always the building. The planting that is intended to screen objectionable views or objects can usually be made a part of one of the larger plantations that flank and partly frame the building and make a background for the sweep of greensward that forms the foreground. Without a foreground there can be no picture. Then there may be smaller and lower masses of planting in the front corners of the plot, and something good in itself and not too large might be placed near the entrance or entrances—avoiding, however, a grim pair of anything placed one on

each side of a gateway like sentinels from mediæval times ready to chop off the head of any one passing the portals. Rather let it be a group on one side and a single specimen shrub or vine on the other. These serve to mark the entrance and are quite useful for that purpose on dark nights. Shrubs placed near the building are frequently desirable, their location being indicated by its form. Long, blank walls may be fitly relieved by tall shrubs, and corners where grass refuses to grow may be acceptably filled with shrubs, vines, ferns or other material suited to the location and exposure, which may be wet or dry, shaded or sunny. To the planting already suggested—all of which is subject to variation to meet specific conditions—there may well be added vines to climb over fences, trees, and on the buildings themselves when constructed of brick or stone. Vines on buildings look far better if faced with shrubbery, because the transition from sward to vine-clad wall is too abrupt, and also because the lower part of such vines tend to bareness of stems as they grow older. These bad effects are overcome by the use of shrubs that are allowed to sweep the grass with their lower branches, which is the correct way to grow them. Other planting will be suggested by special conditions.

WHEN TO PLANT.

From October 15 to the end of November is the best time to transplant nearly all deciduous material, and the condition of the soil, the weather, and the long season suitable for such work make all the conditions favorable for successful results from fall work. A fall "Field Day," upon which the bulk of the work could be done, might be made a club event, and a few preliminaries in the way of carefully selected committees would secure system and insure substantial results. In many instances good material can be had for the mere trouble of going to the woods and taking it up. Such material should be selected and marked while in leaf, but further work must be delayed until the wood has thoroughly ripened and the leaves have fallen, indicating that the plants' season of rest has begun, then, and not till then, must the work of collecting and replanting the selected material be undertaken.

WHAT TO PLANT.

Among the best wild material available in most locations reached by PARK AND CEMETERY are the following trees and shrubs: Native Thorns in several varieties, Crab Apple, *Cercis Canadensis* or Red Bud, also known as American Judas tree; Choke Cherry, Bird or wild Black Cherry, *Cornus Florida* or large flowered Dogwood, *Ptelea trifoliata* or Shrubby trefoil, also known as Hop-tree; Sumachs in variety, Sassafras, Wahoo or Burning

bush, Elder (but not the poison variety), Hazel, wild Roses in variety, including *Rosa setigera*, the climbing sort; Witch Hazel, Prickly Ash, *Cornus stolonifera* or white Dogwood, having red twigs all winter, and Button bush. Nothing gives quicker returns than vines and no vines are better than Wild Grape, Bitter-sweet, *Ampelopsis quinquefolia* or Virginia-creeper, *Clematis Virginiana* and *Bignonia radicans* or Trumpet-creeper. The *Ampelopsis* is the only self climber in the lot, but for use on buildings the Japanese variety, *A. veitchii* or *A. tricuspidata* is also excellent, and *Clematis paniculata*, another nursery-grown vine, should be largely used where a support can be given it. In selecting material for the planting of schoolhouse grounds preference should be given to varieties that flower during school time. And the planting of both church and schoolhouse grounds must be so planned that it will practically



CHURCH AT WOODLAWN PARK, CHICAGO, BEFORE ARBOR-DAY PLANTING.



THE SAME CHURCH AT WOODLAWN PARK, CHICAGO—THE PLANTING WAS DONE AT ARBOR-DAY EXERCISES BY THE SUNDAY-SCHOOL CHILDREN.

take care of itself when once established. Hardy herbaceous plants, such as Violets, Squirrel-corn, Rudbeckia, *Coreopsis*, Butterfly-weed, Golden-Rod, Asters, etc., may fitly be introduced among shrubs.

Such plantings will aid in a development of a love of refined surroundings and in the discipline that insures protection for the living things that make this world attractive and life worth living. Children should be taught to enjoy plant, bird, animal and insect life without indulging their savage instinct to slay. To pick a flower just to pull it to pieces or to throw it away is to slay it. To wantonly destroy useful or beautiful animal or vegetable life is a crime, and the inherent instinct to do so, active in almost every child, must be checked if the civilization of the Twentieth Century is to reach a higher plane than has so far been attained.

A sum of \$25,000 was sometime since provided by an anonymous donor for the purpose of maintaining John Wesley's house in the City Road, London, as a permanent Wesley museum, the formal opening has taken place, says the *Congregationalist*. The rooms are three in number. Hundreds of American and other visitors annually make a pilgrimage to these rooms, which are to-day in much the same condition in which they were in Wesley's time. Deeply interesting and affecting is the room in which Wesley died. In the front rooms is the high-backed, comfortable chair in which he used to sit and in which the president sits when presiding over a conference. On the landing stands the old "grandfather's clock," once Wesley's and on the bureau the famous teapot presented by Wedgwood to Wesley. The lid is gone and the spout is broken, but an American offered £2,000 for the teapot. The house was finished eleven months after the chapel, and Wesley first occupied it, as he says in his journal, on Oct. 8, 1779. The third room on the floor is the "prayer room," which Wesley used to enter at 4 o'clock each morning. All these relics are now permanently preserved.

PARK NOTES.

Albany, Mo., is taking steps toward the purchase of property for the purpose of a city park.

* * *

By the provisions of an act of the Michigan legislature the park board of Detroit was authorized to issue \$150,000 of bonds for an aquarium and horticultural building in Belle Isle Park. The council judiciary committee has decided to submit the question to the people in November.

* * *

A movement is on foot to purchase twenty acres on Kenesaw mountain, Georgia, one of the most noted of southern battlefields, by the survivors of the Eighty-Fifth, Eighty-Sixth and One Hundred and Twenty-Fifth Illinois regiments, and the Fifty-Second Ohio regiment, for a public park and the erection of a monument.

* * *

The public library of Scarborough, Me., which was started in a small way some years ago by Rev. Dr. Merrill, has recently received a donation of \$10,000 from the trustees of the Walker estate for a library building, and a lady summer resident has offered to pay the difference of cost between brick and granite for the structure.

* * *

A tract of 200 acres of land beautifully located in the suburbs of Parkersburg, W. Va., has been arranged by its owner, ex-Senator Camden, for a playground for the children of the city. A part of the tract is well shaded and will not be disturbed, except that seats and tables are conveniently placed, while the unshaded portion is arranged with flowers, paths and other pleasant effects.

* * *

Mr. Duke M. Farson of Chicago has bought Buffalo Rock on the Illinois river, ten miles east of LaSalle, it is supposed for methodist camp-meeting purposes. The rock is nearly as flat as a table on top and contains 100 acres. Buffalo Rock is rich in Indian lore and legend, and, being located in the center of the Illinois Indian territory, it shares with Starved Rock its historic associations. In the history of Illinois it has also played an important part. It was brought into prominence during the Black Hawk war, and has been used for many years as camping grounds by state troops.

* * *

The official life of one of the most interesting official bodies Cleveland, O., has ever known will end in a few months—the Board of Park Commissioners, which has been in existence for nearly seven years. During this time it has expended or arranged to spend some two and a half million dollars on its splendid park system, comprising ten parks, and if its suggestions are carried out it will have one of the largest continuous chains of parks in the world. Before the board was created by act of state legislature, Cleveland had but some 92 acres of parks under the direction of the director of public works; it now has over 1,243 acres, which include some munificent gifts of property for park purposes, donated to the city under the influence of this respected board of public officials.

* * *

The following is a practical suggestion for the securing of street trees for city embellishment. Quincy, Ill., has some very fine arcades of Elm trees in certain portions, but is woefully lacking in shade trees in others, and Mr. Dickhut, superintendent of the city's park system, suggests "that a large number

of citizens go in together in the purchase of a large quantity of shade trees and then have them all planted by one man, or under one contract. In this way the trees could be secured at next to nothing, and the cost of planting would be reduced to a minimum. This may not be the proper time for planting trees, but if the matter was taken up now it could be carried to a successful conclusion by next spring. The effect of shade trees on a residence thoroughfare is not only to beautify it, but increase the value of property as well."

* * *

In relation to the great scheme of establishing a national park in Minnesota, previously mentioned, a recent press dispatch from Minneapolis says: "Dr. Northrup, president of the University of Minnesota, and also president of the proposed Minnesota National Park Association, has discarded as impracticable the proposition to acquire the necessary park lands by purchase, and presents the following scheme: The utilization of 800,000 acres of the Indian reservation in and about Leech and Winnibigishish Lakes, with the possibility of an extension of the park confines north to the Canadian border at a future time. The Town of Walker is left outside the park lines, as is Deer River on the east. Both Leech and Winnibigishish Lakes are included. The value of the land to-day as it stands is estimated at about \$5,000,000. Of this one-fifth is represented by the land itself, \$4,000,000 by the standing timber. All the land is government reservation for the Indians, and part of the public domain, and by congressional action can be made into a park."

* * *

In discussing park improvements in connection with important changes proposed for the parks of Denver, Col., Mr. Reinhard Schenke, landscape engineer of the park commission, makes these suggestive remarks: "The beauty of a park is in its simplicity, and still in its variety. Groups of trees and shrubs, bodies of water and stretches of green meadow give the idea of greatness, and well-developed specimen trees the idea of beauty. The groups of trees should be arranged so that you cannot see the whole park or garden at one glance. Just as you have to stroll all through a wooded glade to appreciate all its beauties, so it should be with a park. The point to be kept in mind and sought after in this work is to accomplish great results with small means. A bunch of hollyhocks and ribbon grass planted against a fence often gives a better effect than a large carpet bed. A honeysuckle growing over some old moss-covered rock and a bunch of water lilies in a quiet corner of a pond give splendid effects."

* * *

Last year there appeared in these columns a note concerning a model, in bedding plants, of the battleship "Maine," arranged in the Michigan Central Railway grounds at Ypsilanti, Mich. This year the gardener, Mr. John Laidlaw, raised a monument of similar material in memory of that vessel. It is 22 feet high and 20 feet across the base, surmounted by an eagle 2 feet 7 inches high standing upon a globe two feet in diameter. Below this is an octagonal cone 14 feet in height resting upon an ornamental base, at the eastern and western extremities of which, upon a gable peak, a miniature battleship Maine is set. In dark red lettering near the base the words "Erected by the Michigan Central R. R. in Remembrance of the Maine" are plainly set out. The design consumed 1,820 *Alternanthera versicolor*, 3,010 *A. aurea nana*, 980 *A. spathulata*, 2,200 red *A. parychoides major*, 2,985 *Echeveria metallica*, 365 *E. secunda glauca*, 8,540 *Sedum variegatum* and 400 *Oxalis corniculata*. It would be more gratifying to record that Mr. Laidlaw had expended the energy and ability required for this in a less grotesque effort of garden work. The proposed plans for beautifying the of the Ann Arbor Station Grounds, by Mrs. Frances Copley Seavey, will be in marked contrast to those of Ypsilanti.

CEMETERY NOTES.

Negotiations in progress seem to favor the purchase of a tract of land south of Boston, between Hyde Park, Dedham and Norwood, for the establishment of a Protestant cemetery. The tract will contain some 500 acres, and will be laid out under the direction of prominent landscape architects.

* * *

The people of Babylon, Long Island, N. Y., are becoming reconciled, says a press dispatch, to the establishment of a great cemetery in the northern part of their town in the Deer Park region among the pine lands. Eight cemetery associations of the city of New York have purchased 200 acres each and are to establish a great burial ground of 1,600 acres. They are to pay the town authorities 50 cents for each burial permit, which it is realized will go far toward paying for the care of the town's highways.

* * *

W. D. Dane, comptroller of the Forest Park Cemetery, Troy, N. Y., is to represent the American interests of the American and Cuban syndicate in Cuba, where he will meet Cuban capitalists and arrange for the inception of modern cemeteries on the island of Cuba. Jose Eugenia Marx, a wealthy tobacco grower of Havana, represents the Cubans in the matter. The company proposes to locate cemeteries in different parts of the island. The capital stock of the company will be \$2,000,000, of which sum half is provided by Americans.

* * *

The Woodlawn Cemetery Association, Winona, Minn., were successful in the suit to secure the \$20,000 legacy from the estate of the late George Plummer Smith of Philadelphia. The time has passed in which the contestants are legally entitled to an appeal in the will case. Of the \$20,000 about half is cash and the other half Winona real estate. The Pennsylvania hospital, the residuary legatee, made the contention about the will, claiming that the cash legacy of \$10,000 provided for in the codicil of the will nullified the previous bequest of the land.

* * *

The Nyack Rural Cemetery Association was organized at Nyack, N. Y., on Sept. 6. It is the intention to build a liquid air crematory under the direction of Dr. S. H. Emmons, who owns the patents covering the process by which it will perform its work. The front of the retort, or furnace, is to be of glass, through which the process going on within can be observed. By the use of liquid air it is said that within twenty minutes the entire body, including even the teeth, will be entirely consumed. The ashes can be removed within five minutes after the work of the retort is finished.

* * *

Yeadon, Pa., is undergoing a curious cemetery oppression, due to the interested vacillations of its Borough Councils. It is already blessed with all or portions of four cemeteries, and now it is proposed to add ninety-seven acres to the already immense territory now held by the dead who seem to be pushing the living to the wall. Meanwhile the councilmen are playing for boodle from a trolley company for right of way. In connection with the controversy an incensed taxpayer says: "Go it, gentlemen, but remember what old 'Abe' said about being able to fool some of the people all the time and all of the people some of the time, but not all the people all the time."

Mrs. Clarence Mackay, to whom was presented by her father-in-law, Mr. John W. Mackay, the beautiful estate of Harbor Hills, near Roslyn, Long Island, has had a cemetery question on her hands which she has just solved. When the estate was purchased it was necessary to include the purchase of a negro cemetery adjoining the property, a proceeding which afterward caused tribulation to the colored brethren who found themselves unable to secure a place where to remove their dead and continue burial proceedings. Mrs. Mackay, finding the cemetery on her hands filling no useful purpose until the bodies could be removed, volunteered to secure a burial plot, which she did in Greenlawn Cemetery, Pine Lawn. All is now harmonious.

* * *

A curious complication has arisen in relation to the old established Presbyterian Cemetery on Chatham street, North Plainfield, N. J. Owing to very small business of late years it is unable to pay its fixed charges, and a bill for taxes, amounting to \$210 has laid it open to sale. Senator Charles Reed, the borough council, to whom the case was referred, has decided the cemetery must be sold like any other property. If it is sold the purchaser, of course, would have the right to remove the bodies. The lot holders are protesting against such procedure, as having liquidated all calls upon them, they do not believe their property liable. This is a question that should be settled once for all, so that lot holders may know to what extent their lots are safe against such conditions. Since writing the problem has been solved.

* * *

Frank G. Carpenter, in a letter to the *Pittsburg Dispatch* about the graveyards of Porto Rico, writes as follows about the San Juan Cemetery: "When I entered the San Juan Cemetery I noticed that the open graves were singularly narrow and I wondered how a good-sized coffin could be squeezed into them. While I waited I saw four men bringing a box. They laid it down beside one of the open graves and then took out something wrapped in a long sheet and dropped it into the grave. They threw in quicklime and then filled the grave with clods. The coffin was taken back to the city. As I went through the graveyard I noticed the new holes which had just been dug. They were really carved out of bones. Here the spade in going down had cloven a skull, there it had broken a thigh, and on the other side had cut its way through ribs and arms. The walls of each grave, in fact, were lined with protruding bones like the roots sticking out of the sides of a hole dug in the woods. There were bones on the bottom where the dead was to rest. As I looked I realized that in this two or three acres had been buried the dead of 300 years. San Juan dates back to the sixteenth century, and for generations the dead have been moving in and out of these holes, every now and then leaving a bone behind. While in the cemetery I asked one of the sextons where the skeletons of the ousted dead were thrown. He pointed to a rude stone hut in one corner of the graveyard. The hut was fifteen feet square and twelve feet high. Its door was closed with a great lock, and at first I did not see how to enter it. By going to the back, however, and holding onto the rough plaster, I found that I could climb up and look in. I saw a mass of human bones. The pit below me was more than half filled with them, their ghastly lime like whiteness shining under the rays of the tropical sun. On one skull was a little hair, and several arms and thighs were decorated with what seemed to be petrified flesh. There was no stench; probably lime had been thrown upon the mass. How deep the pit is I do not know. It may have a subterranean outlet to the sea, as have the 'Towers of Silence,' where the skeletons, after they have been cleaned by the vultures, are thrown by the Parsees of Bombay."

Among the rules and regulations recently adopted by the Cemetery Association, Lebanon, Ind., are the following: "All persons are prohibited from planting trees, shrubs or plants on or about graves and from planting flowers, except by consent and under direction of superintendent. Flowers are permitted only in vases or urns." "Lot owners are prohibited from placing on lots or graves all toys, cases, boxes, globes, shells, cans, jugs, bottles and bric-a-brac of every description; any such articles found will be removed." "No wooden benches, chairs, settees, head-boards or wooden articles of any kind allowed on the grounds." "All foundations for all stone work must be built by the cemetery company. No head or foot stone over one foot in height above surface of lot allowed, and must be four inches or more in thickness. Only one stone can be placed at a grave lot, head and foot stones not allowed. Only one monument on a lot allowed, except by permission of directors." This is a movement in the right direction.

* * *

In the annual report of trustees of the city cemeteries of Delaware, O., to the city council very favorable comment was made on the progress of the "Perpetual Care" fund, which is accumulating under an addition of 20 per cent. to the prices of lots, and the sale of deeds to lot owners covering such care. Considerable improvement is contemplated on the "Free Ground," in fact it is designed to place it in as good condition as any part of the cemetery. Each grave is now marked by a marble headstone with name and date. This is a move in the right direction. The following paragraph is a suggestive one to our smaller cemeteries: "Necessary rules and regulations have been adopted, from time to time as necessity required and although to some, they may seem arbitrary, yet to everyone, who gives the matter careful and thoughtful consideration, they will acknowledge the necessity of them, for instance, the planting myrtle and other obnoxious plants. The yellow myrtle planted years ago has so taken hold of some sections, as to entirely kill the grass, and will cost the trustees a good many thousand dollars to eradicate it. These again plant trees, not suitable for cemetery purposes, or roses and other plants, such matters have been entirely prohibited."

Missouri Botanical Garden. 10th Annual Report.

Appropriately the tenth volume of annual reports of the Missouri Garden is devoted to a resume and exhaustive index of those preceding, issued from the institution as constituted upon its present footing. By the will of Henry Shaw a wealthy merchant of St. Louis who died in that city in 1889 virtually the entire estate was left in the hands of a Board of Trustees to administer its affairs.

The chair of Engelmann professorship of botany was established in the Washington University and with this exception practically the entire estate was bequeathed to the Garden for the advancement of science. Thus considerably over a million dollars affords a revenue wherewith to prosecute the articles of said testament. Article 5 reads: "I also declare that scientific investigations in Botany proper, in vegetable physiology, the diseases of plants, the study of the forms of vegetable life, and of animal life injurious to vegetation, experimental investigations in horticulture, arboriculture, etc., are to be promoted no less than instruction to pupils; but I leave details of instruction to those who may have to administer the establishment, and to shape the particular course of things to the condition of the times."

Each annual report sets forth the progress made and in a manner to demonstrate the trust to be wisely, progressively and satisfactorily conducted. The trustees are citizens of the highest distinction in their respective professions. But to the coter

world the direct responsible head of affairs is the director who shapes the policy of the institution, denotes its future and the channels through which it is to progress. Among Mr. Shaw's advisors were Drs. Gray and Engelmann and by their influence the present Director, Dr. William Trelease, was selected as best fitted for the distinguished and onerous position and to whom the scientific productions during the past decade are directly attributable. When the trustees assumed their duties the existing garden of some 47 acres contained a museum, conservatories, arboretum, fruticium and areas devoted to ornamental planting. Everything was dilapidated, unsystematized and antiquated.

Considerable funds were devoted to a proper draining of grounds, repairing of buildings and walks, and creating of library and museums upon a most useful and modern basis. As trustees the board wisely fortified the contingencies certain to result from unimproved and non-revenue bearing property by establishing a liberal sinking fund. At present the interest is derived from the rentals of city buildings, but as the vast properties, now a burden of taxation, are leased and bear revenue, the available funds at the disposal of the garden will yearly increase.

In the meantime comprehensive plans for future development have been devised and all progress now develops in accordance. The herbarium and library have grown until they compare favorably with any in the country; the director has a corps of assistants who find time to prosecute invaluable research in addition to their routine duties of superintendence and construction; a school for the instruction of young men in gardening is unquestionably the best in America and for the garden itself a design for its extension and improvement has been submitted by eminent landscape architects. Although the ornamental features of the grounds will always increase and when the present plans are fulfilled will offer a synoptical flora of the United States and the universe respectively arranged in botanical sequence, according to the Bentham and Hooker and Engles and Prauth systems, and although the extension and improvement of conservatories and geometric gardening will always form a valuable attraction of beauty and botanical study, the greatest efficiency will be found in the scientific productions made possible by the facilities offered for such work. We have witnessed but the conception of what is to follow and among it is a comparatively prodigious quantity of monographs and scientific work of the best quality, as for instance: A revision of the North American *Rumex* by Dr. Trelease; the *Yucca* Moth and *Yucca* Pollination by the late Dr. Chas. V. Riley, a Revision of the North American species of *Epilobium* by Dr. Trelease, Preliminary Bibliography of the Tannoids by J. C. Bay; Monograph of the Agaves by A. I. Mulford; Monograph of the *Sagitaria* by J. C. Smith; Monograph of the Lemnaceæ by C. H. Thomson among which that upon yuccas, epilobiums and agaves are of the highest class. The tenth report contains an illustration of the late Prof. E. Lewis Sturtevant, the modest yet erudite scholar and eminent agricultural thinker who donated his rich and valuable pre-Linnean library and extensive card catalogue to the Garden just prior to his death. A feature of all the reports are the photo illustrations and pen drawings of garden scenes and plants.

In the last annual report Prof. Lamson-Scribner contributes, "Notes on the Grasses in the Bernhardt Herbarium," but the best service is rendered by an exhaustive index to the wealth of information in the preceding nine volumes.

Demonstrations have been sufficient to merit the entire confidence now held in the botanical world that the Missouri Botanical Garden is developing with an energy and steadfastness unprecedented and with every indication of its continuance.

E. M.



SELECTED NOTES AND EXTRACTS.

Japan Snowball and Other Viburnums.

The snowball family has always been an interesting one. What is now known as the old sort has been long esteemed for its beautiful white balls of flowers in May. There is hardly an old garden in the land that does not possess one of them. This one is a straggling grower, hard to make a handsome bush of unless pruned, and having divided leaves. In its habit of flowering it produces one to three flower heads in a group, seldom more. But good thing that it is, it is excelled by the one from the Japan, which has now come to be called Japanese Snowball. This is of an entirely different nature from the others, the flowers only resembling it. The leaves are entire, thick, and of plaited appearance. In growth it makes a shapely bush without any pruning. Indeed it is easily spoiled by injudicious pruning. Instead of a straggling bush, bare of side branches, there is in this a thickly branched bush of good outline. But it is in its flowers that the chief excellence lies. They are in pairs, opposite each other on the stem, one on each side, and sometimes as many as ten pairs on one branch. When a large bush is in full flower it is a magnificent sight. There is just enough leaf here and there to be seen to give a ground work to the white flowers. A shrub to be in general demand must be hardy, beautiful and easily transplanted, and all these qualities are justly claimed for this one. Regarding the time of flowering, the old sort leads the new one by about four to six days. In catalogues the old sort is called *Viburnum opulus* and the new one *Viburnum plicatum*.—*Joseph Meehan in The Practical Farmer.*

* * *

The Ailanthus.

In France it has been found that the ailanthus, which multiplies itself so rapidly by suckers from the roots, is well adapted to rocky and sterile hill and mountain sides where other vegetation will not exist. In such location it sends out its roots between the rocks and from these spring new, young plants, clothing such hillsides with forest growth. The wood of the ailanthus is soft and light, and of little value hitherto known, either for fuel or manufacturing purposes, but it has been found that it serves admirably for broom handles, and is proving so useful for this purpose that the cultivation of the tree is being extend-

ed even beyond the limits of poor lands.—*Vicks Illustrated Monthly Magazine.*

* * *

Flowering Shrubs for Decoration Day in the West.

Decoration, or Memorial Day, in most of the States about May 30th, is a happy time, though it is accompanied by sad memories of loved ones departed in battle and in peace. It is Dame Flora who makes it a happy time, without whom Memorial Day would soon become a thing of the past. Above all things, we want an abundance of flowers at this time, and the question arises,—“what?”

A correspondent from Washington State asks for a suitable list for that section. As regards latitude, a list suitable for Maine should answer for Washington; but there are other considerations locally that may make a great difference between such widely-located points. Without referring to any positive records, it would be safe to say that the earliest spring flowers would be timely, such as Bridal Wreath *Spiræa*, Lilac, *Spiræa Van Houttei*, *Deutzia gracilis* and *Exochorda*.

Around Philadelphia, snowballs and weigela are looked upon as the principal flowers to be counted on in abundance; but this past season, they had just about finished blooming at the close of May, lilacs had disappeared long before; but in New York City, not much further north, lilacs were seen. The difficulty of providing a correct list for another State can, therefore, be recognized.

Pæonies and iris come in about the same time as the preceding, followed by deutzias and spiræas, other than those mentioned, and mock orange.—*Meehan's Monthly for August.*

* * *

Hybrid Pyrethrums.

These so-called hybrids are really all garden varieties of *Pyrethrum roseum*, but there are very few other hardy composites which can compete with these giant, colored daisies, with their fern like foliage and showy flower-heads. For decoration of the border and for cutting, they are distinct as well as useful, from the beginning of bloom till the end of June; height one and one-half to two and one-half feet.

When well established the clumps will send up from seventy five to 100 flower stems with three to four flower heads to each. The flower heads, however, will be finer if only one is allowed to develop on each stem. Plants that were not planted

till July sent up from twenty five to thirty five flower stems the following June.

Like their near relatives, the chrysanthemums, these pyrethrums prefer and winter much better on deep, rich, well drained lard. They should be covered with straw or long hay as soon as the ground is frozen hard. A good dressing of well rotted manure between the plants, applied soon after covering, is taken off in spring, and an occasional watering with liquid manure given when flower heads are developing will add to their size and give clearer, brighter colors.

The single and anemone flowered varieties are the most graceful but double varieties are grand for the border, and can be used for cut flowers and designs wherever the China aster could be used. The color ranges from white to deep crimson and includes many shades of pink and red. Stock can be increased by division, the best time for which is when growth commences, after flowering.

If kept free from weeds, the soil loose round the plants and the flower stems cut off as soon as flower heads are shabby, there will be no trouble in keeping plants over the following winter, and a second crop of bloom will often develop before frost.—*R. N. in The American Florist.*

* * *

Rapid-growing Shade Trees.

Impatient for shade; it is little wonder so many persons turn first to the poplar to supply their needs, regardless of the future. They might easily compromise and take a silver or a sugar maple, a white ash or American linden. The silver maple is not to be recommended for sidewalk planting, because of its surface roots and liability to spindling growth; but for a lawn, with a little guidance and room to grow, it makes a beautiful specimen, which in good time rivals the noble oak. I have seen magnificent specimens, not less than thirty-five years old, with an immense spread of branches almost as great as their height, and drooping to almost touch the ground—huge trunks which at once arrest the eye and encourage a feeling of awe. It is true, such trees will not live as long as some others; but if, with care, they last from seventy-five to one hundred years might they not have served a useful life? The white ash is quite rapid-growing, and does well in cities and on streets; though complaints are occasionally entered that trunk borers are fond of it. In Philadelphia are magnificent specimens to prove they can escape severe injury from such enemies. For side yards and lawns, *Catalpa speciosa* will be found admirable and fairly rapid in growth. It is better than *C. bignonioides* in habit of growth.—*S. Mendelson Meehan in Florists Exchange.*

Park and Cemetery.

ESTABLISHED 1890.

An Illustrated Monthly Journal.

Devoted to the advancement of Art-out of Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

The regular contributors to PARK AND CEMETERY are among the most eminent Landscape Architects, Landscape Gardeners and Horticulturists in the United States, whose practical articles make the journal one of great value to any one identified with landscape work.

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Subscription \$1.00 a Year in Advance.

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Correspondence solicited on subjects pertinent to the columns of the journal.

Officials of Parks and Cemeteries are requested to send copies of their reports.

Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

Association of American Cemetery Superintendents.

WM. STONE, "Pine Grove,"
Lynn, Mass., President.
GEORGE M. PAINTER, "West Laurel Hill,"
Philadelphia, Vice-President.
H. WILSON ROSS, "Newton,"
Newtonville, Mass., Secretary and Treasurer.

The Fourteenth Annual Convention will be held at Cleveland, O.

The American Park and Out-Door Art Association.

CHARLES M. LORING, Minneapolis, Minn.,
President.
WARREN H. MANNING, Tremont Building,
Boston, Mass., Secretary.
O. C. SIMONDS, Chicago, Treasurer.

The next meeting of the Association will be held at Chicago, Ill.

The American Society of Landscape Architects.

JOHN CHARLES OLMSTED, Brookline,
Mass., President.
SAMUEL PARSONS, JR., St. James Bldg.,
New York, Vice-president.
CHAS. N. LOWRIE, 156 Fifth ave., New
York, Treasurer.
DANIEL W. LANGTON, 115 East 23rd St.,
New York, Secretary.

Second Annual Meeting of the Park Superintendents of New England.

The park superintendents of New England held their second annual meeting at Providence, R. I., September 12 and 13, with good attendance, and carried out an entertaining and profitable program during the two days exercises.

The business transacted included the adoption of name, constitution and by-laws recommended by the committee

appointed for the purpose at the last meeting consisting of Mr. John A. Pettigrew, Supt. Franklin Park, Boston, and Mr. G. A. Parker, Supt., Keney Park, Hartford, Conn.

The following officers were elected: President, John A. Pettigrew, Boston, Mass.; Vice-presidents, Joseph D. Fitts, Providence, R. I.; John A. Holmes, Cambridge, Mass.; Chas. E. Keith, Bridgeport, Conn.; W. H. Richardson, Concord, N. H.; Superintendent of Parks, Portland, Me.; Superintendent of Parks, Rutland, Vt.; Secretary and Treasurer, G. A. Parker, Hartford, Conn.

The program was mainly devoted to the inspection of the parks and points of interest, and the park people of Providence entertained their visitors in a most pleasing manner. On the first evening the committee had arranged for a subscription banquet, which was given in the new Casino, Roger Williams Park, at which Mr. Richard H. Deming, president of the City Park Commissioners presided. The building is a handsome structure in the Colonial style. The following day was spent in driving about the city and viewing the residential portions of the city and the public grounds and parks. The pride of Providence is Roger Williams Park, a beautifully undulating tract of land of 432 acres, of which 130 acres is covered by charming waterways. A steam launch ride on the lake was an enjoyable feature of the visit. The days outing terminated with a trolley ride to Crescent Park on Narragansett Bay where a typical shore dinner was enjoyed.

Some recent work of Mr. Warren H. Manning, landscape architect, Boston, is a new park at Westerly, R. I., upon which he has been called in consultation.

The roads and Park Committee of Westmount, Quebec, has received the report of Mr. F. L. Olmsted, Brookline, Mass., on Westmount Park. The reports contain valuable suggestions for improvement and commends the taste already displayed in the improvement of this park.

Mr. Hugh C. Risdon, formerly sales agent of Northwood cemetery, Philadelphia, Pa., has been appointed in a similar capacity to represent Somerton Hills cemetery, Philadelphia, recently opened and dedicated.

Charles W. Hamill, superintendent of Mount Olivet cemetery, Baltimore, Md., has been relieved of his appointment by the board of trustees for alleged irregularities in his accounts. An accountant, was engaged to strike off a trial balance, as the trustees desired to make some improvements and wanted to know how they stood in regard to money matters. It is understood that a considerable shortage has been discovered.

The jury of American and Foreign architects designated to consider the competitive plans sent in under Mrs. Phoebe Hearst's liberal proposition and suggestion, for the comprehensive development of the grounds and buildings of the University of California at Berkeley, have awarded the first prize to M. Benard, the architect, of Paris, France. The ultimate cost of the improvements will reach an immense sum. M. Benard will receive a premium of \$10,000 for his plans in addi-

tion to the customary architect's fees. The other prizes assigned were as follows: Howell, Stokes & Hornbostel of New York, \$4,000; Des Pardelles & Codman, Boston, \$3,000; Howard & Caldwell, New York, \$2,000; and Lord, Hewlett & Hull, New York, \$1,000.

Mr. Gifford Pinchot, Forester, Division of Forestry, Department of Agriculture, Washington, D. C., has issued a circular inviting co-operation in preparing a year book containing a resume of the achievements of the United States in every branch of science as related to agriculture during the nineteenth century, for distribution at the Paris Exposition. The Division of Forestry will contribute a short history of forestry in the United States, and also an account of the efforts of private landowners to apply the principles of forestry, and Mr. Pinchot's circular is particularly directed to obtaining information in these directions, and further information may be obtained by addressing him.

The United States Department of Agriculture, Division of Forestry, has just issued a pamphlet describing an offer of practical assistance to tree planters, especially in the treeless regions of the West, and a section of the division has been organized for this purpose. Briefly stated, the division proposes to give such aid to tree planters that woodlots, shelterbelts, windbreaks, and all other economic plantations of forest trees may be so well established and cared for as to attain the greatest usefulness and most permanent value to their owners. Applications for such assistance will be considered in the order of their receipt, but the Division reserves the right to give preference to those likely to furnish the most useful object lessons. After an application has been made and accepted, the superintendent of Tree Planting, or one of its assistants, will visit the land of the applicant, and after adequate study on the ground, will make a working plan suited to its particular conditions. The purpose of this plan is to give help in the selection of trees, information in regard to planting, and instruction in handling forest trees after they are planted. Applications should be made as early as November of each year, and the pamphlets of information may be had upon request.

BOOKS, REPORTS, ETC., RECEIVED.

Somerton Hills cemetery, Philadelphia, Pa. Opening and Dedicatory Exercises, May 25, 1899. Illustrated pamphlet.

From J. O. Van Zandt, superintendent, Oakridge cemetery, Marshall, Mich., a number of photographs of prominent features of the cemetery.

City of Boston, Department of Parks. Twenty-fourth annual report of the Board of Commissioners for the year ending January 31, 1899. Illustrated with half-tones.

The annual report of the State Horticultural Society of Virginia.

Oak Grove Cemetery, Delaware, O.. Charter, By-laws and Rules. Illustrated with full page half-tones.

 * SITUATIONS WANTED, ETC. *

Advertisements, limited to five lines, will be inserted in this column at the rate of 50 cents each insertion, 7 words to a line. Cash must accompany order.

Roderick Campbell, for 21 years Landscape Gardener and Superintendent of the famous Forest Hill Cemetery, Utica, N. Y., is open to an engagement as Superintendent or laying out of new or the improvement of old cemeteries anywhere in the United States or Canada. Address RODERICK CAMPBELL, Utica, N. Y.

Wanted, a man of experience to act in the capacity of superintendent in building up and developing a modern lawn cemetery; married man preferred; good lodge house, healthy location, schools near by and reasonable salary, equal to \$600 per annum. Answer H., Lock Box 12, Chattanooga, Tenn.

Wanted: Competent cemetery superintendent who can invest \$500 and take interest in new cemetery enterprise. Address E. W. Werick, Sec'y, 56 Erie County Bank Building, Buffalo, N. Y.

Position wanted, as Cemetery Superintendent, by a member of the A. A. C. S. Have had several years experience, and am now in charge of an incorporated cemetery. Best of references as to character and ability. Address, American, care PARK AND CEMETERY.

Landscape gardener and architect; active man, good designer, thorough gardener and business man, with extensive experience, is ready to accept position. For particulars as to character and ability address C. R., care of PARK AND CEMETERY.

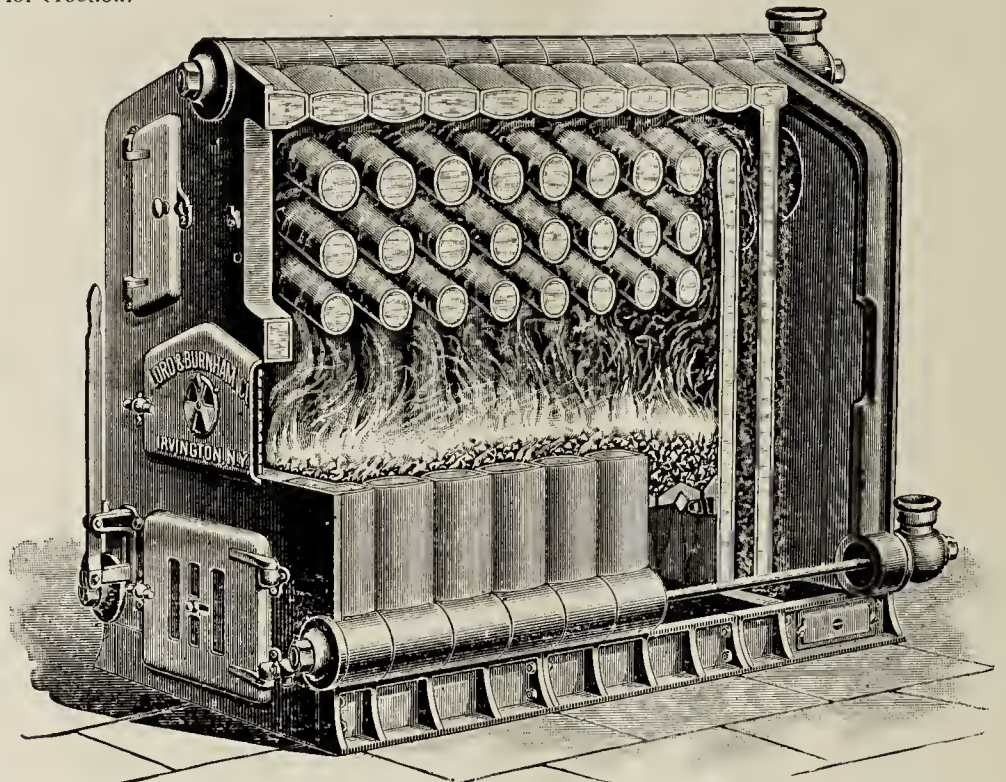
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The Lot Diagram pages provides for keeping a record of all lot owners and simplifies the important matter of accurately locating the position of graves and the names of their occupants, substantially bound, with name of cemetery on front cover in gilt letters. Size of book, 9 1/2 x 12 inches.

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"Simplex," 40 pages 9 x 12 for 960 names, \$1.50. "Simplex," 80 pages 9 x 12 for 1920 names, \$2.50. Specimen Pages of the "Combination" or "Simplex" will be sent on application.

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PARK AND CEMETERY.

* A Monthly Journal of Landscape Gardening and Kindred Arts. *

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CONTENTS.

EDITORIAL—Swan Point Cemetery, Providence, R. I.— The Pilfering of Flowers, etc., in Parks and Cemeteries —The Good Roads Question—Fall Effects and Land- scape Art—An English National Trust Society—The Duty of Officials to the Public.....		157, 158
*The Public Parks of New Haven, Conn.....		159
*The Early Cemeteries of New Haven, Conn.....		161
The Effect of Trees on Temperature.....		164
*Sophora Japonica, Japanese Pagoda Tree.....		165
*Cereus Grandiflorus.....		166
*A Mighty White Oak.....		166
History of the Dahlia.....		167
*Logan Grove, Medford, Mass.....		167
*The Hypericum.....		168
White Lilies.....		170
The Outside Cemeteries of San Francisco.....		171
*Some Noted Mausoleums in Woodlawn Cemetery, New York.....		172
Epitaphs.....		172
*Marginal Planting.....		174
Mountain Grove Cemetery, Bridgeport, Conn.....		174
Notes on Parks and Park Work.....		176
Improvement Associations.....		177
*Garden Plants—Their Geography, XLVI.....		179
Park Notes.....		181
Cemetery Notes.....		182
Selected Notes and Extracts.....		183
Reviews of Books, Reports, Etc.....		184

*Illustrated.

ON their return from the New Haven convention a number of members of the Association of American Cemetery Superintendents stopped over in Providence, R. I., to visit Roger Williams park and Swan Point cemetery. Swan Point cemetery possesses features which have been developed so naturally and yet artistically, that it stands unique in many particulars. Possessing, like so much of New England territory, its full share of rock and boulders, these rather than being neglected as detrimental, have been used with splendid results in improving the grounds, and in combination with trailing and creeping vines and low bush and dwarf flowering material, effects have been produced of marvelous attractiveness, and the term is used advisedly too. In an early issue some details and illustrations will be given, which will demonstrate what can be done by a genius in gardening, with what material he has on hand coupled with an innate love and knowledge of nature and her ways in her floral kingdom.

ONE of the most serious and at the same time most annoying difficulties, park and cemetery superintendents have to contend with, is the petty depredation, of more or less frequent

occurrence, carried on among the flowers and smaller plants, by persons who pay no attention to the rules governing such practices. It also often extends to injury to the trees and larger shrubs. In these columns stringent measures have been advocated to stop such abuses, while at the same time the difficulty of catching the culprits in flagrante delicto is realized. We think it should be presumed that much of this petty pilfering is done without due knowledge of the consequences attending detection, and that education is very necessary to explain to the public that to preserve even the wild beauty of the park great care and expense are necessary. A method has been adopted by the Board of Park Commissioners of Rochester, N. Y., educational in its nature. Thousands of circulars have been distributed on the street cars to persons visiting the parks, and in the public schools calling attention to what the authorities are doing in planting and caring for wild flowers, asking that all will refrain from picking them, and including on the circular the legal penalties in store for those disregarding these injunctions. The circular strikes us as an excellent suggestion which might readily be extended to cover many situations and cases, and is right in the line of practically educating the people in their duties to the parks and cemeteries in regard to their plant life.

UNQUESTIONABLY, an old important matter in the development of a country is its roads, and it is one that for some reason or the other has been most neglected in our own country. Whether it has been from the fact that this has been eminently a peaceful nation, with no necessity to create and maintain good roads for military purposes, or that the very extent of territory to be covered has blinded our people to the economy represented by good thoroughfares, the fact remains that of all the civilized countries at present under prosperous conditions our means of communication in the way of roads are unquestionably the poorest of all, taken altogether. And it is gratifying to note, that at last, the value of good roads is slowly making itself felt, and that the necessary political methods to secure them are gradually taking shape. During the last year or two a large number of organizations have been effected over the

country to work up sentiment favorable to reform, to change state constitutions so as to make the work a state economy, and to devise means and study the engineering details connected with the most economical and perfect systems of construction. The most potent factor in the whole question is the education of the people, the farming and suburban communities. The fact of the great economy provided by good roads over bad ones, requires to be driven into the minds of the masses. The value of horse-flesh and the possibility of making one journey and load take the place of two, has not sufficiently impressed them. And while the horrible conditions of our country roads in spring and fall cause an incredible actual money loss, the possibility of making it good by extra labor and hardship, has unfortunately superseded any agency brought to bear upon the country citizen to induce him to put his hand in his pocket for the taxes for such improvement. It is an absolute necessity in our development, and thankful to say is bound to come.

WERE the average student of landscape gardening in doubt as to the necessity of cultivating his artistic nature with a view to its participating in his future work, a study of the woods in this beautiful October should quickly remove it. The color pictures presented from the touch of the first light frost until the actual fall of the leaf frequently tempts the observer to declare that were a painter to put such an array of coloring on his canvas, few would believe him true to his inspiration; and yet there is a general harmony and restful beauty in all the combinations. An interesting study can be made of the maples alone, each variety in the patch of woods or the landscape has a distinct shade of coloring, ranging between the brilliant chrome and the reds verging on brown. This is but a suggestion, for endless variations in nature's pigments can be detected in all others of her plant family. Then passing a little later to the leafless trees we cannot but mark again the differential tones pervading the trunks and limbs of the forest growth. A knowledge of all this with that of application of such knowledge to work in hand must be part of the furnishing of a competent superintendent or landscape gardener. His schooling must not only be in books, the record of past effort and experience, but the book of nature all about him must be freely drawn upon. This broad and bountiful book will not only afford him the greater part of that practical education which he must have to be successful in his profession, but it is a never failing source of inspiration for the finer effects which can be produced in landscape work in the hands of man.

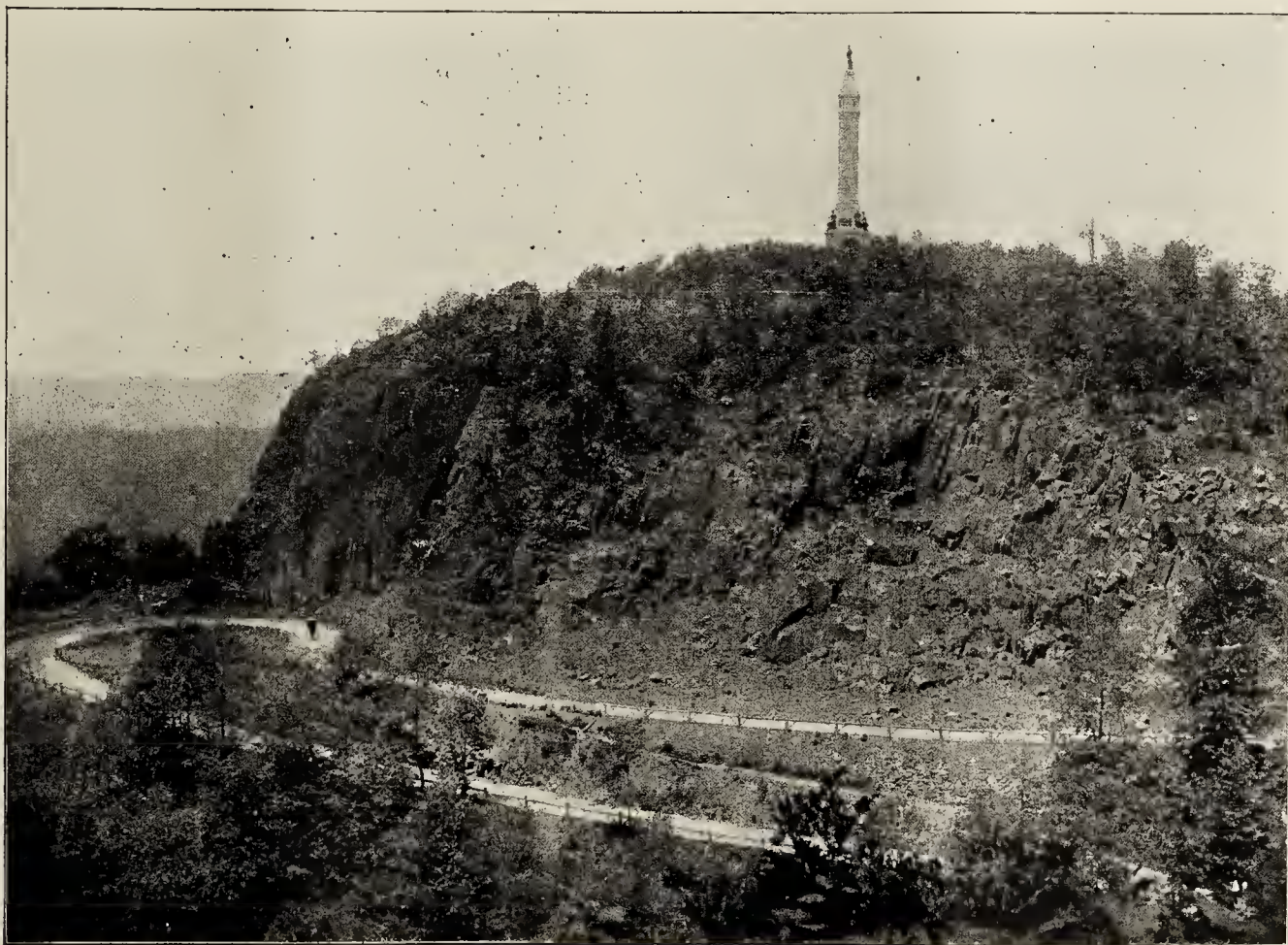
THERE is a National Trust Society in England whose work is of far different import than the name conveys to American readers. And yet in some of the eastern states successful efforts are being made to attain the ends comprised in the object of the English society. In an article in *The Nineteenth Century* on "The Open Spaces of the Future," by Miss Octavia Hill, she tells of the progress of the above trust, of which she is a member, and it is interesting to find so significant a change in the common understanding of the term trust. She says: "We have received from one lady a gift of a beautiful cliff near Barmouth; we have purchased by 173 donations a headland of fourteen acres in Cornwall, commanding the best view of Tintagel, and are appealing now for help to secure a wooded hillside in Kent with a splendid view; we have bought and entirely preserved from ruin a lovely old clergy house in a fold of the Sussex downs; we have purchased a piece of fen land to preserve plants, moths and birds peculiar to marsh land; lastly, we have received a gift of a spur of a Kentish hill commanding a lovely view over the country." This is exceedingly refreshing, and while we in America cannot get the picturesque ruins to improve our landscapes, we possess wonderful landscapes and many tracts of woodland and natural phenomena worthy of preservation and care for future generations. Every state should organize such a trust as this, and work to interest those who possessing possible natural treasures may also possess the spirit of generosity, looking to the comfort and pleasure of their fellow man.

SOME recent court decisions supporting public sentiment in opposition to the arbitrary rulings of a certain park board suggests a word of advice to such officials. While it happens quite frequently that the first expression of public opinion lacks directness, that expression should inspire respectful consideration, untainted by the arbitrariness which usually accompanies the response of the people's representative. For a representative official or body of officials to retain the confidence of their constituents, there must be no lapse whatever. Every lapse weakens the confidence bestowed upon them, and puts every subsequent act in the full glare of that critical spirit which the previous slight had aroused. This fact should lead all officials, wherever and however situated to cultivate a calm and attentive demeanor, ever ready to foresee and appreciate progressive steps, so that they may lead those confiding in them, and not be driven into that oblivion which errors of judgment in this direction provide for shortsighted office holders.

THE PUBLIC PARKS OF NEW HAVEN.*

Until about twenty-five years ago New Haven was simply a rural city or large town and possessed, as in fact it still retains, much of the rural conservatism which contents itself with the good things it has without undue greed for others that are costly and not immediately needed. Its wide reputation for the sylvan beauty of its streets and ancient green fully satisfied the pride of its citizens and with the open country close at hand on all sides, additional parks and pleasure grounds seemed to be superfluous. About the year 1883 however a few public spirited persons carried through a movement

been done up to the present time to make them accessible to the public and available for the immediate wants of the present population. They are all however only in the preliminary stages of their development and it has not been thought important to press their improvement with any greater rapidity or at any greater cost than is called for by the public necessities as population grows around them. Hence although our park system is a liberal one in its anticipations for the future, the principal merits of most of our parks consist in their undeveloped natural capabilities and they have little to show in the way of artistic cultivation. When



VIEW OF EAST ROCK PARK, NEW HAVEN, CONN.

Taken from Indian Head, showing the Loop of the Farnam Drive about one-fourth of the way up.

for the purchase of East Rock range as a suburban park, and the educational effect of this achievement was such that six years later a Park Commission was established by Act of the Legislature and vote of the Town, with two hundred thousand dollars at its disposal to extend the municipal park system. This commission soon procured nine additional park sites within the city and in its near vicinity, ranging in area from fifteen acres to two hundred and fifty, and were fortunately in time to secure most of the available tracts in and surrounding the city, which by their natural advantages of situation or capability of development were specially available for park purposes. On all these sites enough work has

it is stated that the entire annual appropriation for the maintenance and improvement of the ten parks under the charge of the Park Commission is only \$16,000.00, of which \$6,000.00 is devoted to East Rock Park and \$10,000.00 to the other nine, it will be readily perceived that brilliant triumphs of landscape gardening on any considerable scale cannot be reasonably expected.

The park system of New Haven is composed of two portions. The first of these comprises the five city squares or breathing places which existed prior to 1883 and which were then and still are under the charge of the Board of Public Works. The other portion embraces the ten new parks which have been purchased since that date and which are under the control and management of the Park Commission.

Of the city squares the principal one is the ancient

*Paper read at the New Haven, Conn., Convention of the Association of American Cemetery Superintendents, September, 1899. By Hon. Henry T. Blake.

'Green,' of about sixteen acres in area, which was set apart as a "Market place" at the first settlement of New Haven in 1638. It was then the central square of the nine which constituted the original town plot; and being dedicated "to public uses" as the term was then understood the public buildings of the town for several generations were located upon it, including "the meeting-house," the school house and the jail, with its accompaniments, the pillory and whipping post, and in addition to these conveniences, it served for more than one hundred and fifty years as the common burying ground. All these relics of the past have now disappeared except the three churches still standing upon it and which were erected between 1812 and 1815. From its position and the nature of its uses "the green" has been for more than two hundred and fifty years the center of New Haven's political, civic and religious life. Until 1784 it was unsightly and uninclosed and disfigured by weeds, bushes and promiscuous cart tracks, but in that year numerous elm trees were planted in it by Mr. James Hillhouse, and in the course of fifteen years thereafter other improvements were made and the whole square enclosed and graded through the efforts of Mr. Hillhouse and other public spirited citizens. After the year 1800 burials on the green were discontinued and in 1821 all the tomb stones upon it were removed to the Grove Street Cemetery, except such as were beneath the Center Church and also excepting four others in the rear of the church which are still to be seen there.

Of these four stones not removed, the one which is enclosed in a railing with a modern monument and marked "I. D. Esqr." is the original memorial of John Dixwell, one of the members of the Court which condemned Charles I to death in 1654 and who died in New Haven under an assumed name in 1689. The other stones marked "E. W." and "M. G." were in 1821 supposed to be the tomb stones of Whalley and Goffe, two others of "the Regicide Judges" who were concealed in New Haven in 1661 and who found refuge for a while in "Judges' Cave" on West Rock. Later investigations have shown that the supposed Whalley and Goffe stones were erected for other persons, but the Dixwell memorial is undoubtedly authentic.

Besides "the green" there are within or adjoining the thickly settled portions of the city nine other public squares or breathing places. Of these the principal ones are first, Wooster Square, of six acres in area, five blocks from the green and laid out with trees and walks in the same old fashioned manner; second and third, Water Side Park and Quinnipiac Park, both of which are situated in factory districts and each of which when completed will contain about sixteen acres. Both of these are on the water front, planted with shade trees and provided with facilities for bathing and ball playing. Fourth, Bay View Park, which is another sea side park in a first class residential district in the southern part of the city and on the edge of the harbor. It has an excellent bathing beach, several hundred feet in length, skirted by a drive, and contains twenty-three acres of upland and lawn. It is well shaded and provided with

seats and a small boating lake, and is a favorite resort for ladies and children.

The five other urban parks are all within a mile and a half the of City Hall and wholly or partly surrounded by a rapidly growing population. They are first, Clinton Park, of about seven acres, facing a large inland bay in the northeastern part of the city. Second, Beaver Ponds Park, in the northwest section, embracing an undeveloped tract of marsh and upland, through which flows a never failing stream of pure spring water, and which when completed will form a picturesque park of about one hundred acres. Third, Edgewood Park, in the western residential district, containing about one hundred and ten acres of wood land and meadow, which is intersected through its whole length by West River. This park like the Beaver Ponds tract has fine possibilities for future picturesque treatment. A considerable part of it has been already partially laid out under intelligent supervision and improved with driveways, foot paths, flower beds and shrubbery so that it forms an important attraction to that thriving part of the city. Fourth and fifth, Trowbridge Square and Jocelyn Square, each containing about two acres and each in the heart of a tenement population. Several other open places of somewhat smaller dimensions in different parts of the city, shaded with trees and provided with walks and benches, are not included in this enumeration.

The outlying parks remain to be mentioned and of these there are four. The one nearest the center of the city is East Rock Park, about a mile and a half northeast of the City Hall. This contains three hundred and fifty acres and occupies a chain of four wooded heights, the principal one of which is East Rock, which shows a precipitous front three hundred and sixty-two feet in elevation overlooking the city. On its summit stands the Soldiers' Monument, forming a landmark visible for many miles in all directions. This park is traversed by over seven miles of drives and as a mountain park has few superiors for the number and variety of its natural attractions. Its counterpart, West Rock Park, lies two and a half miles northwest of the City Hall, its front toward the city being marked by a bold cliff which rises abruptly four hundred and six feet above the stream at its foot. This park strictly speaking contains about two hundred acres but it adjoins a wooded mountain district of indefinite extent stretching northward, much of which belongs to the City of New Haven and of which at least two hundred acres are already practically a part of the park. This park has some three miles of drives within and around its borders and affords a fine variety of views, that from its summit being especially extensive and impressive. A prominent attraction of West Rock is the historic "Judges' Cave" in which the Regicide Judges, Goffe and Whalley, were concealed for a time from their pursuers in 1661. This circumstance is commemorated by a bronze tablet affixed to one of the rocks forming the cave by the Society of Colonial Wars.

A third outlying park is at Beacon Hill, on the east side of New Haven harbor and about two miles from the City Hall. It embraces about seventeen acres and its principal claim is the superb view from the summit

of the hill on which are the remains of Fort Wooster, constructed in 1812, from which the park derives its name. A bronze tablet on the fort, placed by the Sons of the American Revolution, commemorates the gallant resistance made from this hill to an attack on New Haven by British troops in 1779.

Three quarters of a mile from Fort Wooster is Fort Hale Park, containing a little over forty acres. It is situated directly on the sea shore and has nearly half a mile of water front including several elevations of one hundred feet high and upwards, which are on the water's edge and afford splendid outlooks over sea and land. This Park is named from Fort Hale, a casemated earthwork erected by the U. S. Government in 1863, never used and now dilapidated but which forms an interesting feature in the park. This fort is the successor of one which during the Revolution stood on the same site and which actively resisted the landing of the British troops at this point in 1779. A considerable part of this park is land belonging to U. S. Government including and adjoining Fort Hale, which has been placed by Act of Congress under the control of the New Haven Park Commission.

The entire park system of New Haven is accessible by trolley lines which run to one or more entrances of every park at a cost of five cents from any part of the city.

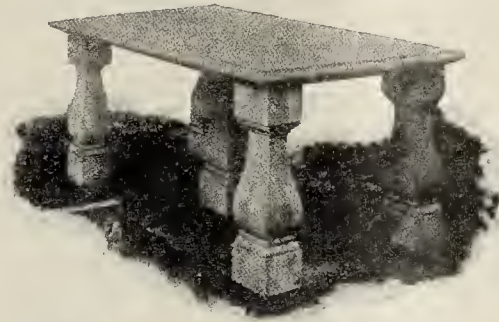
For a complete resume of the park resources of New Haven it would be proper to mention the several pleasure grounds which are maintained by the Street Railway Companies and which are made attractive to the people by the entertainments and other enticements usual at such places. Of these the most prominent is the park at Savin Rock, a sea side bathing resort, four miles from the City Hall, to which trolley cars run every ten minutes and which is thronged every day and evening by pleasure seekers from the city. At the same distance on the other side of the harbor is Light House Grove, with similar popular allurements. One and a half miles further east, on the shore of Long Island Sound, are Cosey Beach and Mansfield's Grove, two contiguous resorts whose combined attractions are largely patronized. Eight miles from New Haven by water is Pawson Park, a favorite place for society picnics and Sunday School excursions, to which a steam boat runs twice a day during the season. And finally Schuetzen Park, a popular gathering place for our German fellow citizens, noted for its invigorating athletics and Teutonic tonics, is at the end of a short trolley line in our northern suburbs.

On the whole it may be said that New Haven with its nineteen parks and pleasure grounds is fairly well supplied with places of rest and recreation. Its population is about 115000 and the park acreage, not including the public resorts which are privately maintained, is something over eleven hundred acres, or about one acre to every one hundred inhabitants.

If the circulars which the Department of Agriculture has distributed, looking to a comprehensive at Paris next year of plans and photographs of park, landscape and gardening development of the United States, receive due attention, a most important exhibit will result.

THE EARLY CEMETERIES OF NEW HAVEN, CONN.*

In writing of early burial grounds, it may not be uninteresting to mention the fact that the Indians of this locality also had a place of burial, which was located on Beacon Hill, now known as Fort Wooster Park. This property was afterwards owned by my



MEMORIAL TO ROGER SHERMAN.

own ancestors, and I recall an incident related in my childhood by my grandmother. It was the custom of the Indians never to bury one of their number unless some one could say a good word of the dead. One of them died and was left unburied for several days because no one could speak well of him; finally one old Indian came along and pronounced him as having been a good smoker. Then they planted him in a sitting posture and facing the east.

New Haven has had an existence bordering on to three centuries. In the spring of 1638 the first settlers sailed from Boston, arriving here the latter part of April in that year, and landed in boats at the foot of College street, within two blocks of this place where we are now convened. A memorial tablet marks the spot.

Among their first enactments was to lay out the town in nine squares, and to the "Town Born" of New Haven are still known as the "Nine Original Squares," in the center of which they laid out a market place: (the present New Haven Green). They then established a church, schools, a whipping post and a burial ground, all adjacent to each other; the two latter are rather suggestive, coming as they did from these good Boston people.

The first burying ground was located under and in the rear of the present Center church on the Green, as you will see by the accompanying map. The names of those resting under that edifice are recorded on marble tablets in the vestibule of the church. Among the noted dead of their day and generation, under that church can be seen the tombstone erected to the memory of Margaret, the first wife of Benedict Arnold. In the rear is a monument to Colonel John Dixwell, one of the regicides who signed the death warrant of King Charles I. of England. On the rear of the church are tablets marking the spot were Theophilus Eaton, the first governor of New Haven colony, and his deputy governor Stephen Goodyear, were buried. These grounds were used as a common place of burial from the first settlement of the town in 1638 to the beginning of this century. The last interment here made was in 1812.

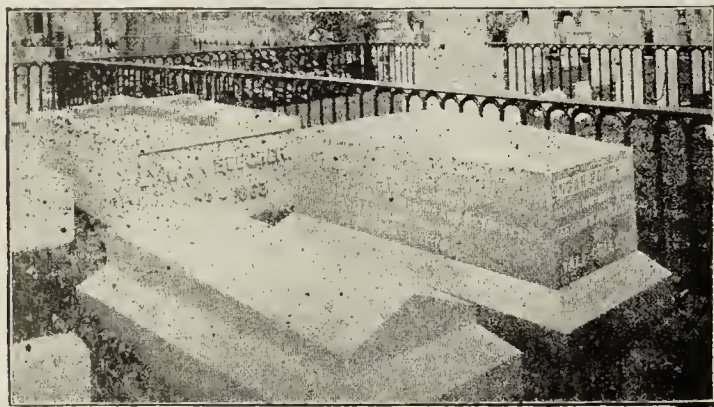
In the year 1757 Trinity parish (in communion with the church of England) erected a church edifice on its land located on the easterly side of Church street, south

*Paper read at the New Haven, Conn. Convention of the Association of American Cemetery Superintendents, September, 1899. By Edward C. Beecher.

PARK AND CEMETERY.

of Chapel. It also had a church yard in connection with its parish church, but no record appears how long and to what extent it was used. The following vote passed by its vestry in 1785 establishes this statement where it was voted:

That there be no further burials under the body of the church except those families, some members of



MEMORIALS TO LYMAN BEECHER AND NOAH PORTER.

which have already been buried, by which is understood the heads of families and their children, only excepting any person leaving a legacy of thirty pounds, and particularly desiring that liberty."

In 1792 its vestry appointed "a committee to confer with the committee of the other societies in relation to putting a fence around the old burying ground on the Green," and I think it safe to suggest that no interments were made after that period in their Church street property.

In the year 1818 the property was sold and the old building was to be pulled down, or removed, and probably at that time all remains were then transferred to the Grove street cemetery.

In September, 1796, the Hon. James Hillhouse, with the aid of thirty-one other citizens, purchased a field of six acres of ground, with a view to obtain a burial place, in the words of the record, "larger and better arranged for the accommodation of families, and by its retired situation better calculated to impress the mind with a solemnity becoming the repository of the dead." Heretofore interments had been made in rows indiscriminately, regardless of families, on the principle of "first come first served."

In 1797 a charter of incorporation was obtained from the general assembly of the state of Connecticut, under the corporate name of "The Proprietors of the New Burial ground in New Haven," but in after years the corporate name was changed to "The Proprietors of the New Haven City Burial Ground," as it stands to-day.

The provisions of its charter authorize the corporation to elect one member of its number, the City of New Haven to select another, and the third to be the clerk, ex-officio, as "its standing committee," who have the charge of its funds and the whole care of the grounds, and to so continue in office until their successors are elected.

To me this is a very interesting coincidence, cover-

ing as it does just the period of a century, and during all that period there have been only five clerks, the speaker being chosen to that office at its close. Our predecessors all did well their part; may our successors be able to say the same of our administration.

In the planning and laying out of the grounds, the corporation gratuitously gave each religious denomination and its clergyman a burial plot, also gave one to the president and fellows of Yale college. It also set apart about an acre of land to be used as a potters' field, a place of burial for strangers and for people of color, there being quite a goodly number of the latter at that time, and you may be surprised to know that here in old Connecticut some were slaves.

From time to time additions of land were made, so that the present area is now eighteen acres. Family plots were laid out, 18x30 feet, and sold from four to ten dollars each. This corporation never was a money-making affair, but was laid out pure and simple as a family burial place.

In the year 1821 the monuments and stones of the old burial ground were transferred to Grove street cemetery, and a public service commemorating the act was held, July 20th, of that year in the Center church, before a great concourse assembled. Owners of burial plots then placed their family memorial stones in their respective plots; the remainder are arranged alphabetically around its northern and western walls.

The interest which our citizens took in this enterprise never flagged, and the amount of money raised was commensurate with the times. The year 1841 witnessed the completion of an eight foot stone wall, with towers, erected on three sides, at an expense of \$11,000; an iron palisade fence on the front at a cost of \$3,500. In the year 1845 an Egyptian gateway, costing \$5,000. was erected, thus consummating the entire work, the corner



MEMORIALS TO PROFESSORS LOOMIS, TWINING AND HADLEY.

stone of which was laid with appropriate ceremonies in July of that year.

In 1870, by a special act of the general assembly of the state, the proprietors were empowered to contract with the owners of burial plots for their perpetual care, and herewith we beg leave to submit such form as the

standing committee have adopted and in use at the present time.

In 1872 a chapel building was erected at the entrance of the grounds, not as ornamental as it is useful.

In the early days in fact down to 1815 and even later, biers were in use to carry the dead to a place of sepulchre. After this period a hearse was brought into requisition, and a sexton and hearse driver were appointed, which practice was in vogue up to 1865 when the standing committee were authorized, by a special act of the general assembly, to appoint grave diggers and sextons, or hearse drivers, as occasion should require, and to fix their compensation. Any "Interlopers" attempting an interference were subjected to a fine of ten dollars, or imprisonment in the New Haven jail for a term not exceeding sixty days. The association probably owned their own hearse, and were by these acts protecting their own interests. Whether this law still remains on the statute book or not, I do not know, but it is a dead

ribbon or rosette. This scarf was considered as a perquisite (if we may so use the expression) for linen shirtings in those days was worth something. In many instances the custom of providing liberal libations of "toddy" was not forgotten. Mr. Bostwick well remembers the procession in the instance of the funeral of Eli Whitney and it was conducted in this manner. The funeral took place from the house now standing and occupied by Mr. Douglass, on the easterly side of Orange street, between Elm and Wall streets.

Time would fail me to say all I would like to include in this history; so I must stop, and in closing will only enumerate some of the more prominent and noted men having a national history, whose graves you will find placarded as we drive through the grounds.

The Hon. Roger Sherman, Connecticut's signer of the Declaration of Independence, and the first mayor of New Haven, (and, by the way, Mr. President, the building we are now in stands on a part of his original



1690.

1687.

Crypt of the old Central Church on the Village Green, New Haven, Conn., showing the Preservation of the Graves and Memorials of the Early Settlers. The stones on the left, under which are given the dates, mark the graves of Sarah Trowbridge, mother, 1687, and Sarah Trowbridge, daughter, 1690.

letter if it does. In funeral processions I have myself seen the old-fashioned post stage coaches in line, public carriages then being very limited.

In speaking of the introduction of the hearse, we are indebted to our former esteemed fellow-citizen. Amos Bostwick, Esq., (now of New York city, who has been connected with Woodlawn Cemetery association over a quarter of a century) for the following information. He tells us the first hearse was a crude, improvised affair, being simply a set of wheels with a platform (no top) wide enough to support a coffin; a black pall was thrown over it; then it was strapped on to the vehicle, and in a funeral cortege the horse was led by the sexton, immediately followed by the pall-bearers, the clergy and sometimes the family physician on foot, wearing emblems of mourning consisting of a white linen plaited scarf (the rule being of sufficient quantity for two shirt patterns). The scarf was worn over the right shoulder, crossing the breast and back and at a point just below the left knee the two ends were fastened with a black

homestead.) General David Humphreys, LL. D., one of General Washington's aids in the war of the revolution; an ambassador to Portugal and Spain. A distinguished historian and poet. To him this country is indebted for the first importation of the Merino sheep, and Andrew Jackson, when president of the United States, had his wardrobe annually supplied from the products of General Humphrey's mill.

Yale college's presidents, Clapp, Stiles, Dwight, Day, Woolsey and Porter, together with hosts of noted professors of that university, too numerous to mention in this short paper.

Noah Webster, LL. D., author of the American dictionary and spelling book; his first draft made in 1782, and no publisher found willing for a long time to publish it. Ashmun, the first colonial agent to Liberia. Jedediah Morse, D. D., the father of American geography, and his son was the inventor of the Morse telegraph. Eli Whitney, the inventor of the cotton gin Charles Goodyear, inventor of vulcanized rubber.

PARK AND CEMETERY.

Prominent officers and soldiers connected with the wars of the revolution, wars of 1812 and the late civil war, both of the army and navy:

Rear Admiral Foote: Read Admiral Gregory; Major-General Alfred H. Terry, of the United States army.

Of the prominent clergy of the country: Rev. Lyman Beecher, D. D., Rev. Nathaniel Taylor, D. D., Rev. Leonard Bacon, D. D., of the Congregational church,

Of the Episcopal church: Rev. Bela Hubbard, D. D., first rector of Trinity church. Rev. Harry Crosswell, D. D., Rev. E. E. Beardsley, D. D., church historian.

While we cannot boast of a cemetery comparable with cemeteries of the present day in all their adornments by nature and art, we can say this Grove street cemetery was the first one in the world laid out in fam-

ily plots, and for its size probably contains more noted dead than any other one in the United States. Its novelty was one of the early attractions of New Haven, and was called "The Pere La Chaise of America." Of the memorial stones some of the epitaphs were unique, especially those attracting the eye of an Englishman, who was horrified to see that so many had been "Executed" by D. Ritter. This man Ritter was the only one in the marble trade at that time, and this was his method of advertising his business.

Thus briefly have I endeavored to call your attention to an outlined history of this ancient New Haven City Burial Ground, in the hope that the custodians of other homes of the dead may learn something of the reverend care that we have aimed to bestow upon all that is mortal of those who have been to us most dear.



THE EFFECT OF TREES ON TEMPERATURE.

Dr. Stephen Smith, in showing that trees are a safeguard against many of the dangers of summer heat in cities, since they tend to lower the temperature and to purify the air, states that the Washington elm of Cambridge, Mass., a tree of moderate size, was estimated a few years since to produce a crop of 7,000,000 leaves, exposing a surface of 200,000 square feet, or about five acres, of foliage. Dr. Smith enumerates the causes of the increased summer temperature of cities which so appreciably raises the mortality of the lower classes during the hot months. Among these are the absence of vegetation, the drainage and hence the dryness of the soil, the covering of the earth with stones, bricks and mortar, the aggregation of population to surface areas, the massing together of buildings and the artificial heat of workshops and manufactories. When the summer temperature begins to rise the solar heat is constantly adding to the artificial heat. The temperature of the whole vast mass of stones, bricks, mortar and asphalt gradually increases, with no other mitigation or modification than that caused by the inconstant winds and occasional rainstorms. Dr. Smith says the practical remedy for many of these evils is the planting of large numbers of trees in the streets. He points out that the temperature in a forest, a grove or even a small clump of trees

is lower in summer and higher in winter than it is in the open. The difference between the temperature of the air under and among the branches of a single tree, densely leaved, and the surrounding air, on a hot day, is 20, 30 and 40 degrees, and in the soil there is a difference of from 10 to 12 degrees. The reverse is true in winter. Railroad engineers have to use far less fuel in passing through forests in winter than in traversing the same distance in the open country. When the ground in the fields is frozen two or three feet deep its temperature in the forest is found above the freezing point. Trees, in fact, have a normal temperature, probably approximating 54 degrees Fahr., which they maintain summer and winter. Another important effect on temperature is that caused by the evaporation of water from the surface of the leaves. A sunflower, with a surface area of 5,616 square inches, throws off at the rate of twenty to twenty-four ounces every twelve hours. A vine with twelve square feet of foliage exhales at the rate of five or six ounces daily. It has been estimated that an acre of grass emits into the atmosphere 6.4 quarts of water in twenty-four hours. It is this fact which gives significance to the estimate of the superficial area of the foliage of an elm tree. The advantage of having an automatic evaporator under one's window is potent. Dr. Smith urges the authorities of

cities to take in hand the work of planting trees freely throughout their streets. Trees about three inches in diameter and fourteen feet high can be planted in a city, including transportation from nursery, opening and relaying the pavement, providing suitable iron box and the necessary earth, at an expense of from \$5 to \$7 each.—*Record*, Chicago.

SOPHORA JAPONICA, JAPANESE PAGODA TREE.

It is with much pleasure I am able to present to the readers of PARK AND CEMETERY an illustration of the rarely seen *Sophora Japonica*, called Japanese Pagoda Tree. The lovely specimen, or specimens rather, for there are three of them, are growing at Belmont, in the West Park, Fairmount, Philadelphia. Mr. C. H. Miller, the superintendent of the grounds, thinks the trees all of 75 years old. The three trees, by whomsoever planted, were set 12 feet apart, in triangular shape, and are about 40 feet high, and spread quite as much. In fact such a beautiful shady grove do they form, that it is a favorite one for picnic parties, as the benches under it indicate. The number of bunches of flowers on this group runs into the thousands; and when in bloom, as it was in August, it was truly a magnificent sight. Even in late September, when last I saw it, the cluster of bladder-like pods made a most ornamental display, appearing at a distance just like clusters of flowers, and this feature it possesses well into October. This tree belongs to the natural order Leguminosæ, which takes in peas and similar plants with like flowers. The clusters of flowers are cream colored, and when they are so abundantly produced as they are this season, the display is grand indeed.

I do not know why it is so scarce in cultivation unless it may be because it takes some years before it flowers. It has been known in cultivation since 1763, yet trees of any size are rare even in such a centre for rare old trees as Philadelphia.

It is easy enough at this time to get fair sized plants of it, as most nurseries contain it.

It is probably accustomed to more heat in its native country than it gets with us or else the season is more prolonged, as the seeds in the trees in this park do not ripen unless in unusually favorable seasons.

When planted alone, where it can develop freely,

it makes a round headed tree of great beauty, usually spreading as many feet as it is in height.

Besides the common form there is an exceedingly beautiful weeping variety, *Sophora Japonica Pendula*, which is as pretty in winter, when bereft of foliage, as it is in summer, as indeed is the case with many other weeping trees. There is besides a variegated leaved sort, a species, or variety, I am not sure which, called *violacea*, which is also in nurseries in this country.

The bark of young trees of *sophora* is quite green, much like that of *laburnum*, and this color is retained until the tree is quite large.

It will interest many readers to know that Belmont, where the trees illustrated are growing, is quite historic. Belmont Mansion, as the house is called, commands a view of a large portion of



Sophora Japonica—Japanese Pagoda Tree.

the city of Philadelphia, standing on an elevation 243 feet above tide level. It was erected by Judge Peters in 1745. Judge Peters, in the days of the Revolution and subsequently, entertained a host of notable personages within its walls. Franklin, Rittenhouse, the astronomer, Bartram, the botanist, Wharton and distinguished scientists were frequent visitors. Lafayette, Baron Steuben, Talleyrand, Louis Phillippe, Robert Morris, John Adams and the author of the Declaration of Independence, Thomas Jefferson, have all stood within its walls and trod its grounds. Washington's memory is the most sacred legacy of these grounds. The biographer, Thomas Breck, says of this. "Whenever a morning of leisure permitted that great man to drive to Belmont, it was his constant habit to do so,

In its beautiful gardens, beneath the shadow of the lofty hemlocks, he would sequester himself from the world, the cares and torments of business and enjoy a recreative and unceremonious intercourse with the Judge"

Whether or not the Sophoras are old enough to have been in position in the days referred to I cannot say. They have certainly been there very many years.

Visitors here will find, quite near Belmont, Tom Moore's cottage, which he occupied while living here. One of the sweetest of his ballads was composed in this cottage.

"I knew by the smoke that so gracefully curled
Across the green elms that a cottage was near,
And I said if there's peace to be found in this world,
A heart that is humble might hope for it here."

Joseph Meehan

CEREUS GRANDIFLORUS (*Night-Blooming Cereus*).

Stems long, terete and rooting. Flower tube springs from the edge of leaf and is 4 to 5 inches



Cereus Grandiflorus. Night Blooming Cereus.

in length. The flowers are remarkable for their rare beauty and sweetness, when fully expanded measuring from 6 to 9 inches in diameter; the calyx is brown on the outside, and of a yellow color on the inside; the many, narrow sepals are also yellow; the petals are broader and pure white; stamens very long, numerous and tipped with oblong anthers of a bright yellow color.

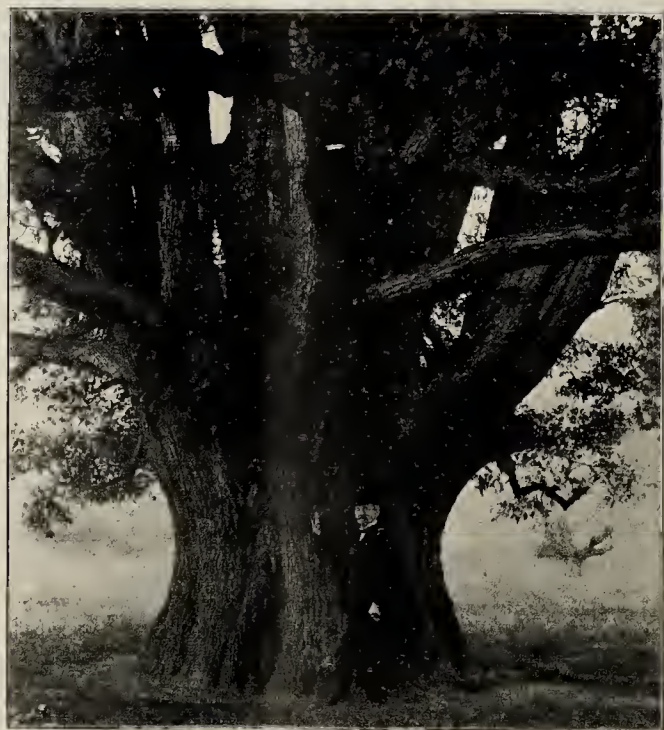
The Night-blooming Cereus usually flowers in July or August, and when the plants are large several flowers will open the same night. So rapid is the expansion, the soft trembling of the petals (numbering about ninety) can be seen. The blossoms are of very short duration, continuing in full bloom only about six hours. They begin to open at 7 or 8 o'clock in the evening, are fully blown

by eleven, and by three or four o'clock in the morning they fade and hang down quite decayed; but during their short continuance there is scarcely a flower of greater beauty, or with so rich and delicate a perfume.

Although only occasionally seen in conservatories, the grandiflorus can be successfully grown in the house where a normal temperature is maintained, and will even stand transplanting to the lawn in the summer season if protected from strong winds. The plant to the right in our illustration was imported from Germany. The one on the left was a small slip taken from a plant in Iowa. It is now 11 years old and has been blossoming for 8 years, and, although but a small plant, has produced as many as five flowers at one time. Both plants are owned by a lady living in Chicago. Each summer the pots containing the plants are placed in the ground close to the foundation of the house and in an angle where they are well sheltered from the north and west winds. The photograph from which our illustration is made was a flash-light picture taken about 9 o'clock in the evening of August 28th.

A MIGHTY WHITE OAK.

Venerable trees always induce reflective sentiment, and such a stupendous fellow as is here represented is well worthy of admiration. We are indebted to Mr. Joseph H. Carpenter, Jr., of Wilmington, Del., for the photograph from which the



A White Oak, Borough of Yeadon, near Philadelphia.

cut is reproduced. The tree, which is a white oak, stands on grounds some 90 acres in area which Mr.

Carpenter is now laying out for a cemetery, located in Delaware county, Pa., immediately outside the line of Philadelphia. In diameter it is ten feet in one direction and eight feet in the other, and its branches spread over 100 feet. The tree is perfectly healthy and promises to grow to much larger proportions. It is located close to an old residence built in 1774, which is still standing in good condition, and there is no doubt but that the tree has been growing by the house at least since its construction.

HISTORY OF THE DAHLIA.

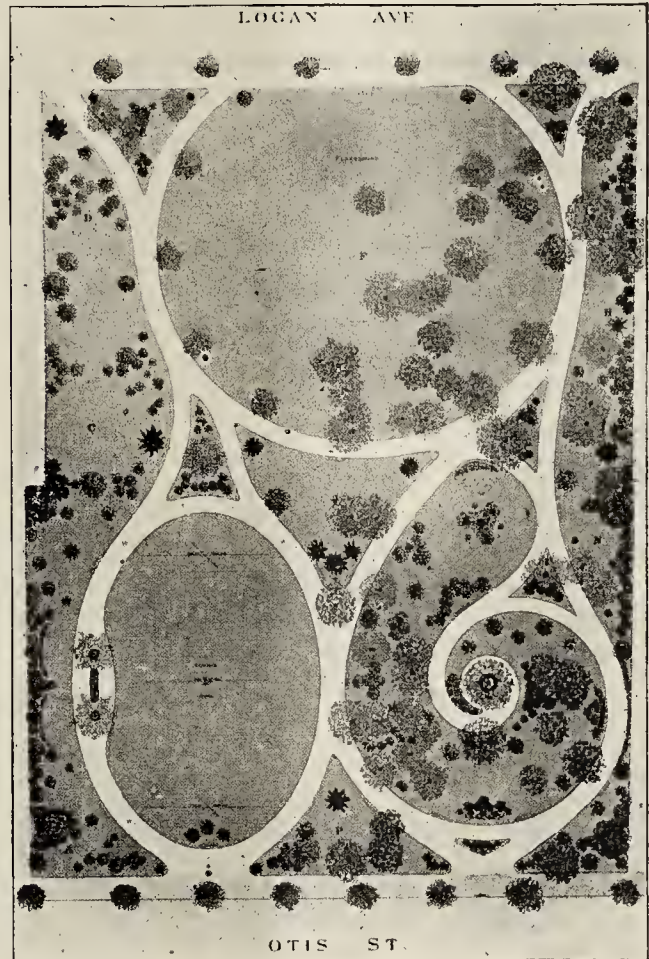
The Dahlia which is rapidly regaining the popularity attaching to it decades ago has an interesting history, which has been commented upon as follows by the *London Globe*:

More than 100 years ago Baron Humboldt discovered the dahlia, a small single flower, in Mexico. Could some prophetic vision have revealed to him the dahlia of to-day in its dazzling hues and varied forms he might, perhaps, have been prouder of that discovery than of all his other scientific achievements. It was sent by him to the Botanical Gardens, Madrid, where it received the name of dahlia in honor of the botanist, Prof. Andrew Dahl. The same year it was introduced into England, where it was cultivated under glass. For a few years it was lost to cultivation, then reintroduced into England. Cultivation soon developed the double form and every color except blue. For many years the ideal dahlia of the cultivators was a perfectly double, ball-shaped flower. Those who remember the compact flowers of thirty or forty years ago know how nearly the ideal was realized and remember the deserved popularity of the dahlia of that day. But people soon tired of the regularity of that type, and for a few years it was neglected. Florists were giving time, labor and thought to the development of the rose, carnation, chrysanthemum and other popular flowers. At last some far-seeing cultivator recognized the possibilities of the dahlia, and in new, improved and more beautiful shades of color it resumes its sway and to-day greets us in so many varied and attractive forms that every taste may be suited.

The ancestral home of the Astors is in the little village of Waldorf, twelve miles southeast of Mannheim and midway between the Rhine and the low-lying hills forming the northern part of the Black Forest. Their house, which is still standing, is an unpretentious structure of two stories, facing on the open town square and containing probably six rooms. To one side is a small yard, such as frequently adjoin the houses of the peasants in this part of southern Germany.

LOGAN GROVE; MEDFORD, MASS.

In describing his design for Logan Grove, Medford, Mass., Mr. Edward P. Adams, landscape architect, Boston, says: The preservation of a grove of oak and maple trees, which covers nearly half the area of the park, was the primary object of the selection of this site. The purpose of the develop-



PARK DESIGN FOR LOGAN GROVE, MEDFORD, MASS.
Edward P. Adams, Landscape Architect. Approximate Scale, 80 Feet to the Inch.

REFERENCES:

A to P refer to sections on planting list. F. Place for flag pole. R. Rockery. * Light. S. Sundial. T. Drinking Fountain. N. One-sixteenth mile walk.

ment was the enhancement of beauty of the place and the improvement of the facilities for recreation of the largest number of those living nearby. To this end the idea in the preparation of the park design for Logan Grove has been to afford a chance for as many kinds of recreation as possible without their conflicting with one another. The planting has been designed to give a finished appearance to the grounds with a pleasant variety and a frame of verdure for the whole. In the grouping, such a choice of plants was made as would present some element of beauty in flowers, in berries or in foliage at every season of the year. In some groups the flowers will be most conspicuous; in the others the various colored leaves or the many shades of green.

THE HYPERICUM.

The Hypericum comes after our spring and early summer garden flowers are gone and autumn has not yet assumed its color. The passing of the dog-star sees few summer flowers, but they, evidently feeling their responsibility, seem trying to glow the more brightly. The Hypericum helps to fill this vacant space and its brilliancy in part atones for the absence of many milder flowers.

The Hypericum as a group does not belong to our climate. It belongs rather to the south temperate zone, and in America, the Middle and Southern states seem most its home. Hence, most American species do not succeed at the north, and as most European forms also do not take kindly to our climate, only a few kinds remain and they mostly native which we may consider at all trustworthy friends.

As they have little value as cut flowers, few if any have found their way into our green-houses.

The Hypericum is a genus of about two hundred species, all shrubs, suffruticose forms or subshrubs and perennial herbs, none in cultivation here taller than four or five feet; assuming

all variations in habit from erect to prostrate; having simple lanceolate or ovate leaves and blooming from the latter part of July to the first of September in flower-clusters of a brilliant yellow. All species are of simple culture succeeding in almost any garden soil but generally preferring a light warm land, hence useful in sandy soils, blooming later and for a longer time if partly in the shade. They are propagated by seeds, suckers, cuttings and by strong pieces of the creeping rooted kinds.

In use, some species are more or less stiff and formal, and require to be treated as garden-shrubs, while others are freer and are appropriate to greater informality. They cannot, however, be regarded wholly as an "unmixed blessing" for their principal use is to give a dash of color in late summer and remain unobtrusive the rest of the year, and they are not of a character to please if found too plenti-

fully and exclusively. They have not the all-round character of the Viburnum and their general lack of hardiness is much against them. They are so strong in color that they require to be toned down by a surrounding mass of green as in a shrubby or herbaceous border. The smaller species are useful as rock plants. Unfortunately as a group they are short-lived and six or seven years end the enjoyment which one individual can give.

The following are the kinds of value in cultivation:

Androsamum, the Sweet Amber or Common Tutsan of Western Europe, is a dense under shrub one and a half to three feet high with erect stem, large ovate leaves four inches long and flowers in cymose clusters. It is a half hardy plant not enduring our northern winters, but where it does suc-

ceed it is one of the best in fruit and foliage but its flowers are not particularly attractive. In its native state it seeks shady wet places. It differs from the other members of the genus in that the fruit is a berry instead of a dry capsule.

Ascyron, the Great or Giant St. John's Wort, a perennial two to six feet high.

The peculiarity

of this somewhat coarse and ungainly plant is that it is native to both North America and Northern Asia. It stands erect, branching slightly toward the summit from a tetragonal stem. The flowers are in cymes and large, two inches wide, with narrow petals, thin, twisted and curiously shaped. The leaves are large and partially clasping. Toward fall the plant is apt to become unsightly through the lower leaves dying and remaining.

Aurcum, a somewhat formal shrub, held in high regard for its hardiness, its round, compact and perfect shape and its large brilliant flowers. Were it not that the petals remain and wither before the fall, it is said that it would be one of the best of all shrubs, but its hard outline and general stiffness forbids that although it is a good shrub. It is three to four feet high and in its natural condition at the south seeks rocky situations, generally shady where



Hypericum Hircinum.

moisture is longest retained. In cultivation it succeeds in any good soil. Its leaves are broad, one and a half inches long and the flowers large, the effect being rendered even higher by the conspicuous mass of yellow stamens which fill the center. It is perfectly hardy and very useful in a mixed herbaceous border. Young plants from seed bloom the second year.

Buckleyi, a low, dense, widely branching species from the mountains of the Carolinas and Georgia, with small broad leaves, and flowers in terminal cymes, forming neat rounded tufts. It is uncommon both in nature and cultivation but seems adapted to rockeries and the margins of small shrubberies. Sufficiently hardy.

Calycinum, Rose of Sharon, Aaron's Beard, is an interesting sub-shrub one foot or less high with numerous unbranched stems procumbent or ascending, occurring in thick tufts. Both the flowers and evergreen leaves are very large. It spreads rapidly by creeping woody root-stalks completely covering the soil and is used as a ground cover abroad. In New England it is not very hardy and while its annual killing back prevents it from covering wide stretches it does not destroy its bloom nor its beauty for a herbaceous border or the margin of a shrubbery. It may be protected and its dark persistent foliage preserved. It is one of the most valuable foreign species thriving well in sun and moderate shade and makes one of the best dwarf shrubs for the Middle States.

Densiflorum is a large *Hypericum* four to six feet high, shrubby, stout and densely leafy. The leaves are usually very narrow but some forms are narrowly oblong. The flowers are small and numerous. The shrub is native to the Middle and Southern states, perfectly hardy, and sufficiently attractive to deserve cultivation but as yet it is not well known.

Galioides. Like *densiflorum* this is a form with narrow graceful foliage and abundant small flowers, but is practically suffruticose though sometimes a round compact shrub. Perfectly hardy, its home is also in the Middle and Southern States where it is natural to low wet lands but grows freely in any garden soil. The hardy narrow leaved and small flowered species deserve attention as their characteristics relieve them in part of the stiffness so prone to the *Hypericum*, although in their proper places the large flowered forms are much the better.

Hircinum, goat-scented St. John's Wort (See cut.) So named from the strong odor of its leaves. A suffruticose species with strong branching stems two to three feet high, it forms a compact rounded mass which with its broad bright leaves and large

flowers made gayer by the long spreading styles and stamens is very attractive. It comes from the Mediterranean Region but seems nevertheless nearly or quite hardy. Of easy cultivation, it requires a dry position and some winter protection. Variety *minus* is a form with smaller flowers.

Hookerianum or *oblongifolium* is a thin growing sub-shrub two and a half feet high with good foliage and large flowers in clusters of several. It is hardy, coming from the Himalayas 8,000-12,000 feet above the sea-level and is considered abroad one of the best species from its beautiful somewhat cup-shaped flowers. It is said to become eight feet high in India.

Kalmianum is a species rare in the native state confined to Niagara Falls, where it was first found, and the Great Lakes. It is a low-growing spreading shrub two to three feet high with rather contorted stems. Its leaves are narrow, one to two inches long and crowded, and its numerous flowers small. It is capable of enduring considerable dryness and is easily adapted to the garden, succeeding well in the shade. While not so showy as some other species it is a valuable kind both from its bright narrow leaves and its hardiness.

Moserianum, a most brilliant specimen, is a hybrid, credited to M. Moser of France, of *H. patulum* and *H. calycinum*, generally resembling the latter but losing its coarseness and surpassing both parents in good qualities. It is suffruticose, two feet high, erect with tips pendulous and bearing large cup-shaped flowers whose brilliant yellow is heightened by the numerous tufted red-tipped stamens. It is worthless at the north, however, from lack of hardiness, but farther south it is a good shrub, best in masses and better adapted to the herbaceous border than the shrubbery. It is sometimes used as a pot-plant.

Patulum is a low, gracefully spreading, evergreen shrub, one and a half feet high with many purplish arching branches and large flowers. Coming from China and Japan, it is nevertheless not very hardy but where it succeeds it is one of the best. While not so showy as some American forms it is most graceful and delicate, and one of the best for rock-gardens. The earliest to bloom.

Prolificum is a stout, bushy, native shrub three to five feet high diffusely branched with broad leaves and large flowers in profusion. It is a strong, hardy shrub found in sandy and rocky soil through the Middle and Southern states, and is considered one of the most satisfactory and healthy *Hypericums*. Its bright flowers and attractive foliage make it a fine species growing rapidly in ordinary garden soil and flowering regularly and profusely.

A. Phelps Wyman.



WHITE LILIES. (*Candidum*.)

THE fairest and sweetest of all the flowers, these are yet among the hardiest.

Botanists tell us how deep in the soil all lily bulbs are buried in their natural habitat. This is for two reasons; many kinds are native to the hot

localities and the torrid zone where the earth is burning and scorching for some depth below the surface, so the bulbs are cool, deep, down in the strata where moisture exists; equally as many kinds are native to cold climates and are protected from freezing by the depth of soil. We learn from this, that lilies may be safely grown in northern and southern climates. The same varieties are beautiful, hardy and free alike in all climates.

Lilium candidum is the oldest and best known of all the class. I need no apology for placing it first on the list. Its antiquity, its purity, beauty and exquisite sweetness have given it a place in legendary lore, sacred annals, in pictures and sculpture; and it is dedicated to saints and to the Virgin Mary.

"Annunciation" and "Madonna" are the names long ago conferred upon *L. candidum*, and by these churchly names it is known in the floral trade. Although much used in a symbolic sense on sacred occasions, as shown in the pictures of the Annunciation where the old painters represent the angel Gabriel extending white lilies to the Virgin Mary, and vases of them by her side; and that it is dedicated to more saints and used on more Saint's Days than any other flower, yet the most substantial proof of its popularity is in its very general culture. All gardens where sweet flowers grow must have white lilies, else there is a deficiency.

It is somewhat singular that the native home of *L. candidum* is not known. It has been claimed as one of our native flowers, but this is not proven. It came across the waters from the "Old Country" with our flower loving ancestry and was planted upon home-sites that fell into wildness and neglect, as many inevitably did; those coming afterward to clear up and reestablish the home and home-garden, when flowers so fair and beautiful burst into unexpected bloom, supposed them to have been the fruitful natural offering of the soil. The most decisive evidence of its native habitat comes from the *Revue Horticale* which published in 1883 a statement from Father Lazariste, of the College of Autara at Lebanon, to the following effect: "Our Lebanon mountains are filled with *Lilium candidum* in several places. It is, certain nobody has

planted them there, for they grow in the wildest places where no one has set foot but goat herders. I claim the mountain recesses of Lebanon to be the native home of the Madonna Lily. I have had the peasants bring them to me, of as fine quality as I ever saw in France or Rome.

Although a very delicate flower in appearance, *L. candidum* is in reality one of the hardiest of bulbs. All countries seem to suit it and the cold of the winters far north have no deleterious effects upon it; neither the prolonged, dry summers of southern sections.

The cultural directions are simple, but though pliant on the whole, yet in certain things the wants of the flower must be complied with. In the first place we refer to out-door planting. In cemeteries, parks or private gardens, the lily bed or border is ever beautiful, long lived and reproductive, the lilies in the open, become more abundant and beautiful as the years go by; make the bed rich and warm and deep. Old, decayed barnyard fertilizers, mellow garden compost, leaf mold and always sand, intermixed and if necessary, bone dust, or any preferred commercial fertilizer, will make a lily bed, but by no means use fresh grass, or heating compost. Lilies do not thrive in such soil. They all as a class, prefer old mellow fertilizers and without an exception must be planted deep in the soil. Never less than one foot, but better two, and strong bulbs will push the bloom stalk up from a still greater depth. September or October, is late enough, and some gardeners bed lilies in August. The bulbs begin to grow almost immediately. The green leaves are waxy and tender in appearance but there is a peculiar "strength in weakness" as applied to the Madonna Lily. The bulbs that send up the crown of leaves are the ones sure to bloom. Small sized bulbs make straggling leaves and a practiced eye can tell at a glance, which will bloom the first year. Let them grow together, however, and in another year the weak bulbs will have gained strength sufficient to bloom grandly. Planted in August, September or October these lilies will bloom in May in the South, in June in the North. They do much better left for years where they are and all the extra care they need is to have the bloom stalks and foliage cut away when turned yellow and a mulch put over the bed. The mulch may, with advantage, be also applied over the bed, up and around the new growth, early in the fall. Somewhat shaded, but with several hours of sunshine upon it each day, the lily bed should be; and the soil should be well drained.

White lilies constitute the chief crown of beauty in every garden of bloom. No position is too conspicuous, and nothing is more attractive in parks

than clumps of lilies, come upon at unexpected turns.

Among plants with dark green foliage white lilies are beacon lights. Their bloom time is not over six weeks, but they retire from bloom just in the rush of summer flowers, particularly the riot of June roses, and so beautiful are they, that when planted in numbers enabling them to create the effect of profusion, it is common to hear references made to "the time the lilies were in bloom."

The difference in a few white lilies and in many massed in groups, borders or beds is material. The more the better for fine effect. Hundreds of lilies in full bloom is a scene of delicacy, enhanced by the numbers. Doubting the dream-like, magical effect of so many together, try to be in New Orleans in the month of May, and pass down some of the principal residence streets, or visit the City, Audubon, or other parks, either in the day-time or by the electric lights, and see the white lilies blooming by hundreds. To be sure, any one flower in profusion, may for a time, exclude other kinds, but these lilies only bloom for a few weeks, making room then for other flowers. To do them justice plant as many bulbs as is convenient regarding means and room for them to grow. Plant them by dozens; plant them by hundreds and see what you see.

G. T. Drennan.

THE OUT-SIDE CEMETERIES OF SAN FRANCISCO.

Here they are the new cemeteries, spread out on gently sloping ground at the base of a beautiful range of hills back of them, overtowered by masses of rock richly tinted in the hues of a setting sun. They are seven in number, like the hills of the eternal city, and differing as the homes of the living are the cities of the dead. Lines of utility, with absolutely no display of the beautiful, are run over ground which might have been made subservient to gentle curves of natural ascent. Here harsh lines with rigid corners, there a stretch of rows which force out of shape the undulating ground. And while in these several instances we are confronted with what was perhaps dictated by business methods, directed by those who were never favored with the sweet influence of seeing the useful accomplished through artistic means, we also find any number of attempts to accomplish just this end in places where it is almost uncalled for. If I combine circles and straight lines to lay out figures and ornaments, I certainly ought to be influenced through more powerful demands than the direction of wishes and whims. Should not the range of mountains back and in front of me, beheld wherever I stand, be the all controlling factor? And small as the soul feels of him who properly takes in the sublime ef-

fect and the noble task expected of him, so ought his work to be nothing but a subservient feature in the entire landscape.

Therefore let us cast aside criticism and comparison and dwell only upon the tract where the true idea has been most properly conceived and carried out. I speak of Cypress Lawn Cemetery, the only resting place of those gone from us which approaches the proper spirit and reaches the sought for ends in acceptable ways,—ways that meet recognized demands.

Old Eucalyptus trees are scattered over the ground and the wind sings mournful songs over the lawn beneath. Monuments here and there have been erected, and if they are not what we wish them to be, they are restricted in number, limited in size, and hardly any at all impress us as more than mere proofs of affection of those left to commemorate the dear ones gone before. No matter where you step, a uniform spread of lawn extends as far as your eye reaches. Step aside from the driveway and nothing but swath of green seems to occupy the area. The communicating roads are sunk in and the slopes made to correspond with their meanderings. No path is cut through though they are on the map and reserved in space for all time to come.

And as we behold grand structures of granite and marble, and almost fail to detect the least indication where plots and single lots are separated, it occurs to us that here is perfected the true spirit in which we should approach the work of providing for our dead.

We see and feel this the more as we were ruthlessly insulted at one of these cemeteries by the fact of areas being set aside for those true to a church and those supposed to be faithless to its demands. Nature is more gentle in her ways. It has spread wild flowers of true colors on those little mounds, and cool and forgiving is the rest even there where man's disturbing influence tries to continue the struggle of this heartless battle even after the eternal slumber. And as nature over there, so gentle management here. Sod, and nothing but sod, for rich for poor, for gentle, for cruel, undisturbed as the slumber into which they have silently fallen.

Let us learn then from this instance that under ground we at least can obliterate the lines which restricted us in life, and that while offering to all the democratic associations of a common burying ground, we have for them, plain to all, but one comforting spread of lawn, the material with which nature redeems the most cruel scenes of unharmfulizing effects.

Geo. Hansen.

SOME NOTED MAUSOLEUMS IN WOODLAWN CEMETERY, NEW YORK.

The large increase in the number of mausoleums under construction or in the hands of the designers, may be taken as a sure sign of better times, as well as that this description of mortuary structure is becoming popular among the wealthy classes.

Much has been said and written concerning the design, material and details of mausoleums, and statistics and news reports show that at the present time, a great number of varying cost and dimensions are being erected in various parts of the country; they are by reason of their cost, in most cases isolated forms of mortuary memorials, and as the saying goes are generally few and far between.

This is not entirely true however, for Woodlawn Cemetery, New York, has the distinction of possessing, a large number of such memorials, the cost of which as a collection is proportionately far in excess of the outlay for such buildings in perhaps any cemetery in the world of its age.

On the opposite page are given illustrations of five of the well-known mausoleums of Woodlawn, and particularly distinguished among them are those of C. P. Huntington, the railway magnate, and Jay Gould, the financier.

The Huntington Mausoleum occupies a very commanding site, with its terraced steps leading down to the main roadway. It is constructed exteriorly of Quincy granite with stones of great size and it has fine bronze doors. The dimensions of the tomb itself are: twenty-eight feet by forty-two feet with roof twenty feet above platform. It is always mentioned in connection with the Huntington tomb that it is intended to convey the idea of the Valhalla in its design and details. It cost \$250,000.

One of the most imposing examples of mortuary architecture in the country is the beautiful temple-like structure erected some years ago for the late Jay Gould. It is always considered to resemble the Parthenon at Athens, but it is more like the temple of Theseus, the architect asserts. It is Ionic in style and many authorities claim it to be the best specimen of fine Grecian architecture in the United States. In area it is thirty-three by twenty-two feet, the roof being twenty-two feet above ground. It is constructed of Westerly granite, and its doors and fittings are of bronze. There is no mark whatever on the exterior of this structure to identify it. It was erected at a cost of \$50,000.

The Dr. L. C. Warner mausoleum fronts on an arm of the artificial lake. It is conspicuous in design, and has an open grilled entrance gate. It is built of Concord granite and cost \$30,000.

The mausoleum of Mr. W. H. Webb differs materially in design from the other illustrations, and redeems the idea of a mausoleum from the monotony of outline which so frequently characterizes it. It is constructed of Barre granite and is embellished with bronze doors and fittings and stained glass windows, and cost \$25,000.

The Standard Oil magnate's tomb, the late Mr. Flagler, is also a departure in the line of mausoleum designing. It is built of Westerly granite and in recessed blank windows on the four sides are placed inscription tablets. Its cost was \$25,000.

These five examples of mausoleum design give an idea of what can be effected in such structures and also the amount of money that may be expended in their construction.



Mr. Thomas White, sends us the following epitaphs, and he says of the veteran stone cutter who cut the first inscription, whom he knew well, that he would have served as an excellent model for Old Mortality in Sir Walter Scott's novel.

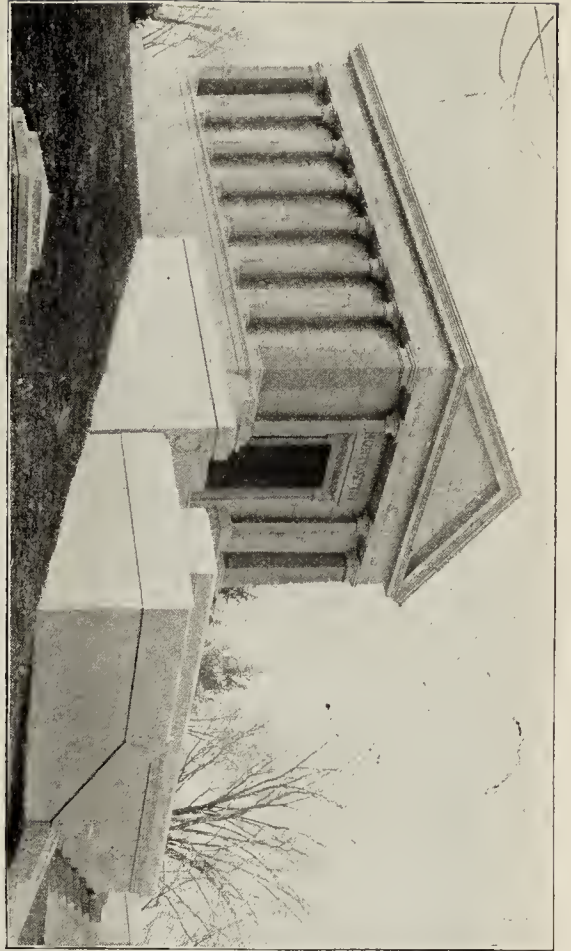
In memory of Capt. Reuben Chase who died Feb. 15, 1824. Aged 70 years wanting 4 months and 8 days.
 Freed from the storms and gusts of human life
 Freed from the squalls of passion and of strife
 Here lies Reuben Chase, anchored who has stood the sea
 Of ebbing life and flowing misery,
 'Tho not dandy rigged his prudent eye foresaw
 And took a reef at fortunes quickest flaw,
 He luffed and bore away to please mankind,
 Yet duty urged urged him still to head the wind;
 A rheumatic tempest at length his mast destroyed
 But jury health awhile he still enjoyed;
 Laden with grief and age and shattered head
 At last he struck and grounded on his bed;
 Then in distress careening thus he lay
 His final bilge expecting every day
 Heaven took his ballast from his dreary hold
 And left his body a wreck destitute of soul.
 He was an honest man, a Revolutionary
 Officer and Pensioner.

The epitaph below is taken from a cemetery in Milford, N. H.:

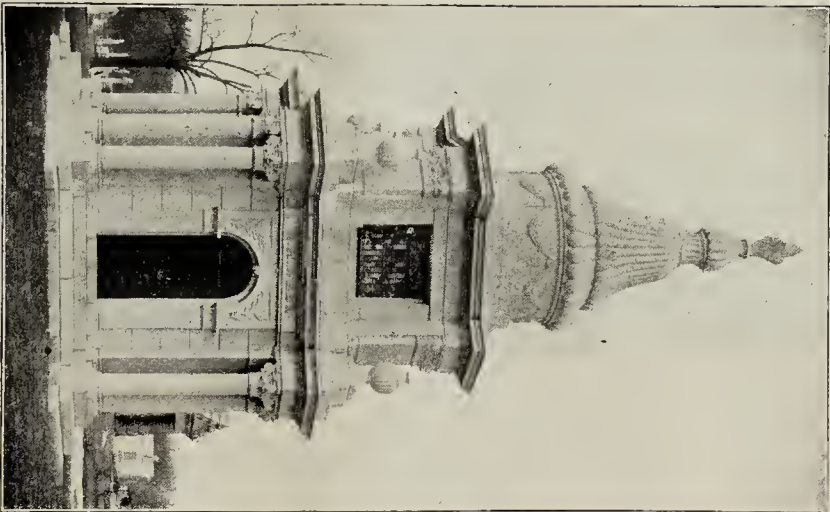
Caroline H.
 Wife of
 Calvin Cutler, M. D.
 Murdered by the Baptist Ministry and Baptist churches as follows:
 Sept, 28, 1838 AET 33. She was accused of lying in church-meeting by the Rev. D. D. Pratt and Dea. Albert Adams, was condemned by the church unheard, she was reduced to poverty by Dea. William Wallace. When an exparte council was asked of the Milford Baptist church, by the advice of their committee, Geo. Raymond, Calvin Averil and Andrew Hutchinson, they voted not to receive any communication upon the subject. The Rev. Mark Carpenter said he thought as the good old Dea. Pearson said, we have got Cutler down and it is best to keep him down.
 The intentional and malicious destruction of her character and happiness as above described destroyed her life.
 Her last words upon the subject were, tell the truth and the iniquity will come out.



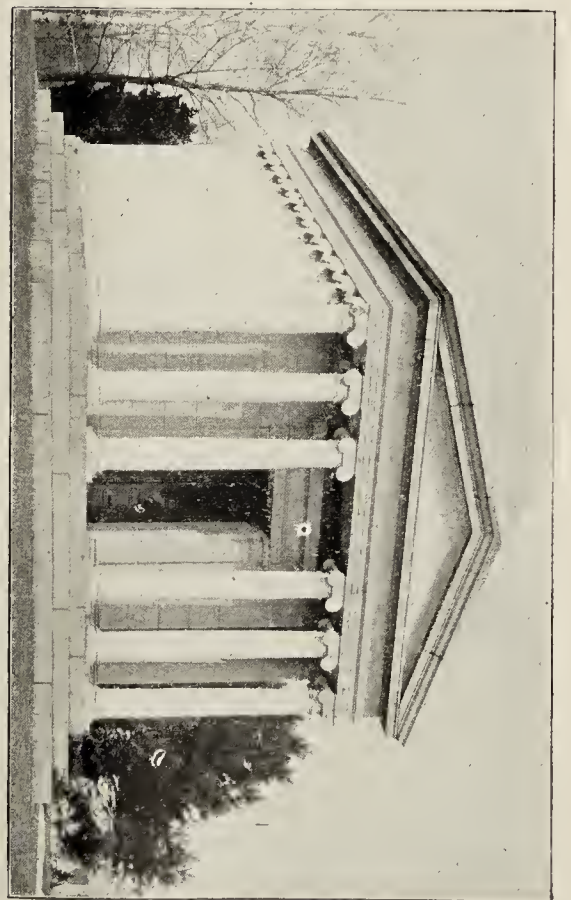
DR. L. C. WARNER.



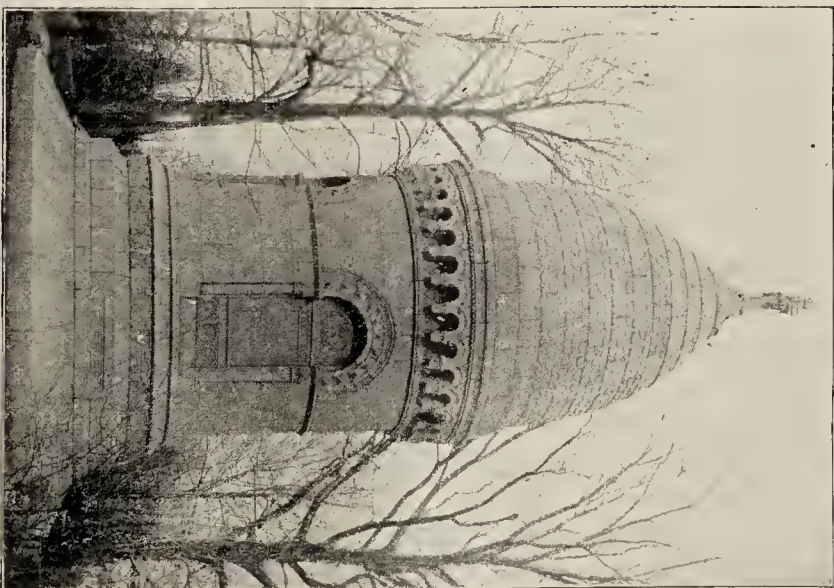
C. P. HUNTINGTON.



W. H. WEBB.



JAY GOULD.



FLAGLER.

SOME NOTABLE MAUSOLEUMS IN WOODLAWN CEMETERY, NEW YORK CITY.



1. WATER MARGINS, GRACELAND CEMETERY, CHICAGO. The Foliage is principally that of our Native Dogwoods (*Cornus Stolonifera*), Virginia Creeper, Snow Berries, Syringas, Willows, Lindens and Elms.

MARGINAL PLANTING.

A landscape without water features may possess distinctive beauty, but the combination with a lake or stream, possesses, to say the least, an added charm. Both in parks and cemeteries after their earlier stages of development, the advantage of combining the waterscape with the landscape for diversity of attraction is realized, and there are very few public grounds of importance, of either class, without some water features to enhance their beauty.

To be attractive however, the waterscape demands positive ability in its design and marginal planting, as may be so readily discerned in many of the examples we have within the reach of most lovers of landscape art. Effects must be considered for all the four seasons, and whether the planting entirely surrounds the water, or diversity of arrangement is attempted, so as to permit stretches of lawn to the water's edge, the choice of material and its grouping must be such as to provide harmonious, and graceful conditions at all times.

The illustrations herewith presented need no

verbiage to describe them. They are in keeping with the other features of the splendid landscape development of Graceland cemetery, Chicago, carried out by Mr. O. C. Simonds, the superintendent.

It is a carefully studied planting scheme, in which there is nothing obtrusive, but wherein each component factor has a place to fill and fills it, and that, moreover, to the promotion of harmonious and picturesque results. The illustrations also demonstrate the effectiveness which can be secured from native and local material. Mr. Simonds is a strong advocate of scouring the neighborhood for suitable plants and trees for decorative planting work, and there are very few localities from which there may not be drawn all that is required for the most advanced landscape designing.

The advantages of such a course of procedure in landscape work is obvious, and needs no comment now.

Mountain Grove Cemetery, Bridgeport, Conn.

Mr. Charles Nichols, superintendent of Fairmount cemetery, Newark, N. J., while en route for home after attending the New Haven Convention



2. WATER MARGINS, GRACELAND CEMETERY, CHICAGO. Description on opposite illustration also applies to this.

of the Association of American Cemetery Superintendents, paid a visit to Mr. Burton H. Dorman, superintendent of Mountain Grove cemetery, Bridgeport, Conn., and in a communication gives the following notes on that cemetery:

"It was organized August 16, 1849, contains an area of about 40 acres, which cost \$5,000 and is under the control of nine directors.

My first visit to Mountain Grove was made some 20 years ago, and the present appearance of the grounds has so completely transformed their former appearance that first impressions were obliterated in the change from former neglect to their present beauty. The grounds are naturally gently rolling and diversified, being well adapted for burial purposes, with good soil for digging and improving.

The cemetery is now conducted strictly on the lawn plan and no lot enclosures of any kind are allowed. A large number of iron railings have been removed, a few however still remain which Mr. Dorman hopes soon to be able to remove. I consider iron railings or any other enclosure to lots is superficial and worse than useless, and aside from giving protection the lots are marred by their pres-

ence. I urge every member of the A. A. C. S., to oppose enclosures of any kind to lots, and by cooperating in this reform we shall be able to educate lot owners to our views on the question.

A stroll through the grounds shows many fine monuments, sarcophagii, etc., some of them of considerable beauty and many massive in proportions. I viewed with interest the lot of Phineas T. Barnum, the well-known "Great American Showman," a fine granite monument marks his resting place. Near by is the lot and grave of his protege Tom Thumb, also marked by a granite monument. During their lives. P. T. Barnum and Tom Thumb were intimately connected.

There is a plentiful show of flowers scattering and in beds, throughout the grounds. Most of these were raised from seed sown by the superintendent, and the results are very creditable to him as a florist. We gained much information from him on the planting and propagating of flowers.

The general appearance of Mountain Grove cemetery reflects great credit on Superintendent Dorman, and gives strong evidence of his ability for a larger field than his present limits."

NOTES ON PARKS AND PARK WORK.

There are 84 cities and towns in New England which have Park Commissioners or are doing more or less of park work that I have so far learned of, and it is certain I do not know of all.

Now however crude or insignificant their work may be, yet in every town where there is a park commission or park work, there is hidden away in it somewhere, a love for the beautiful as expressed in natural scenery, and if it has not done so, sooner or later that hidden love for the beautiful will grow into its full development, and the embryotic park work will become the good and great influence for the best in its community. It therefore behooves us who as pioneers are marking out and beating down paths, to hold out the glad hand to the smallest and weakest of these efforts.

As far as I have learned it is only 42 years ago that the first acre of ground was bought in the United States for park purposes, that is for Central Park in New York. Before this there were only lands which had belonged to cities, originally for other purposes, like Boston Common, the Battery in New York, and others.

Much interest had been taken in such lands and improvements had been made.

Chas. Downing, whose untimely death in 1853 had not prevented him from improving some of the public grounds of Philadelphia and planning for those of Washington.

Savannah two centuries ago, and Washington nearly a hundred years ago was laid out with many squares and circles, primarily for defense, but these are now improved as small parks or ornamental grounds.

Baltimore followed New York, in its Druid Park in 1859, Philadelphia in Fairmount Park in 1867, but the magnificent Boston Park system did not begin until 1874, and the Metropolitan system was hardly commenced 5 years ago.

Some cities like Hartford had park commissioners in the early sixties, but it was not until 5 years ago that Hartford had any thing like a system of parks.

It is only within the last 15 years, and more than half of it has been done in the last 5, that park work and park influences have become general. This newness of park work is what I wish to call attention to now, believing it will be helpful to those of us who are struggling along in the newness of our work, losing our way and hardly knowing what to do, or which way to turn. We know very well there is an ideal, beautiful, grand park possible, in every piece of ground, and about every city and town, yet we grope along in darkness trying to find it, thankful for any help which may come to us, and thinking that the best is beyond our reach. Yet it may be helpful for those who are so situated to know there are others like themselves, that this work we are doing is largely a pioneer work, for it is probable there is not a park superintendent in this country who can say his father was also a park superintendent, that nine-tenths of them have not held their position 10 years, and more than half, not five.

In New England we have in Mr. Doogue a superintendent of Public Grounds for 21 years, but is there

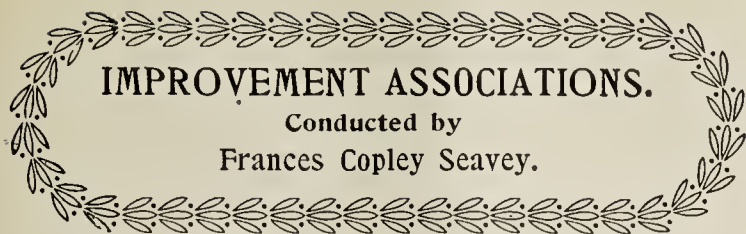
another in New England who has held his position 10 years? And then again it may be well to know that nearly every one of the park superintendents have come to their work from other businesses. There is in New England one superintendent who decided when a boy to be such, graduated at a school of landscape gardening in Europe, worked and studied in the parks of Paris and London and New York, and is now in charge of the third largest park system of New England, being exceeded only by Boston and the Metropolitan Park System. I refer to Mr. Wirth of Hartford. Is there another in New England who has from the beginning had such a purpose and such a training? If so I do not know of him.

We are apt to think when we read the works of Repton, Price, Loudon and others, some of them over a century old, all of them referring to the Babylonian, Mediæval and English park, some of them even referring back as far as the Garden of Eden, that park work must be very old, and we are the only ones who are not up in the work. As interesting and instructive as all these works are, they should not lead us to suppose that all has been discovered, or that we are to look into the past for our lessons of the present or the future. While much has been discovered in the past and useful for us to know, yet I believe there is a new park development coming, which will have a wider, deeper, and higher meaning than the old could ever have possessed or have grown into. I feel that a new light, a new dispensation of park development is coming, of which Charles Downing was the forerunner, and Frederick Law Olmsted is the mastermind. I am sure in the years to come, the name of Olmsted will be connected with park work, even as the name of Euclid is with geometry.

A man who has done much for park work in New England, who has given time, money, energy, thought, almost himself to the work, said to me not long ago: "I am but a baby in this work." If he who loves the work and lives amongst it feels that he has hardly learned the first letter of the alphabet, is it surprising that others with less opportunity should feel doubtful as to what is best to be done.

G. A. Parker.

King Leopold of Belgium is the king of the gardeners. The greenhouses of his palace at Lacken, near Brussels, are famous all over the world, and as the king is exceedingly proud of his flowers the royal greenhouses are open to the people in the month of May. Unlike the Versailles gardens, where nature itself is submitted to a very strict etiquette, the park of Lacken looks quite like an English garden, where nature is allowed freedom. The lawns are spangled with white and yellow flowers, which the gardeners are ordered never to cut, and the trees grow as they will. A single stroll through the king's azalea greenhouse is worth a visit to Lacken. Brussels itself has very much to interest one in its parks and city improvements, and the floral displays in the season suggest a flower loving people. It attracts a large number of visitors, for about it centres much of historical interest, and the field of Waterloo is near by.



Leave the World a pleasanter place than you found it.

THE LOCAL CEMETERY.

This phase of Improvement Club work has already been touched on, but, as late fall is the best time for such work to be done, a discussion of its details has been deferred till the present.

In all parts of the country, except the extreme south, the natural season of rest for vegetable life arrives by November and plants are then dormant and in the best condition to be transferred to new homes. Evergreens, both broad leaved and needle varieties, are a marked exception to this rule for it is safer to transplant them in the spring. Magnolias, also, must be moved in the spring.

Every member of any given community is personally interested in the local cemetery, which fact proves both an advantage and a disadvantage to the work and to the workers who have it in charge. The seeming paradox is explained by saying that while almost every one is willing to share in the work, each one will also be pretty sure to have definite ideas as to what should be done—most of them wrong ideas. Perhaps in no other direction is custom, prejudice and pre-conceived notions, so numerous or so strong as those that cluster around the grave.

It should be a labor of love to the intelligent and progressive men and women who are at the head of Improvement Associations first: to ascertain what the civilized world considers best in this connection, and second: to patiently give their reasons to all who combat the work of putting those ideas to a practical test.

What is known as the Lawn plan, sometimes called the Rural Cemetery plan, is acknowledged the world over to be the ideal plan for the disposal and the care of the dead. It originated in the United States and its best examples are found here. This style is familiar to many of our readers—to all old subscribers, for its tenets have been inculcated through these pages by numerous and diverse methods—but, for the benefit of new subscribers and of any Improvement Clubs that may have honored us by being in any degree guided by our suggestions, an outline may not be undesirable.

The Lawn plan may, in a large way, be described as a park in which interments are made. It is the outgrowth of the general and natural desire to see one's friends laid to rest in pleasant places.

A cemetery designed in accordance with this idea is a piece of ground in which all good natural features, whether of vegetation, ground surface, waterways, etc., are preserved and improved; where a few driveways on simple lines are laid out to fit the shape, surface and native growths; these driveways are properly constructed and a drainage system is established; the space is divided into sections, and these into lots; ground not already in suitable condition for burial purposes, is made so by filling, the removal of stones, trees, etc., care being taken to preserve just the right trees; a certain proportion of space is reserved for ornamental planting; rules are made limiting the planting on lots to what the designer considers appropriate, and visible boundaries to lots, whether copings, hedges, or fences are forbidden—because the intention is to make the place look well as a whole, the whole being greater than its parts; to this end, lots are treated in relation to the general effect rather than individually. Mounds are not park-like and detract from the general effect, so they are omitted, and for the same reason footstones are barred, the height of markers at the heads of graves limited, and no monuments allowed except those made from designs that have been submitted and passed on by the Superintendent or Board of Directors (who must be men of taste and judgment); and all stone work must be done according to certain specifications to the end of securing work that will be permanent.

Conditions differ, and only a competent Landscape Gardener who is acquainted with this class of work can decide the numerous details in opening a new cemetery, but grounds that are already in use may be greatly improved by a careful study of those that are correct in design; by slowly undoing poor work, and by gradually substituting and introducing better features.

Fences, copings, hedges or other visible boundaries between lots, and mounds over graves, detract from the appearance of the grounds as a whole, therefore they should all be removed. There should be no visible boundary between lots, though sometimes one or more sides of a section is visibly bounded by a drive way. Walks between lots should be on the same level as the lots themselves, and both should be mantled by a close covering of green sward, and there should be broad openings innocent of any plant save grass over which spaces the lengthening shadows of neighboring trees should sweep like hands across a dial; and in appropriate locations handsome hardy shrubs may be massed.

To secure such effects, it is necessary to restrict the use of plants to certain locations, as, for instance, to parts of irregularly shaped sections, to

steep slopes or other parts of the enclosure unsuited for interments, and to a margin surrounding the entire grounds especially reserved for such planting.

If these spaces are well chosen, carefully distributed, and planted with art, the results will be so admirable that lots will find ready sale and the merit of the plan be demonstrated in the most practical manner; for the public can be depended on to recognize a good thing when seen, although the mere statement of what constitutes a good thing is likely to fall on unheeding ears. Which brings us back to the point by suggesting that it is worth while to do something this fall in the way of well arranged planting to serve as a silent monitor to lot owners, exercising a persuasive influence that can not offend and may be productive of active results.

In remodeling old cemeteries the best way to alter appearances for the better is by appropriating a strip of land around the confines of the tract, either by the removal of graves or by the purchase of adjoining land, and planting on it an irregular border of trees and shrubs.

Such a scheme of boundary plantations serves a double purpose by securing charming effects and agreeable seclusion inside the grounds, and by screening the interior from the outside, often so changing the aspect of a neighborhood that what was formerly a defect becomes an advantage. Indeed, a cemetery planned and conducted strictly on modern lines is in no way objectionable even in a residence district and need not be so any more than a park. The feeling that the place where our friends lie in peaceful sleep is a grewsome, a frightful, or a ghostly place, seems unworthy of the civilized plane on which in this day we, as a people, should live. It savors of the ignorance and superstition that made the disgrace of witchcraft possible. We should be beyond that stage. Ghosts are likely to be very unfashionable in the coming century. Even fairy stories are getting out of date, and we are threatened with the extinction of Santa Claus. It seems time that the iconoclasts who shatter the idols of childhood should repair the damage, as far as possible, by replacing the fairy land of imagination by fair lands of reality. Is this done? On the contrary, there are comparatively few small cities—almost no towns—that have a park.

In scores of villages the cemetery is the nearest approach to one, and as every community must have a cemetery while comparatively few can have a park, it would seem a wise thing to combine the two. This is true from the point of view of expediency, to say nothing of the teachings of modern civilization regarding the disposition of the dust of the passing generation.

Of course, the highest phase of this subject in-

cludes proper appliances for reducing the so-called dust to true dust, or ashes, clean and sweet, that can be inclosed in a small receptacle and quietly consigned to the family plot in the burial park. But those who are as yet opposed to this method can surely find no legitimate objection to a park to replace the old-time burying ground which presents an appearance suggesting a curious and unbeautiful hybrid between a stone yard and a village of Prairie dogs.

F. C. S.

From an address delivered by President Loring at the Detroit meeting of the American Park and Out-door Art Association we extract the following:

“One of the most attractive and valuable features of a former session was an address by Mr. E. L. Shuey of the National Cash Register Company of Dayton, O., which was illustrated by stereopticon views showing the great work which that company has accomplished in a section of the city which was as unattractive and untidy as any of which we have any description. Through the efforts of this company this section is now one of beautiful, happy homes, and the children who occupy them are growing up to be refined men and women. We who have studied the effects of such surroundings know that they will live higher and more cultured lives than if they had grown to maturity among the scenes which surrounded them in the beginning. To this object lesson I am indebted for many thoughts which have stimulated me to increase my efforts in behalf of the more unattractive parts of my own city and of the villages in my state. The good work which was begun at Dayton is being spread all over our land.

“One of our first aims should be to encourage and assist in the formation of neighborhood and village improvement associations as it is through such organizations that the hearts of the people can be reached. Upon the invitation of such an association, located in one of the most beautiful cities in Minnesota settled by refined and cultured people from the Eastern States, I addressed the citizens on Municipal Improvements and Beautiful Homes. My talk was illustrated with views from different cities, many of them kindly furnished me by the National Cash Register Company, showing streets before and after their borders were planted with trees and houses with no trees to shade them, and with no attractive surroundings, and the same houses after such improvements had been made. This city has many beautiful streets and private grounds which have been over planted, and to my mind this is nearly as bad as if there had been no planting done, sunshine and air being more necessary than shade. My address was well received and resulted in an increased membership for that association of several hundred within two weeks of my visit.”

GARDEN PLANTS—THEIR GEOGRAPHY, XLVI.
GENTIANALES.THE JASMINUM, FRAXINUS AND MENYANTHES
ALLIANCE.

(Continued.)

Ligustrum "Privet" is in 25 species and a number of varieties in Europe, temperate and tropical Asia and Australia. *L. vulgare* is naturalized in the Delaware valley and other places at the north. *L. ovalifolium* has supplanted it as a hedge plant, and is also a good sub-evergreen summer flowering shrub, but not so hardy.

There are several other useful deciduous species for the north and evergreens for the south, some of which are prettily variegated.

Amsonia, in 4 species, are natives of North America and Japan. They are herbs with cymes of blue flowers.

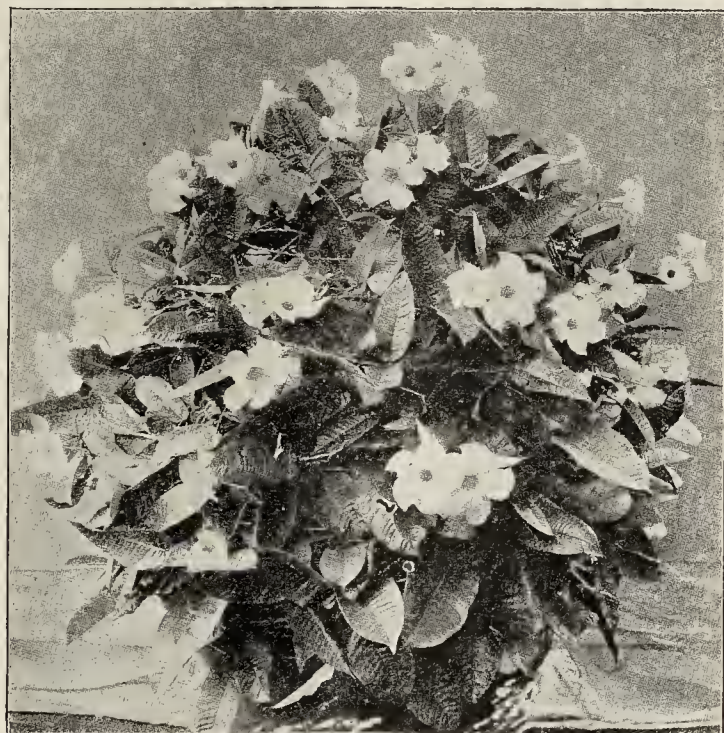
Tabernæmontana is a large genus of 150 species, many of which are good sized trees and shrubs. They are found throughout the tropics. *T. coronaria* fl. pl. does well in southern California, and some others are being tried in South Florida. They are often handsome fragrant shrubs with white or creamy flowers.

Nerium "oleander" has 2 or 3 species in Mediterranean countries, sub-tropical Asia and Japan. There are many varieties, and, although often unsuspected, their juices are venomous poisons.

Apocynum, "fly trap," "Indian hemp," etc., is in 5 species, natives of the south of Europe, North America and temperate Asia.

Trachelospermum, wrongly called "Rhyncos-

and North America. *T. jasminoides* and its varieties are well known fragrant white flowered climbers



Dipladenia Amabilis.—From Gardening.

perum" by Lindley, has six or seven species in the East Indies, the Malay Islands, Eastern Asia

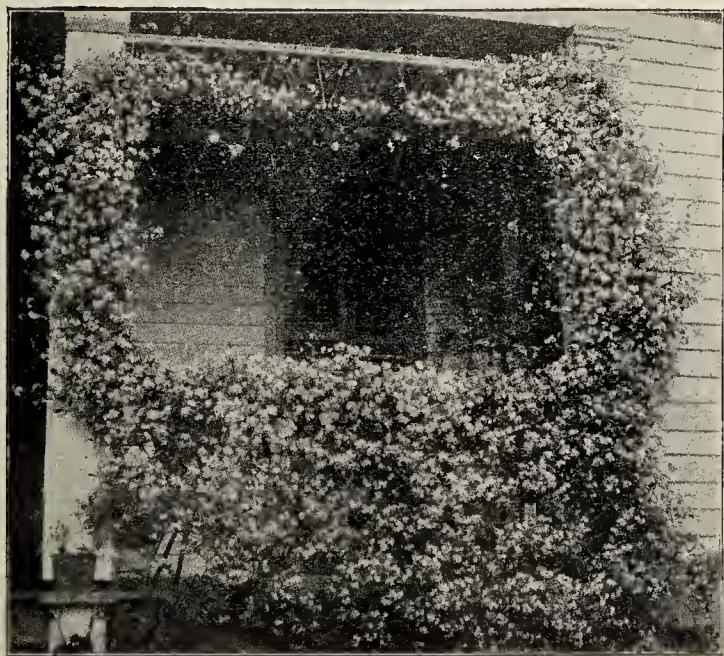
hardy in the lower south. *T. difforme*, the native species, is found from the middle Delaware valley southward. It has herbaceous stems, inconspicuous flowers, and is of little use unless perhaps for hybridizing experiments.

Beaumontia, in 4 species, are handsome East Indian and Malayan climbers with fine white flowers, but somehow they are rarely seen in cultivation, although I imagine they might succeed in the warmest parts of the south.

Adenium, in 4 species, may pass with a similar remark, but are very different plants. *A. obesum*, sometimes seen in gardens in the Eastern tropics, is a native of Aden and other parts of Arabia. It is like a huge leafless sugar beet, with a thumb-like branch or two at the top, tipped off with a few leaves and a little bunch of pink oleander like flowers. I think it might succeed somewhere about the Gila valley.

Dipladenia, in 40 species, natives of tropical America, are often superb climbers, but our southern friends do not seem to have given them much attention. There is no good reason why they should not succeed as summer climbers, or even permanently in the parts of Florida where *Echites*, *Andrewsei* and *Vallaris dischotoma* succeed.

Mandevilla has 30 species, but the deliciously fragrant white flowered *M. suaveoleus* is the only one cultivated. Several are quite small flowered, and others are confused with *Echites*, I fancy. I don't know about the ability of *M. suaveoleus* to stand



Trachelospermum Jasminoides at the Lower South.

perum" by Lindley, has six or seven species in the East Indies, the Malay Islands, Eastern Asia

much frost, but it is fine in parts of the world where light frosts occur almost every night for three months, and does well in southern California. It is evergreen in some climates, deciduous in others, and varies, too, in its season of bloom.

Pcriploca, "silk vine," is a well-known European twiner. There are 10 or 11 others in subtropical Asia and Africa.

Asclepias has 60 species in North and South America with 2 or 3 scattered elsewhere. A few of the orange, purple, and white flowered kinds are handsome plants.

Araujia Scricofera is the plant known in gardens as physianthus, and the plant known as *Schubertia grandiflora* is now considered as a variety of *Araujia graveolens*. The genus is South American.

Marsdenia, in 55 species, are sometimes pretty shrubs or climbers found in many warm parts of the world. *M. flavescens* is a creamy flowered Australian climber. *M. suaveoleus* is a shrub from the same country, and *M. erecta* is a small white flowered plant from Syria.

Stephanotis has 14 species in the south of China, the Malay Islands, Madagascar, Peru and Cuba. *S. floribunda* does well in southern California and is practically the only species grown. *S. Thouarsii* is in European gardens, but rarely flowers. These species are superb climbers with fragrant waxy white flowers.

Hoya has 50 species in the East Indies and other

been introduced to cultivation, but they are only met with in the best gardens. *H. carnos*a, the



Stephanotis Floribunda.


"wax plant," is, however, a popular and easily managed plant in southern gardens. It has a pretty variegated form. Some of the East Indian species are epiphytes, even *carnosa* will attach itself to trees or walls like ivy. *James MacPherson.*



Araujia Graveolens.

parts of Eastern Asia and in tropical and subtropical Australia. Probably as many as 40 have

The Department of Agriculture, Washington, has recently issued "Notes on the Forest Conditions of Porto Rico," by Robert T. Hill of the Geological Survey. Mr. Hill, who made his observations in January last, says that the island was originally covered with forests, from the sea level to the mountain summits, though many of them have disappeared, owing to 300 years of exhaustive cultivation of heavy plantation crops. He is of opinion that in ten years the cleared slopes of the barren mountain sides can be covered with productive trees. These forests now contain thirty varieties of trees used for timber and fuel, one for cordage, eleven for dyeing and tanning, eight resinous trees and ten yielding fruit. There are seven varieties of palms, which are used for sustenance, clothing and utensils. The principal trees valuable for fruits are the orange, lime, lemon, citron, guava, cashaw, anona, corazones, mamey, jobos, alligator pear, and mango, and these are common and highly productive all over the island. It is curious that apples, plums, pears, cherries, peaches and other trees of temperate climes do not bear fruit, though they take root and grow luxuriantly. The author is of opinion that Porto Rico presents an interesting field for the practice of economic forestry, and that all of the mountain slopes can be rapidly reforested.



PARK NOTES.

An interesting item in the report presented at a recent meeting of the park commission of Chattanooga, Tenn., was to the effect that upon the streets of that city there were growing 6,822 trees.

* * *

The park idea grows apace in the smaller towns, and many are profiting by the advice to provide park areas while property is within the reach of their finances. East Aurora, N. Y., has voted to appropriate \$7,000 for the purchase of a grove to be devoted to park purposes.

* * *

The supreme court of Illinois has decided that the shade trees in front of a man's residence belong to him, although they may be located on public property. The case in which the decision was rendered was one in which the property owner sued the telephone company for damages for cutting off the limbs of his trees.

* * *

The question of a city park at Kirksville, Mo., has been settled finally by the City Council, and the city has secured a beautiful tract of twenty acres of land in the northwest portion of the city, which will at once be opened for a park. A subscription of several hundred dollars was raised among the merchants to provide for improvements on the grounds. The Commercial Club has also voted \$200 annually for that purpose.

* * *

The board of control of the Mackinac Island park, Mich., has adopted a resolution providing for the improvement of that portion of the park known as the "Fort garden," in front of the old fort. Permission was also granted the Marquette Monument Association to erect a monument in some part of this section of the park, which will hereafter be designated as Pere Marquette place.

* * *

The first assessment under the Minnesota law authorizing the board of park commissioners, on petition of the property owners and order of the common council, to take charge of boulevards for cutting the grass was recently confirmed by the board of park commissioners of St. Paul. During the season the superintendent of parks has regularly cut the grass on street boulevards to the extent of eight and one half miles of street frontage, at a total cost to the owners of abutting property of \$625 67. The cost per front foot for the season has varied, according to the length of time during which the work was done and the conditions under which it was done, from 1 cent to 1.73 cents.

* * *

Another important park project under consideration in Chicago is the parking of the Des Plaines river, which traverses some of the finest suburban sections of the city. Boston and Minneapolis have already embarked in such waterway parks, and the results are more than satisfactory, and the land and landscape features about the Des Plaines offer opportunities for an extension of the city park system, it would be unwise to neglect. The territory of which it is proposed to make a park is twenty miles in length and a half mile wide on each side of the river. It is thought that the towns can obtain the land at a low

price, and several land owners have expressed their willingness to donate a part of their holdings.

* * *

In the course of an address before the Twentieth Century Club, Boston, by Dr. Edward Everett Hale, on "Forestry and Village Improvement," Dr. Hale said: "The state is properly the first owner, because it can manage forests better than any one else. It takes 50 years before an investment in forests can be realized. Few individuals can afford to wait that long, but the state has all time. Germany derives a large income from the forests. Hanover alone 10 years ago derived a yearly profit of \$700,000. The Germans regard their forest incomes as the best. It is time we should be fellow-workers with God and replant our hills. We must bring back to the state of Massachusetts the glory of the first century."

* * *

The 39th annual report of the board of Park Commissioners of Hartford, Conn., has recently been presented to the Common Council. It is a pamphlet of nearly 100 pages illustrated with 29 full page half tones of scenery in the various parks of Hartford. A large amount of improvement work under able design and superintendence is recorded in connection with the principal parks. Hartford is particularly favored in park areas, and enjoys some exquisite park scenery. The modern view of connecting the parks by parkways laid out in effective designs, has gained favor in Hartford, and much attention was given to this feature of its system during the past year. In the opinion of the board with the exception of one or two small pieces of land needed to protect and complete purchases already made, the present boundary lines embrace all the land to be included in the park areas: During the year ending April 30, 1899, the board expended \$103 282 09 as against receipts of \$103,388.65.

* * *

We have a few private parks in this country of considerable area, though generally lacking the care which hereditary ownership bestows upon such estates, but compared with the parks of the great landowners of Old England, no comparison can be made. In all there are some 334 of these parks many of them being several thousand acres in extent. Windsor park and Windsor forest cover more than 4,000 acres. The park of the marquis of Abergavenny, near Tunbridge Wells, is 2,500 acres in extent. Of some of the largest the *London Mail* in a recent article says: "Blenheim park, the seat of the Duke of Marlboro which is twelve miles round, has an acreage of 2,700; the herd of deer, at present comprises 770 fallow and sixty-four red deer. A curious feature in Blenheim park is an arrangement of the oak and cedar trees, which are grouped in separate bodies, so as to indicate the position of the Dutch and English troops at the battle of Blenheim. The largest park in England is Grimsthorpe, the property of Lord Aveland, in Lincolnshire. It is no less than sixteen and three-quarters miles in circumference. The red deer have been bred here for centuries, although the herd is not so numerous as that which roams over the wilds of Tatton park, the seat of Lord Egerton, which comprises 2,500 acres of Cheshire land. The deer here are of extraordinary beauty and number 800 fallow and forty red. The finest deer in Kent are to be found in Eastwell park, 2,508 acres, the seat of the earl of Winchelsea. One of the grandest parks in England is Chatsworth, the duke of Devonshire's seat in Derbyshire. Every variety of scenery is to be found in this domain. It is a pretty sight in the evening to see the deer quenching their thirst in the Derwent, which runs through the grounds. Lord Kimbrey has restored the deer to his Norfolk park, which were removed during the present century by his predecessors and he is said to have declared that 'a park is not a park without deer.' In Scotland, while there are not so many parks, the tendency in this direction is increasing, as it is also in Ireland.



CEMETERY NOTES.

A syndicate of Pittsburg capitalists have been negotiating for the purchase of a tract of land near Grapeville. It is stated the land will be used for a large cemetery for the burial of people from Pittsburg and Allegheny. This location is some 30 miles away from Pittsburg.

* * *

A gentleman of Galt, Ontario, offers to defray the expenses of constructing a pyramid to be faced with the tombstones scattered about old St. Andrew's cemetery. The tombstones facing outward many of the inscriptions could be deciphered, and it would form a memorial pile to the dead who sleep there.

* * *

The trustees of the Dunmore cemetery, Scranton, Pa., have awarded a contract for a new receiving vault to the New England Granite company. The exterior is to be constructed of granite and will be in the Doric style of architecture. The interior will be finished with polished imported Italian marble and bronze fixtures. There will be sixteen crypts closed by bronze doors. The vault will be constructed on the most approved principles and is to be completed in a few months.

* * *

The matter of burying in the colored cemeteries of Richmond, Va., is becoming a great question in that city. Some time ago an injunction was obtained prohibiting further burials in certain six cemeteries, and the corporations owning them have now engaged eminent counsel to test the matter in the higher courts if necessary. The original injunction was granted on the plea that a public nuisance was likely to be created by further burials in the enjoined cemeteries.

* * *

The officials of the Catholic cemeteries in our larger cities are not lagging far behind in their efforts to reform cemetery management and allied interests. In Cleveland, O., Rev. G. F. Houck, chancellor of the diocese, has designed and had constructed a funeral car to run by electricity on the street railway tracks, embodying the best features of modern design and arrangement, with such further details as the necessities of the service suggested to him. The dimensions of the car are 28 feet long by 8 feet wide.

* * *

A new receiving vault is under construction at Mountain Grove cemetery, Bridgeport, Conn., from designs of Mr. Joseph W. Northrop, architect. It will be of arched construction, with exterior of granite. The catacombs, 17 in number are placed in the rear; they will be slate, with pink marble panels. The walls and arched ceiling of the interior will be of enamelled brick and the floor of stone. The entrance door will be of bronze, and all the latest ideas regarding ventilation and drainage have been considered in the design.

* * *

Mr. Edmund Ira Richards has recently made a present to the town of North Attleboro, Mass., of a granite monument in the Old North burying ground, to be an ornament to the grounds and a source of information to the school children and others passing by the cemetery. It is erected to commemorate the placing of the first body in the cemetery which occurred in the spring of 1676. Four or five years ago this burying ground was

fixed up, the stone slabs cleaned and newly erected and the cemetery enclosed by a granite wall.

* * *

Mr. F. Z. Dickinson proposes to supplement the improvements which he has made in the Dickinson family burial lot in Prospect Hill cemetery, Brattleboro, Vt., by the erection of a granite water basin which will be given to the cemetery-association in due legal form for its perpetual use. The basin, of Quincy granite, will be of oblong shape and will be surmounted by an urn for flowers. The water supply for the basin will also be provided by Mr. Dickinson, thus relieving the association of all expense, and making this handsome and useful gift complete, with the use of the water free to all lot owners. At either side of the basin will be receptacles for discarded flowers. The design of the fountain is by a New York architect. The gift has been accepted by the cemetery trustees.

* * *

The directors of the Fernhill Cemetery Company, St. John, N. B., at a recent meeting decided to recommend to the next annual meeting in April the following changes in the charges for the perpetual care of lots: For 1 lot \$80 instead of \$60. For ½ lot \$40 instead of \$60. For 1 lot and monument, third-class, \$120 instead of \$100. For ½ lot and monument, third-class, \$60 instead of \$100. It was also decided that \$10 additional be charged on all third-class lots for each additional stone placed there now or hereafter. These recommendations are due to the fact of the continual decrease in the earning capacity of money, which is an important consideration for all cemeteries conducted on this plan. The general improvement of Fernhill on modern ideas is being rapidly brought to completion, and every year finds considerable progress made in this direction.

* * *

The annual report of the cemetery of Spring Grove, Cincinnati, O., to September 30, 1899, has recently been submitted. The total receipts for the year amounted to \$126,328.25; which included: From sales of lots, \$36,756.65; interments, foundations and single graves, \$26,538.48; gardener's service, \$956.10; trust fund for perpetual care of lots, \$6,934.20. The expenditures amounted to \$144,832.02, which included among the others: Labor, material, watch and gatekeepers, \$31,070.54; interments and foundations, \$8,705.53; salaries and stationary, \$11,593.10; the balance from last report was \$24,845.63 and the balance carried to next year is \$6,341.86. There were 99 lots and 35 fractional lots sold, of an area of 51,985 square feet. Vault permits issued, 65. Burial permits, 1460. The number of single graves now occupied is 12,394. Total interments to date 63,857, and number of lot holders 10,058.

* * *

The finishing touches are being put to the crematory in Mt. Auburn cemetery, Boston, which will make it one of the best equipped crematories yet established. The chapel on the hill has been entirely remodeled, the interior of lath and plaster partitions being removed and a new interior of fire proof decorative material substituted, which closely resembles some of the work on the interior of the new public library. In the center of the chapel floor there is a space for the bier, which after the religious services descends to the basement, whence it is taken to the operating room and furnaces in a rear building. Here the body is reduced to ashes through the action of kerosene furnaces, supplied with a strong, forced draft from powerful fans operated by a dynamo. The whole process is entirely noiseless. The chapel is of granite, the style of architecture composite, with the Egyptian predominating. The interior contains two waiting rooms and two lavatories, besides the operating rooms in the basement. The plans and designs for the remodeling of the interior were made by Mr. W. T. Sears, architect of Boston.

SELECTED NOTES AND EXTRACTS.

Avenues of Trees.

Shall avenues or roadways be lined with trees all of one kind, or shall they be mixed? This is a question that must be largely settled by individual preference, although doubtless most persons will prefer the grandeur produced by an overtopping row of one kind of tree. Can anything surpass the rows of large old elms seen in some of our New England cities? I have seen, too, magnificent avenues of silver maple, which well-cared for, somewhat resemble the elms in their general effect. In Fairmount Park, Philadelphia, there is an avenue planted with pin oaks. They have reached fair proportions already, but are still comparatively young. Their best effect is yet to come. In selecting like trees for a driveway, one should be careful to judge of the result after the trees have developed. Norway maples leading up to a residence on a hill may be grand trees individually, but are likely to have a "squatty" appearance—to use an expressive, common term. Along a level strip this will be entirely different. Mixed trees are very satisfactory if their growths are in a considerable degree similar, ranging in general height from 30 to 50 feet. Take, for instance, the sugar maple, American ash, red oak, tulip tree, and American linden, with possibly silver maple and American elm added; or say, American horse chestnut, sweet gum, Magnolia acuminata, scarlet and pin oaks and salisburia. A group of smaller round-headed trees would include Norway maple, English ash, Turkey and English oaks, white-leaved linden, ash-leaved maple, and Western Catalpa.—*S. Mendelson Meehan in Florists' Exchange.*

Labels for Trees.

It is a matter of great importance, although withal more marked in the "breach than the observance," to have the different varieties of plants and trees, whether in park, cemetery, farm or home grounds, properly labeled. In this connection the *Southern Florist* draws attention as follows: The question with many growers is, What is the best label? Prof. L. H. Bailey describes a label which is used on the grounds at Cornell University that seems to be almost everything that could be desired. It consists of the ordinary painted pine label bought by nursery men and florists, and which is six inches long and one and one-half inches wide. The labels may be purchased for \$1.30 per thousand.

Strong galvanized wire is secure to one end of the label, and if the trees are large the wire should be eighteen inches long. After the wires have been placed write the name of the tree with a soft pencil upon the label, then dip the label in white lead well thinned with oil. The paint partially obscures the name at first, but it soon appears bright and pencil marks are indelibly preserved. If heavy wire is used the labels cannot be removed without a pair of pinchers.

Transplanting Roses.

The natural season for transplanting roses is the spring, though with due precaution, they may be safely handled in the early fall. Some are more susceptible to cold than others; and all object seriously to careless treatment. Most young roses are scantily rooted, which necessitates a severe pruning of the tops in transplanting. Three or four inches of healthy young growth is all-sufficient to leave. The wood shrivels and weakens if the roots be exposed very long, hence when received from the nursery they should be at once planted out or heeled in. Some roses are budded or grafted on a strong-growing stock; while others are on own roots. The former require watching to prevent suckering from the stock, which soon robs the plant of its vitality. To lessen the effect of such a contingency, it is wise to set the plant deep enough that the junction of the graft or budded portion may be covered, that it may be allowed to throw out roots for its own support. Manetti, Dog, and Multiflora roses are the most common stocks, and may be usually readily distinguished from the cion. At times, buds will be present on the stock. If they be rubbed off before the plant is set, immediate sprouting will be prevented. With most roses, particularly the hybrid remontant varieties, a deep, rich soil is requisite for good results. Roses planted in sod will prove failures. Make a bed for them, dug two or three feet deep and made rich with manure—cow manure is excellent. Do all that is possible to encourage a strong heavy growth, and to this end let the bed be located in the full sunlight, away from large trees. The hardy, common roses are perhaps less particular, though they show appreciation for care. The beautiful trailing rose, Wichuraiana, is adapted for almost any situation, on margin of beds, on banks and rockeries, or can be trained to a trellis or stake. The abundance of pretty flowers which it

presents calls forth the following remark from an ardent lover of gardening: "I welcome the hybrids of Wichuraiana. I have a bed, 12 feet in diameter, of the type, that takes ten years off the age of any man each time he looks at it."—*Meehans' Monthly for October*

Lobelias for Stock.

Though good plants may be obtained from seed, this method of propagation is not altogether reliable, and it is advisable to rely on cuttings for the next season's supply. To do this it is a good plan to grow a few plants in pots during the summer, as these keep through the winter better than if lifted from the beds. When it is necessary to resort to the latter means some care is necessary owing to the tendency of lifted plants to damp off during the winter. It may not be generally known that a good way of obviating this evil is to select a number of plants for stock and to go over them a short time before lifting and cut off the tops. When the plants again break into growth they should be lifted and potted. Treated in this way they invariably keep through the winter without difficulty.—*The Garden, London.*

Wild Flowers for the Garden.

When planting for the early flower garden do not forget the wild flowers. Select a moist, shady spot, remove sufficient earth and fill in with carefully selected leaf mold from the forest. Fringe the bed with pretty maidenhair and other small ferns, fill it with the spring features, anemone, wild hepatica and violets. The spring is the best time to make a wild flower bed but as the plants are more hardy than cultivated ones, little difficulty will be experienced in their safe removal at any time if taken up with a ball of earth adhering and kept well watered and shaded.—*The Minnesota Horticulturist.*

The Hyacinth.

For more than a century, from 1559 to 1680, the tulip had an undisputed reign till a rival appeared in the shape of a double hyacinth. Rea says of the "hyacinth, or jacynth:" It is "of divers sorts and many of them of small esteem." Some double varieties were, however, known at that time, three being mentioned by Bauhin, but the double kind from which modern ones have been derived was raised at the end of the seventeenth century by Peter Voorhelm, a celebrated Dutch florist. The hyacinth was never quite such a rage as the tulip, though during the height of its popularity great prices were paid for bulbs in Holland. It is said as much as 2,000 florins, or about £150, was given for one root by some enthusiastic Dutch collector.—*Longman's Magazine.*

Park and Cemetery.

ESTABLISHED 1890.

An Illustrated Monthly Journal.

Devoted to the advancement of Art-out of Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

The regular contributors to PARK AND CEMETERY are among the most eminent Landscape Architects, Landscape Gardeners and Horticulturists in the United States, whose practical articles make the journal one of great value to any one identified with landscape work.

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Officials of Parks and Cemeteries are requested to send copies of their reports.

Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

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The Fourteenth Annual Convention will be held at Cleveland, O.

The American Park and Out-Door Art Association.

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O. C. SIMONDS, Chicago, Treasurer.

The next meeting of the Association will be held at Chicago, Ill.

The American Society of Landscape Architects.

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The committee of the new Lowell Street cemetery, Wakefield, Mass., has offered a prize of \$100 for the best plan for laying it out in lots, the contest to close Jan. 1st.

There has been considerable shaking up in progress in relation to the park affairs of Baltimore, Md., resulting in a complete reorganization of the executive force. The office of engineer and general superintendent which was held by the well-known engineer, Mr. Chas. H. Latrobe,

has been abolished, and in the place of the one official under the double head, two will be appointed a general superintendent and a landscape gardener. The new general superintendent will be the supervisor of all park work and the landscape gardener, will look after the work of beautifying the grounds and caring for the flowers, plants, etc. There will be a local superintendent at each park as at present. The new plan also provides specific duties for the various officials, which has never been the case before. There will be a small clerical force and the entire department will be run from the main offices. Mr. Francis H. Walters has been elected to the office of general superintendent at a salary of \$2 000 per annum. The salaries of the landscape gardener will probably be \$1,800 per annum. Further economy is to be accomplished by a reduction of the number of employes, concentration of the purchase of supplies in the hands of one committee, and the supplying of most of the shrubs, plants and flowers needed from the various park conservatories instead of securing them by purchase. In preparation for this change the Board is now enlarging the conservatory at Carroll Park, and will also increase the capacity of those at Druid Hill and Patterson Park. The merit system is to be applied to the selection and retention of employes.

Mr. David Z. Morris, for sixteen years superintendent of Mount Hope cemetery, has resigned the office, and Mr. John W. Keller, his assistant has been appointed to succeed him. At a meeting of the commissioners of the cemetery, on motion, the resignation was accepted with regret coupled with a eulogistic review of his services in the development of the grounds. Mr. Morris has assumed the management of Brown's Nurseries, Ontario, Canada.

Obituary.

It is with sincere regret we have to announce the death of Mr. Burrill Chaffee, for twelve years superintendent of Oakwood cemetery, Syracuse, N. Y. At the New Haven convention in which he took active interest he appeared to be in good health, and no one would have anticipated, for him so early a call from the dread messenger. A month ago however symptoms of severe illness presented themselves which culminated in typhoid fever, from which he could not rally, and he died Wednesday evening, October 11, at the comparatively early age of 49 years. His death will profoundly affect his many friends to whom his many good qualities bound him in a warm regard. His son Guy, who has been his assistant is now in charge of the cemetery pending action by the board. He leaves a widow, one daughter and three sons.

The board of trustees of Mount Olivet cemetery, Baltimore, Md., have appointed Mr. A. H. Reiter superintendent of the cemetery, in place of Mr. Charles W. Hamill.

Mr. Max S. Retter, lately superintendent of the Barrancas, La., national cemetery, has relieved Wm. Dillon, superintendent of the cemetery at Fort Leavenworth, Kan. Dillon has been transferred to Mound City, Ill.

The Park Commissioner of St. Louis,

Mo., has appointed Mr. Frederick W. Pape, general superintendent of public parks, to succeed his father, William C. Pape, who was cruelly murdered on September 8. The son is 23 years of age, a florist by trade, and the question of his qualifications for the position is being discussed. While sentiment had much to do with the appointment, and perhaps deservedly so, politics would seem to have had more.

BOOKS, REPORTS, ETC., RECEIVED.

Report of the Board of Metropolitan Park Commissioners, Commonwealth of Massachusetts, January 1, 1899. Illustrated with maps and photogravures. The reports of Messrs. Olmsted Bros., the landscape architects, are instructive features of this report.

Transactions of the Massachusetts Horticultural Society, Part 11, for the year 1898, contains some interesting committee reports. That of the committee on Children's gardens, which is illustrated, shows remarkable progress in the work. Part 111 of this annual report gives a list of the accessions to the library for the year.

Superintendent Leavitt of Wyoming cemetery, Melrose, Mass., has forwarded us an account of the improvements which have been prosecuted at that cemetery during the past season.

"Information Regarding Cremation as a Method of Disposing of the Bodies of the Dead." Boston, published by the New England Cremation Society, 1899. This pamphlet contains particulars concerning the New England Cremation Society, and a large amount of information touching the present status of this important and growing question.

From Department of Agriculture; Division of Forestry, Washington, D. C.—Bulletin No. 25. Notes on the Forest Conditions of Porto Rico, by Robert T. Hill. An interesting and fully illustrated pamphlet giving a clear statement of the forest resources of Porto Rico, and descriptions of the physical features of the island bearing on the question of the forests and their products. The illustrations of the sections of woods are from reproductions of impressions made by the woods themselves by a process thought to be used for the first time in this pamphlet.

The Agricultural Experiment Station, University of Nebraska, Lincoln has issued a Bulletin No. 59, on the Homemade Windmills of Nebraska, by Erwin Hinckley Barbour, a very interesting description of the homemade windmills of the farmers of that state. It is fully illustrated and as the author says, it brings together views of a number of mills and presents facts about their uses, construction, cost and durability which will undoubtedly be of use to prospective builders. This is one of the timely and instructive practical efforts tending to endorse the wisdom of the establishment of the experimental stations of the United States.

Thirty-ninth annual report of the Board of Park Commissioners of the city of Hartford, Conn., for the year ending April 30, 1899. This report is profusely illustrated with views in the several parks of the city.

PARK AND CEMETERY.

✻ *A Monthly Journal of Landscape Gardening and Kindred Arts.* ✻

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CONTENTS.

EDITORIAL—Chicago Municipal Art—Progress in Cemetery Improvement—Small Parks—Women's Clubs and Arbor Day—Fall Flower Shows.....	185, 186
*Aralia Spinosa.....	186
*The Rockefeller Monument, Lakeview Cemetery, Cleveland, O.....	188
Water Lilies—A Retrospect.....	189
*The Rochester, N. Y., Parks.....	190
Spiræa at Rose Brake.....	193
*White Lilies (Pancratium).....	195
The Waste of Leaves and Top Soil.....	196
Improvement Associations.....	197
*Garden Plants—Their Geography, XLVII.....	198
The American Park and Out-door Art Association.....	200
Park Notes.....	201
Cemetery Notes.....	202
Selected Notes and Extracts.....	203
Reviews of Books, Reports, Etc.....	204

*Illustrated.

THE Municipal Art League of Chicago, which was organized last June has recently got into working shape by the election of a governing board, which consists of three sculptors, three painters, three architects, the mayor of the city, one representative from each of the park boards, one representative from the board of County commissioners and six lay men. The sculptors are: Max Mauch, C. J. Mulligan and Lorado Taft; the painters: C. F. Brown, Ralph Clarkson and J. H. Vanderpoel; the architects: Louis Sullivan, D. H. Burnham and P. B. Wright. The harmonious work of this large board will be expected to create great things in the future embellishment of Chicago.

IT is gratifying to note the rapid development of the improvement idea in cemetery practice, and from the many press reports and comments coming to hand from New England and contiguous territory, we are constrained to the belief that the recent convention of the Association of American Cemetery Superintendents at New Haven and Hartford has had a remarkably happy influence in that section of the country. There are however, other causes leading up to this condition, not the least of which are the several organizations of women devoted to the recognition of the historical characters and localities of early American history, and the preservation of their tombs and graves. Their activity in this direction has drawn attention through the press to the dilapidated and unkempt condition of these early graveyards, and naturally it has fol-

lowed that attention should also centre itself upon the more modern burial places. But the main cause of this revival of improvement as connected with the recent convention alluded to, is undoubtedly the prominence accorded to the proceedings by the New Haven and Hartford papers. Some of these journals are of national circulation, while most of them have wide influence, and the liberal and intelligent manner in which they treated the convention proceedings, not only testifies to their up-to-date intelligence and progressive spirit, but to their influence in stimulating public sentiment. A moral can be readily drawn from this by every cemetery official in the country, which is: to cultivate the good will of the local press and by impressing the publishers with the advantages and benefits of cemetery improvement enlist their sympathies in the work. It will be a potent factor in inducing a public sentiment in favor of the cemetery and its welfare.

THE question of small parks, or breathing spaces, as they are often designated, for our large cities has become a paramount one, if we may judge from the present activity in relation to the subject. The matter is being threshed out in the public press, in social organizations, and wherever interest in the people's welfare is felt, and the discussions cover a broad field of argument, introducing not only the æsthetic, which has been, hitherto in a certain sense the main spring of the movement, but the practical which unfortunately too often means the dollars and cents side only. Be that as it may, statistics are being given to show that the improvement of the physical conditions of the tenement districts of the large cities, such as opening them up and providing recreation areas, has been an excellent investment on the part of city authorities, savoring also of the sound economies involved in self-protection. From the æsthetic standpoint the argument is very strongly in favor of the small park for crowded districts; then again there is the feature of municipal improvement closely allied with the park idea, that of improving the grounds about our public buildings. What a great, iniquitous oversight it has been to provide for the extensive and noble public buildings that grace some of our cities, without any attention being paid to their surroundings, the whole available

ground space covered with the building pile, without a thought for a framework of lawn or shrubbery or anything else suggestive about it. Indeed we have needed Municipal Improvement Leagues for a long time, and it is to be hoped that those now in existence will be enabled to exert a pronounced and beneficial influence not only on future development but in the way of correcting the neglect of the past.

* * *

Apropos to the question of small parks generally, the sixteenth annual banquet of the Merchant's Club of Chicago, which was held on the evening of November 11, devoted its program of entertainment and discussion to "Small Parks and Playgrounds." At this function the guest of honor was Mr. Jacob A. Riis, of New York, a well-known writer on sociological subjects and intimately associated with the movement in New York City. The meeting was attended by a number of members of the city council, which by the way has lately evinced much interest in the question, and the result of the meeting has already borne fruit in the Chicago Council, in amended efforts to promote an early solution of the problem.

AT the recent meeting of the Massachusetts State Federation of Women's Clubs held at Winchendon, Mass., Mrs. Cora C. Jones of Roxbury delivered an address on "Arbor Day and the Possibilities for Women's Clubs," in which she said, "Arbor Day is the only holiday that exists for the future; all others eulogize the past; keep alive some memory mingled with sorrow. Arbor Day speaks only of joy, progress, hope; the most unselfish of days, providing for the welfare of the future, adding to the joy of our descendants rather than glorifying the deeds of our ancestors." This is an inspiring view of this modern American holiday, which deserves such commendation to the good will and activity of the people, for tree planting and the out-door embellishment of our homes and public places is to be a line of progress to characterize our development in the near future. But the most pertinent feature of the address was the appeal to the women's clubs to help the cause, and one of the closing paragraphs of her effort is as follows: "What greater service can women's clubs do than first to inform themselves on the subject of forestry and to seek to impress on the present generation the imperative need of tree-planting and tree-preservation? It would be a most worthy ambition to infuse through our school system, reaching as it does the life and heart of every child, the purpose and the will to exert every effort to change the destructive process to one of increase in every state and territory and to teach those habits of thought and feeling in regard to the benefits and uses of

tree-planting that will deter them from the destruction of our lawns and parks."

NOTWITHSTANDING the oft repeated promise that the chrysanthemum has passed the zenith of its popularity and must soon give way to other floral favorites, the fact is that the chrysanthemum shows are increasing in number and improving at least in magnitude so far as the evidence of this year proves anything. In all the leading cities where horticultural societies have influence, the recent floral exhibits in which the chrysanthemum has been queen, have, generally, speaking, been more important in magnitude, more attractive in display and more successful financially than in previous years. But we do not note any great advances either in the quality or variety of this floral wonder, for wonder it is, looking at its career and the remarkable development to which it has yielded, and it is perhaps to this condition that the prognostication of its decline is due. But the readiness with which it submits to the florists efforts, and the brilliant and effective floral displays it produces will give it a long lease in popular favor. This will be particularly the case in respect to the increasing efforts of our park commissioners to provide exhibits in their public conservatories. Too much attention can scarcely be paid to this department of park work; it is bound to increase the public utility of the park, while it does so much to elevate and refine the citizen. We should like to see more effort displayed in out-door exhibits of the hardy flowering chrysanthemums in our parks. It should be possible to produce early flowering varieties of sufficient distinctiveness to create beautiful effects, and moreover it would induce the use of such plants about the home grounds to prolong the season of fall flowers.

ARALIA SPINOSA.

I am indebted to Charles H. Miller of Fairmount Park for many beautiful pictures of park scenes, but the one of a group of *Aralia spinosa*, illustrated with this, is certainly unsurpassed for beauty. This small tree is beautiful anywhere, but in a position such as these three are the combination is very effective. As will be seen the photographer has caught them just as their large heads of flowers are expanded. I have seen heads of flowers large enough to well fill a half bushel measure. In color they are greenish white, distinct enough to contrast nicely with the foliage. Equally as pretty, if not more so, are the berries which follow the flowers. From a green color they change to a dark red, much as common elderberries do, and then to a black, and one can imagine the display when the large heads of flowers the picture presents are changed to clus-

ters to dark red berries. The whole head, twigs, fruit stems and fruit all change to a lively red color. The contrast between berries and foliage is most striking. What makes both flowers and fruit of more than usual value is that they are produced toward the close of summer, when there is a dearth of flowers on shrubs and trees, and in the last days of autumn the foliage assumes the scarlet color of a sumach. This aralia is one of many species, some of them hardy and others not, but none of them are superior to this for ornamental planting. It is a native of this country, from Pennsylvania southwardly. There are a few hereabouts in semi-waste thickets, but I could never determine whether they are truly wild or have sprung from cultivated trees.

It can be propagated from roots, as can all the species; in fact, about a good-sized specimen little ones will occasionally appear, but not in quantities to be objectionable. As the illustration proves no little ones have appeared near the three, or if they have they have been removed. It is more common to find two or three start from one center, as these have done, than for shoots to appear far apart. The shoots of aralia are not at all spreading, but the immense compound leaves spread out so far that an umbrella-like head is formed, making a nice canopy under which to place a seat. The stems of this aralia as well as the leaf stalks are prickly, not with sharp spines, but still sufficiently so as to notify those who handle them recklessly to be more careful in future. Because of this comes its name of 'Hercules' Club and Devil's Walking Stick, the latter somewhat of a local name for it, I think.

The spikenard, *Aralia racemosa*, and another species *A. nudicaulis*, are wild here, but these are low growing, half herbaceous sorts, with pretty flowers and fruit.

Among closely allied plants are the famous ginseng, *Panax quinquefolium*, and another, *P. trifolium*, and the common European ivy, *Hedera*

Helix, belongs to the same natural order.

There are among other hardy arborescent sorts, *A. canescens*, *A. Japonica*, *A. pentaphylla* and *A. Maximourezii*. *Pentaphylla* is different and *Maximourezii* decidedly so, having palmately divided leaves, but *Canescens* and *Japonica* do not appear to differ from *spinosa*, if what are in cultivation under these names are correct.

A closely allied genus, so close in fact that it is hard for the general observer to say wherein it differs, is *Dimorphanthus Mandshuricus*. It would pass anywhere for *Aralia spinosa* when planted by itself, but when near the other it is clearly seen to have a thicker, heavier growth throughout, and it flowers about 10 days ahead of *Aralia*. Its flowering is over and fruit showing some red coloring by the time the *Aralia* flowers open. It is a grand

companion to the *Aralia*. A tree or group of it should be planted apart from *Aralia*, to have the benefit of both.

When seen in the winter season no one would think there would be the leafy shade afforded as exists and as the illustration represents. The



ARALIA SPINOSA. FAIRMOUNT PARK, PHILADELPHIA.

length of leaf including the leaf stalk is often fully two feet, and then there are so many of them that a large bush of it affords a lovely bower. There are other trees bearing compound leaves in the same category. The Kentucky coffee, *Gymnocladus Canadensis*, is one. Many a person has given me an incredulous look when I have recommended it for a shade tree. Yet it is well suited for the purpose. Though the branches are few, the leaves are produced as in *Aralia*, and a beautiful shade tree is the result.

The trimmed tree showing to the left of the *Aralias* is the European hornbeam, *Carpinus Betulus*, an excellent one for many situations, especially where, as in this case, a tree of its present outline is required. It would be hard to find a handsomer group than that illustrated above, and in this case the picture comes very near doing it justice.

Joseph Meehan.

THE ROCKEFELLER MONUMENT, LAKEVIEW
CEMETERY, CLEVELAND, O.

At intervals during the progress of quarrying and cutting the Rockefeller monument, recently



THE ROCKEFELLER MONUMENT, LAKEVIEW
CEMETERY, CLEVELAND, O.

completed in Lakeview Cemetery, Cleveland, O., has been the object of considerable attention. Its simplicity and magnitude, as including among its members one of the few monoliths in existence exceeding fifty feet in length, and the difficulties that had to be encountered and provided for in the transportation to the site, made it a prominent object in cemetery memorials, and the success of its final erection has been awaited with interest.

We are enabled herewith to give a view of the completed memorial as it stands to-day on the Rockefeller lot in Cleveland, and also illustrations showing the method and construction required to set its huge blocks of Barre granite.

Its dimensions are as follows: First base 14 feet by 14 feet by 3 feet; second base, 9 feet 2 inches by 9 feet 2 inches by 3 feet 8 inches; die, 6 feet 8 inches by 6 feet 8 inches by 7 feet; shaft, 5 feet by 5 feet by 52 feet, giving a total height of 65 feet 8 inches. To secure a stable foundation it rests on a bed of concrete 8 feet deep, which should insure an absolute permanence.

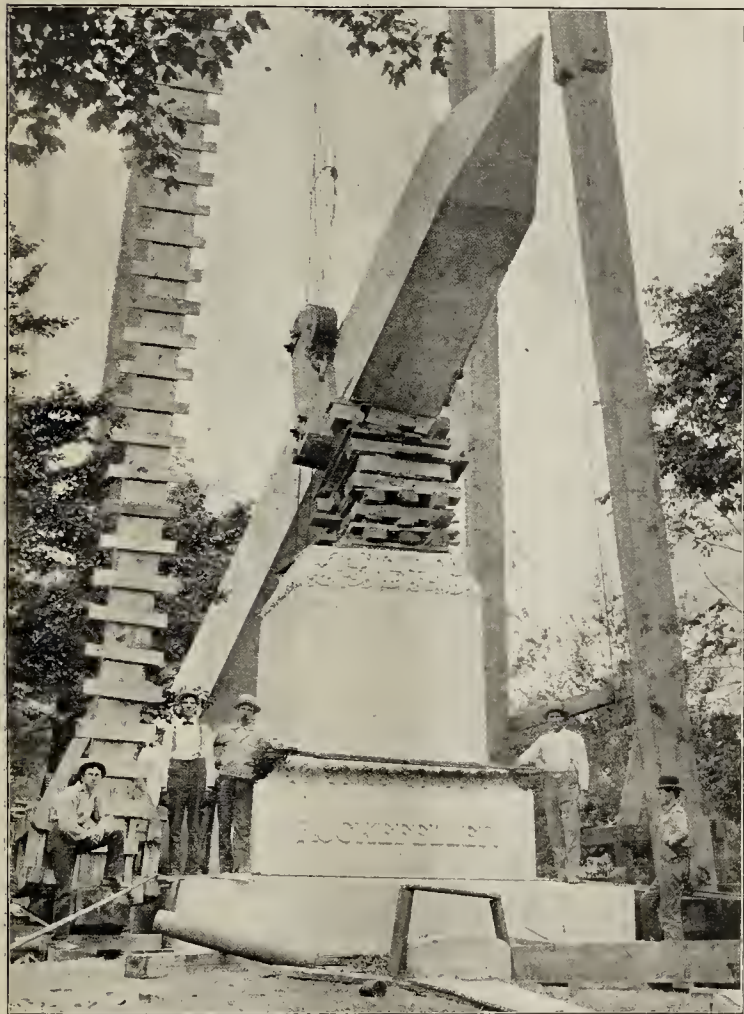
Considering the dimensions of the monument it has been fairly rapid in its execution, the contract having been made on April 27, 1898, and it was completed September 12, 1899, a period of less than seventeen months—a short time for so large a monument.

Not the least interesting feature connected with the work was the erection, which was carried out by Mr. W. F. Howland of Barre, Vt., who designed and constructed the rigging employed in raising it. The illustrations very graphically describe these operations, and a few further details will suffice. The derrick was built of sixteen-inch square pine timbers, spliced with hardwood planks, and the four legs were spread at the bottom and braced to maintain rigidity; the tops of the timbers were united by cross heads. This derrick was moved



SETTING THE SHAFT, ROCKEFELLER
MONUMENT.

out over the stones as they were needed. the stones lifted and carried into place, the work being done



RAISING THE SHAFT, ROCKEFELLER MONUMENT.

by hand. The shaft was taken hold of near the apex and raised with the heavy end resting on the ground until an upright position was gained. It was then lifted and blocked up until it was high enough to clear the bases already in place, when the derrick and shaft were moved directly over the seat of the shaft and it was lowered into place. The operations were carried out very successfully, all the calculations proving to be correct, and the monument was complete.

The above illustrations are valuable as showing the apparatus required in the erection of memorials of this description in a cemetery requiring great care and where space is limited.

WATER LILIES—A RETROSPECT.

The season just closed has been a remarkable one and much can be learned from year to year as no two seasons are just alike, as regards sunshine temperature, etc. Aquaculture has made rapid strides and in all our parks and cemeteries with very few exceptions are to be seen Aquatic plants. The old fogyism that a water lily pond breeds malaria, mosquitoes, etc., has long since proved fallacious, and is superseded by intelligent planting of

all such natural ponds with Aquatic plants as they are an omen of health and life giving properties instead of miasma, malarial fevers, ague, etc. Yes, it must be admitted that swampy ground and malarial spots, cannot only be made beautiful, pleasant and inviting but healthful, and the man who undertakes such work is a philanthropist.

By planting such ponds, it assists nature as by so doing, Aquatic plants oxygenate and purify the water just as much so in proportion as the leaves of trees and plants purify the air. With live plants in the water and suitable plants for boggy and swamp ground, etc., it is easy to conceive how beneficial such work is in such a community, and how interesting and inviting such a picturesque landscape is or will become under skillful generalship; as I said before Aquaculture is progressing rapidly and there is improvement all along the line.

The addition of tender Aquatic plants has added largely to the already large class of suitable plants for the purpose and they well repay for the extra labor and time in caring for and replanting them annually. These plants have not supplanted the hardy varieties, for the latter are indispensable and take precedence, yet they have even made the hardy ones more popular by their novel features and colors, for what was lacking in the one, was supplied by the other. Their popularity is increasing every year as their culture is better understood and their great usefulness as decorative water plants become known.

During the past season success has crowned the efforts of not a few who made an attempt at water-gardening, while again others have failed, and while it may be readily asked what was the cause of the failure it is more difficult to answer without knowing the various conditions in any individual case.

It may be that tender *Nymphæas* and *Victorias* have not been satisfactory; then there must be something wrong or wanting or out of man's ordaining in these cases, because there are reports from other sections that this has been the best season experienced.

In New Jersey, the weather this past season has been about normal, but not so hot on the whole as last season. The tender *Nymphæas*, *Victorias* and the hardy varieties, have been very satisfactory. In fact the *Victorias* have been better than preceding years, especially *V. Trickeri*; yet this latter variety has failed to grow in some places, and in two or three where it was quite a success last season. The season must be to blame, yet how can we reconcile these conflicting statements. Here in New Jersey it has been a success; in St. Louis a complete success. At Benning, Washington, D. C., a plant of the *Victoria Regia* and *V. Trickeri* planted under

the same conditions as the preceding year—when they were a success, failed to make any standing, yet seedlings of the latter variety that started in the same pond and never disturbed made most satisfactory growth and flowered on the 24th of August and had leaves 3 ft. 6 in. to 4 feet in diameter, without taking the rim into account. The plants in St. Louis,—in Tower Grove park and in the Botanic gardens had leaves that measured 5 ft. 6 in., diameter. Also the plants at Riverton, N. J. In the latter case, no artificial heat was used after the latter part of June. At St. Louis and Benning none whatever, and the plants were planted out the first week in June. I noticed that we had a spell of warm weather early in June at planting out time followed by a cool spell. This cool spell may have proved a check and where plants had been subjected to a change, undergone a journey and confinement for two or three days just previous, the effect may have been due to such causes. Following precisely the method of growing *Victoria Trickeri* as described in PARK AND CEMETERY of October, 1898, it has been most satisfactory. Out of door seedlings have also grown and flowered and the last flower on my largest plant was produced October 20th. last. I also had flowers of the tender *Nymphæas* later than this, and hardy *Pygmea* type this 2nd. day of November.

There is in some of the older plantations of Aquatics a tendency to let the plants continue from year to year, and I have seen ponds overcrowded, the result was that much foliage was crowded out of the water, numerous flowers hidden from view and the leaves above water destroyed by red spider; the flowers were small and the color pale and dull compared to healthy vigorous plants. It may appear wasteful to throw away good plants but better to do this than to spoil all; it has to be done in other branches, and must be done where ponds are overstocked regardless of the disposal of such plants, such conditions as above will bring the culture of Aquatics into disrepute.

Again there is an error committed in planting small ponds. The man in charge wants to grow all he can and too many varieties and plants are crowded into one small pond, the result is not one does satisfactorily; the plants are in small pots instead of large boxes or tubs, and cannot present anything but a starved condition and their true character not seen and some one gets blamed and very likely the vendor of such plants.

It must be borne in mind that all Aquatic plants are voracious feeders, they require a large proportion of rich soil below, and ample space for development of their leaves on the surface of the water.

Wm. Tricker.

THE ROCHESTER, N. Y. PARKS.

The public park system of Rochester was originated in 1888. At present it comprises three large parks and a number of small squares throughout the interior of the city; nearly seven hundred acres in extent.

Genesee Valley park, which contains three hundred and forty-three acres, is on the south-east side of the city. It is intersected by the Genesee river. Its general effect is pastoral.

Seneca park is on the north side of the city, and contains two hundred and twelve acres. It is intersected by the famous Genesee river gorge. The general effect of this park is picturesque.

Highland park is on the south side of the city, and contains seventy-five acres. It occupies part of a moraine which runs east and west, and the northern and southern slopes are diversified by a contour of small ravines, hollows and glades which present a rather unique aspect. The view from the highest point sweeps a circle throughout the Genesee Valley of fifty or sixty miles. Twenty acres of land included in this park were donated by Ellwanger & Barry, the famous nursery firm. The late Mr. Patrick Barry, of respected memory, and the present venerable Mr. Ellwanger, suggested using Highland park as an arboretum, but on the ground being looked over with that object in view it was deemed advisable, on account of the space being too limited for that purpose, to exclude all arborescent, deciduous, plants, and devote the southern slope of the park to a shrub collection, that is, a collection of shrubs, hardy or nearly so in this latitude, of ornamental and cultural value and botanical interest, and indigenous throughout the temperate regions of the globe. The northern slope or side of the park to be devoted to a pinetum or collection of coniferous trees and shrubs, hardy or nearly so, and indigenous throughout the temperate regions of the world.

The ground was prepared and the nucleus of the shrub collection was planted in 1890, with constant accessions ever since, as they could be procured either by exchange or purchase.

The ordinal or family sequence of planting has been adhered to amongst the shrubs. Of course there have been modifications somewhat, in order to suit the natural adaptations of different plants. We can see to-day that in many cases it would have been better for us to have departed more from family affiliations than we have done so as to obtain the proper conditions of plant growth. We are careful now in our accessions to place the plants in the conditions best adapted to their growth, if the ground in the family order is unsuitable.

The shrub collection embraces about sixty fam-

ilies and about twelve hundred species and varieties.

The species of some genera, such as *Vitex*,

species and varieties of spiræas placed as specimens around in the same manner. This conception has been in the main carried out throughout the col-



Highland Park, Rochester, N. Y.—Central View at one End of Shrub Collection.

Caesalpinia, *Escallonia*, *Cyrilla*, *Indigofera*, *Fontanesia*, *Corylopsis* and other like subjects require a little protection in winter.

At first sight, to the ordinary observer, it may present the effect of a confusion of shrub masses without any purpose or object in view. The massing effect, however, has been adhered to as much as possible. For instance, in the rose family: in the spiræa section, a large central group of spiræa *prunifolia* fl. pl. was planted and individuals of *Spiræa Japonica* and its varieties; *S. salicifolia* and

lection. During the past few years the original plans have been deviated from somewhat by introducing numerous groups and masses of spring flowering bulbs in the grass, and showy biennials and perennials in informal masses, in nooks and corners amongst the shrubs to add color and charm to the scene, and to attract the people around. It must be understood of course, that these bulbs, biennials and perennials are used purely for a show effect and in no botanical sense whatever. We must confess that we had not much sympathy with this idea at



Highland Park, Rochester, N. Y.—Mass of Select Sweet Williams in Bloom Against Background of Spiræas.

its varieties, and other species of spiræas individualized around the outskirts of the group. In another spiræa mass; *Spiræa Van Houttei* is used as the central group, and forms of the numerous

first, when we were requested to carry it out, as we thought that a garden effect should be excluded from the shrub collection. Our opinions have changed now, however, and we are enamoured of the beauti-

PARK AND CEMETERY.

ful floral and foliage combinations that spring up before us sometimes like fairy scenes. Some idea can be gathered from some of the accompanying pictures of some of these flowering plants massed in connection with shrub groups.

A pleasant feature is the grass walks ten feet wide that lead to all convenient points. Grass walks were used on account of the steep nature of the ground to avoid washing out by heavy rains.

The collection of coniferous trees and shrubs, commenced about four years since, on the north slope of the park contains up to date about one hundred and fifty species and varieties. They have been planted absolutely without any regard to generic affiliations.

Every one who has had experience in the growing of coniferous evergreens knows that it is difficult sometimes to explain their caprices under what appear to be perhaps most favorable conditions of growth for a certain species or variety. Therefore with the end in view to obviate putting all our "eggs in one basket" we have tried the same plant under different likely conditions, as we believe

tered and in other ways apparently suitable. White pine, white spruce, hemlock spruce, red cedar, and arbovitæ have been planted in large masses and

most of the specimens surround these groups. The largest of the coniferous evergreens are not over five or six feet in height, and it will be a few years yet before they will be of any practical educational value.

The question now arises in conclusion, what value are these collections to the people and to the tax payers? Such things usually

have their opponents in all places, and there has been no exception here. But during the past few years the inspiration conveyed by the general effect of such a large aggregation of individuals and masses of shrubs in leaf and flower and fruit, has evoked great enthusiasm and admiration, and has opened the eyes of a great many citizens to the simple possibilities of embellishing their home grounds. It is quite a common occurrence to see a lady or gentlemen going around with note book and pencil jotting down what appeals to them as being suitable for a definite place in their own private grounds, as everything is plainly labeled for



Highland Park, Rochester, N. Y.—Group of *Yucca Filamentosa* in Flower.



Highland Park, Rochester, N. Y.—A Partial View of the Lilacs in Bloom

there is a greater likelihood by this method of obtaining good healthy specimens, than by putting all of a genus together even if the ground is well shel-

that purpose. On week days, and particularly on Sunday afternoons, large crowds of people visit the grounds during the summer months.

Dr. E. M. Moore, the venerable and esteemed president of the Board of Park Commissioners, has in view the purchase of two or three hundred acres of rich, alluvial land adjacent to Genesee Valley park for the purpose of establishing a comprehensive arboretum. We sincerely hope the doctor will succeed.

John Dunbar.

SPIRÆA AT ROSE BRAKE.

A collection of spiræas is one of our specialties at Rose Brake and we find no other class of shrubs so useful for furnishing bloom throughout the summer.

A large and beautiful shrubbery may be made of spiræas alone. Their diversity of foliage is remarkable; so many shapes and sizes of leaves can be found among them. Some are very small and willow-like, as in *S. salicifolia* and the familiar *S. Thunbergii*. Others are wedge-shaped, as is *S. cuneifolia*; some have Hawthorn like foliage, some are plum-leaved, while some have handsome compound leaves which resemble the Mountain Ash. They mimic the foliage of so many plants that many of them have been named for this habit alone, as *Spiræa chæmædrifolia*, *S. sorbifolia*, *S. vacciniifolia*; *S. carpinæfolia* and *S. hypericifolia*. We have planted all these species and many more, but with so little knowledge of their habits and the size to which they would ultimately attain, that some have over-topped and crowded out the smaller kinds. We hope to make a new *Spiræa* shrubbery next season, as, having studied them for a number of years, we feel that we can profit by our past mistakes. I will describe here some of the most important and beautiful of these shrubs, with their time of bloom and habit of growth.

Earliest of all, and one of the most beautiful and valuable shrubs known to our gardens is *Spiræa Thunbergii* which here in our collection, is of graceful spreading habit and is about five feet in height. It has plenty of room to develop, but is planted in partial shade. Before the leaves come, about the middle of April, this spiræa will begin to show its tiny white pearl-like flower buds strung on slenderest, hair-like, lateral branches. In a few days these will expand into small white blossoms in corymbs, so freely produced as to cover the plant. They last a week or ten days, sometimes longer. Indeed a few flowers may still linger on the branches after the bush is in full foliage. These fine narrow leaves have a very graceful appearance. They are very abundant and are of a charming shade of light green. They remain on the bush sometimes as late as December, and this spiræa is one of the most valuable plants we have for autumnal effects. The foliage changes to soft delicate salmon and

reddish orange shades, and retains this coloration a long time.

The next spiræa to bloom in our shrubberies is *S. arguta*, which opens a day or two after *S. Thunbergii*, of which it is a hybrid. It has very abundant and larger flowers than its parent, but the leaves are not so beautiful. They are shorter, and oblong obvate in shape, and do not color so finely in the fall. This is, however, a very valuable shrub for its beautiful early bloom. *Spiræa prunifolia*, the plum-leaved spiræa, familiarly called Bridal Wreath, is the next to flower here, and is so well known that I need say little about it. Perhaps fifty *S. prunifolias* are planted to one of any other variety, and to very many people, the word spiræa has no other meaning. In our cemetery here the great bushes of this spiræa are uniformly tied up about three feet from the ground with strong cord, so that they all look exactly alike. In our own shrubberies we let them alone and they have a graceful and slightly weeping habit of growth. This is one of the largest spiræas and it turns in the fall to beautiful shades of salmon-pink and dead gold, at which season it is exceedingly ornamental.

Spiræa Van Houttei blooms about the same time as *S. prunifolia* and is of first importance in its family. It is becoming very generally planted and makes a very large spreading bush, from six to seven feet in height. In the spring its branches are weighted down under the wealth of clustered bloom, dazzlingly white, and covering the shrub like a heavy fall of snow.

Spiræa cratægifolia is another shrub of large growth and blooms about a week later than *S. Van Houttei*. It produces its flowers as profusely, but they are not such a pure white. It is very fine when in flower and should be planted to keep up the succession of bloom.

Spiræa bracteata blooms late in May or early in June and seems to be a spiræa of medium size with rounded leaves and very abundant white flowers in dense clusters. Many nurserymen sell this spiræa under the name of *spiræa rotundifolia alba*. It may readily be recognized by the bract borne near the middle of the flower stalk.

Spiræa cantoniensis, also called *S. Reevesii*, is of medium size, and blooms late in May. The double form is a fine shrub and it remains a very long time in flower. This is one of the shrubs that does well in the shade. Indeed we find that many of its class do excellently well in a partly shaded situation near large trees.

Spiræa cuneifolia has curious small wedge-shaped leaves and clusters of pretty white flowers that open in June. It is of rather straggling habit of growth but is pretty and distinct and of medium

size. One of the largest of spiræas is *S. opulifolia*. This is strong-growing and becomes a tall, upright shrub with large light green foliage, something like that of the snowball and clusters of large white flowers in June. Its common name is wine bark and it grows wild on the cliffs of the river here. After blooming the carpels or seed vessels are conspicuous and very ornamental turning reddish or wine color on the stems.

S. opulifolia aurea is the golden-leaved spiræa, and should be planted in the sun if it is to be effective. The young, light orange colored leaflets are very pretty when they first expand in the spring. As the season advances the foliage becomes duller in hue and if planted in the shade, reverts to green. This spiræa is largely planted by those who like golden-leaved effects. We have what we call the golded shrubbery composed of these spiræas, golden-leaved Philadelphus, golden-leaved elders and for contrast, some purple-leaved plums, birches and hazles. This shrubbery was an experiment which I will describe at another time.

To return to the spiræas. *S. discolor*, variety *ariæfolia*, also called spray bush, is one of the most beautiful of its family, and is distinct from all that I have described. It will grow ten feet high in rich, moist soil, and should have a conspicuous place where it can get the sun and have plenty of room to develop. It has a distinct grace and beauty of its own and has large feathery panicles of bloom that are greenish white and fragrant. These are very freely produced and give it an airy effect hard to describe. This should be in every collection. It blooms towards the end of June.

Other June bloomers are *S. Billardii* and *S. Blumei*. These have spikes of pink blossoms with long stamens and continue in flower a long time. *S. Billardii* is of larger growth than *S. Blumei* and has longer and stiffer spikes of flowers. They are useful for variety and to keep up the procession of bloom.

Spiræa trilobata has very pretty foliage and is of low spreading growth and is valuable to plant on the margin of the shrubbery as it droops gracefully to the ground. It has white flowers in June. The three lobed leaves are prettily crenate or scalloped, and it is more useful for foliage than for flower.

Spiræa sorbifolia has pinnate foliage like that of the Mountain Ash, and large plumes of cream

colored flowers in June. It is of rampant growth, suckers freely and must be watched to keep it within bounds. It likes a moist situation.

Much finer is *Spiræa Lindleyana* which has the same character of flowers and foliage but is more refined in appearance and is useful in sub-tropical planting with its picturesque primate leaves. It needs plenty of moisture and is one of the choicest of spiræas. It does not do well here and dies down to the roots in cold winters. The hot dry summers keep it from flowering well.

A pretty little group for the margin of a shrubbery or for a flower border is composed of *spiræa callosa alba*, a small shrub always in bloom from June to severe frost, *spiræa Bumalda* and *spiræa callosa crispifolia*. *S. Bumalda* is a little smaller than *S. callosa alba* and has beautiful heads of bright pink flowers. *S. callosa crispifolia* is the smallest of all shrubby spiræas and is a little gem. It is of rounded form and has curled, crisped leaves that are very pretty and odd and it is a profuse bloomer. It has heads of small pink flowers all summer.

A conspicuous place in the flower border should be accorded *Spiræa Anthony Waterer* which is a spiræa of medium growth and very valuable for its succession of rich pink heads of flowers. It is well known and much used by florists for forcing. To succeed with it requires careful cultivation and free use of the garden shears, as all the faded bloom must be clipped away to encourage fresh flowering.

Spiræa callosa Fortunei is of medium growth and has beautiful flowers in July as rich in color as those of *S. Anthony Waterer*. This is one of the best of the late flowering spiræas and is sometimes called *superba*.

We have many more species and varieties of spiræa, but I have described the most conspicuous of them, and have said enough I hope, to prove their great value in all collections of shrubs. They should not be crowded, nor, as a rule, planted in dense shade.

Many of them, however, prefer partial shade and all of them like to have wet feet. They are particularly adapted to margins of ponds and running streams.

I will at some future time, devote a chapter to the herbaceous varieties of spiræa.

Danske Dandridge.

“A garden is a place arranged for promenades and at the same time for the recreation of the eyes. But it is also an accessory to the house, serving it as an accompaniment, an environment; and, within certain limits, it is simply another apartment, an annex of the house. Therefore, how can the art which built and adorned the dwelling be refused the right to interfere in this exterior house?”—*Vitet.*

WHITE LILIES. (*Pancratiums*.)

INNÆAUS in his "Philosophy of Botany" gives the "natural" as the last of the three characters used in the description of plants.

A natural family, or order is composed of several genera of plants, which by having some common mark of resemblance, receive a name, based upon this general character. In many cases the name comes from the most conspicuous genus belonging to it, as the Rosaceæ of rose-like plants and Liliacæa of lily-like bulbs.

The order Liliacæa consists of herbs, shrubs or trees with bulbs, corms, rhizoma or fibrous roots, simple, sheathing or clasping flowers. All lilies are herbs with scaly bulbs, whence arise the tall and rather slender stalks, furnished with alternate or somewhat whorled leaves, bearing upon their summit erect, or drooping flowers, characterized by purity, elegance and sweet perfume.

The typical genus *lilium* or true lily embraces the considerable number of ninety, as far as known. They are scattered over the world in all temperate parts.

The lilies native to the United States are as fine as any in the world and embrace a large number.

Pancratiums, or in local nomenclature "Grayson lilies," "Cup lilies," "Swamp lilies" and most common of all, "Spider lilies" are snow-white lilies native to the swamp lands of Mississippi, Alabama, Louisiana and Florida. Gray says *Pancratium* comes from the Greek word all-powerful, for which he sees no meaning. Probably the learned botanist failed to see them at home on the rivers, bayous, savannahs, lakes and water-ways of the Southern borders. "All-powerful" is what they naturally suggest. From every strong bulb six or eight, sometimes ten bloom-stalks shoot up, and the long, strap-shaped leaves as broad as a saddle-girth are bright and shining green. Below about 35 degrees the leaves are evergreen. Every stalk bears a cluster of pure white blooms and the construction of these beautiful lilies warrants the assertion that they are the eccentric members of the class. The long, lanceolate, snow-white perianth surrounding the central, upright cup, also pure white, is unlike any other lily, and imparts an unique and very graceful appearance to the bloom.

They are profuse and constant bloomers and so densely do they grow in their native haunts that above the luxuriant masses of green ferns, flags, tall grasses, reeds and aquatics the spreading blooms

upheld on tall stalks are like white-pinioned birds in flight, and from the deck of a passing boat, car window, or other point of view the effect is fascinating.

No wildling takes more kindly to culture, and no lily fills so many different places as these. Under the drip of the fountain, or bordering any water-way, they are beautiful; and equally as well are they set out, in exposed places, if they get plenty of water during the summer time. The long, strap-shaped leaves make crowns and from all sides gracefully fall, extending like fountains of green, no mean ornament for any position. The blooms are wax-



PAŒCRATIUM, OR SPIDER LILY.

like in construction and the writer was sending some flowers to a sweet girl graduate, one June, and being in doubt about the beautiful spider lily's lasting qualities culled some blooms and kept them in water as an experiment. They stood the test. Thirty-six hours afterwards they were perfectly fresh. The bloom stalk is large, cylindrical and hollow and should really only be cut when elaborate floral display is wanted, but the separate stem to each of the four or six lilies that are borne on the terminus is just about three inches long and therefore convenient for cut-flower purposes.

Pancratiums flower from May till frost in which they differ from all other lilies. Although native to all southern lands, and apparently semi-aquatic, they are perfectly hardy in northern sections if a few general rules are observed. First of all, and last, and most important, bed them deeply in mellow soil. This enables them to resist the severest cold. Two and three feet, more rather than less,

is what may be called deep. They are frequently three feet and more, in their native beds.

Plantations of white lilies are ever more beautiful and effective than one, or a few in each place. The lone-sentinel lily stalk no matter how beautiful the flowers, fails entirely to convey a full idea of the possibilities of many together. Reference in this, is to out-door cemetery, park or garden planting. It must be borne in mind that white lilies harmonize with all other flowers and are beautifiers to masses of foliage formed by other plants.

Japan has proven the possibilities of *Pancratium* by its pink and scarlet "spider lily." Mr. Peter Henderson said there were no poor relations in the lily family, which is gratifying when the native spider lily is modestly asserting its claims.

G. T. Drennan.

THE WASTE OF LEAVES AND TOPSOIL.

THE BURNT OFFERING OF LEAVES.

Every fall the air in suburban places is made acrid and thick with the smoke from burning leaves. The other day I heard an old gentleman call to a friend across the street of a town near New York, "We shan't have any pure air any more for a month or six weeks. It's an outrage, and ought to be stopped." Even so. The places where people live, their roads and lawns public and private, must be kept neat, and the intrusive and ubiquitous leaves cleared away. But why must they be destroyed to the loss of a valuable thing and the public inconvenience? Are there no horses to be bedded, no compost heaps, no manure piles through which the leaves can at last be returned to the soil as Nature intended? As everybody knows, but few stop to think, leaves are a valuable fertilizer, the natural provision for preserving and replenishing the soil, a loan from the earth which ought to be returned to it for its and our maintenance and increase. Yet uncountable leaves are yearly burned, not only in swept-up heaps in suburban lots and streets, but as they lie on the ground in the neighboring woods. This is done in the name of neatness, and not only are the leaves destroyed, but part of the humus too, and the soil is yearly depleted. Will people not reflect that this is not only a waste, but like any other waste, a foolish one?

* * *

THE WASTE OF TOPSOIL.

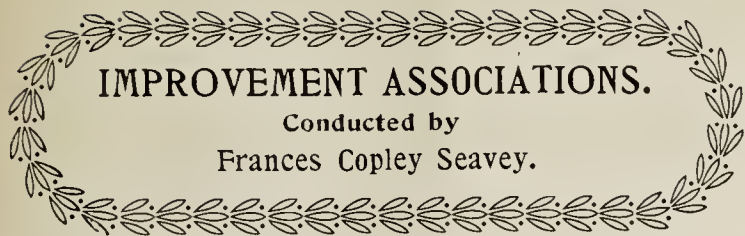
Far too seldom does anyone raise a protesting voice against the covering up and virtual obliteration of topsoil. Topsoil is the compost of humus and minerals spread by Nature over the earth in ten thousand years; and this precious substance out of which vegetation grows which makes possible the existence of man and his animals, which produces

wheat for his bread and timber for his shelter and grass for his cattle, is what can be seen obliterated under any barren rubbish that is solid wherever men have begun to build houses or cut the crust of the earth. Topsoil is most commonly buried where a house is built, and the clay or gravel from the cellar excavation is thrown out. This is done, partly because it is cheaper for the time, but mainly because it is easier, and people have not yet begun to think about the subject. It is true that when the house is finished and the yard is graded new topsoil has to be hauled in, often at great expense, for the lawn to grow upon, but that is no matter; the trouble and small expense of removing the topsoil from the site of the house and a little distance round it and putting it on one side till wanted, has been saved, and the owner does not stop to think and the builder does not care.

But cellar excavations are not the only places where surface soil is buried alive; wherever there is grading and filling we may look to find alluvial deposit underneath and debris on the top. For instance, in the northern part of New York City, where "good dirt" is scarce and costly, there is a tract of some acres which happened to slope a few feet below the level of the road; so its rich meadow loam has been buried under rocks the product of neighboring blasting operations, and over them thin gravel has been spread on which coarse weeds are growing. Before many years the land will be cut up into building lots, and then some other place will have to be stripped of its surface soil to provide something for the grass plots and flower beds to grow in. Perhaps the land will sell for just as much for building purposes with a coating of rubbish as of fertile soil; but surely it would have been wiser and cheaper in the end in these days of machinery to have stripped off nine inches or so of the meadow to put over the rocks and gravel. There seems to be something wanton and wrong in the wasting of these resources by which after unknown ages, the earth has been made fit for man's habitation. The surface soil is a trust that has been accumulating for ages in the bank of Nature, for our use and that of the generations that come before and after, and those who abuse and destroy it are betraying their trust and wasting the inheritance of posterity.

H. A. Caparn.

At the recent meeting of the American Public Health Association at Minneapolis, Minn., resolutions were passed reciting that the organization believes that the presence of forests is conducive to public health, and recommending to all governments to set apart such portions of their forests as may be practicable for national parks.



IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

WINTER WORK.

In time of peace, prepare for war, may be good advice for nations but in our line we must occupy the season of warring elements with preparation for the peaceful campaign of summer.

In both cases, however, the "sinews of war" mean the same and are more or less a necessity, so raising money may be considered an important part of the winter work of Improvement Associations, though the chief end of such work as I shall suggest is to arouse interest and, if possible, enthusiasm, in the subject while at the same time imparting wholesome information in a manner so agreeable that it is recognized as pleasant recreation.

The would be landscape painter has first to learn how to see; how to look at scenes and objects in their various aspects that he may learn the secrets of composition, of atmosphere, of breadth, of what to see and of what to overlook; of all that pertains to seeing what constitutes good landscape art. One who has not had this eye training is incompetent to judge such paintings, for they have never correctly seen the aspects of nature that are depicted.

All this is in some degree true of the position of the general public in relation to various phases of landscape gardening, and if it can be shown the difference between good and bad planting, a long step towards rousing interest, raising money, and the ultimate success of the work of any given association will have been taken.

As has been intimated elsewhere in these papers, the best way to put the subject clearly before the people is by furnishing good examples, and the next best way is by illustrated talks by a competent landscape gardener or by a well informed amateur.

The material for lantern slides to be used in illustrating such little lectures—talks is a better word—should be diligently gathered by club members who are camerists and can take pictures of good and bad front gardens and back yards, neglected grounds and those that have been nicely improved, barren railroad station grounds and those that are planted and cared for, littered commons or public squares and those that have been transformed by trees and shrubs, dreary graveyards and modern cemeteries that are cared for on the lawn plan, bleak or sun scorched school house grounds

and others that have been reclaimed and humanized, unsheltered churches and those that have been shaded and screened by planting, and so on. There is no end to the subjects that may be secured for showing the before and after effects of appropriate planting. If such negatives are not available at home, it should not be a difficult matter to get them from other clubs.

Once secured, these lantern slides with the talks to accompany them may be worked into a Lyceum course, utilized as a church or school entertainment, or boldly brought forward as one or two numbers for a course of entertainments gotten up by any Improvement Association for raising funds to be used in prosecuting the campaign of the coming spring and summer. In any case they will prove popular.

Other entertainments included in such a series might be chosen to suit any community, as tableaux, living pictures, living statuary, a musical or literary evening, a play, progressive whist or other progressive games, etc., but at least two evenings of such a series should be devoted to carefully thought out, aptly illustrated talks, such as have been mentioned here because they are most helpful, serving as they do the double purpose of bringing in money and making friends for the cause. In no other way can be so distinctly shown what may be accomplished along these lines.

Aside from developing means and interest, the next in importance of possible winter work, is deciding what needs to be done.

A plan for the summer campaign is as necessary as interest among the residents and friends for the work. To do anything well there must first be a clear understanding as to what is to be done, There is a always some one thing to be done, that is of paramount importance. That is the thing to do first. There is usually something else that comes a close second after the first, and that is what should be taken in hand as the second feature of the season's work. And so on, taking up each bit of work in the order decided upon. In this way, by calmly, leisurely and intelligently planning in advance, the most and the best can be done with both time and money when the season for active work is come, and there will be fewer false moves and less to regret when the working days are over and the results are reviewed.

F. C. S.

* * *

It is well said that "in selecting work to be done the end to be accomplished must recommend itself. There must be real work to do, and its expediency or its necessity must appeal to the moral and æsthetic sense. Something can always be done when the public recognizes the need of doing."

GARDEN PLANTS—THEIR GEOGRAPHY, XLVII.
GENTIANALES.

THE JASMINUM, FRAXINUS AND MENYANTHES
ALLIANCE.

(Continued).

Stapelia is a genus of South African succulents requiring much the same cultural conditions as the tender cacti. There are 70 species, some of which



STAPELIA GIGANTEA. Flowers 1 foot to 14 inches.

are very curious but hardly agreeable as to perfume.

Gelsemium "yellow jasmín" has 3 species in the southern states, China and Sumatra. The southern *G. sempervirens* has a double form, and would I think flourish on south walls at Philadelphia. It just manages to exist there in the open ground. From eastern Virginia southward it is a beautiful fragrant yellow flowered climber, covering low shrubs with its alluring but poisonous blossoms. They should never be carried in the mouth.

Spigelia, "pink root" has 30 species in tropical and South America. There are five native species but *S. Marilandica* is the best and only one commonly grown.

Nuxia floribunda and *Gonioma Kamassi* are small South African trees. The wood of the latter is in high repute for the making of carpenters tools.

Buddleia is a genus of trees, shrubs and climbers with 70 species. They are found in tropical and sub-tropical America, Asia, Africa and the African islands. Four or five are found along the Mexican border, *B. marrubifolia* being the most showy. *B. globosa* a Chilean species does well at San Francisco, Calif., and in the south of England. It is a showy orange flowered shrub of rather loose growth. *B. Japonica* and *B. Lindleyana* from China and Japan. *B. paniculata* from Afghanistan eastward and *B. Colvillei* from Sikkim are also grown as fairly hardy kinds southward. *B. salvifolia* is a

small tree in South Africa whose wood is useful for engraving.

Emorya in 1 or 2 species are found along the Mexican border.

Desfontainea spinosa is a handsome small shrub found along the Andes from Columbia to Chili.

Strychnos, nux vomica, is a sample of what some of these plants can do in the way of poison. The species are often pretty shrubs however when laden with their golden fruit.

Exacum has 30 species in the East Indies and other parts of Asia, and in Socotra and Madagascar. They are often mountain annual or perennial herbs of great beauty. Half a dozen or so are in cultivation, generally with violet purple flowers.

Orphium frutescens is a small South African shrub with pink flowers.

Sabbatia in 15 species are natives of North America and Cuba. They are handsome sometimes fragrant pink or white flowered annual or biennial herbs, slender growing but with handsome heads of flower. They often grow in marshy places, but some at least are amenable to cultivation.



EXACUM MACRANTHUM.—Gardener's Chronicle.

The yellow *Chlora perfoliata*, several pink flowered *Erythraeas*, *Cicendia pulchella*, and the East Indian *Canscora's perfoliata* and *Parishii* are among many of the interesting and pretty annuals of the affinity but little thought of, which might be tried grouped with such plants as *Sabbatias*.

Eustoma Russellianum is now the name of a plant known as *Lisianthus* found from Nebraska to Texas.

Gentiana has 180 species scattered over the world from the Arctic regions to the cool mountain tops of the tropics. They are very generally



GENTIANA ANDREWSII.—*Vick's Magazine.*

treated as "Alpines" in Europe but are so little attempted to be grown in the states that I doubt whether I can write anything useful about them. They are commonly divided into two sections, *Gentianella* whose characters may be found in the books of the botanists, and which has a number of beautiful annual species; and *Pneumonanthe* which also has both annual and perennial kinds. I do not mention biennials for they need annual sowing. Always take care to procure *Gentian* seed as soon as ripe and sow it at once. Then the best gardeners will learn every scrap of information available as to the natural habitat and climatal requirements of individual species. These are often very different in such a widely distributed genus. Even from the same locality some grow in sphagnum bogs, and others on almost bare rocks, and within a little distance a beautiful species may be found in pastures or growing on roadsides.

Again the same species may be constitutionally different in various localities. *G. acaulis* var. *angustifolia* from bare rock on the Swiss Alps would scarcely stand the same treatment as the roadside *G. acaulis* from the northern plains. I would even doubt if *G. pneumonanthe* collected in gross 18 inch specimens at the foot of the Alps, and little 3 inch midgets from the bogs of northern England would thrive happily side by side. After all however there is nothing for such things but a trial, and that trial for very many of the species must be at a great elevation on the mountains, or far away to the north. There is a great range of color and size and form in these beautiful plants. *G. lutea* is yellow, 4 feet high at times, with flat flowers in great axillary clusters. *G. punctata* is yellowish

and spotted. *G. amarella* is blue but has a yellowish variety and some authors consider the reddish flowered *G. Germanica* a variety of *amaralla*. *G. Bavaria* has lighter but similar flowers. *G. purpurea*, the *G. rouge* of the French, has dull brownish flowers and grows in peat moss. It has also blue and white flowers. *G. asclepiædea* has blue or white flowers and whether growing in marsh or woodland is sure to be quite local in distribution. It has tubular flowers in a thyrse. *G. ciliata* is a fringed gentian similar to *G. barbellata* of the rocky mountains. It is found in alpine pastures in Switzerland and elsewhere, but does not seem to be in cultivation, and in fact but few of the fringed gentians are; the rocky mountain form mentioned is reckoned a perennial but would almost surely be suffocated in the dense atmosphere at sea level, even though soil and winter shelter were similar. *G. nivalis* is a bit of a plant found in Scotland and rarely more than 2 or 3 inches high. The species found on the Andes, often near the snow line, have a large proportion of reddish flowered species among them, but few if any of which are in cultivation. As for the 50 or so of North American species and varieties there are many beautiful forms among them, but except *G. Andrewsii* they are rarely indeed seen in cultivation, and the best of European gardens can rarely boast more than three or four, and about the same number of Himalayan ones. Such beautiful species as *G. angustifolia* and its white variety found in the low pine barrens from New Jersey to Florida and many another on both sides of the country are worth every pains to grow them. I saw a beautiful bunch of *G. crinita* gathered on the edges of moist woods within a little distance of Newark, N. J., on the 10th of last October. Surely such late flowers cannot perfect seeds—can they? The whole sod in which this species grows—seeds, grass and all should



GENTIANA CRINITA.—*Vick's Magazine.*

be transplanted to the garden. I have now dwelt on these plants a good deal. Well: a bed of Gentians was the first thing in a garden to rivet itself on my mind and besides they are worth dwelling upon. Some European collections contain about 40 species. *G. asclepiadea* in var., and *G. acaulis* in var., from Europe, the Rocky mountain forms of *G. amarella*, *G. affinis* and the western *G. Oregana* are among those sometimes heard of in American gardens.

Menyanthes trifoliata in var. *Lymnanthemum nymphæoides*, and *Indicum*, and several *Villarsias* are pretty aquatics or marsh plants, known as "bog-beans," "floating hearts," and so on.

James MacPherson.

THE AMERICAN PARK AND OUT-DOOR ART ASSOCIATION.

A meeting of the council and others interested in the American Park and Out door Art Association was held in the green room of the Auditorium Annex, Chicago, Saturday, Nov. 4th.

There were in attendance: President Chas. M. Loring; Vice-presidents, R. H. Warder, John C. Olmsted, E. J. Parker, Thos. H. Macbride; Treasurer, O. C. Simonds, and Secretary Warren H. Manning, together with the following of Chicago: Mr. W. M. R. French director of the Art Institute; Mr. Emil Lorch, of the Art Institute; Prof. Geo. W. Kriehn, of the University of Chicago; Mr. Bryan Lathrop and Dr. P. M. Woodworth, President of the Lincoln Park Board.

Dr. Woodworth was elected chairman of the meeting. The secretary gave a general review of the work of the association, particularly that which has been delegated to the committees, with a brief outline of what had been accomplished by these committees, and stated that he had conferred with Mr. French of the Art Institute in regard to the date for the next annual meeting. It was voted by the council to hold the meeting on the 5th, 6th and 7th of June next, and to make the Auditorium Hotel the headquarters of the association.

The following suggestions were brought up in the general discussion which followed:

Mr. E. J. Parker urged the importance of securing a larger membership and called attention to the good work which was being done by the various railroads, particularly the Boston & Albany and the Pennsylvania R. R., in the improvement of the surroundings of stations. He suggested that a paper upon this subject would be desirable, also a paper on "School Grounds." He called attention to the valuable time that was being lost by the Chicago University in postponing planting operations upon their grounds. He also stated that he thought the association should secure an opinion and have a discussion upon the question of the rights of telegraph companies to cut trees on the roadside in locating their poles and wires. Mr. Parker spoke also of the importance of having more attention given to the surroundings of national, state, city and town public buildings. He spoke also of the importance of checking

the abuses of public advertisements which had been referred to a committee of the association,

Mr. R. H. Warder stated that the association should aim to stimulate a more active public sentiment in favor of cleanliness and good order.

Prof. Kriehn said that he would like very much to have a paper upon "Small Parks" treated in the broadest possible way in order to bring out suggestions that would help make such parks of the greatest use to the greatest number.

Mr. Lorch suggested that a collection of photographs be displayed at the meeting of the association in which would be indicated what was bad and what was good in the treatment of public and private grounds.

Mr. Warren H. Manning suggested that the surroundings of church buildings should also be considered in the work of the association.

Mr. O. C. Simonds thought it important that someone should consider and present before the meeting the work that our association should aim to accomplish during a series of years. A paper on "The Preservation and Protection of Parks Once Formed" would be a good subject.

Mr. Bryan Lathrop said that he had been greatly impressed at a recent visit to Washington with the great injury that was being done to small parks by the removal of all shrubbery, on the ground that it was likely to prove a shelter to evil-disposed persons, this being the idea of the present man in charge of the grounds who appears to have the power to do this work without restraint. He thought public attention should be called to this and some provision made for the protection of public parks.

President Chas. M. Loring said that he should encourage the organization of neighborhood and village improvement associations.

Mr. Thos. H. Macbride suggested that school and home grounds would be a good general topic for discussion.

Dr. P. M. Woodworth would have more attention given to such matters as laws relating to boulevards, the moral effect of parks on the community, architecture and sculpture in parks, and would have every department of park administration discussed at our meeting. He spoke of the good work that was being done at Dayton and thought that Chicago was ripe for a movement in this direction.

Mr. E. J. Parker thought that papers should generally be presented by men who by reason of extensive travel and research would be able to treat the subject presented in the broadest possible manner.

Mr. Thos. H. Macbride suggested that it might be advisable to have some general subject treated in detail at each session, or perhaps at each meeting.

Mr. John C. Olmsted agreed with Mr. Macbride in this matter.

President Loring stated that short, pithy papers should be prepared rather than long essays in which an attempt was made to cover the subject treated. The shorter papers were more valuable because they brought out discussion and in this way the views of a large number of men were secured. It was generally agreed that such papers would be best.

PARK NOTES.

A fine pavilion has been presented to Hermann Park, Goldsboro, N. C., by Messrs. H. and S. Weil, two public spirited men, who a few years ago made a gift of the park itself to the city, and have been improving it since.

* * *

Salem, O., is to have a fine park in the near future. a Mr. J. T. Brooks having decided to improve a piece of land, some 35 acres in extent, called Pine Hollow, and make it a public park. A park has been much needed and this generous suggestion of Mr. Brooks should find appreciative response.

* * *

Elizabeth Haywood of Warren, O., has donated 12 acres of land south of Sharon for the establishment of a park to perpetuate the memory of her late husband, ex-State Treasurer Benjamin J. Haywood. The offer has been accepted and a large amount of money will be expended to beautify it.

* * *

The Johnston fountain, a memorial gift to the municipality erected last summer at Champaign, Ill., at a cost of some \$10,000 and which stands in the center of the city, was badly defaced last month by vandals. The miscreants used chisels, defacing the beautifully-carved stone base of the fountain in a shameful manner.

* * *

Truly the park idea is growing. At a special election held at Waverly, Kans., recently, the proposition to buy a site for a town park carried by a vote of over 2 to 1. This was the third election held for this purpose in the last two years. The proposition was defeated by one vote the first time and the second election resulted in a tie vote.

* * *

In France, Germany, Belgium, and some other European countries it is the practice to plant fruit trees along the public roads. The local governments plant the trees and cultivate them as a source of revenue, and it is said that in Belgium there are three quarters of a million roadside fruit trees, which in one year produced \$2,000,000 worth of fruit. The walnut, chestnut, cherry, plum and apple are the favorite trees for roadside planting.

* * *

The members of the Fredericksburg national park commission have laid before the Secretary of War their plans for a memorial park which will include the battlefields of Fredericksburg, Chancellorsville, Tebb's Tavern and several other fields comprised in an area of twelve miles square on the south side of the Rappahannock. A bill is pending before congress on this subject. The secretary of war, without binding himself to any positive action, promised to do what he could to further the wishes of the commission.

* * *

General C. C. Andrews, is continuing his campaign for a national park in northern Minnesota. The limits for the park he has in mind include 611,592 acres of land surface and 218,470 acres of water. To create a park it will be necessary for the government to enter into a new treaty with the Indians, but General Andrews believes this will not be difficult, for he thinks the Indians would prefer to have tourists than lumbermen visit their locality. Game would be preserved and the country would be a magnificent health resort.

* * *

Prof. Bell, the inventor of the telephone, is laying out at

Washington, D. C., a remarkable garden patterned after the fairy parks of Japan, with their miniature mountains, trees and gracefully bridged lakes. The most striking feature, however, of the garden will be the genuine Japanese house boats, or yanebune. The dainty craft are constructed of clean, unpainted wood, upon which no iron can be detected, but only here and there a cleat of copper. In the centre is the cabin, a lilliputian Japanese house, with the steeply arched roof and the pretty paper doors. Within, it is neatly matted and furnished with a hibachi or charcoal brazier, and a tiny blue tea service.

* * *

Congress has from time to time taken action in favor of a grand memorial bridge across the Potomac River at Washington to the National cemetery at Arlington, in honor of George Washington and dedicated to American patriotism as also to the plan for a national boulevard connecting Arlington with Mt. Vernon. In his annual report just published, General John M. Wilson, Chief of Engineers, strongly recommends the construction of both these important monumental works. The sundry civil act of March 3rd, 1899, contained an item of \$5,000, to continue the examination of the subject, and to secure designs and estimates for the bridge and four eminent bridge engineers have been invited to submit competitive designs on or before January 16th next.

* * *

The full bench of the supreme court of Massachusetts, has rendered a decision in the case of the attorney general vs. Henry Bigelow Williams and others, proprietors of the Westminster Chambers in Copley square, Boston, holding the act of the Legislature limiting the height of buildings in Copley square to 90 feet as constitutional, and allowing the plaintiff to maintain his bill to restrain the height of the Westminster Chambers to 90 feet. The act limits the height of buildings to be built or altered, exclusive of towers, domes and sculptured ornaments, abutting on St. James avenue, between Clarendon and Dartmouth street and Huntington avenue, and upon the corner of Dartmouth and Boylston streets, to 90 feet, and limits to the height of 100 feet buildings to be built or rebuilt on land abutting on Boylston street, between Dartmouth and Clarendon streets. The court further holds that the prohibition against erecting a building above the height of 90 feet is absolute, except that certain erections which are usually above the substantial parts of a building may, with the approval of the park commissioners, be put on any such building above that height.

* * *

After considerable public discussion on the action of the Fairmount Park Commissioners in prohibiting the use of Automobiles, the said commissioners finally decided the question in favor of such vehicles, restricting them to two entrances. The resolution and stringent rules adopted are as follows, and will offer suggestions in similar cases: *Resolved*, That until otherwise ordered, automobiles for the conveyance of passengers shall be permitted to use the following drives, to wit: Thirty-fourth street, Belmont avenue, northwest approach leading from City avenue bridge to Ridge avenue. Also Dauphin street entrance, turn to the right or north over the trolley bridge up Greenland drive to Chamounix drive to Belmont drive, to Belmont avenue, and return the same route.

Subject to the following regulations established for the protection of the public:

1. Conductors in charge of automobiles must be skilled in the management of such vehicles.
2. When horses become restive or frightened at the approach of an automobile the conductor of same shall bring it to a full stop.
3. Conductors of automobiles must not sound the gong or bell except at the intersection of drives.
4. Conductors of automobiles must conform to the rules governing other vehicles in the Park including the restriction of speed to seven miles an hour.

CEMETERY NOTES.

The board of trustees of Prospect Hill cemetery, Paw Paw, Mich., have adopted resolutions looking to the establishment of perpetual care as a feature of the management.

* * *

A fine Receiving Vault to cost a large sum is now in course of construction in Oakwood cemetery, Sharon, Pa., the gift of Mr. F. H. Buhl, president of the Sharon Steel Co.

* * *

The legality of the ordinance forbidding funerals from going through Pittsburgh's parks is likely to be tested in a suit for \$10,000 brought by a driver for an undertaking firm against Schenley park police, by whom he was arrested while driving through the park on his return from a funeral.

* * *

One of the large schemes awaiting consummation is to establish a cemetery at Grapeville, Pa., 27 miles from Pittsburgh, from which a funeral car is to run by rail. Some 400 acres are under option, and it is the intention of the New York syndicate figuring in the deal to immediately improve the property on advanced ideas.

* * *

Interest in the cemetery is becoming more pronounced as public sentiment is being educated to a proper sense of duty in this direction. It has been divulged that the improvements underway at Cedar Grove cemetery, New London, Conn., are being carried out through a gift of \$10,000 made to the cemetery for that purpose by Hon. A. C. Williams. Such gifts are better than memorials in stone or metal.

* * *

A bill has been prepared for introduction to the next session of congress, providing for an appropriation of \$3,850 for the improvement of the government burying lot in Oakwoods cemetery, Chicago, known as the "Confederate Mound," and a further appropriation of \$250 annually for the protection and maintenance of the lot. It is upon this lot that the confederate monument was erected a few years ago.

* * *

The cemetery commissioners of Grand Rapids, Mich., are working on a plan that will call for an entire re-organization of grave marking in all city burying grounds. It is proposed to have all graves designated by flat markers instead of by uneven slabs and stones of all sizes and shapes. A study of the old grounds is being made to determine upon a plan of offsetting the unsightly appearance of the older burial sections by an arrangement of shrubbery and other planting material.

* * *

The Hollywood Cemetery Company, Richmond, Va., has just erected a small marker of Virginia granite at the grave of President John Tyler, as well as one of the same material to Frederick William Emrich, whose body was the first one interred in the cemetery. The "Winnie Davis" monument was unveiled in that cemetery with imposing ceremonies on Nov. 9th and at the same time a portrait statue memorial of Jefferson Davis, president of the Confederate States.

* * *

The Morningside Cemetery Association has been organized at Brattleboro, Vt., and the Royal Wood farm, the deeds for which have been in the possession of the Wood family for

over 100 years, has been transferred to the association. It contains 100 acres and adjoins Prospect Hill cemetery on the north. The work of improvement will be undertaken without delay and it is proposed to combine nature and art in making one of the most attractive cemetery plots in Vermont.

* * *

A movement is on foot for the enlargement of the National cemetery, which adjoins Loudon Park cemetery, Baltimore, Md. The matter has been brought to the attention of the Secretary of War by the Grand Army of the Republic, and an appropriation of \$16,000 has been requested, with which an enlargement and improvement may be made. The number of burials is increasing, and now averages fifty five a year. Last year ten soldiers of the Spanish-American war were interred there.

* * *

Springfield, Ill., has often been criticized on the condition of the road leading to Oak Ridge cemetery wherein is located the Lincoln monument. Through the efforts of a committee, of which Dr. H. Wohlgenuth, president of Oak Ridge, is a member, a large sum of money was raised by private subscription, and a boulevard driveway, laid in brick, has been completed. This improvement has been a most needed one, and while reflecting credit on the promoters, shows what can be done by concerted and liberal effort.

* * *

What any organized body can do to improve our smaller cemeteries is well exemplified in the case of the cemetery at Charlevoix, Mich., which contains the remains of a number of soldiers. The Woman's Relief Corps of that place some time since resolved to mark the soldiers graves, and this was followed by the work of general improvement. The latest achievement is the erection of a steel windmill for water facilities, and the women having enlisted the practical sympathies of the summer visitors and residents, may be relied on to complete the good work.

* * *

A decided advance has been made in Oakland cemetery, Atlanta, Ga., by the erection of what is called a house of public comfort. It is located near the centre of the grounds, and is constructed in the Romanesque style, of granite and marble. It has two stories and there are six rooms with toilets, each finished in good style and with tiled mantles. One of the rooms has been set aside as a ladies' parlor and is well furnished. There is also an apartment for gentlemen, with everything well arranged. The sexton has an office in the building. The vault contains eight catacombs and sixteen racks. It is substantially constructed on modern lines and the whole structure is a worthy addition to the cemetery.

* * *

The trustees of the Green river cemetery, Greenfield, Mass., have been making a strong effort this fall, to interest people to take better care of their lots, and for the general improvement of the grounds and radical measures are in progress. The trustees have decided to fill in the paths to create level lawns and to renovate the same, and a number of the lot owners have agreed to do this. The trustees are considering plans for the erection of a lodge and greenhouses so as to have a stock of plants and flowers on hand for sale. The following is a schedule of prices for care of the lots. Cleaning up in spring and mowing three times for lots 14 by 20, \$1, the same mowed seven times, \$2; annual care including everything, \$3; reseeding and fertilizing in spring, \$1; regrading and reseeding, \$6. The schedule of prices for lots of the larger sizes is about one-third higher on each item. A scheme is also under consideration looking to perpetual care. We may expect to see a revival of cemetery interest follow the recent convention of superintendents at New Haven, Conn.


 SELECTED NOTES AND EXTRACTS.

Something New in Hedge Plants.

It is very difficult for any of us to get out of the old rut and strike for something new. Yet there are possibilities outside that are worth seeking. Hedge plants are invariably chosen along a certain line of well-trying things, which occasionally become monotonous. In greatest popularity, the Osage orange has given way to the Japanese or Californian privet. Honey locust, buckthorn, althæa, Japanese berry, Pyrus, japonica, hemlock and Norway spruce are all pretty largely used in about the same quantities. Rosa rugosa, very popular for massing as shrubbery, is gradually coming into use. What a very small list it is! Two of the prettiest sights I ever beheld were long rows of the Japanese blood-leaved maple and Spiræa Van Houttii, the latter in full bloom. Both are well adapted for hedge purposes, although the spiræa cannot have the usual method of trimming. But what a relief to get away from the regular routine and two trimmings each year. Instead, there would be the annual thinning out of old shoots in the Winter and the result, a graceful, symmetrical hedge, its flowering unexcelled for showiness. The Japanese maple would come expensive; but lots of men would put many times the necessary amount in a dressed stone wall and get no more pleasure out of it. By annual trimming it could be kept two feet high, and in color form a sight that will repay the cost. A Japanese holly, Ilex crenata, makes a fine, rare, evergreen hedge; but the plants are not to be had in great quantities. The following would all prove desirable: Spiræa Thunbergii, Hydrangea p. g., flowering almond, Viburnum prunifolium, Azalea amœna, Deutzia gracilis, cephalotaxus (evergreen). Lawson's cypress, pines, retinosporas, yews, etc.—S. Mendelson Meehan in *Florist's Exchange*.

* * *

Lobelia Cardinalis.

The Lobelia cardinalis, or Cardinal Flower, is the most showy of our native plants. Its rich, cardinal-red shade is extremely rare in flowers; in fact, we can recall no other wild flower of the same gorgeous hue. Though growing naturally in rather wet spots, it takes kindly to cultivation and will grow and blossom very satisfactorily in almost any location, particularly if it is where a dash of water can be given it once in a while. It begins to blossom in July, and the long spikes of brilliant flowers will continue opening to

the very tip, lasting until the latter part of August.

Numerous side shoots spring out from the main stalk and lengthen the time of flowering, and these little sprays mixed with some fern fronds are lovely for table decoration.

The plant can be raised successfully from seed, but will not bloom until the second year. With us, while not common, it is sufficiently plenty that roots can always be obtained if you know where to go for them. I have found that after the seeds have ripened the flower stalk withers and in the fall a new growth starts, forming a little green rosette of leaves and this is the best time for transplanting.

This summer I found a plant with pure pink blossoms growing in the midst of hundreds of the typical colored flowers. I thought it a rare find, as I had never seen or heard of any such before. Later I found that one of the same color was growing in a bed of seedlings at Highland Park.—F. B. in *Vick's Magazine*.

* * *

Mulching for Winter.

One of the most important matters for consideration at this season of the year is that of mulching trees, shrubs and other plants for winter. The mulch which we apply in autumn is to accomplish a different purpose than our spring mulching. What we do now is mainly to prevent the soil freezing about the plants, to some extent at least. To newly planted trees and shrubs the mulching is almost essential as, unquestionably, they are very much the better for having their roots in unfrozen soil. And when there are cases of doubtful hardiness, shrubs or trees which are known to suffer in hard winters, just mulch them and see how much better they will thrive. In my own experience I have been able to carry many such a plant through the winter by the aid of a good mulch.

In the case of such things as have been recently transplanted many more will be alive and flourishing when spring comes if mulched at this time. There is such a check from the transplanting that they need help and this mulch gives by providing unfrozen ground for the roots. Manure is perhaps the best of materials to use because it accomplishes two objects, enriching the ground as well as protecting the roots. Aside from this, forest leaves are the best of all. They are easily handled and it takes very few to keep out a great deal of frost. With zero temperature the soil would be open that was under five

to six inches of leaves. But less thickness than this will answer, as it does not matter if a little freezing does occur.

A prominent and successful landscape gardener whom I have in mind had a way of mulching large trees set in the fall, which answers well. His plan was to procure a half cart-load of soil, and this much was mounded up about each tree. Not only did this keep out the frost but it kept the tree steadily in place, and better success than he had could not be wished for. It is the swaying about of large trees of this character that causes so many of them to fail. There is not the close contact between root and soil that there must be to ensure success. When spring comes all mulchings except that of manure are to be removed. Manure will usually have pretty well disappeared by that time.

Referring again to partly tender shrubs, although the rhododendron is not so counted here, it is one vastly benefited by a mulching to keep frost from its roots. The great lot of foliage it carries calls for the supply of moisture by the roots to make good what it loses in cold, windy weather, and these calls can be the better met when no frost is about their roots.—Joseph Meehan in *Gardening*.

* * *

Raising New Varieties of Roses.

For those who desire to experiment with raising new varieties of roses, a variety, known as General Jacqueminot, is almost essential. The pollen has strong tendency, and the pistils are also healthy and vigorous to such an extent that it frequently bears abundant seed vessels of its own. It can therefore play an important part either as a male or female parent in crossing for new varieties. There are some roses that it would be very desirable to improve, but, on account of lack of vitality in some of the organs, it is impossible to improve. The common Crimson Bour-sault is one of this character. Any one who would take it in hand to improve, and really effected an improvement, would make his fortune. It is of the hardiest of our roses, and yet of a very remarkably vigorous character. When in bloom with its multitude of bright crimson flowers, it is a source of genuine pleasure to the lover of roses. But it cannot be improved because its stamens are always without perfect pollen. The anthers are there, but they do not produce a single pollen grain. If, however, it was taken in hand by some enthusiastic rose grower, the pollen of some strong hardy variety used to fertilize the flowers, it might possibly be improved,—indeed, the probabilities are all in its favor. The raising of new roses, at any rate, is very interesting employment, and the American gardener would find it to aid materially in his gardening pleasures.—Meehan's Monthly.

Park and Cemetery.

ESTABLISHED 1890.

An Illustrated Monthly Journal.

Devoted to the advancement of Art-out of Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

The regular contributors to PARK AND CEMETERY are among the most eminent Landscape Architects, Landscape Gardeners and Horticulturists in the United States, whose practical articles make the journal one of great value to any one identified with landscape work.

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Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

Association of American Cemetery Superintendents.

WM. STONE, "Pine Grove,"
Lynn, Mass., President.
GEORGE M. PAINTER, "West Laurel Hill,"
Philadelphia, Vice-President.
H. WILSON ROSS, "Newton,"
Newtonville, Mass., Secretary and Treasurer.

The Fourteenth Annual Convention will be held at Cleveland, O.

The American Park and Out-Door Art Association.

CHARLES M. LORING, Minneapolis, Minn.,
President.
WARREN H. MANNING, Tremont Building,
Boston, Mass., Secretary.
O. C. SIMONDS, Chicago, Treasurer.

The next meeting of the Association will be held at Chicago, Ill.

The American Society of Landscape Architects.

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CHAS. N. LOWRIE, 156 Fifth ave., New
York, Treasurer.
DANIEL W. LANGTON, 115 East 23rd St.,
New York, Secretary.

We acknowledge with many thanks the receipt of an invitation to the Tenth Annual Banquet to Florists, Nurserymen and Market Gardeners, held November 18, at the Mercantile Club, St. Louis. This banquet is provided for in the will of the late Henry Shaw of St. Louis.

Mr. James Jensen, superintendent of Humboldt Park, Chicago, has been engaged to take charge of the grounds connected with the Villa Palatina, a residence property at Lake Geneva, Wis.,

which has been recently purchased by Mr. E. G. Uihlein, a late park commissioner of Chicago. Mr. Uihlein is an enthusiastic horticulturist and the grounds in question promise to give a wide scope to Mr. Jensen's ability.

Association of American Cemetery Superintendents.

The printed report of the Proceedings of the New Haven and Hartford Convention, will be ready for distribution December 1. Correspondence in relation thereto may be addressed to,
Frank Eurich, Woodward Lawn Cemetery, Detroit, Mich.

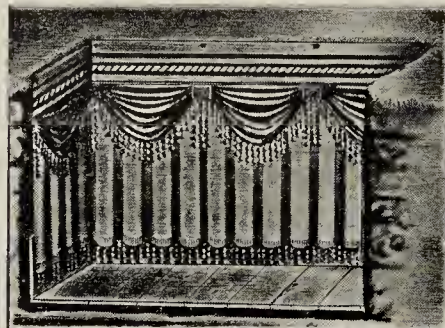
The Michigan City, Ind., council recently voted a salary of \$100 each to its park commissioners but they declined to accept and asked that the money be returned to the treasury. These gentlemen are John G. Mott, Chas. Porter and W. H. Shoenman.

The annual inspection of Illinois nurseries, required by law of the state entomologist, has been finished. The work was done by assistants of Prof. S. A. Forbes, state entomologist and professor of zoology at the University of Illinois. The total number of nurseries found was 274, about equally distributed throughout the state, the largest being in central and northern Illinois. The average cost of inspection paid under the law, by nurserymen was \$5.38 for each nursery.

Obituary.

Mr. James A. Bain, superintendent of Highland and Wood Lawn cemeteries, Terre Haute, Ind., died October 18 at his home at Highland cemetery. Mr. Bain, whose death resulted from a complication of maladies, will be sincerely mourned by all who knew him. He was one of the best known citizens of Terre Haute. He was born in 1829 at Bath, Somersetshire, England, and in 1846 moved to Canada. Thence he moved to Pittsburg, Pa., and later to Cincinnati where he occupied the position of assistant superintendent of Spring Grove cemetery. On June 1, 1884, Mr. Bain moved to Terre Haute to accept the position of superintendent of the cemeteries. A widow survives him.

Mr. Frederick W. Chislett, superintendent of Crown Hill cemetery, Indianapolis, Ind., died at the home of his son in Pittsburgh, Pa., on the night of Nov. 8th, after an illness of some weeks. A more extended notice will be given in our next issue.



BOOKS, REPORTS, ETC., RECEIVED.

The main features of the September issue of "Municipal Affairs" is: "City Government by Tax Payers," and a number of valuable and interesting articles pertaining to the subject are given.

"The Plant World," a monthly journal of popular botany, will hereafter be published by the Plant World Co., Washington, D. C. The editor in chief is Dr. F. H. Knowlton, U. S. National Museum, Washington.

By courtesy of John Robinson, town clerk, Niagara Falls, Ontario, a copy of Lot deed and Rules and Regulations of Fairview cemetery, Niagara Falls, Ont.

"Park - Cemeteries, Garden-Churchyards." A pamphlet favoring park like cemeteries and cremation by Mrs. Anna Blunden Martino, Birmingham, England. Mrs. Martino makes a strong plea for improvement in cemeteries and churchyards and her efforts will undoubtedly help a growing sentiment.

"A short view of "Great Questions" by Orlando J. Smith. New York: The Brandon Company.

COMMERCIAL VIOLET CULTURE. By Professor B. T. Galloway. Chief of Division of Vegetable Physiology and Pathology, United States Department of Agriculture, Washington, D. C. 224 pp., small octavo, in flexible covers of royal purple cloth and gold. Publishers, A. T. De La Mare Printing and Publishing Co., Ltd., New York. Price \$1.50

In his preface to this highly instructive little book, Prof. Galloway says: "More people have embarked in this business and failed than is the case with any other crop, and for this reason we believe that it is one of the most promising fields for the young, energetic, and intelligent man to enter. Whoever enters it, however, must recognize at the start that there are many difficulties, and that to be successful means much labor, patience and determination to overcome all obstacles." This is the sound suggestion with which the author opens a very practical treatise on violet culture, and on examining its pages it will be found that in the matter of detail nothing will perhaps be found wanting to give a broad understanding of the necessities and methods required to successfully grow violets for commercial purposes. The work is fully illustrated, and much space is devoted to the construction of houses and frames, with their cost and latest details of arrangement. A discussion of possible returns for investment and labor fitly brings the book to a close.

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PARK AND CEMETERY.

** A Monthly Journal of Landscape Gardening and Kindred Arts. **

VOL. IX. Chicago, December, 1899. NO. 10.

CONTENTS.

EDITORIAL—The Year' Beneficencies—The Demand for Nursery Stock—Advertising Signs on the Landscape—Flower Shows and Education—A Retrospect—Municipal Art.....	205, 206
*Grouping for Instruction.....	207
Agricultural Schools.....	208
A Note on Early Chrysanthemums and Cosmos.....	209
Walks and Drives.....	210
*Cinnamon and other Ferns.....	211
*Evergreen Cemetery, Portland, Me.....	212
*The Russian Olive Again.....	213
Plant Nomenclature, I.....	214
*The Batterson Monument, Hartford, Conn.....	215
*Improvement Associations.....	216
*Transplanting Large Trees.....	217
*Garden Plants—Their Geography, XLVIII.....	218
Landscape Forestry.....	219
Park Notes.....	220
Cemetery Notes.....	221
Recent Legal Decisions.....	222
Selected Notes and Extracts.....	223
Reviews of Books, Reports, Etc.....	224
<i>*Illustrated.</i>	

THE year about to close has been unprecedented in its number of donations and bequests for educational, memorial and public beneficencies, the sum total of which amounts in value to very many millions of dollars. The latest and altogether worthy of record is that of Mr. P. A. B. Widener, the Philadelphia financier, who gives real estate and money to the extent of some \$2,000,000 to establish a home, training school and hospital for crippled and deformed children, than whom we have no more pitiable and worthy objects upon which to lavish superfluous wealth. Mr. Widener has long been considering the project, and is intending it as a memorial to his deceased wife. It will however redound to his own eternal credit. It is to be carried out in every way to accord with advanced ideas, which will include beautiful grounds and accessories. The cause of education has been the recipient of much consideration in the way of donations, while what immediately interests us is the large number of gifts of land for park and improvement purposes that have been made by public spirited citizens. Indeed the widespread interest that is continually being manifested in the direction of establishing park systems in our growing towns and wide awake villages, and the increasing number of Improvement societies which are being promoted

for the purpose of encouraging better conditions in our national life, is a remarkable indication of the trend of activity in the immediate future in æsthetic progress.

ONE of the results of the prosperous conditions now prevailing throughout the country is seen in the unusually large demand for nursery stock, which in many localities is practically exhausted. This naturally promises that spring planting will be heavier than in many years, without considering that the long and favorable fall may have in certain respects anticipated some of the work generally deferred until spring. However, the nurserymen are to be congratulated on the increase of business; and the attention being given to art out-of-doors, the improvement of waste places, the planting of depleted areas, as well as the widespread interest in park and cemetery development, make the closing year of the century a happy harbinger of rapid advance in these lines of work which are destined to create marvelous changes in local conditions.

ONE of the important questions discussed at the last meeting of the American Park and Out-door Art Association was that of the disfigurement of the landscape, its highways, and even the conspicuous points in our villages and towns by advertising signs and like objectionable features, and a committee was appointed to formulate an appeal to the public to cause the removal of the offenses. To make the effort more immediately effective the managers of our parks and cemeteries and all associated with out-door improvement should foster agitation in every available direction to secure the removal of the obnoxious signboard and advertising nuisance. The local press should be induced to join in the effort to educate the people, by showing up the objections to this marring of the landscape, and there might follow recourse to the legislature to enact such legislation as would enable the local authorities to enforce its rulings. As an example of prompt action in this direction we note in the petition of the Quincy, Illinois, Boulevard and Park Association, to the Board of Supervisors of Adams County, asking the favorable consideration of the Board in the matter of improving the school grounds and soldiers' home, a suggestion

that the Board remove from such public properties advertisements that have been placed about them without official consent. This association is doing wonders for the city of Quincy, and like work could be accomplished elsewhere. PARK AND CEMETERY invites its readers to report any action they may know to have been taken on this question.

WE have often suggested the value of flower-shows for educational purposes, and if it were possible to measure the results we should undoubtedly recognize the truth of the suggestion. It is a pity however that the managers of these annual exhibitions appear to see only trade benefits to be derived, and consequently in their efforts for success ignore the more important considerations involved, considerations indeed that are likely to have more effect on the permanence of their endeavor, than the immediate trade benefits to be achieved. The love of flowers in the general public mind is a far more potent factor in the increase of flower cultivation than the caprices of fashion, to which the promoters of flower shows more particularly bend themselves, for in the endeavor to make a financial success, the prices of admission are generally prohibitory to a large attendance and seem chiefly to aim for the presence of the wealthy classes only. This is a very narrow view of the question, not becoming to the men trading in nature's choicest products. A thousand admissions at ten cents would unquestionably offer better prospects for the trade than one hundred at one dollar, and there should now be more patriotism among the promoters of flower shows looking to combining the welfare of the trade with the welfare and the enlightenment of the people. The time is here when we should expect as much philanthropy in the pursuit of business as we expect from those who have acquired wealth; when the almighty dollar should not be the only thought we have in every public effort that is made.

IT is not every year that in closing renders a retrospect in particular lines of work pleasing and promising; so many have passed that have lent themselves to gloomy forebodings on future prospects. But in the awakening of the artistic sense of the people in the direction of improvement in municipal government as affecting particularly parks and public places; and in the promotion of the idea of art out-of-doors in its relation to home surroundings, great advances have been made, and the education of the people in these lines of progress has been far reaching. The recognition of Arbor Day as not only a holiday for the exercise of certain pleasing functions but as an opportunity for active promotion of horticultural knowledge and

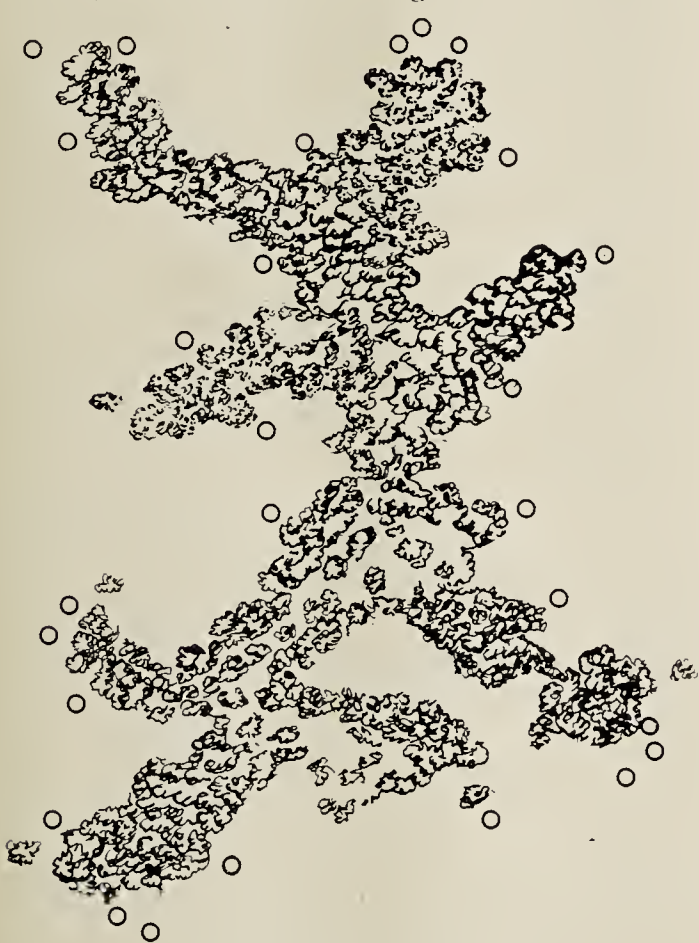
culture is taking root throughout the country and in a multitude of places is bearing fruit. The lawn plan in our cemeteries, which really means the adaptation of landscape art to the development of our burial grounds is now altogether the rule in the laying out of new properties, and is exercising such an influence on the managers of the older graveyards that the large majority of schemes of renovation and improvement are governed by its tenets in the necessity of keeping up with the times. The agitation is constantly gathering force, looking to the provision of small parks in our larger cities for the crowded districts, and the demand for the improvement of school grounds, and other open public areas must be credited in their more practical aspects to the year 1899. In fact throughout the country there is a distinct current of sentiment favorable to more refined conditions of life, influenced and directed by a broader discernment of the refining influences of nature and art in their effects on civilization.

THE impetus which has been given to municipal art in connection with public honors to some of the heroes of the Spanish-American war, is a matter upon which the American people may congratulate themselves. It is in the direction of development in which, considering the vast strides we have made, and the wealth we have accumulated, we were seriously deficient. In no countries in the world, are cities to be found of the magnitude which many of ours have attained wherein there is such a lack of public embellishment, and provided we do not go too hastily at work to make up for shortcomings, the present active interest in the matter will secure results to our lasting credit and honor. We have noted a criticism to the effect that in certain cities we have too many monuments, but the criticism is either not fully understood or is in itself too vague. Whoever heard of Paris, that city of art, having too many monuments? The fact is that where such a criticism lies is not in the city having too many monuments, but in their lack of artistic merit on the one hand, and on the other the further lack of artistic intelligence in their location and surrounding. But this may be said to be conditions of the past. The newly created municipal art leagues and commissions may safely be entrusted with such matters, and it is a gratifying fact that the courts appear to be broad enough to construct questions of art brought forward for their adjustment and decision, in a positive and enlightened manner. This is particularly emphasized in the Copley square decision with regard to the height of buildings, and previously to the decision of the New Jersey courts on the Hudson county soldiers' monument.

GROUPING FOR INSTRUCTION.

In presenting a few hints on the grouping of the roses and other plants closely allied with them—such as Spireas—I would say in the first place that there is no need whatever to mix them with Pæonias or poppies or pinks or anything of that series. They have lots of such color of their own for most of the seasons,—in many parts of the world for all the seasons. It is intensely stupid of course for a gardener to entertain ideals without means at his command to carry them out or even drum around to interest others. But then a body needs diversion of some sort you know.

Now, these roses and things as I have said are



SKETCH OF GROUPING.

very popular, and planted together make an amazing brave show in shades of white, yellow, occasionally orange, maroon, red, pink and parti-colors, and any of these may prevail more or less at some time or the other, with a sprinkling of most of them all the time. Maybe I had best begin at the bottom and work up. Well, it is best to prepare the ground thoroughly, study its quality or qualities, and refrain from bothering too much about it suiting this, that, or the other thing. Climate is far more important. You can't modify it without artifice which is not in this contract. You *can* do something with soil. If plants don't suit the climate, and the climate disagrees with them (you can mostly find out roundabout) don't dicker with them.

Find those that do suit. In the mean time your lawn is thickening up nicely and has had a mowing or two. It hasn't (if you are wise) been formed on a soil that won't grow clover. Then with a lot of 18-inch pegs you can go ahead with some such outline as the sketch. Throw the pegs out kind o' carelessly, but with some thought as to what each one may stand for. On the margins they may be four, six, eight feet apart, and they may be six or eight feet through the inside, but several should be two foot stakes at 15 or 20 or more feet apart for Hawthorns and flowering peaches, cherries, pyrus and prunus. And the smaller chaps such as that wonderful prunus lauro-cerasus from the Shipka pass, and Stephanandras and heaps of roses and Amalanchiers and things will fill up the spaces. Yes they're all near relations. But I was mentioning about the pegs—when you throw them out you had better have a man follow with a mallet to drive them down fast where they lay. He might count them if you think you could trust him to count. You can't trust everybody you know, but that's neither here nor there. When you have your count you can decide when you want your best display, whether in the early summer or the autumn for instance. Sometimes you can decide all this in advance—have it all cut and dried as it were. You can make up your numbers with a single one of the expensive trees, and two or three of cheaper ones about as good; lots of the best things are cheap. Prunus Pennsylvanica, Pyrus acuparia, P. arbutifolia vars., Cratægus coccinea, C. oxycantha vars., C. tomentosa, and others, and a lot—maybe 50 or 100 if the group will hold them of Cratægus Pyracantha in variety. They're evergreen you know. Yes you can get that cherry laurel but it's dear for such a hardy affair. I'm not urging it. If these things don't live with you try some spireas or Amelanchiers, or you may like a show of orange when maybe Kerria Japonica would fill the bill—you see I don't know where you live—and that bothers me. But you can just have a lot of such things to fill up with. Then you can make up the balance of your number with threes and fives, buy 'em by the half dozen at dozen rates, and lay the spare ones away in a reserve ground against such phenomena as dry seasons and the like. They come along sometimes you know.

What kinds should they be? Well, for early summer you can get Spirea Cantonensis, cana, conferta, betulifolia, discolor, japonica Bumalda and others, and also the nine barks, Neillia opulifolia and its yellow leaved sort, golden they call it. You can get a lot of Potentillas and Gillenia trifoliata and plant 'em in beds and a whole host of H. P. roses just about the same for color as sweet Wil-

liams especially if you want 'em to be. Some of them last longer too. Then there's lots of single roses for the off-side margins such as *alpina*, *gallica*, *cinnamonea*, *moschata*, *multiflora* vars., *Noisettiana* in some sections, *Nutkana*, *rubiginosa* vars., *rugosa* vars., *setigera*, *repens*, *spinosissima*, *Wichuriana* vars., and *acicularis*. I have said before the whole outfit is akin to *Neviusia Alabamensis*. *Rubus deliciosus*, *Cotoneasters* and in some places *Photinia variabilis* will be happy too. The single roses make quite a show during Autumn with their reddish or orange or purplish or maroon hews, and there's the hawthorns with their haws, and the crab-apples, and the Romans.

You can get about all you want out of 'em and you needn't mix 'em with poppies or hollyhocks if you desire to teach the kids anything about affinities. If you want 'em know-nothings why "that's another story." No! books won't do—they're too confusing—they need object lessons—that aint confusing!

There's *Cydonias*, flowering almonds, *Exochorda*, herb-spires, Gums and such like for other seasons, lots of 'em to mix in, you won't run short, more likely you can't care for 'em.

James MacPherson.

AGRICULTURAL SCHOOLS.

The following extracts from a paper read by Prof. Samuel R. Green at the recent meeting of the American Pomological Society held at Philadelphia, gives the opinion of a successful and prominent educator in this important field of education:

"My special object in presenting this paper is to oppose what I believe is pernicious doctrine, and widely prevalent, namely: That it is not desirable to give horticultural or agricultural education to students of the high school grade, but that it should begin in schools of the college grade. For nearly twelve years I have taught in the Minnesota School of Agriculture, Minnesota, Minn., an institution which has grown in that time from a mere "nothing" to the position of first in importance among agricultural schools in this country; from a doubtful experiment to a permanent establishment; and from a position where it was despised by horticulturists and agriculturists it has become the most popular state institution in Minnesota. This school is unique in its plan, and I believe its inception marks the beginning of a special epoch in agricultural education in this country, in which horticultural and agricultural education will be put on a more helpful basis than at present.

"Minnesota was the first state to establish a graded agricultural high school that should lead up to the college of agriculture in the State University, but which would be as complete in itself as the common high schools. This school has been in operation for 11 years, and the results seem to show its wonderful adaptation to the needs of our rural classes. It was established after the agricultural college course in the State

University had proved a failure. It has been a success from the start, and has been improved as the needs of the student body showed an opportunity to make advantageous changes in the course of study. In its management little attention has been paid to precedents, but every effort has been directed towards making it most helpful to the student body. This is one of the few schools in this country which has been established in order to educate farmers' sons to be better farmers. The course here is comprised in three school years of six months each, commencing about the 1st of October and continuing to about the 1st of April. It is open to both sexes who have completed a common school course in English, Grammar, Arithmetic, History of the United States, and Geography as prescribed by the State Department of Public Instruction. All students must take the agricultural studies. As laid out, it includes a good high school education in the common English branches.

Physical culture is required of all students. Before graduation each student must have had a practical experience in field work for at least one season. Every effort is made to teach the subjects from the standpoint of the tiller of the soil.

"The state of Minnesota has furnished a fine establishment for carrying on this work, and has put about \$350,000 into buildings and their equipment. * * * A special building for horticulture and physics is now nearly completed, costing, with greenhouses and equipment, \$35,000.

"Expenses are kept down to the lowest possible figure. Board and washing are furnished at cost, text books at a rental of \$2 per year, and the total expenses for one school year need not exceed \$85 for each student, including even heating and lighting of the rooms. Good dormitories are furnished, and an excellent library and reading room are always ready for use. The students have excellent literary societies, a good orchestra and band, a good gymnasium and basket ball team. Three hundred and sixty students attended last year.

"Until 1897 girls were not admitted to the same courses as the boys, but a short course was provided for them in summer. In that year a special home building and dormitory was provided, and for nearly two years they have attended classes with the boys, and the results of this plan have been very pleasing. It has conduced to good order and gentlemanly conduct among the boys, and has added much to the social life of the school; and it is a feature having so much to recommend it that it has evidently come to stay. About sixty girls attended last season.

"The Minnesota College of Agriculture requires for entrance the studies taught in the agricultural high school, is intended for educating teachers, and it is not expected that many will enter it. At present there are 26 students in attendance.

"The total attendance in the whole agricultural department in the University of Minnesota last year was 483. The success of the system here described seems to show that the best part of the agricultural instruction now given in our agricultural colleges can be readily acquired by students of the high school grade; that

it is a mistake to require a college entrance examination of those who wish to gain a good working knowledge of scientific agriculture; that the colleges of agriculture should confine themselves to educating teachers of agriculture and kindred sciences; that few will attend agricultural colleges, and they should not be expected to educate the mass of farmers and gardeners; that the farmers of this country are willing to patronize agricultural schools as soon as they are made helpful and are put within their reach. The common statement that the boy is most apt to follow the pursuit with which he is most familiar is here exemplified by about 97 per cent. of those who have attended the School of Agriculture being found on farms or in occupations closely connected with farm life. It is shown, too, that it is entirely practicable to hold such a school during the winter months, when the boys can most easily be spared from the farm, and that while the benefits of field work are not fully available in winter, yet with suitable greenhouses and illustrations this difficulty can be largely overcome, and it is more than outweighed by the advantage of holding the session at a time when the sons of farmers can easily attend: and in having the boys on the farms of the state during the growing season, so they do not get out of touch with practical farm life. Besides, the students can gain knowledge of field conditions far better in working for practical horticulturists and agriculturists than by any field instruction that could be given to a large number of students in any educational institution. And the economic side is then kept continually before the student, which is very important.

"It seems to me that in this country we have paid too much attention to the higher phase of agricultural education, and too little to the education of the hard-headed boys who have to do the practical work, and that we could profit by the experience of Germany and France and increase the agricultural schools of the lower grades. There are in Prussia at least 102 schools of agriculture of about our high school grade, and they have introduced agricultural instruction into what would correspond to our district schools. Of these latter there are over 1000 in Prussia in the rural districts, where the children are taught some of the rudiments of agriculture, and most of these schools have a garden in connection with them. These low-grade schools are being rapidly increased in number, and are looked upon as being exceedingly helpful and desirable by the best educators in Germany; and our experiment in Minnesota, it seems to me, indicates that they would be fully as desirable here."

A NOTE ON HARDY CHRYSANTHEMUMS AND COSMOS.

The writer was very much interested in your editorial on the chrysanthemum shows and especially when you alluded to the hardy chrysanthemum for outdoor display. Indeed they are grand and when mixed with cosmos provided with a background of such shrubs as retain their foliage to a late date, we would have a garden all to itself; but

—it is here as with the small boy who could not always have what he wanted.

Somewhere around '93 or '94 the writer introduced hardy chrysanthemums to our herbaceous border in Humboldt park, and he distinctly remembers one variety, Golden Fleece, from Dingee and Canard, exhibited by this firm at the World's Fair.

In my Diary, dated Nov. 5, 1894, I find the following notes: "Chrysanthemum Golden Fleece, a hardy variety, is now in flower, but owing to considerable frost during October, the flower's have only partly developed. As an outdoor variety it is a failure."

This variety was kept for a few years, being protected every winter by straw covering, but notwithstanding this it got poorer every year and finally disappeared altogether.

This experience put a stop to growing hardy chrysanthemums for outdoor effect and the failure is attributed to early frost just at the time when the buds opened and heat was most necessary.

Warm weather later on did not seem to be able to revive the plants and but a few crippled blossoms was the reward for our painstaking labor.

Of course this may be overcome by producing early flowering varieties; by this is meant such varieties as will have their flowers developed by the first of October for this vicinity.

Another fall bloomer that causes great disappointment in the cosmos. Usually at the time we should have some benefit from its grand flowers, Jack Frost comes along and takes his share only leaving us the barren stalks. A number of so called early flowering varieties are in the market, but after 27 years trial I still failed to get these varieties to bloom earlier than the old cosmos bipinnatus. Last year seeds were received from California but with the same results.

A few years ago I noticed on J. C. Vaughan's grounds at Western Springs, an early flowering cosmos and a real one at that. It must have been in flower the latter part of August or first part of September. I obtained some seed of it, but, alas, with the same old success. Was it because I stole the seeds?

Although rather discouraged I still hope we may have both—early flowering cosmos and hardy chrysanthemums, but I want to say this much, they must be raised and grown under our erratic climate or I very seriously doubt any success.

James Jensen.

Floriculture for certain park uses is becoming a prominent department in the majority of parks. The number of greenhouses and conservatories recently constructed fully attest this.

WALKS AND DRIVES.

Nature forms no roads. They are the work of men and animals, and would undoubtedly proceed from point to point in straight lines if obstructions of various kinds did not interfere and cause a deviation. This fact the landscape gardener has realized; he uses shrubbery and masses of trees to obstruct the course of his walks and drives and thus gives origin to pleasing curves.

There are two distinct modes of laying out grounds, the Geometric or Artificial, and the Natural, the former being the sponsor of the straight formally planted avenue, and the latter of the curved drive. In the earlier years of landscape design, the man of wealth surrounded his home with improvements distinctly different from the natural scenery about him. Fountains, statuary, clipped hedges, balustrades, and costly flights of steps took the place of true natural improvements. It was here that we found the broad, geometrically straight avenues, giving grand vistas from one part of the estate to the other, and offering unmistakable evidences of wealth. In the latter, or natural style of art, the principles of which are in common use to-day, the demands are that a drive or walk should be as natural and artistic as possible. By the use of moderate curves, these requirements may be answered, but at the same time, the main object of the approach, its use, must always be considered.

As the main object of the approach is its use, it should be the most direct and the shortest distance between the highway and the house, for no visitor wishes to feel that he is being made to travel a greater distance than is necessary. At the same time there should be a similar relation between the house and the drive externally, that there is internally between the hall and the entrance proper. When we enter a house, we gain our first impression from its hall. The nature and circumstances of its occupants are indicated to us by its furnishing and appearance. The same is true of the drive. Here the visitor gains his first impression of the grounds, and of the house externally. He is not satisfied if the drive carries him through a greater distance than is necessary or if his first view is not a pleasant one. He should not be allowed to lose sight of the house after it has once been presented to his view, for this being his destination, it should be kept before his mind. These first impressions may seem trivial, but our first opinion is generally a lasting one, and therefore should be pleasant.

The place of entrance of an approach does much to increase its effect, and if the point where it is to leave the highway, be not already determined upon, and past alteration, it should be so chosen as to afford a sufficient drive through the grounds before

arriving at the house, to give the stranger some idea of the extent of the property, to allow of an agreeable diversity of surface, and lastly to be of ready access to and from the house. This point being decided upon, the other, the house, being stationary, it remains to lay out the drive with such gradual curves as will appear easy and graceful.

The two extremes are fixed, and as I have said in the preceding paragraph, it now but remains to lay out the road. This must be done with the two main principles in view, which have been laid down for the formation of an approach. First, that the curve should never be so great or lead over surfaces so uneven as to make it disagreeable to drive upon, and second, that the road should never curve without some reason, either real or apparent. The latter of these rules while no more important than the former must be obeyed, for nothing is more unmeaning than to see a drive, winding here and there over the lawn towards a house, without the least reason for its curves. To free ourselves from this error, we are not obliged to return to the straight lined road, for reason may be given to a curve or bend by planting a mass or group of trees and shrubs, so arranged as to make it appear necessary for the road to wind around them. The mass may be planted so as to make it appear necessary to pass around it, or what is often much better, to pass through it. The latter method may be accomplished by planting upon both sides of the road, and is often more desirable as the group is given more permanent character, and therefore more likely to impress the one as being a virgin growth, causing the road to pass through its openings to avoid destroying the group. The cluster or mass of shrubbery should, in all cases, be in proportion to curve.

From what has been said, it must not be understood that straight roads are inadmissible, for it is quite the reverse. There are many locations where the straight line should be preferred, as a matter of taste in design. As a connecting link between the strictly perpendicular and horizontal lines of a building, and the irregular surfaces surrounding it, a perfectly straight walk or drive is in the best taste and adds greatly to the effect of the architecture, while a frequently curving walk detracts from it. The same may be said of a walk both ends of which are visible at the same time, for in this case especially, the tendency would be to follow a straight line. Imagine making a number of lines or curves in passing up a fifty foot walk, when in a hurry to get from the entrance gate to the house. Our first inclination would be a straight line, and such it should be. In this case, beauty depends upon harmony rather than contrast, and more than either upon utility.

In designing a piece of ground our effort is to make a picture. The lawn is our canvas, and upon it we place our buildings, trees, and shrubs, in such positions as to give the best effect, and then, for the sake of convenience, introduce walks and drives, but give them a secondary importance. An artist would not paint a white streak or band across the foreground of his picture, and so divide it in two. The same may be said of the design of grounds; he does not give undue importance to the road or drive, but instead, considers his creation a picture, and does not mar it by placing a streak of gravel or macadam across the face of it. Instead he considers the walks and drives as mere accessories not to be given prominence. Therefore let me close by saying that, although the walk or drive is purely for use, when we are constructing the home grounds, we should not fail to consider it as a subordinate feature and yet, when seen, to be pleasing in its various features.

Bryant Fleming.

CINNAMON AND OTHER FERNS.

To those who love plants and especially the wild ones of our woods, ferns are deeply interesting. Their varied growth, lovely outline and singular way of fruiting, afford a great deal of pleasure to those who love them.

There are slow growing sorts, medium ones and tall growers, deciduous kinds and those of evergreen character. In a collection of a dozen sorts one would find as much variety as in a dozen of any other genus.

Though many persons may have heard or have read of *flowering ferns*, but few really know what they are, or that there are such varieties. The illustration presented herewith is of the Cinnamon fern, *Osmunda cinnamomea*, one of the most beautiful of large growing ferns, and one of the flowering sort. The "flowers" will be seen in the centre of the fronds, but the color, that of cinnamon must be seen on a living plant to judge of the pleasing contrast it makes with the deep green of the fronds.

These flower spikes are really fertile fronds. In this and some other ferns, the fruit dots are not on the back of some of its fronds as is the case with most all ferns, but are arranged separately in spikes, as shown in the picture. When plants are of some age, as this one is, a dozen or so of these fertile fronds will be enclosed by the barren ones, and a prettier display cannot be desired.

There are not many native ferns produce the fronds separate as this does, though two other *Osmundas*, the *regalis* and the *Claytoniana* do so, in a measure. The Ostrich ferns, *Struthiopteus*, and the sensitive fern, *Onoclea sensibilis*, do the same,

and so do some of more humble growth, such as the various *Botrychiums*.

Ferns like partial shade and to be damp at the root. In such situations the cinnamon fern will make fronds 5 feet in height, with fertile ones of the same height. The illustration represents one of three feet, but it is in cultivation, though let grow much as it will. It is planted close to a house where the sun shines on it but to 9 A.M., after which for the rest of the day it is in the shade. The wall is thickly clad with *Ampelopsis Veitchii*, which the photographer thought best to hide, but the vine is of good service in this, that when the leaves fall in autumn they are permitted to lie over the plants altogether, letting the new fronds push through the decaying leaves in spring. These leaves are of very great help to the plants, keeping frost from the



CINNAMON FERN.—OSMUNDA CINNAMONEA.

roots, preserving moisture in summer, and in the course of time rotting and furnishing just the kind of food ferns delight in.

The best time to secure native ferns is in late summer, when growth is perfected. The height they attain and their general appearance are shown then, and growth being perfected the plants stand removal.

There are several large growing ones of evergreen character which should be obtained if possible. *Aspidium marginole*, *A. acrostichoides*, and *A. spinulosum* are three of them, and there are those of smaller growth among the *Aspleniums* and *Polypodiums*.

These evergreen ones are pleasing until snow covers them, which is always long after the deciduous sorts have faded and disappeared for the season.

Joseph Mechan.

PARK AND CEMETERY.

EVERGREEN CEMETERY, PORTLAND, ME.

Evergreen Cemetery, Portland, Me., is a type of the old style burying ground in course of transition to the modern cemetery. For instance, in the older portions of the grounds will be found the objectionable features common to the early ideas concerning cemetery improvements, such as grave mounds, coping, division lines of various kinds, much stonework and little planting, while in the newer sections the lawn plan is being carried out



THE EATON MAUSOLEUM.

on lines comporting with modern ideas.

Evergreen Cemetery, the largest cemetery in the State, consists of 328 acres of land, situated about three miles from the city proper and in the suburb of Deering, which has been recently annexed to the city. It is readily reached by electric cars, which pass in front of the two main entrances, and these entrances are attractive in design and surroundings. It is conducted by the city of Portland, an annual appropriation being required for its maintenance, and it was established in 1854.

It may readily be imagined that with so great an acreage there would be large opportunity for an effective design, although the general lay of the land is devoid of picturesque elevations; notwithstanding this, however, the grounds, as a whole, do present some very pleasing scenic effects, and are neat in appearance and well cared for. It is plentifully supplied with water features, there being four lakes of good area, three of them being embellished with more or less marginal planting, which with the addition of some aquatic birds, fine specimens of swans in particular, create additional interest in connection with the general design and conduct of the cemetery.

The soil is sandy and the roads are constructed of gravel and macadam—one of the principle avenues is shown in the center one of the group picture herewith given. Unfortunately a county road traverses the grounds, which no doubt adds to the cares confronting the superintendent.

The illustrations presented indicate in a general way the characteristic features of Evergreen Cemetery. In the newer portions are some good examples of mausoleum and monumental work of modern design and execution, and the lawn plan is strictly adhered to. It is the effort of the management to bring all features of this cemetery, as nearly as may be, up to modern requirements, but as the superintendent says, it is quite an undertaking. However, patience and continual perseverance in an educational way will convince, in due course,

even the most refractory lot owners that the modern plan carries with it the highest ideals connected with cemetery work, and the contrast between the new and the



A MAIN AVENUE.



THE CUMMINGS-RAND MONUMENT.

old portions of the older burial grounds becomes an irresistible argument.

The office building, which was erected in 1893, is a permanent structure of appropriate design, and with modern conveniences for the transaction of business and for public comfort. It is rapidly becoming enveloped in a drapery of climbers and the surrounding planting tends to make it a beauty spot. The view of one of the lakes, with the swans and accompanying natural and artificial effects, draws attention also to the flourishing evergreens, a class of material which abounds on the grounds.

A perpetual care fund has been established, which now amounts to \$100,000, but the extent of the cemetery, with the 4,500 lot owners, demands a great increase of this amount to effectively carry



OFFICE BUILDING, EVERGREEN CEMETERY, PORTLAND, ME.

out the idea embodied in the term perpetual care. The interments now amount to over 18,000.

We are indebted to Mr. Frank M. Floyd, superintendent, who has been indefatigable in his



THE SWANS IN EVERGREEN CEMETERY, PORTLAND, ME.

efforts for improvement, for information and photographs used in the foregoing.

THE RUSSIAN OLIVE AGAIN.—(*Eleagnus Augusticifolia*.)

In the August number there was some account of this tree, but further notes will not be out of place. Since the former article was written, I have taken special pains to see how far it has been distributed. I find it highly spoken of at the Experiment Station of Ottawa, Canada. It is a decided success in Manitoba and the Dakotas. A nurseryman in Illinois writes me, they came through last winter, which killed millions of seedlings of other kinds, unharmed. A bed of native black walnuts were killed to the ground beside them. I have just received a letter from Professor Green of the Minnesota University, in which he says he is highly pleased with them, and is propagating them as rapidly as he can. It is a tree remarkable for its successes—with no failures. It needs, however, a little

watching while young to train it to a compact head.

In growth it outstrips all our natives, unless it is the cottonwood; and on the high and dry divides, it will leave that to die, and itself grow on victori-



THE RUSSIAN OLIVE.

ous. —A tree which can smile on a hot wind with the mercury 110 in the shade; and then take 40 below as a good joke, can endure almost anything.

This tree has remarkable foliage—in short it has four shades or tints of silver. The upper side of the leaf has one shade and the lower side another. The twigs also have a glauca tint. Then the fruit is burnished silver and this often hangs on till mid-winter. The tree in some catalogues is called the silver berry, but it must not be confounded with the dwarf silver berry tree of Oklahoma. When the various tints of this tree are put on exhibition by a gentle breeze it is indeed charming. It is to deciduous trees, what the glauca pungens is to evergreens. Its colors make it a good neighbor for other trees of green foliage. I have seen avenues of these olives which were charming. They have a small yellow blossom whose fragrance fills all the air.

As a road tree, it would have peculiar charms. In the spring when all the air was laden with a delicious perfume it would be like a ride through some land Elysian. The fruit is about the size of a pickled olive, but I think it is of no use for food. From its hardiness and thriftiness I judge it will be a large tree, when it must have a unique and charming appearance, unlike anything seen before in our parks and forests. It is propagated from cuttings, and from the seed. The cuttings need to be caloused before planting. The berries are gathered and planted in the fall. Of course the seeds are large and the trees never can be raised on a vast scale as readily as the elms, maples and other natives. We are glad we have this tree as a reinforcement for lawns, parks and forests. C. S. Harrison.

PLANT NOMENCLATURE. I.

Changes in plant names are always inconvenient to those connected with their study or handling. The question naturally arises why are they altered and by whom? It has even been asked why some one does not call a halt on this seemingly promiscuous alteration that bewilders so many florists and the general public. But a moments reflection indicates that logical reasons are the foundation of the changes else that would have long since been done. Several fundamental facts are to be conceded before a brief discussion of the status of nomenclature can be attempted. These are: The systematic study, otherwise called scientific study of plants is not confined to any one body, age, nation or race. To simplify and unify their study when referred to, plants are given a name—an integer in an index as it were whereby the one name serves the purpose throughout the universe. They have been principally derived from Greek, Roman, Latin, Assyrian and Aryan roots and not infrequently compounded from two or more languages.

In science nothing is taken for granted unless substantiated by fact, and a commoner has an equal opportunity with the sage or specialist in establishing it.

One man may observe, record and publish the results of his investigation in one country and language, and another may record and publish his observations in another country and language. Assuming that each has given a different name to the same plant, scientific bodies have agreed upon rules that shall decide which shall be accepted. It has happened that plants have been figured and others described, that upon further research prove them to be too vague, brief, or unrecognizable to permit it to be placed without doubt with either a plant of the same name or another with a degree of similarity to it but still sufficiently dissimilar to have it separated and given another name than the one in question. This confusion has long been an impediment in botanical study.

Darwin found such abundant barriers of this sort that to obviate them for work similar to his he bequeathed the funds that enabled the compilation of the *Index Kewensis*. There have been national and international congresses convened passing certain resolutions that in the main are at present almost universally adopted, and except in minor and comparatively unimportant particulars have been adopted by the American Association for the Advancement of Science.

After various national and international congresses each nation makes its own standards, the object of each being to adopt resolutions as to nomenclature that will give each plant in a universal classification its proper relative position in a critical analysis for fact and position. The schedule adopted by the American Society has been adhered to by most all of the leading American authorities and institutions in their publications. There may be some alterations adopted in the interna-

tional congress when convened within a few years and thereafter it is probable that every scientist will adhere to the same regulations as to nomenclature. It is probable that the real benefits of such harmonious workings will not be popular or in common usage for another generation. That this is most desirable in the end is open to no question, and such temporary inconvenience as arises during the transition is too insignificant to warrant any consideration in the necessarily radical change.

Most plants have a number of synonyms and when the authority is given for each there is little difficulty in determining the plant referred to though there is more labor. Hitherto the botanics of America have included different areas—Coulter for the West, Gray for the East and Chapman for the South. Not infrequently have these different authors employed a different name and consequently a different authority to one and the same plant—a state of affairs which tends to complicate and multiply the amateur's difficulty in studies of the national flora. As previously mentioned this entails confusion to botanists and does not compose the simplest system. In a measure such works as Sargent's *Sylva* simplifies study in that it covers the entire territory of North America above Mexico, but it is not complete in that it only includes the trees, the shrubs, herbs and annuals are still in their previous confused state as to nomenclature. To a certain extent the recently completed illustrated *Filma* by Britton & Brown render great assistance in that it includes the areas covered by both Gray and Chapman although following a different system (Engler & Prantl) to that adopted by Sargent, Gray or Chapman (Bentham & Hooker.) On the American continent north of Mexico there are about six thousand species; in the universe they are about two hundred thousand, and for these there are about seven hundred thousand names recorded. That this duplication of names for different plants is confusing and impedes botanical inquiry is therefore quite evident.

The first standard for reducing this synonymy has been declared in the early part of the present century by A. P. DeCandolle to be priority. Many of the earliest works on plants are merely lists of plants with no illustrations or full descriptions to allow the plant referred to to be identified. Therefore the earliest work to which priority can be referred is the first edition of Linnæus' "*Species Plantarum*" in 1753 and it has been adopted. Zoologists have met with these same difficulties. The present system adopted by the American Association of Scientists as applied to botany were first submitted by A. P. DeCandolle at an international botanical congress held at Paris in 1867, and with modifications have been adopted by the American Scientists.

Emil Mische.

(To be Continued.)

"The difference between landscape and landscape is small, but there is a great difference in beholders. There is nothing so wonderful in any landscape as the necessity of being beautiful, under which every landscape lies."—*Emerson.*

THE BATTERSON MONUMENT, HARTFORD, CONN.

The illustration herewith of the beautiful monument recently erected on the family lot of Mr. James G. Batterson, in Cedar Hill cemetery, Hartford, Conn., in memory of his wife, who died Jan. 10, 1897, will surely bear out the promises suggested by the fact of Mr. Batterson being widely known as a manufacturer of monuments.

It is cut from red Westerly granite, and both the material and workmanship are as near perfection as is very well possible. Of the sarcophagus form, it is very massive, of fine proportions and in

their graves shall hear His voice, and they who hear shall live.)

Such a monument in a cemetery will exercise a potent influence on future designs. The classic simplicity, albeit embellished in due and proper spirit, with its dominant proportions, suggestive of durability and memorial permanence, invites criticism certain that it fulfills the requirements of refined taste and an exalted regard for the possibilities of the future in regard to monumental art in the cemetery. It is an excellent example of classic proportions and a suggestion of advance in cemetery memorials.



THE BATTERSON MONUMENT, CEDAR HILL CEMETERY, HARTFORD, CONN.

excellent taste. Two members only show any curving, and that has the proper effect of emphasizing the rigid simplicity of the plain polished surfaces. The base is unpolished and the dimensions are fourteen feet by eight feet six inches, and eighteen inches thick, weighing about fifteen tons in a single piece. The monument is nine feet in height and weighs about forty-eight tons in all. Nearly smothered by the carved vines of ivy and laurel, which decorate the frieze and seem to have grown upon and about the letters, is a Latin Scriptural text from Saint John's Gospel:

VENIET HORA IN QVA OMNES QVI IN SEPVLCHRIS SVNT AVDIENT VOCEM EJVS ET QVI AVDIERINT VIVENT.

(The hour will come in which all who are in

John Marshall's Grave.

Mr. Jackson Guy, a Richmond (Va.) lawyer, thus writes of John Marshall's grave at Shockoe Hill Cemetery, Richmond: "The only neglect that can be attributed to Marshall's grave is the general neglect that may be said to apply to the cemetery. The section in which he is buried contains six graves, each with a horizontal monument, and all in a straight row, his and his wife's being the central two. The tombs over the Marshall graves are exactly similar and are in perfect preservation, and the section is inclosed with an iron picket fence three feet high, the ground surrounding being everywhere covered with green periwinkle or grass. A large and beautiful poplar marks the spot of the Marshall section, with a stately magnolia near by."

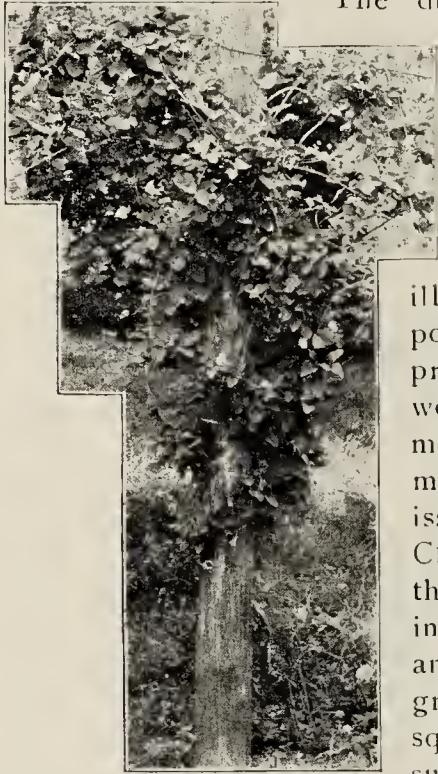


IMPROVEMENT ASSOCIATIONS.

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Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

FURTHER SUGGESTIONS APROPOS OF WINTER WORK.



A DECORATED CLOTHES
POST.

The difficulty experienced by some clubs in finding suitable "before and after" material available for immediate use for lantern slides, to be used in the illustrated talks on the possibilities of Improvement Society work that were recommended in this department of the November issue of *PARK AND CEMETERY*, suggests the advisability of using slides made from any available photographs of barren, squalid, wind-swept, sun-baked scenes in alternation with others made from those of

good planting, of well grown specimen plants or groups, or from any out-of-door view suggestive of pleasure and comfort as the outgrowth of improved sanitary and æsthetic surroundings. It would be a good thing to incidentally show that æsthetic surroundings, and sanitary surroundings, are almost synonymous—as they surely are in effect.

The subjects for poor examples will not be far to seek, even in winter. Go out and "take" any back yard where tin cans, boxes, barrels and ash heaps hold undisputed sway; or where shaggy, volcano-shaped wood piles, and bare posts for clothes lines are the chief features; schoolhouse grounds with dilapidated fences and unscreened outbuildings; churches and other public buildings where there is shade for neither man nor beast; a long line of hitching rails forming the sole decoration of the principal business block of the village; the forlorn and unsightly ruin of the last fire still standing as a monument to the Public Spirit apparently buried beneath; of the mud hole where the boys of the neighborhood float rafts, soil their clothes and absorb malaria—and so on, ad infinitum.

There are innumerable specimens of the other class of subjects already photographed; and every



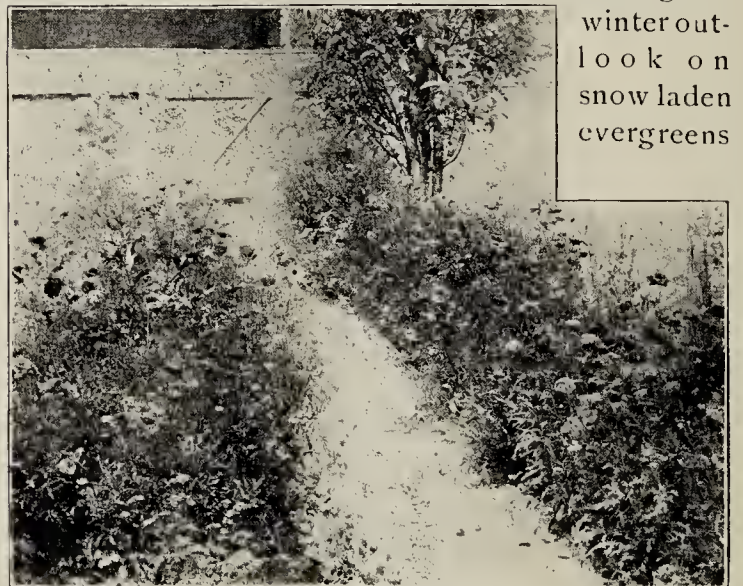
A SUMMER PARLOR.

club will contain fertile minds and facile pens to furnish the matter to accompany the stereopticon views.

Care should be taken to alternate the views in such a way as to supply telling and, if possible even startling, contrasts—extreme opposites following each other.

For example, one slide showing an arrangement of bare fences, four clothes line posts, a wheelbarrow and a chicken house, might be repeated between those of a series of the opposite class, such as a yard with the fences screened by vines or shrubbery; home grounds giving glimpses of possibilities in the way of "summer parlors;" a vine garlanded clothes post; and a Poppy-bordered walk leading to an alley gate.

Such scenes shown on a large scale on a screen, are impressive, and clearly indicate the desirability of windows draped with purple banners in June and having a winter outlook on snow laden evergreens



A BORDER OF POPPIES.

and evanescent Christmas garlands,—all so inspiring to better thoughts and higher aims.

* * *
Notes.

A drinking fountain on the village green is to be built next year by the Improvement Society of York, Me.

* * *
The Improvement Association of Kingston, R. I., has during the past season bettered the condition of streets, made sidewalks, erected and maintained street lights, and instituted lecture courses and entertainments to raise the money to pay for these improvements.

* * *
The Edgemont, Ohio, Improvement Association reports a "rousing and enthusiastic" October meeting at which preparations were made for next year's work and twenty-six prizes awarded to the boys who had made the best gardens. In the speech preceding the awarding of these prizes it was said that the object of the association was not only the improvements of the village gardens but of the village boys.

* * *
The Improvement Association of Richfield Springs, N. Y., since its organization in 1886 has given the village street lamps, graded and planted a village park, built some stone sidewalks, given a village hall, aided in establishing a free library, and encouraged and assisted in the work of beautifying private property. A good record.



"EVANESCENT CHRISTMAS GARLANDS."

A report from the Peterboro, N. H., Improvement Society speaks of the hopelessness of expecting much change in the appearance of cities but suggests the advisability of "catching towns and villages young" and training them up in the way they should go.

F. C. S.

TRANSPLANTING TREES,

The Southern Pacific Railroad Co., has accomplished a masterly feat in transplanting Palms a century old.

The Arcade Depot in Los Angeles, California, when completed, several years ago, had two magnificent palms, of the last century, taken up, and set on either side of the main entrance. Both palms survived the removal and are regarded as monuments to the skill of modern engineering as applied to transplanting trees of large sizes. It was once considered impracticable, but as Josiah Allen's wife says: "Money, these days, can move an ellum twenty feet high, and shade a park with big trees in a day."



A TRANSPLANTED PALM—A CENTURY OLD.

The method is first to cut the ends of the roots, in a circle, around the outer edges, and the roots of trees generally extend as far as the top spreads. The trench may be dug deep enough to cut the end of every root and in a year, or some less, the tree will be ready for removal. The amateur way, at least, is thus depicted, but engineers have appliances that prove their efficacy in many such instances as the palms of the Arcade Depot, Los Angeles. The nature of the palm is to send down a strong straight root, so that depth, rather than circumference would be the difficulty to contend with in removal. Should that main tap root of gigantic proportions have been broken, the hardy palm would gradually have perished. Much depends also in having the environments as nearly like the conditions before transplanting as possible, regarding the nature of the soil, depth and the position according to the points of the compass. Old hunters say that moss and lichen grow more densely and that the bark is thicker on the north side of forest trees. Obviously, then the transplanted tree should have the same side to the north.

G. T. Drinnan.

GARDEN PLANTS—THEIR GEOGRAPHY, XLVIII.
POLEMONIALES.

THE POLEMONIUM, CONVULVULUS AND SOLANUM
ALLIANCE.

This widely diffused alliance has 19 tribes, 210 genera and 3,385 species, almost sure to be augmented as tropical exploration proceeds.

In North American gardens it is represented by perennial and annual herbs and climbers, with but a few woody plants. These become more abundant as the tropics are approached. Several plants of economic value as the potato, tomato and tobacco are included within it. A large number of ornamental species and varieties are grown in gardens, but the Phlox and Ipomeæ are much the most familiar in the Atlantic states. The line of structural demarcation between this group and the preceding one is not very strong, the tribes of each seem to touch at several points. Both have regu-



PHLOX PANICULATA AND VAR.



P. DRUMMONDII VAR.

P. SUBULATA.

lar flowers, but the pentamerous character seems more constant in these.

The eye of the gardener however discovers dif-

ferences of germination and growth, which scientific languages often fail to convey. In some tribes the cotyledones are strongly marked and peculiar, and many botanists do not see the seedling plants. I cannot think tribal, or specific characters complete where such primary organs are omitted, and no doubt a series of germinating tests would reveal a host of curious facts.

Phlox has about 25 good species natives for the most part of North America, but with extensions to Russian Asia. Thirty-eight or forty or more have been described, and the names are legion. Ten or twelve with a perfect host of varieties are commonly grown in gardens. They are exceedingly showy, sometimes tall growing and occasionally woody at the base, while other sections are creeping evergreen, or tufted moss like plants, and two of the Texan species are annuals.

Quite a number of Rocky Mountain and western forms occur, but little known in the Atlantic states or in Europe. With a range of color very similar to *Rhododendrons* with shades of lavender and blueish purple added, this fine genus of plants is capable of superb effects if planted in sufficiently large masses and distinct colors. The various kinds cover the whole flowering season. It is a mistake to employ many wishy-washy shades. As for the names, florists and nurserymen should avoid useless synonymy.

Collomia is given 11 species by some authors while others are disposed to regard them as a section of the next genus.

Gilia is a very variable genus of about 70 species as now constituted. They are chiefly found on the Pacific slope, and on the Andes of Chili. Several forms of the *Gilia*, *Ipomopsis*, *Leptodactylon* and *Leptosiphon* sections are in cultivation. *G. tricolor* has good foliage often very subject to aphid.



GILIA BRANDEGEL.—Vick's Magazine

Polemonium has 8 or 10 species in the temperate and mountain regions of Europe, Asia, North America and Chili. *P. cœruleum* the "Greek valerian," may be called cosmopolitan in northern regions. It has a pretty variegated form. The flowers are blue to purplish, and white to yellowish in the various species.

Cobæva in 5 species are from Mexico and Western tropical America. *C. scandens*, and its very handsome variegated leaved form, are well known tender climbers in Northern gardens.

Cantua is a genus of 6 or 7 species of shrubs from Peru and Bolivia. Some species have quite handsome pendulous orange red, and others yellow and white erect flowers. They should be more extensively tried southward on both coasts.

Nemophila has 8 or 9 species mostly from the Pacific slope. They are highly appreciated winter growing annuals in British gardens, where they flower during a long season in summer. *N. microcalyx* is a small flowered Atlantic coast species perhaps of interest to the hybridist.

James MacPherson.

(To be continued).

LANDSCAPE FORESTRY.

What is more essential for a landscape than a fine forest? Or what is more pleasing to the eye than a woodland effect?

How gratifying to learn that the cities and states are bringing before the public attention the question of large forest grants and forest protection.

It is interesting to watch the development of the forests in parks and on large estates. Public parks are educating the public mind. Boston's parks are coming to be centres of interest to outsiders. They are surprised to see what can be done by properly caring for the natural woods.

But to particularize. He must be an artist indeed who can develop a woodland so as to remove the objectionable features, enhance the beautiful and still leave the natural effect.

All native forests are full of dead wood, and many less desirable or less valuable species which were better removed. It is the part of the forester to do this. Yet how many things he must bear in mind as he does it.

He must not only think of the trees he wishes to preserve, but he must see and foresee how that which he does is to leave a perfect landscape effect. This will necessitate a knowledge of the conditions at all seasons of the year—the spring flowers, the summer fruit, the autumn foliage, and even the winter sombre grays and browns.

Follow him through the forest where there are many kinds of trees in all stages of growth and

where there are many landscape conditions to observe. He approaches the edge of a forest faced down with Gray Birches. Shall he ruthlessly slash them out because they are a poor wood or because in some places they look weedy? "By no means." Nature has provided them not only for a border protection against heavy winds and hot sun, but also to make pleasing outlines to the forest by concealing long barren boles.

In the absence of birches there may be some poorly formed or slanting trees which if removed will leave holes or barren looking places in the border of the woods.

Follow the forester up a steep hillside. Shall he take down a large pine, which stands alone among deciduous trees, just because it is decaying? For the landscape effect—"No!" Again there may be a Red Maple, a Poplar, or a Pitch pine, or many another tree not so valuable as its companions but which to remove would be to make an ugly vacancy or rob the view of some of its variety or characteristic features.

Does the forester remove the undergrowth or shrubs such as Sassafras, Viburnums, Cornels, Witch Hazel, Scrub Oaks and many others, just because they are in the way? "Not so." They serve the double purpose of keeping the forest moist and add greatly to its beauty. Nature has not put them there without cause.

How thoughtful of her to provide the graceful hemlocks and the leafy and "shade loving beech" to fill the long vacant space between the ground and the high tops of the old trees. How much they add to the pleasure of looking at the forest! Although shade loving trees, they will make fine specimens if left to grow in the open.

Surely the landscape forester must be an artist—must know where to leave trees in the foreground to surprise the eye when it sees the view beyond, must know where a poorer species will by contrast set off a better.

He must be a botanist knowing every species and variety, also a dendrologist that the trees under his direction may have the best of care. Nor should it hurt his feeling to be a patient man—patient to see the work go on rapidly when necessary, but very cautious where there was a question. In case of doubt, if he must think twice or thrice, it were better to leave to time, which will sooner or later answer the question.

Shall such landscaper be a politician? Surely, in so far as he can influence the public mind to be aggressive in caring for the forests. But what can be expected where politics enter to keep changing the superintendents of such work? Rather leave to nature if it cannot be left to a capable, trustworthy and staying mind.

Andrew Auten.



PARK NOTES.

Through the activity of the Park and Boulevard Association of Quincy, Illinois, an era of tree planting and out-door improvement seems to be opening up for that city. The association has made arrangements for the supply and planting of trees at cost. They propose to furnish nursery grown shade trees, desirable as regards kind and condition at 40 cents each, and including setting out at 55 cents. Surely property owners would not hesitate to improve their frontage on these terms.

* * *

A call was recently sent out by the Parks and Forestry Committee of the Asheville, N. C., Board of Trade to all persons interested in forest preservation, and in the establishment of a National Southern park in the Southern Allegheny Mountains, for an Inter-State Convention to be held at that place November 22nd. The purpose of the convention is to form a permanent association, to induce Congress to establish a National Southern Park, and to influence legislation in favor of scientific forestry.

* * *

The business acumen of the Japanese people is daily asserting itself. Prominent representative Japs have asked of the South Park Commissioners, Chicago, the privilege of sending men to take care of the buildings donated to Chicago at the close of the World's Fair, and to erect in addition, buildings for growing Japanese lilies and a building in which visitors to the park may rest and drink tea free of charge. It is not intended as a means of advertising products but the country and its government.

* * *

The amount expended for flowers for the public squares of Baltimore, has created a temporary difference between the comptroller and the Park board. In 1897 the Park Department spent \$5596.58 for flowers for the squares, and \$5321.40 for labor, which does not include the salaries of the superintendents. In 1898 the amount spent for flowers was \$6249.62 and for labor \$5578.33. Under the new system provided for in the charter, when all the squares will come under the direct control of the Park Board, the latter hopes to work many economies and in the case of the flowers there seems to be a ripe field.

* * *

At a recent meeting of the executive committee of the Park Commission of Wilmington, Del., the new Century Club was given permission to label the different varieties of trees in Brandywine park, as a method of stimulating the study of forestry. The committee expressed gratification in allowing the privilege which will be of great benefit to students. Plans for the labeling have not been completed, but the labels will be about six inches long, and will contain both the botanical name of the tree as well as the common name. A scheme will be adopted for each variety of tree so that comparisons may be made between the growths.

* * *

This is healthy advice from the local paper of a small town. In connection with an appropriation for park purposes in the town, the St. Louis, Mich., *Leader* has the following to say: "Money expended on the park is money expended for all the people of the city and for that reason will not be begrudged if results can be seen. We do not know how the council proposes to spend the money nor does it presume to dictate but it would suggest that a little of this sum be used in the spring to plant in more trees and shrubbery and that our native trees and shrubs be planted. Make the park a field museum of native trees and

shrubs; they may take a little longer to grow but the park is to last for all time."

* * *

The annual report of Commissioners of the general land office, recently issued, shows a grand total of 929,308,068 acres of unappropriated and unreserved public land in the United States. There were 150,541 acres certified or patented as swamp lands during the year; of Indian and miscellaneous land, 212,848 acres; 420,760 acres selected by the various states and territories were certified for educational and other purposes; under railroad grants there were certified 504,651 acres, with 60,392 acres for wagon road construction. The commissioner suggests the enlargement of the Mount Ranier National Park in Washington and the Yellowstone National Park in Wyoming. Protection against forest fires is especially urged.

* * *

Mr. John D. Rockefeller has made another donation to the Cleveland park board of \$225,000 to construct arches and roadways under the Lake Shore railway for the purpose of connecting Gordon park with Rockefeller park, which he gave the city, and for roadways and arches under Superior street to connect two sections of Rockefeller park. This brings the approximate amount of his donation to the park fund to nearly a million of dollars. Gordon park was presented to the city by Mr. W. J. Gordon, Wade park by Mr. J. H. Wade, Shaker Heights by the Shaker Land Co., Ambler parkway by Curtis & Ambler, and Mr. Rockefeller gave money to the board to buy all the connecting links. The land acquired by Mr. Rockefeller's beneficence comprises all the land from Gordon to Shaker Heights, excepting Wade park and the parkway. This land was purchased at a cost of \$700,000. Cleveland has been particularly favored in such munificent gifts.

* * *

For several years the question of public parks has been discussed by the citizens of Stillwater, Minn., and being submitted to the voters at the recent election it was decided by a majority of about four to one, that the time had come to take decisive action in the matter. This result is doubtless due, in large degree, to the interest which the ladies of the city have aroused by their efforts to promote such improvements. The park committee of the city council are considering several proposed sites and have called on Mr. Frank H. Nutter, landscape architect of Minneapolis, Minn., to advise with them in the selection of lands situated on the high bluffs at the head of Lake St. Croix and at the foot of the river gorge which some twenty-five miles further north terminates in the celebrated "Dalles of the St. Croix" at the Inter-state park. Stillwater presents many features of striking natural beauty, and it is to be hoped that liberal plans will be adopted to preserve some of them, at least, for all time.

* * *

The board of commissioners of Audubon park, New Orleans, have decided to carry out the suggestions of Mr. Olmsted as outlined in his report on the improvement of that park. The keynote of his design is to make the park truly southern. The foliage of Louisiana vegetation is in itself extremely beautiful and luxuriant, and naturally assumes, where it is grouped, the most picturesque forms. That foliage alone is particularly delighting to people who come here from northern climates, and they have repeatedly complained, says the *Picayune* from an artistic standpoint, that so little use of it had been made in even as small a park as Lafayette. Mr. Olmsted has also expressed the idea that the structures, such as buildings for shelter and other purposes, gateways, lodges and the like, be built to conform to the history and traditions, of the city, and be made characteristic of the races that founded and built it. Therefore it is suggested such constructions be in the French and Spanish styles of the time of the founding, and that even touches characteristic of Mexico would not be out of place, all of which will find response in the minds of landscape architects.



CEMETERY NOTES.

Mr. Rufus King has recently built a receiving tomb at the cemetery of Monmouth, Me., and presented it to the town.

* * *

A Ladies' Cemetery Association has been organized at Woodstock, Ill., for the purpose of improving the Oakland Cemetery. A constitution has been adopted and officers elected.

* * *

By the will of the late John Eastman of Cambridge, Mass. a bequest of \$1,000 is made to the town of Dennysville, Me., the income of which is to be devoted to the care, preservation and ornamentation of the town cemetery.

* * *

At the semi-annual meeting held recently of the directors of the Bohemian National Cemetery, Irving Park, Chicago, it was shown that during the half-year from April to October, this year, the total income was \$20,719.49 and the expenditures \$18,236.35. Since April 530 bodies were buried in the cemetery, making the total 13,950.

* * *

The citizens of Staten Island are worried over the fact that three new cemeteries have been laid out on the island. The Borough of Richmond now has more cemeteries than any other borough in Greater New York. Property for burial purposes is exempted from taxation, and the revenue from many acres of land will now be lost. The new cemeteries are St. Agnes' and Ocean View in Gifford's and the Baron Hirsch in Graniteville.

* * *

What any organized body can do to improve our smaller cemeteries is well exemplified in the case of the cemetery at Charlevoix, Mich., which contains the remains of a number of soldiers. The Woman's Relief Corps of that place some time since resolved to mark the soldiers' graves, and this was followed by the work of general improvement. The latest achievement is the erection of a steel windmill for water facilities, and the women having enlisted the practical sympathies of the summer visitors and residents, may be relied on to complete the good work.

* * *

A number of descendants of the early settlers interred in the old Sebring graveyard in Solebury township, Pennsylvania, have evinced a great interest in the ancient burial ground, of which they had no knowledge until recently. They have determined to have the graveyard restored to its original condition so far as possible, and in pursuance of this purpose have requested Mr. Warren S. Ely of Doylestown, a well-known genealogist and who first called attention to the graveyard, to procure power of attorney to commence the work of restoration and to take charge of the property. The restoration of the old historic graveyards is receiving considerable attention.

* * *

The Clark mausoleum now being erected in Homewood Cemetery, Allegheny, Pa., will be a conspicuous feature on its grounds. Its design is in the form of a Greek temple, the front having four Corinthian columns; the exterior is of granite and the construction is marked by the use of very large stones. Tennessee marble is used in the interior with a wainscoting of Italian marble. The floor is of white Italian marble. There will be four crypts on each side, constructed of white marble with panels of pink Tennessee, on which will be cut the

inscriptions. The double doors and rear window frames and grilles are of bronze, of handsome design.

* * *

It will be remembered that a few years ago an explosion of dynamite seriously injured the O'Neill monument erected in Norwood cemetery, Philadelphia, Pa. As a sequel to this Mr. James B. O'Neill has entered suit against the Norwood Cemetery Company to recover \$5,000 damages. The plea recites that the monument cost upwards of \$10,000, and was constructed of granite, ornamented with Italian marble statues. It is alleged that the company contracted to protect the monument from defacement, but that it failed to perform this duty, inasmuch as explosives were stored in the cemetery and not properly guarded. The plaintiff avers that on Nov. 8, 1896, the monument was blown up by dynamite belonging to the company, the statues were broken and injured, and the granite badly cracked.

* * *

A novel proposition was recently referred to the District Commissioners of Washington, D. C. Mrs. Ryan of New York proposed to build for the Community of Sisters of Washington a home for the sisters, containing a chapel. Under the altar in the chapel she wished to have constructed a tomb which should contain the remains of herself and the members of her family when they die. No expense would be spared in building the home and the chapel, but the construction of the tomb was a necessary condition of the offer. The proposition was laid before the District Commissioners and referred to the District health officers. They decided that the building of the tomb for the purpose of receiving dead bodies would be a violation of the laws regarding cemeteries and could not be allowed.

* * *

The case of the Johnstown Cemetery Association, Johnstown, N. Y., vs. William Parker, has just been decided by the appellate court on an appeal. The defendant who was neither a member of the association nor a lot owner, was doing work on certain lots for their owners, contrary to the by-laws of the cemetery association, which also prescribed a penalty for the offense. It was suing to recover this penalty that led to the court's decision "that the act of the legislature under which the cemetery association acted in passing the regulation in question, was unconstitutional and that therefore, the penalty therein provided and for which the association sued, could not be collected. The court held however that the association had the right to pass regulations which are binding upon its members—that is lot owners acting as such. Also that the association had the right to pass regulations excluding persons not lot owners from their grounds, and also to sue them as trespassers at common law."

* * *

According to the Boston *Transcript* a New York man has collected statistics regarding cremation in the United States, which go to show that more incinerations have been made in Boston than in any other city in the country, except New York, St. Louis, Philadelphia and San Francisco, although it is only six years since cremation began in that city. It appears that the first crematory in the United States was established at Washington, Pa., in 1876, and the second was built in Lancaster, Pa., seven or eight years later. The whole number of cremations made in the United States from 1876 to 1899 is 8,885, these being the annual figures from the year 1883; 25, 16, 47, 114, 127, 190, 249, 372, 471, 561, 647, 831, 1017, 1101, 1391, 1699. There are crematories in New York, Buffalo, Troy, Swinburne Island, Waterville, St. Louis, Philadelphia, San Francisco, Boston, Cincinnati, Chicago, Los Angeles, Detroit, Pittsburg, Baltimore, Lancaster, Pa.; Davenport, Iowa; Milwaukee, Wis.; Washington, D. C.; Pasadena, Cal.; Washington, Pa.; St. Paul, Minn.; Fort Wayne, Ind., and Middletown, Conn.

RECENT LEGAL DECISIONS.

REGULATION OF LOCATION OF CEMETERIES.

The supreme court of Wisconsin says that it may be admitted that cemeteries are not nuisances in themselves. They are necessary and rightly regarded as sacred places. They ought not to be considered injurious to people of average sensibilities and intellect from the mere fact that they are the resting places of the dead. With the customarily laid out walks and drives, the mounds, the flowers and shrubs, the monuments and inscriptions, and many other incidents that may be mentioned characterizing a modern cemetery, they are in many respects places of beauty as well as of inevitable decay. Nevertheless public welfare requires reasonable regulations in regard to their location and management. All mere sentimental considerations and individual interests bearing unjustly upon the interests of others ought to give way to the necessities of the case, and the police power of the state is ample to secure that result. The prevention of the location of cemeteries in the thickly populated portions of the country, or where such condition is probable, or near dwelling houses actually existing, has generally been considered a proper exercise of police power when regulations in that regard have been challenged on constitutional grounds.

And the court holds, in the case of *Pfleger against Groth*, that section 1454 of the Revised Statutes of Wisconsin is a valid exercise of police power, which section prohibits the establishment of any cemetery for burial purposes within the platted portion of any city or village in that state so as to approach nearer than one mile to any lot or block in the plat upon which there may be a building; also prohibits the laying out or establishment of any such cemetery outside the platted portions of any city or village, within 200 rods of any inhabited dwelling standing on any lot or block in such city or village, without first obtaining the consent of the municipal authorities thereof; and declares that any violation of the statute shall be deemed a nuisance and subject to abatement at the suit of any person aggrieved.

Nor does the court consider that acquiescence for even eight years can be regarded as sufficient evidence of the consent of the municipality required by the statute in a case where the municipal authorities and the law were disregarded entirely.

And the court repudiates the suggestion that the law of 1893, now embraced in section 1454a, of the Revised Statutes, providing a method for taking land in invitum or against the will of the owner, for the enlargement of cemeteries, but limiting the right in that regard, except in cities and villages, to lands that do not approach nearer than 20 rods to a residence owned by the occupant thereof, without his consent, amends section 1454 by removing all restrictions to the enlargement of cemeteries in cities and villages. It holds that the act of 1893 amends section 2 of chapter 315, Laws 1887, and relates solely to the subject of taking lands for cemetery purposes by right of eminent domain. It does not deal with or affect in any way the law regulating the location of cemeteries or their enlargement. It provides how land may be acquired for such enlargement when permission shall have been obtained to make it under section 1454, Revised Statutes.

Notes.

The common council of Neenah, Wis., has passed an ordinance creating a cemetery commission for that city, to exercise a general supervision over the cemetery owned by the city or any land that may be hereafter acquired for such purposes.

* * *

There has recently been purchased for Calvary cemetery, Cleveland, O., an adjoining 57½ acres of land on the east side. This purchase gives to Calvary cemetery a total area of 160 acres, making it one of the largest Catholic cemeteries in the country.

It is intended also to place it in the front rank in regard to improvements.

* * *

Improvements are in active progress at the new Morningside cemetery, Brattleboro, Vt. A contract has recently been let for a public vault to be constructed of granite from design by Mr. C. F. Page, architect, Rutland, Vt. It will be 24 ft. by 31 ft. and contain 42 catacombs beside the chapel. The estimated cost is \$10,000. The foundations will be put in this winter, a tent being used for protection, in which salamanders for warming purposes will facilitate work.

* * *

The Alden Improvement Club, Oakland, Calif., has placed itself on record in the matter of the need of Oakland for a great park. At a recent meeting the subject was taken up and an important paper read on the subject.

* * *

Italy seems to be following America in establishing an Arbor day. It is to be held in the month of October. In the parks, or some other public place, lessons in tree culture will be given to children.

* * *

The proposition for the city of New Orleans, La., to purchase Central park by the issue of bonds, on being submitted to public vote was lost, the number of affirmative votes being less than the two-thirds-majority required.

* * *

Col. Martin Kingman, Peoria, whose liberality in regard to the soldiers' monument of Peoria merits public recognition, has just been in the South to negotiate the purchase of Breed's Hill, south of Kenesaw Mountain, of which to make a park and erect thereon a monument to the 86th Illinois. It is proposed eventually to offer it to the government for a national park.

* * *

Springfield, Ill., has at last taken up the question of providing a park system for that city, a matter far too long neglected. A park and boulevard committee of citizens have about decided on the extent of the proposed improvements and in an estimate of the taxable value of the district tributary to the boulevard project, it would give an annual increase for the park system of approximately \$50,000.

* * *

Largely through the efforts of the Santa Barbara, Calif., Chambers of Commerce a new forest reserve has been set apart by the general government, embracing in the neighborhood of 150,000 acres, and extending from Gaviota to below the Ventura county line. The new national park is called the Santa Ynez Forest Reserve. A proclamation reserving it for public use was signed by President McKinley on the second day of October.

* * *

The park commissioners of Chattanooga, Tenn., have been an active body in improvement work. It has recently had a force of workmen engaged in the improvement of the citizens' cemetery which has been thoroughly cleaned and will be improved as much as possible now so that it will not be difficult to complete the improvement next year. The commission has also decided to set out 1,500 water oak trees in the city.

* * *

As a memorial of the recent expositions at Omaha, Neb., a park of some eleven acres is to be established, to be known as Kountze park. This in great part is due to the liberality of Mr. Kountze, who donated 5½ acres of the tract, and sold at a reasonable figure the other 5½ acres to the city. The city accepted the donation under the conditions named, and the work of improvement will proceed in due course. The tract in question was in the very centre of the grand court of the exposition.


 SELECTED NOTES AND EXTRACTS.

Top-Dressing Lawns.

Much valuable fertilizing material is wasted where applied on frozen ground that is sloping. The rains and melting snow carry it off. Stable manure affords protection to the surface roots of grass, and is in that way beneficial, even though the fertilizing constituents are largely lost.

Considering the matter solely in its relation to fertilization, unleached wood-ashes are largely taking the place of manure, as they are less offensive, unsightly, and do not make possible the spreading of weed seeds. To get the most benefit from ashes or any other fertilizer, they should be applied about the time the roots may be expected to use them, or when the soil will readily accept them. Therefore, apply ashes before the ground freezes, that they may work into the soil; or in early spring, in time for the roots to make use of them.—*Mechans' Monthly for December*.

* * *

Bignonia Radicans.

I have seen one or two notices about the beauty of Bignonia radicans lately in *The Garden*, says H. D. Palmer of Colchester, England, in that journal. I have one I planted some ten or twelve years ago in a S. E. corner which has a stem nearly 6 inches in diameter. It is the major variety. When I first had it I wanted it to grow so as to form a coping to a wall, which it will do if the soil suits it, because the shoots cling and run along like Ivy, but the border I planted it in was a rich one, and though it lived it did not increase in thickness of stem, nor did it push fresh shoots. Seeing one day in your journal that it grew on hills and naturally on roots like a Vine amongst rock, etc., I moved it to its present position beside an old lean-to potting shed, with an ugly roof, which it now completely hides and is a sight to behold every season. In making alterations I had to raise the ground some three feet on my garden side to the level of the field behind, which I had bought in order to make a cart road into the field. This I did by heaping up some 3 feet of broken tiles I had handy and surfacing with gravel. I had forgotten this when I ordered my gardener to plant it where it now grows so well, and well do I remember his look of disgust when I came home in the afternoon and found him with a crowbar still working out a hole to plant it in and

not finding any soil. As he had got down some 3 feet I told him to stop and to fill up the hole with some soil and plant it.

The next season it started into vigorous growth and in about twelve years has reached its present proportions. I kept layering the terminal shoots every year till it had covered the space I wanted, from which, every year, from every joint it throws up shoots some 3 ft long, each terminated by a magnificent bunch of its orange-red flowers. These annual shoots at about the end of March I prune back to one or two base buds, and the display is reproduced every season. To show how it likes and has taken possession of its well-drained mass of old tiles, I may remark that suckers from the roots are constantly springing up in the roadway and as far as 10 feet from the base. It is rather difficult to strike, but if at the spring pruning some of the shoots are laid in at the foot of a wall, as one does scions of Apple trees to keep them plump, longways, and buried about 6 inches, they will root from the joints and throw up shoots the following year; these can be lifted, and make nice plants without any trouble.

* * *

Forming Shrubs of Trees.

An observing gardener can often produce very pleasing results from certain trees by keeping them cut back every year, allowing them to shoot up afresh each Spring. The paulownia, a large-growing tree, is quite frequently thus treated with interesting effect. By the encouragement of strong, vigorous growth, enormous leaves are produced beyond what are even normally large. A single stem is shot up, straight "as a bean-pole," without branches, the leaves being on long, stout petioles. It is not unusual to see these long, one-year stems about 10 feet in height. They are hollow, and will occasionally kill partly back until age is gained. Allowed to grow up, the paulownia makes a large, round-headed tree, producing panicles of blue flowers, arranged like candelabra in great abundance. They precede the leaves in Spring, the buds being interestingly formed the year previous. The ailantus is another tree that may be treated in this way, and in cutting back, considerable of their offensiveness is lost with the absence of flowers. One of the prettiest effects I ever saw was a bank of ailantus

back of a row of houses. The pendulous leaves produced a really tropical effect, which showed to great advantage through a vista formed by two houses.

To get the full value of the striped maple, *Acer striatum*, new growth alone should be encouraged. The unique green and white striped bark is quite pretty, and will usually be found brightest on the young suckers which spring up in abundance around the base of a large tree. As the approximate height of this maple is only about 12 feet, there is no difficulty in keeping it down.

Cornus alba or *stolonifera*, the red-stemmed dogwood, is at this time showing its brightest color. In the Summer, it is only slightly colored, seemingly especially designed for brightening up the landscape in Winter. This may also be kept cut back, performing the operation just before Spring opens.

Many old shrubs, that have been more or less ruined by bad pruning, would doubtless be improved by cutting completely down, getting a whole new growth.

There are but few evergreens that will stand such severe pruning, it being very difficult to get buds to form from old wood; but the *Cephalotaxus Fortunei* is one. When cut down to within a few inches of the ground, or higher up after several such treatments, it goes ahead again, forming a graceful evergreen bush. By nature, it is somewhat straggling in growth, and the occasional severe pruning is found quite desirable. In very hard Winters, it will get pretty well browned on the southern side, like its relative, the yew.—*S. Mendelson Mechans. in Florists Exchange*.

* * *

The Age of Trees.

Gericke, the great German forester, writes that the greatest ages to which trees in Germany are positively known to have lived are from 500 to 570 years. For instance, the pine in Bohemia and the pine in Norway and Sweden have lived to the latter age. Next comes the silver fir, which in the Bohemia forests has stood and thrived for upward of 400 years. In Bavaria the larch has reached the age of 275 years. Of foliage trees the oak appears to have survived the longest. The best example is the evergreen oak at Aschaffenburg, which reached the age of 410 years. Other oaks in Germany have lived to be from 315 to 320 years old. At Aschaffenburg the red beech has lived to the age of 245 years. Of other trees the highest known are ash, 170 years; birch, 160 to 200 years; aspen, 220 years; mountain maple, 225 years; elm, 130 years, and red alder, 145 years.—*The National Nurseryman*.

Park and Cemetery.

ESTABLISHED 1890.

An Illustrated Monthly Journal.

Devoted to the advancement of Art-out of Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Association, etc.

The regular contributors to PARK AND CEMETERY are among the most eminent Landscape Architects, Landscape Gardeners and Horticulturists in the United States, whose practical articles make the journal one of great value to any one identified with landscape work.

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Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers

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The next meeting of the Association will be held at Chicago, Ill.

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Personal.

L. W. Ross, Landscape Gardener, Boston, Mass., is superintendent of a new cemetery now being laid out at Canton, Mass., a few miles from Boston. This is one of the chain of cemeteries being established through the efforts of an eastern cemetery syndicate.

Mr. O. D. Carroll, superintendent, recently moved from St. John's to Calvary cemetery, Cleveland, O., to the fine home built for him at that cemetery.

Mr. Levant L. Mason, Secretary and superintendent of Lake View cemetery, Jamestown, N. Y., last month celebrated the 50th anniversary of business as a jeweler in that city. Mr. Mason opened his store in 1849 and the first entry on his books is dated Nov. 7, 1849. He has occupied many prominent public positions, such as trustee for the village, president of the board; for sixteen years he was a member of the Board of Education and for twenty-three years has been secretary and superintendent of the above cemetery. Mr. Mason was married in 1850 and expects to celebrate his golden wedding in May, next year. Mr. Mason has always taken an active interest in the association of American Cemetery Superintendents and has attended many of its conventions.

The "Shaw" Banquet, St. Louis, Mo.

The tenth (and in this sense an anniversary) horticultural banquet provided for in the will of Henry Shaw, the founder of the Missouri Botanical Garden, was given by the Garden at the Mercantile Club, St. Louis, on the evening of November 18. Covers were laid for 125 persons. The room was tastefully decorated, and the dinner enlivened by music. On the conclusion of the dinner, the chairman of the evening, Professor Trelease, proposed several toasts appropriate to the occasion and suggested by the guests who were present, representative of various florists' and other horticultural organizations; after which he proposed as a subject for special consideration the possibility of securing the appropriate and tasty planting of public school grounds, which are so commonly left in a bare and unattractive condition, particularly in the country, where a little organized effort would so easily cause them to blossom with the most beautiful of native plants. Addresses on this subject were made by Professor W. J. Stevens, Superintendent of Public Instruction of Carthage, Missouri, whose paper clearly indicated the practicability of securing the end in view through the aid particularly of the women's clubs of the smaller cities; and by Professor J. C. Whitten, of the University of Missouri, and Mr. James Newton Baskett of Mexico, Missouri, the well-known writer on natural history and rural life.

The annual meeting of the Indiana Horticultural Society will be held in the State House, Indianapolis, Ind., January 3-5, 1900. This meeting follows that of the State Board of Agriculture. An excellent and instructive programme has been arranged and among the papers to be read are the following: "Is the Carolina Poplar a Desirable Tree for Street Planting?" by J. J. Hollowell. "The Value of Horticulture to our Public Institutions," by Prof. A. W. Butler. "What can we do Towards Creating a Better Sentiment Concerning the Improvement of our Rural School Grounds," by Lawrence Turnan. "Some Desirable Trees for Planting in School Grounds," by J. P. Brown. Some valuable reports will also be submitted. The Indiana Horticultural Society is to be commended for the interest it is encouraging in art out-of-doors.

Obituary.

The death of Mr. Frederick W. Chislett, late superintendent of Crown Hill cemetery, Indianapolis, Ind., and which was briefly recorded in our last issue, removes from our midst one of the best

known superintendents and landscape men of the country, and a member of a family for generations devoted to such work. He was born in England, September 10, 1827 and came to America with his parents at four years of age, spending his childhood and early manhood in Pittsburgh. Removing to Dubuque after his marriage in 1853, he remained there until 1863, when he came back to Indianapolis to take the position of superintendent of Crown Hill, he being then 36 years old. His father, John Chislett of Pittsburgh had just previously been consulted on the location of that cemetery, and was firm in his choice of location, although this was at first contrary to the opinion of those interested. Mr. Chislett occupied the superintendency of the cemetery until his death, surviving the majority of the managers and incorporators of the association. Mr. Chislett was a man of characteristic vigor, energy and executive ability. He was firm, and forceful but of kind disposition, and he leaves a worthy record. A widow and two sons survive him. At a recent meeting of the board of managers of the cemetery Mr. John Chislett was elected superintendent to succeed his father, and the board passed resolutions eloquent with expressions of sympathy and regard for their deceased official.

The folding casket lowering device manufactured at Ovid, Mich., and illustrated in the company's advertisement on another page, is finding many friends among the cemetery officials who have tested its merits. It has many points to recommend it, simplicity, ease of operation, portability and appearance. It lowers the casket automatically at any desired speed and without noise, has grave lining attachments rapidly adjusted, and the opinion of a prominent cemetery official is that it is a vast improvement over human labor, and operates most satisfactorily. The company will comply with any requests for information.

BOOKS, REPORTS, ETC., RECEIVED.

NEW EDITION OF COPP'S SETTLER'S GUIDE. Price 25 cents. The twenty-first edition of Copp's Settler's Guide, a popular exposition of our public land system has been received. It is edited by Henry N. Copp, of Washington, D. C., the well known land attorney. The chapter on surveys is illustrated and tells how to decipher township and section corners. The book gives the latest rulings on the Homestead and other laws and there is considerable information on matters connected therewith. Mr. Copp desires the addresses of all union soldiers who made homestead entries before June 1874, of less than 160 acres.

Trade Literature, Etc.

A New World of Beauty. A description of the Rocky Mountain Evergreens. Adapted to the east and west. Tested and approved by leading Horticulturists. Written by C. S. Harrison, Select Nursery, York, Nebraska.

Nursery Price List of Fruit Trees, Grapes and Small Fruits. Hardy Flowering Shrubs, Shade and Ornamental Trees, Evergreens, Roses, Vines, Plants, Bulbs, etc. John C. Teas & Son, Carthage, Mo.

PARK AND CEMETERY.

✻ *A Monthly Journal of Landscape Gardening and Kindred Arts.* ✻

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CONTENTS.

EDITORIAL — A Review — Cemetery Work — Labelling Trees—Bills in Congress—Public Schools and Nature Study—A Retrospect—New Copyright Law.....	225, 226
*Japanese Maples.....	227
Plant Nomenclature II.....	230
*Whippingham Church, Isle of Wight, England.....	231
*The Hecker Mausoleum, Woodward Lawn Cemetery, Detroit, Mich.....	233
Cemeteries as They Are and as They Might Be.....	233
*Improvement Associations.....	235
*Garden Plants—Their Geography, XLIX.....	237
Park Notes.....	239
Cemetery Notes.....	240
Michigan State Horticultural Society—Legal—Correspondence.....	241
Selected Notes and Extracts.....	242
Reviews of Books, Reports, Etc.....	243
<i>*Illustrated.</i>	

IT is scarcely possible in these marvellous years through which this generation is passing to enter upon a new one without taking time to breathe and reconnoitre the field. Turn which way we will, and fasten the mind upon any particular feature of human progress, and a marked advance may be noted. Even the arbitrary demands of trade are being met by that keen opposition which enlightenment throws into the breach, when it asserts that thus far shalt thou encroach upon the higher domain of culture, and, then erects a barrier within which the exigencies of business exercise no detrimental force. The idea that has up to quite a recent date prevailed in our large cities that open plots and marginal spaces about public buildings is waste real estate, is rapidly becoming a fallacy of the past, it might more properly be called criminal ignorance, for to remedy the evils it has created vast sums of money will have to be expended, and in many respects the evil is beyond the ordinary means of readjustment. That this is no exaggeration the multitude of projects for the embellishment of the cities throughout the length and breadth of our land will attest. Nor is it alone in the matter of public improvement that such pronounced attention is being given. The people themselves in many

localities are beginning to devote themselves to the improvement of the conditions about their homes. The public press is exerting its influence; the horticultural societies are generally incorporating into their programmes for their periodical gatherings, papers and discussions relating to the improvement of home grounds and the planting material suitable for the purpose. This is one of the most important features of national progress, fraught with possibilities almost beyond conception, in its tendency to make an ideal national home life.

UP to the present time the cemetery superintendent has been congratulating himself on the fact that winter affords him opportunity to recuperate and to form plans for future work. The methods now being adopted by contractors—that of erecting large vaults under enclosures, which are heated to provide against the effects of inclement weather—will tend to keep the superintendent on the qui vive, and provide him with responsibility hitherto unexpected. So far as the cemetery is concerned these innovations have their advantages, not the least being that the cemetery may be saved a large proportion of the unsightliness of building operations in the summer season.

WHILE Boston may be in the throes of a discussion relative to the propriety or advisability of attaching sufficiently descriptive labels to the works of art in public museums, no question will be raised on the matter of labelling trees and plants in our public grounds, gardens and conservatories. In point of fact it would be an excellent idea for every lover of plant life to label any specimen he might possess on his grounds, out of the ordinary or having special characteristics. No matter how charmed an observer might be by the beauties of tree or shrub, a knowledge of the name and class of the object, would not only tend to stamp special points upon his memory, but it would create an interest which would be disseminated over the whole class as its members were encountered.

And especially with the young would such a feature be of marked educational value. But to make the plan effective and of the utmost usefulness, it should be the duty of every park or garden superintendent to see that the labels are maintained in a legible and attractive condition, a duty which has hitherto been performed in a more or less perfunctory manner.

IF the number of bills introduced into Congress for the erection of memorials and monuments in various parts of the country, and the aggregate of appropriations asked in the several bills for the work is any criterion of current conditions, prosperity surely prevails. Quite a number of the projects are worthy of immediate action, while others require more mature consideration. One thing is certain that future public monumental work must conform to the canons of art and refined taste, and the work from inception to finish must be free from the ridiculous conditions which have made recent competitions for several important monuments but little less than farcical.

IN the last report of the Public Schools of Carthage, Mo., very pronounced views are expressed on the desirability of including a share of nature study in the geography course. The superintendent holds that for the time usually spent in teaching geography, "we do not add to the ability of the individual or the good of the community as much as we should." He further says the school ought to teach them tastefully to arrange and care for the home yard, and how to make even a small garden plot contribute to the pleasure and profit of the family. Strong recommendations are made to the teachers to devote a certain amount of time to this line of study. In the training of the young of the present day lies the hope of the future, and nothing will contribute more to the home improvement of the community, or to a proper regard for our forestry interests than this inculcating into the minds of our public school pupils a knowledge of tree and plant life and their relation to human welfare. To extend this idea so that all public schools may incorporate it as a part of school training will hasten incalculable good in the near future.

MANY years have elapsed since it was possible to express ourselves exuberantly in taking a retrospect over the past year. It is scarcely proper to say that there ever was a year in either the individual or national life, in which there was nothing to be thankful for. Such a condition in either case will not bear a thought. But glancing backward over the year 1899, there are so many vistas along which we may look with ardent

satisfaction, that we would fain draw the balance sheet and rest contented with the result preparatory to the massing of endeavor for a new year of work. In the line of the artistic development of the country, few years have marked such substantial progress. Art is becoming not only a part of the educational scheme of our people, but its principles and the knowledge of its effects on their lives are becoming interwoven in the daily affairs, and the recognition that a thing of beauty is a joy forever is the influential factor in the vast improvements made in many departments of applied art. This includes art in its broader applications as well as in particular lines. Looking over the field of monumental work, this condition is preeminently apparent. Were the desire for better and more artistic memorials and monuments not a matter of fact, it would have been impossible to witness the improvement in such work that has marked the past year and is demanded for the future. The people are rapidly coming to understand more of the principles of form and proportion, and their relation to surroundings, and this being so they will not be satisfied with less than their intelligence requires.

A BILL has been introduced into Congress to amend existing copyright law, the proposed amendment being of particular interest to sculptors and designers generally. Its main features are as follows: If any person, after the recording of the description of any painting, drawing, statue, or statuary, or model or design intended to be perfected and executed as a work of the fine arts, shall, within the term limited, and without the consent of the proprietor of the copyright in writing with signatures of witnesses attached, engrave, etch, work, copy, print, publish, or import either in whole or in part, or by varying the main design with intent to evade the law, or, knowing the same to be so imported, shall sell or offer for sale any copy of such article, he shall forfeit to the proprietor all the plates on which the same shall be copied, and every sheet thereof, either copied or printed, and shall further forfeit \$1 for every copy of the same in his possession, and in case of a painting, statue, or statuary, he shall forfeit \$10 for every copy of the same in his possession or by him sold or exposed for sale: Provided, however, that in case of any such infringement of such described copyright the sum to be recovered in any one action brought through the provisions of this section shall not be less than \$250 nor more than \$10,000. One-half of all the penalties would go the proprietor of the copyright, the other half to the use and benefit of the United States.

JAPANESE MAPLES.



CHARACTERISTIC LEAVES.

Of the many interesting and beautiful plants which have been introduced into our gardens and conservatories from Japan, perhaps there are none that are more attractive to many lovers of nature, than the Japanese Maples, and it seems very strange that these little foreigners have not become more widely known in this country. More than a quarter of a century ago specimens of these Oriental maples were first introduced into the United States and since that time they have been planted upon nearly every kind of soil and in a large range of climates from the North* to the South, and repeated experiments have shown that many of these Japanese varieties are quite hardy, even as far north as Southern Canada. They also seem to be able to adapt themselves to a variety of soils which should make them a general favorite for landscape work.

It would not be correct to state however, that these maples do equally as well upon one kind of soil as another, for that is not the case. Although they may grow and apparently thrive upon a variety of

soils, still there are certain definite kinds or conditions of the soil that seem to be most congenial to them and upon such soils they respond most satisfactorily to cultivation.

In the habit of growth the Japanese species have much to recommend them; but I believe their strongest claim upon the gardener's attention is in their foliage, for they seem to supply that delicacy and brightness that is lacking in so many of our native species of plants which are being used for decorative purposes. The different varieties present a large range of colors from the brilliant blood red to the most delicate shades of green, and unlike our native maples the leaves are colored from the time of opening in the spring, and in the autumn become even a more brilliant hue than the red maple. Thus the trees add a life and brightness to the landscape the entire season which is very pleasing, especially so, where grouped together, or intermingled with our native shrubs as single specimens. It is as single plants, that these maples show off to their best advantage. When grown in this manner with a considerable open space about them they form very symmetrical and graceful crowns.

This symmetry of growth together with the large variation of foliage in the different varieties makes the Japanese maples fully as desirable for the small private grounds as for the larger private or public parks.

At the present time the chief objection to these trees for general planting is the cost of young stock, which is greater than many of the planters feel that they can pay. These high prices are largely due to the fact that the demand is at pres-



PLATE I. ACER POLYMORPHUM JACONITA.

ent limited and also to the difficulty experienced in propagating; but as the demand increases the prices will probably come within the reach of all who wish to purchase, for the Japanese maples are not especially difficult to propagate when the work is carried

*Garden and Forest Vol. I, p. 453 and Vol. III, p. 75.

out on a large scale. They will grow readily from seed, although grafted or budded stock gives, as a rule, better satisfaction than seedlings.

among themselves, but all having in general the same characteristics.

The accompanying illustrations were taken of specimens of *A. polymorphum* growing upon the grounds of the Massachusetts Agricultural College where there is a very fine collection both of the *Acer polymorphum* and *Japonicum*.

The photographs were taken the middle of October, about a week after the leaves had fallen from the native red maples and many other deciduous trees had lost their foliage. At the time of photographing the maples were in their most brilliant autumn foliage which in many cases was a most brilliant red which color was retained until the cold weather came about two weeks later. It is a characteristic of the Japanese maples that they retain their foliage much longer than other of our deciduous shrubs and as a rule the leaves do not fall until after the heavy freezes in November in this section, and even later farther south.

This lengthens out the season for a few weeks and makes a very pleasing effect at a time when most deciduous plants have such a forlorn appearance.

Below is given a brief description of some of the different varieties of *Acer polymorphum* and *Japonicum* that have been found to give good satisfaction in the climate of central Massachusetts.

Acer polymorphum. This species given by some authors as *palmatum*, includes a large number of



PLATE 2. ACER POLYMORPHUM PENDULA.

The various types of Japanese maples with us seem to do best in a sheltered position where they will be protected from the cold north winds. Even in such a position they often winter-kill at the ends of the branches, but this does not seem to injure the plants in any way and tends to keep them in a dwarf shrubby form which is quite desirable. They like a rich heavy loam containing considerable humus with a good porous subsoil, thus affording a thorough and rapid drainage. These conditions, however, are not absolutely necessary, for on about any well-drained fertile soil the maples seem to give very good satisfaction.

There are two species of these Japanese maples that have been successfully used for planting in this country. *Acer polymorphum* with its varieties and *Acer Japonicum* with its varieties. In each of the species there are a large number of varieties varying more or less



PLATE 3. GROUP OF JAPANESE MAPLES.
The large shrub at the left is *A. P. atropurpureum*.

varieties, varying considerably in size and habit, none of them however reaching the height of our native maples even in Japan*, and in a large number of cases always retaining the shrubby habit, having no trunk but sending off limbs from near the ground. The species *Acer polymorphum* although not so beautiful as some of its varieties still possesses many characteristics which would warrant its presence in every collection.

It is a strong growing upright shrub taking in many cases the tree form. The leaves are deeply palmately parted into five to seven lobes and are of a bright green or brown green color changing to a brilliant red in autumn.

A. P. Jaconita. This is a strong rapid growing shrub resembling the type quite closely in its habit of growth. The leaves are a bright green color, only slightly palmately parted with broader lobes than the above. In Plate 1 is shown a specimen of this variety; this shrub is about twenty years old and is at the present time rather more than twenty feet high being about the same in diameter.

A. P. pendula. This may be classed as one of the most graceful of the polymorphums. In many respects it quite closely resembles the Jaconita, the color and shape of the foliage is about the same, but the petioles of the leaves are longer and the branches are more slender and graceful, giving the shrub a less rigid appearance. The autumn tint of the foliage is much inferior to many of the other varieties, but its free and graceful habit of growth makes it a very desirable addition to a collection. In Plate 2 is shown a specimen of pendula which gives an idea of what is possible to attain with this variety in a favorable location.

A. P. atropurpureum. This variety is very desirable where grouping is to be followed. It is a fine, rapid grower. The leaves are deeply five to seven lobed, of dark purple or brown color which is retained during the entire season. When grown as a single specimen the color is rather dull but in company with lighter leaved varieties it makes a fine contrast. At the right in Plate 3 is shown a group of polymorphums, the largest shrub of the group is a specimen of atropurpureum.

A. P. sanguineum somewhat resembles the last in growth and general appearance, but the foliage has more of a crimson hue making the shrub more attractive as a single specimen than the above. This variety should certainly be included in every collection.

A. P. rosa-marginatum is a very attractive shrub with slender drooping branches covered with a dense bright green foliage. The leaves are quite small

and deeply lobed, of a light green color with the margins of a bright pink. In the fall the petioles and veins change to a bright red, this, with the light green blade bordered with pink, makes one of the most interesting autumn effects of the polymorphums.

A. P. roseum, a slow growing shrub somewhat resembling the last in general appearance, the foliage is however larger and does not have the pink margins. The chief beauty of this variety is its autumn foliage which is of a most brilliant red.

A. P. crispum robinifolium. This variety has broad slightly lobed leaves which turn to a dark red in autumn, it is a strong grower and should be found in every collection.

A. P. crispum, an attractive upright shrub with bright green leaves and red stalks. The edges of the leaves are more or less convoluted giving the tree a very attractive appearance.

A. P. dissectum. This with its sub-variety, roseum and rosa pictum are the most beautiful of the polymorphums. The leaves are eight to ten parted with oblong lobes tapering to a point. The foliage has a very delicate appearance resembling the frond of a fern. When grown as a single specimen the plant seems to have a dwarf compact habit that makes it very attractive for the lawn or for a pot plant in the conservatory. On the grounds is a specimen of dissectum, rosa pictum, which has been growing for several years, but still keeps the low compact form.

Acer Japonicum. This species is as a rule a much coarser growing plant than the polymorphums and its varieties are less sharply marked, still where the Japonicums grow to perfection they make very attractive specimens. The leaves are considerably larger than those of the polymorphums and are not so deeply lobed. As small plants some of the varieties make very desirable conservatory specimens and no collection of shrubs would be complete without at least a few specimens of *A. Japonicum* and its varieties.

The banyan tree characterizes India. It is a species of fig and one of the most remarkable trees in the world. The heart-shape leaves are five inches long, the fruit looks like a cherry and is eaten by birds and monkeys. The branches extend some 200 feet from the trunk at a height of thirty feet from the ground and send down long straight shoots, which take root in the earth. Sometimes the main trunk will measure thirty feet around. One banyan tree is famous because it covers 1,700 square yards and can shelter several thousand men.

*Sargents Forest Flora of Japan, p. 28.

PLANT NOMENCLATURE, II.

Plants were described before they were named and gradually their descriptions were reduced until trinomials were adopted and still later binomials. All systematists of eminence have recognized the desirability of a standard based upon principle, and among the principle codes proposed by recognized scientists or organizations for guiding writers in botany or zoology were: De Candolle in 1813; British Association for the Advancement of Science in 1842; Association of American Geologists and Naturalists in 1845; International Botanical Congress at Genoa in 1865; American Association for the Advancement of Science, 1877; Societe Zoologique Internationale, 1882; American Ornithologists' Union, 1883-85; International Botanical Congress, Genoa, 1892; and Botanical Club, American Association for the Advancement of Science, 1892-93.

Ornithologists have experienced the same confusion of nomenclature, until in 1886 a rigid code was adopted which enables their writings to be expressed in extreme simplicity and convey an accurate impression impossible in botany without at least the citation of an authority and usually a number of synonyms.

Simplification of nomenclature may be brought about in two principal ways:

1. General agreement of botanists to adopt certain names that are to remain permanent. This has the decided objection of giving authority too arbitrary a power, and even though it might work successfully for a period, principle does not dominate it and would not be continually followed, which is equal to saying that the revolution is postponed, not avoided.

2. Deciding according to the principle of priority is by general though not unanimous agreement considered to be the best solution.

To give definiteness, stability and uniformity to such a code, the oldest work that is most complete and scientific according to our conceptions of the study of plants must be settled upon and this point is marked by Linnaeus.

Even though constant alterations have been going on among botanists, this general upheaval is as repugnant and hampering as it possibly can be to any person connected with the commercial handling of plants, and any remedy likely to appear must come from scientists.

Perhaps one reason why American botanists have not brought about this revolution at an earlier date has been the respect and veneration they chose to show towards the authors of our local botanies and manuals; but mere sentiment has ceased to impede the progress of science in this respect. After deciding upon a new departure a committee of the American Association for the Advancement of Science empowered a committee to complete a list of names of the North American plants as they would appear according to the new code. This has been done and represents the ideas of the association. Unfortunately the list is not complete or it would rapidly obliterate the general necessity of the burdensome usage of attaching the authorities of plant names employed in writing.

As before noted this code has not received the endorsement of all American botanists, and among the notable masters who contend is Dr. Robinson of Cambridge, who is of opinion that there can be no stability in nomenclature and that the principle of priority should not decide the name of a plant, but rather that the decision as to what name should be used for genera should be left to the judgment of individual botanists; but this must result in a continuance of the present status. Others prefer the adoption of a standard work as arbitrary authority, but the fallacy of this has been demonstrated by the disuse of such as Pfeiffer's Nomenclator and Stendel's Nomenclator. General adoption of the ideas in the present code was not general when "Index Kewensis" was started—a fact much to be regretted since this monumental index might have served as a nomenclator for a long period in the future. However, the principle of a nomenclator at all is at fault if intended as a standard basis of nomenclature for all time.

Supposing, however, that Dr. Robinson's proposition was agreed upon, it would involve more or less changing and its principal usefulness is expected to render the changes gradual. It is suggested that—"while the scope of the rule is left to the direction of writers, it is urged that generic nomenclature should not at present depart far from that of the three important works: Bentham & Hooker's Genera Plantarum, Baillon's Historie des Plantes, and Engler & Prautl Naturlichen Pflanzenfamilien, but the differences in these three works are so marked that to a great extent the means would defeat its own end.

Emil Mische.

(To be continued).

Among the Anglo-Saxons such tribes as practiced the right of inhumation seem for the most part to have committed their dead to the earth in the very simplest form, unprotected by coffin or aught that could delay the work of decay. The sole example of a *totden-baum*, therefore, is that of Gristhorpe, in Yorkshire, and this belongs to the Celtic period. But it was not so with the Franks. Round Merovingian graves a black residuum will often be noticed, which might easily be taken for charcoal, but which has been shown by chemical analysis to be formed by decomposition of wood. This residuum is very solid, and, as nails do not appear to be met with, it is most probable that these old Frankish *noffi*, *naun*, or *sarcophagi* were in fact formed from solid trunks of trees. In a Merovingian cemetery discovered just outside the gates of Metz, M. Victor Simon found the marble column of some Roman edifice which had been sawn asunder and hollowed out to receive the remains of a Frankish chieftain, in lieu perchance of the more perishable *totden-baum*. Herr Lindenschmidt also has met with the same circumstance at Mayence. The opinion, too, finds further confirmation in a remarkable passage in Gregory of Tours relating the cruelty of Rauchingus, a Merovingian noble, who prepared a tree for the purpose, and caused two of his slaves to be interred alive therein for marrying without his consent.

—The Casket.

WHIPPINGHAM CHURCH, ISLE OF WIGHT, ENGLAND.

Whippingham church, known also as the Queen's church, as her Majesty Queen Victoria, often worships there, is but a few miles distant from the Royal residence, Osborne, Isle of Wight. In former years the Queen worshiped there almost altogether, then for a time, not so often, but within a year or two past, since the death of her son-in-law, Prince Henry of Battenburg, whose remains are enclosed in a vault within the church, her visits are again frequent.

The churches of the Isle of Wight, especially on the south coast, are among the most ancient of England, and present the most interesting sights of the many the country affords. Some of them date back to the landing of the early Christians. The old one at Bonchurch, for instance, is supposed to owe its origin to those pioneers of Christianity and civilization, being one of the very first erected in Great Britain.

The present Whippingham church occupies the site of an older one, on the side of a low hill which slopes to the Medina river. Looking on the beautiful edifice one can almost forgive the sacrifice of the old structure. It was erected in 1861, after designs by the late Prince Consort. Associated as it is to royalty, a something dear to all Englishmen, it is much visited on that account, aside from its merits in an architectural way.

To add to its attractions it is situated along a beautiful country road, well wooded, as, indeed, are most all parts of the Island. The Queen's pew is approached by a private door in the chancel, and over it is a handsome white marble monument to the late Prince Consort. Princess Beatrice, Princess Henry of Battenburg, was married in this church, and now that the remains of the Prince lie within its precincts, there are annual memorial services held there.

It is not uncommon to hear it said that no people uses cut flowers on such occasions as lavishly as we do. Before me is a newspaper clipping of the last memorial services held there, and certainly the tomb must have been hidden beneath a wilderness of flowers. It will interest many if I enumerate some of the pieces. Her Majesty brought a wreath composed of calla lillies and white azaleas, studded

with crimson tulips. The widow, Princess Henry of Battenburg, a chaplet composed of ivy and lilies-of-the-valley. The four children of the late Prince brought respectively an anchor, a cross, a heart and a wreath, each being made up of solanum, tulips and immortelles. Among other offerings were these, a wreath of double white primula and crimson tulips; a wreath of calla lilies and blue violets. Orchids, pancratiums and azaleas were also mentioned. Over the altar stood a magnificent cross of callas, rising seven feet, and above it was suspended a wreath of lily-of-the-valley, while the space on each side was lightly hung with strings of common ivy.

In the churchyards of the many churches I vis-



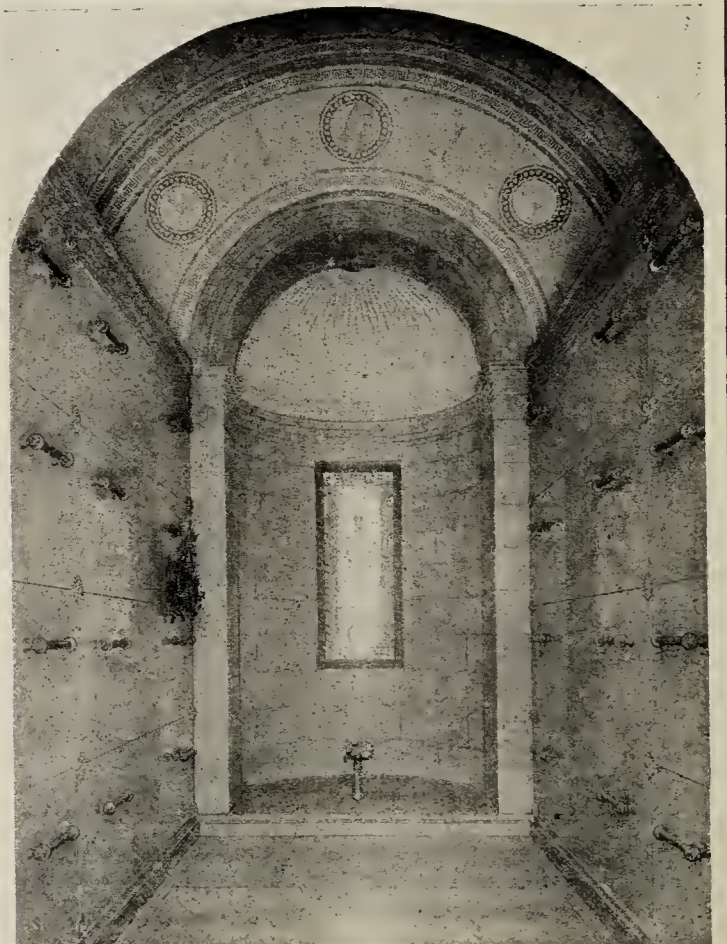
WHIPPINGHAM CHURCH, ISLE OF WIGHT, ENGLAND.

ited, as well as in the cemeteries, I saw abundant evidence of the use of flowers, and many of the combinations were most beautiful. The pretty blue lobelia thrives so well there that it is much used and one can imagine how nicely this would tend to make pleasing contrasts with other flowers. The filling of urns and vases with fresh cut flowers though well in evidence, seemed to me hardly as common as with us, more attention being given to the setting out of flowering plants.

"Still bloom, such flowers for her dear sake,
I love ye all the more
That she has winged her mystic flight
To Heaven's eternal shore."

There is certainly something in flowers which awakens our better nature, or why do we associate them so much with those we have lost? I have written much on the beautiful Isle of Wight, so that my readers can realize what a delightful spot it is, and how well worthy a prolonged visit.

Joseph Meehan.



THE HECKER MAUSOLEUM, WOODWARD LAWN CEMETERY, DETROIT, MICH.

THE HECKER MAUSOLEUM, WOODWARD LAWN
CEMETERY, DETROIT, MICH.

The Hecker mausoleum, erected in Woodward Lawn cemetery, Detroit, Mich., was designed by Messrs. McKim, Mead & White, architects, New York City, and is constructed on the exterior of a high grade of white Vermont marble. It is very attractively located on a lot 135 feet in diameter, which is the center of the circular drive terminating a main avenue from the entrance of the cemetery, and it is so situated that it can never be exposed to the detrimental effects of neighboring inappropriate stone work.

The illustrations clearly show the main features of design and construction. It is roofed with copper, and in the interior, the sides, floor and ends to springing line of vaulted ceiling, are executed in Tennessee marble. The ceilings and ends are decorated with mosaic, with medallions of various colored foreign marbles.

The catacombs on the two sides as well as below the floor are constructed of heavy slate slabs and Tiffany glazed brick. The mausoleum is lighted by a beautiful window set in a circular bay, shown in illustration, protected by heavy ornate bronze grilles. Bronze doors of fine design guard the entrance.

The stone work leading to the entrance is also given in the front view. Four carved marble vases flank the walk and two large carved consoles are prominent architectural details at the entrance. On the plate on the opposite page is given a front view of the mausoleum on the upper part, and rear and interior views on the lower. The bronze work was carried out by the Crescent Brass and Iron Works of Detroit.

The planting is strictly formal; masses of Siberian Arbor Vitæ are used in connection with the two consoles and at cheek blocks of steps. The intention is to trim the arbor vitæ hedge-like with square tops, sides and ends. Irish junipers are planted on either side of the walk, in a straight line at regular intervals, with a group of Spiræ Van Houttei at either end.

In a semi-circle around the rear of the building and evenly spaced, are eight Lombardy poplars, with an irregular belt of shrubbery planted where the terrace merges into the general lot grade. Varieties of golden bell, lilacs, Japan snowball, deutzia, and hydrangea are planted in this belt.

The effect of the planting so necessary to set off such a memorial can be appreciated from the illustrations, and likewise the advisability of setting such a memorial in a lot of sufficient area to display its character.

CEMETERIES AS THEY ARE AND AS THEY MIGHT BE.

Many people to whom age cannot wither nor custom stale the cadaverous look of a cemetery, spare their sensibilities by keeping out of cemeteries as much as they can, and accept their existence as unsightly necessities. But is their unsightly existence necessary? And if it can be modified, is it not most important that it should be? Even in its present forbidding state, the cemetery is a resort for those who have time and desire for a little fresh air, and feelings not made of such penetrable stuff as to be daunted by mere bristling arrays of tombstones. They wander around and find a mysterious pleasure in reading scores of names and dates and obituary facts and genealogies of people unknown to them, and are probably quite satisfied. Then they come home with a sense of having had an outing and a little mild intellectual exercise. If the burying ground were of the old-fashioned kind in which the survivors had exerted themselves to record their testimony to the qualities of the deceased and their own peculiar literary bent, this interest in tombstones would be more easy to understand. But people are getting to confine themselves more and more to dates, names, and facts, with probably a text from scripture, and to bestow their poetical and imaginative work on the local paper. The unmoved contemplation of things ugly or repellant in any way is sure to have its effect on the character; and though they who wander among the tombs do not know it, their moral keenness has been to some extent blunted and their perceptions injured. They are less highly organized when they come out than when they went in; for without some dulling of the sensibilities, no one can learn to regard quite serenely those gaunt legions of stone sentinels, all unlike yet so monotonous in their likeness, all together yet with no kind of union, all so cunningly hewn and squared and polished, yet so crude and savage, with a ghastliness about them to which our simple ancestors who set up Stonehenges and cairns to their dead of rocks hewn by the air and water alone, could never attain. It is as though the fable of Cadmus wherein teeth were sowed to come up men had been reversed, and the men had been sown to come up dragons' teeth. The custom which can inure people's minds to the average cemetery must be powerful indeed, and the Christian faith in the power of the body to one day rise from under those superincumbent masses of stone, would seem to be quite impregnable.

New cemeteries are being made and old ones extended, and so long as population increases so will the cemeteries, until we cease to entrust our dead to the soil. Are we to go on indefinitely making more and more of the earth's surface desolate and spectral with these petrified forests? Or is it necessary to devise some entirely new way of bestowing those whose memory we would wish to keep green, before we can do it without making their abodes into deserts of bald formalism and depressing monotony? The answer is no, for not only can ways of avoiding these things be devised, but they have been both devised and carried out; in no country so thoroughly and well as in our own, though not com-

monly, even here. A little thought on the causes of the effect of a burying ground will suggest its remedy.

In the first place, a tombstone even the simplest need not be ugly or depressing in itself. It gains these qualities from its surroundings. It gains them when it is surrounded by others like itself and the more of them there are, the more waste becomes the wilderness.

In the second place, the asperity of marble and granite, of plane and paralleliped, may be softened and relieved and even beautified by contrast, contrast with the infinitely various and graceful forms of vegetation, with foliage and shoot and bough and tendril, with green and red and brown, but most of all with green. Even the turf, though verdant and lush and refreshing, becomes trim and monotonous, but tree and shrub and plant and vine need be no more monotonous than the clouds. Since man first began to express his delight in the world he lived in, he has used vegetation to adorn and enhance his joy, to adorn and soften his griefs, ivy and vine and laurel and lilies and roses to crown his triumphs and feasts, his births and marriages, cypress and willow and rue and violets and what not to symbolize his hopes and grace his despair in death or suffering; for he knows, though he seldom stops to remember it, that to vegetation he owes his existence and all in it that seems good of the earth.

Here then are the two causes that make our burial grounds so dreary and forlorn. They are places of stones and not of herbs, of solid geometry and not of life and beauty. And it there is any place more than another where evidences and suggestions of life should abound, surely it is in a Christian cemetery in which those who bury their dead can find little consolation but in the hope that death is no death, but only the entrance to another life. So if we must have monuments of stone and marble, let us not put them all together to set off and exaggerate each other's bareness, but put them where but a few can be seen at once, and make the screens that separate them of trees and bushes disposed as irregularly and naturally as may be. Let there be no headstone without its accompanying branch, no obelisk or storied urn or animated bust without a plentiful background of thick foliage. Instead of there being more scanty growth of green things than in any city park, let them be more generous. Let tree and shrub and vine and flower abound everywhere, so that the grim work of the mason may become refined and beautiful, and the facts that he records become meaning, and the texts of scripture impressive and pathetic instead of being lost by vain repetition amid the surrounding multitude of others. For to the dead is due a habitation as fair as to the living.

The proposition reduced to these terms would seem simple enough, even if we had no examples of burying grounds actually made on these lines. Fortunately we have them conceived and carried out with complete success; none among them probably so notable as that of Spring Grove at Cincinnati, due to the remarkable artistic taste and persistence of Mr. Strauch. Like other innovators, and more than most, he had to encounter and overcome the dogged and powerful resistance of vested interests and rooted prejudices, to

fight and cajole his foes who should have been his friends, for their own good. But his cemetery is an actual achievement, known over America and Europe as one of the finest in the world, in which his own monument might be set up and inscribed as justly as that of Sir Christopher Wren "Si monumentum requiris, circumspice."

To those interested in constructing new cemeteries or improving old ones, a few suggestions may be useful.

Large open spaces like those in our public parks, vanishing into remote and varying vistas are not attainable in a cemetery where all things must be subordinate to the monuments. Then let the open spaces be comparatively small and planted thickly on the outskirts. Small burying plots can be arranged among these outskirts so as to be easily accessible, yet not to interfere with the view of the whole scene. Though more secluded, they would be more individual and easy to find than lost in an open space among a large number of others.

Those who could afford to purchase large lots could have them laid out by the cemetery authorities, and be restricted to one monument.

The smaller and cheaper plots to be set away from the main lines of traffic, and arranged so as to economize space in large groups with plenty of planting among and around them.

Liberal space to be set off in the beginning where the designers thought best, not for burial, but for developing the varied and picturesque effect of the whole place. This has been found to pay not only in an aesthetic, but in a commercial sense, for the more beautiful the grounds, the more readily do the plots sell; which shows that the popular instinct is right after all. All natural features, hills and depressions, timber and steep rocks to be taken advantage of to prevent the monuments from intruding into the general aspect of the place. A tombstone being a private monument in a public place, should not be allowed to be much more conspicuous than other private monuments.

All monuments to be approved by the cemetery authorities. Low and horizontal stones to be encouraged as much as possible. It has been suggested by a writer on this subject that natural stones with a sufficient surface dressed off for the inscriptions, would make good gravestones. For the general effect of the place, probably nothing could be better than these with their proper accompaniments of shrubs and plants.

Let these principles of design be followed from the beginning and judiciously adapted to the circumstances, and all rules rigidly enforced for the common benefit; it will be found that by little more than apt arrangement of the materials already in use, cemeteries may be made as beautiful as they are commonly hideous.

H. A. Caparn.

The oak belongs to England. Fifty years ago the people wore a sprig of oak on May 29, which was royal oak day, but the fashion has almost disappeared to-day, and even Prince Charlie's escape by hiding in the branches of a giant oak is not celebrated nowadays to any degree.



IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

PLANS.

Winter is the time to think—especially to think of the out-of-door work of the coming spring.

Improvement Clubs might profitably give attention now to a carefully thought out plan for the work of the coming season.

The new hundred—1900—demands something special from all. It should mark an era in the advancement of the masses—and this advancement may well begin by a general improvement in the neatness, healthfulness and beauty of every day life and surroundings. And Improvement Clubs are the legitimate, ready-made centres from which the widening circles of such a movement must radiate.

Many, probably all of the clubs, have already done work that will prove them to have builded better than they knew.

In planning for the coming year, it will certainly be wise to arrange for several events that will serve not only to attract the attention of the public to the immediate objects in hand, but also to fix that attention on the cause of these visible, definite effects, viz., each society as a society. The probable result will be increased resources in membership and means. It should not be forgotten that in union and in numbers lie strength.

Arbor day would seem to furnish both excuse and reason for the first of this open air series of events, and the improvement of school house grounds may fittingly be chosen as the chief feature of the work.

To perpetuate this line of effort, children must be educated in it, and nothing will catch and hold their attention as will work connected with their own special interests of which their school life is the head and centre.

Again, work done on the school grounds is not done for one set of pupils only, but for all who will come after—a long and motley procession of children will rejoice in the shade and attractiveness resulting from the well planned, carefully executed work of one Arbor day.

An open meeting of the Club might be held as a preliminary of this event, and every inducement should be brought to bear to insure a full attendance of non-members. At this meeting opinions as to what the town most needs might be elicited and then, by discussion and suggestion the ideas of the

Club may gradually become the general opinion and desire.

This discussion should emphasize the educational fact that merely setting out, in hap-hazard fashion any sort of a tree in any sort of a place is *not* the end and aim of Arbor day. One kind of a tree is



GLYPTOSTROBUS PENDULA.
In Tower Grove Park, St. Louis.

good for one purpose and set of conditions while another kind is better and even necessary for other purposes and environments. For instance: it can be clearly shown by photographs, half-tones or stereopticon views, that while the stately, vivid green spire made by the bald, southern cypress is inspiring as a feature of the landscape, it is useless

as a shade tree, for which purpose elms, maples and lindens are among the best, though many others are equally good—the choice depending on the conditions; that often a tree with fleecy, easily stirred foliage, like the white weeping birch or the airy Russian golden willow will add necessary lightness to foliage masses; and that in other cases and places shrubbery or trees of low growth, are required.

By this means a correct valuation of available planting material may eventually become every



RUSSIAN GOLDEN WILLOW.
Wooded Island, Jackson Park, Chicago.

day knowledge, as it assuredly should among the people.

If carried out with the resourceful tact inherent in the best Club leaders, such a meeting is likely to develop intelligent enthusiasm in Arbor day work—a consummation devoutly to be wished. Decoration day would better be the choice for a second concentrated effort to interest and to educate the public in improvement work.

It should not be difficult to show that something tending to permanently improve the general appearance of the local cemetery would more truly honor our soldier dead than would any quantity of perishable flowers laid on individual graves. Let the

flowers be scattered by all means—provided that they are removed before becoming unsightly. But let them be incidental, merely supplementing some lasting memorial such, for instance, as a new fence or a gateway, a belt of trees and shrubs as a wind break or a screen; well made driveways; some good shade trees so placed that they will furnish relief to visitors from the heat and glare of the mid-summer sun, or (as a much needed humane movement) let shade trees be placed near the hitching posts for horses. In short any thing that can be done to increase the beauty or the comfort of the cemetery is a fitting memorial to the dead as well as a monument to the taste, energy and public spirit of the living.

Having gone so far with the outline of the coming campaign, it is probable that enough enthusiasm will have been developed to enable any society to fight it out on this line if it takes all summer.

Our illustrations show one of many fine specimens of southern, bald cypress, *Glyptostrobus pendula* to be seen in Tower Grove Park, St. Louis, where the character of the soil—spongy even in dry weather above a sub-soil of fire clay—suits them admirably, none of them, however developing the queer “knees” that are invariable in the cypress swamps of the south; and a pretty little Russian golden willow on the Wooded Island in Jackson Park, Chicago.

F. C. S.

Warwick castle is held by many visitors to be the most beautiful seat in England. The large baronial hall is a magnificent room. It is decorated with the most perfect specimens of armor, furnished in a luxurious manner, and masses of flowers and large palms abound on every side.

* * *

The original tomb of Washington was built of brick, according to his will, but in 1837, owing to the fact that three wooden coffins had already decayed and disappeared, it was decided to have a marble sarcophagus. This was provided by a Mr. John Struthers of Philadelphia, who received permission from the surviving executor, Major Lewis, to present it, and he also furnished one for Mrs. Washington. They were cut from Pennsylvania marble. It was soon discovered that the dampness of the vault would mar the beauty of the marble, and it was decided to enlarge the structure so as to permit of the sarcophagus standing in dry air and in view of all visitors through the grated gateway. It was on October 7, 1837, that the illustrious remains were placed in their present receptacle, where they have since remained. This shrine is generally familiar to American citizens, with its simple inscriptions and profound interest.

GARDEN PLANTS—THEIR GEOGRAPHY, XLIX.
POLEMONIALES.

THE POLEMONIUM, CONVULVULUS AND SOLANUM
ALLIANCE.

(Continued).

Phacelia including several plants such as *Whitlavia*, *Eutoca*, etc., has 53 species all North or South American. *P. Whitlavia*, *P. tanacetifolia*, and a few others with purplish, pinkish or white flowers are cultivated.



WIGANDIA MACROPHYLLA.

Conanthus arietoides is a little annual from the dry regions of Arizona northward to E. Oregon. It has showy purple flowers for the size of the plant.

Emmenanthe again is a genus of low annuals from an inch to a foot or two high. One or two in cultivation have yellow flowers. The 6 species are from the Pacific slope.

Wigandia has 3 or 4 species from the tropical mountain regions of Central and South America. They have fine majestic foliage, grow to 10 or 12 feet high, and are employed as sub-tropical bedding plants or as single specimens. Some are virulent stinging plants. Their purple cymose flowers are borne during winter, but are not worth the hot-house space needed to produce them.

Cordia is a large sub-tropical and tropical genus with woody representatives on the Mexican border and S. Florida islands. *Eriodictyon tomentosum* is a South Californian low shrub. *Bourreria Havanaensis* is a glabrous shrub. *Ehretia elliptica* is a tree of the Mexican border. *E. acuminata* and *E. serrata* are Himalayan and in cultivation in California and Florida gardens.

Heliotropium has 120 or more species of shrubs,

perennials, and annuals. Of the latter *H. suaveolens* from the Caucasus, *H. convolvulaceum* from Nebraska and *H. Greggii* from Texas and Mexico are fragrant, and worth the attention of those who cannot indulge the Peruvian varieties. Some of the plants known as *Tounefortia* are quite pretty though scentless.

In the *Boragaceae* there are a number of genera such as *Trichodesma*, *Omphalodes*, *Cynoglossum*, *Lindelofia*, *Paracaryum*, *Myosotidium*, *Eritrichium*, *Symphitum*, *Anchusa*, *Lycopsis*, *Pulmonaria*, *Mertensia*, *Myosotis*, *Macromeria*, *Lithospermum*, *Macrotomia*, *Echium* and *Onosma* from which selections may be made in blue, white and yellow flowers of great showiness, though sometimes borne on coarse plants.

Ipomaea has 350 or more species inhabiting the warm and tropical parts of the world. No true *Ipomaeas* are wild in Europe, however. They are often and often among the most beautiful climbers, trailers or shrubs met with in tropical countries. There are about 26 species natives of the United



TRICHODESMA PHYSALOIDES.—*Gardeners' Chronicle*.

States, and these, too, are often very handsome. *I. leptophylla*, found on the western plains from Nebraska to Texas, is a somewhat shrubby habited perennial worth attention, and the Brazilian *I. fistulosa*, also of upright habit, has naturalized in parts of Texas.

Calystegia, in quite a number of species and varieties, is now regarded as a section of convolvu-

lus, and what were relied upon as distinct characters have proved fallacious.



IPOMEA VERSICOLOR.
SYN. MINA.



I. FISTULOSA.
—From Gardening.

Convolvulus, "bindweed," has 160 species in the temperate, sub-tropical and tropical regions. They are often pretty garden plants, but such as the *Calystegias* and "Bearbinds" are apt to be nuisances.

Porana has 9 species in the Indian peninsulas, the Malay islands and Australia. They are sometimes handsome climbers with thyrses of white flowers. They should be tried at the south.

Nolaneæ is a little tribe of 4 or 5 genera and about 26 species from Chili and Peru. They are sub-shrubby or annual herbs often handsome in the way of some convolvuli, with shades of blue, blue and yellow, and yellow and white flowers. They are well worth a trial.



CONVOLVULUS SEPIUM REPENS. SYN. CALYSTEGIA.

Cuscuta "dodder" has about 80 species in the world so far as known, of which I think Dr. Engel-

man made out 32 forms to be natives of the United States. The seeds vegetate in the ground, but the thready plants are parasitical upon various trees, shrubs and herbs, hardly ever those of their own alliance so far as I have seen. Some of the bright orange species are quite showy in the vicinity of water over which they often throw long golden shadows.

Lycopersicum is the tomato in 3 or 4 species.

Cyphomandra Betaccum is shrubby.

Solanum has somewhere between 750 and 950 species. They are found all over the world except in the very coldest regions. Several are climbers. Very many are highly ornamental shrubs, both in foliage flowers and fruit, and although it seems unnecessary several hybrid forms have been produced. The potato belongs to the genus, and a wild form is found in New Mexico, a little starved looking affair when compared with the cultivated forms. The fruits of several species are unwholesome and poisonous. *S. Seaforthianum* is a climber, described as having lilac or bluish flowers.



SOLANUM SEAFORTHIANUM.

Capsicum "red pepper" is naturalized in Florida and Texas.

Physalis also in some species is naturalized in various parts of the sub-tropics, and there are several edible species at the south. *P. alkekengi*, the European "Winter Cherry," and the Japanese form *P. Francheti*, have bright colored calyxes enclosing the berries and are good ornamental perennial herbs.

"*Withania*" has been sold in one species recently as "Climbing Lily of the Valley!" Torrey applied the name to 2 or 3 *chamæsarachas* of the south western states, but the true species are Mediterranean and Canary Island plants. The flowers of the plant advertised are axillary and single, not in "valley"-like racemes.

Lycium "box thorn" has 70 species scattered over the world, and among the 16 or 17 shrubs and trailers found along the Mexican border are some quite superior to the naturalized *L. halimifolium* or *L. barbarum* (whichever it may be) often found in the Atlantic states. *L. Chinense* is quite showy in fruit.

James MacPherson.

(To be Continued).

PARK NOTES.

The Canadian Park at Banff is to be stocked with mountain sheep, goats, moose, antelope, deer, and other animals.

* * *

The Bureau of City Property, Philadelphia, has voted \$5000 to restore the old Bartram House, in Bartram Park, and other relics of the period of the old quaker botanist.

* * *

A drinking fountain will be erected in Cairo, Ill., to cost \$10,000 as a memorial to the late Capt. W. P. Halliday. It will be presented to the city by his heirs.

* * *

The Kansas Municipal League will present a bill at the next legislature to empower cities to plant shade trees along streets and cut weeds on vacant property when owner fails to do so.

* * *

The New York state forest preserve board has recently purchased about 40,000 acres of land in the Catskills. This purchase brings the holdings of the state in the Catskills to more than 300,000 acres. Further purchases are promised.

* * *

The work of Savannah's, Ga., Park and Tree Commission is attracting considerable attention outside local limits. Both Richmond and New Orleans have recently called upon the commission for advice and information upon the subject of tree planting and park work in general.

* * *

A public fountain is to be erected in the near future in Kenosha, Wis., the gift of a wealthy citizen whose name is not divulged. It is to adorn Market Square and will be one of the handsomest public memorials in Wisconsin. Kenosha has been a most fortunate city in respect to gifts from her citizens.

* * *

The whole city front of Atlantic City, N. J., is included in the Ocean Front Park scheme, the deeds of which have been approved by the city council. In the agreement between the property owners and the City fathers, it is stipulated that the city shall keep the land forever open and unobstructed and maintain the same for public recreation and no other use whatsoever.

* * *

Among recent gifts of land for park purposes are the following: Reading, Pa., a tract of 12¼ acres adjoining City Park, by George F. Baer, president board of park commissioners. Hon. Hugh McCurdy, a leading citizen of Corunna, Mich., has presented that town with a park containing 34 acres. It is in the heart of the city and will be known as the Hugh McCurdy park.

* * *

One of the great difficulties attending some of the constructive features of the Paris Exposition to be opened this year, was the preservation of the large trees, the people being strongly opposed to their destruction. Where underground work jeopardized their existence, the engineers devised a scheme of suspending them, practically over their places, while the underground work was prosecuted beneath and about them. Trees, earth and roots were lifted bodily and when the digging and other work was completed they were lowered in their places, and reinstated almost in their primal conditions. Herein is a suggestion ethical and practical; public opinion evidently controls the French authorities and the work itself is a lesson.

The proposed plan for the improvement of Audubon Park, New Orleans, La., under the designs of Messrs. Olmsted, Boston, would involve an expenditure of some \$100,000. There is great enthusiasm over the project but this expense is somewhat of a stumbling block. To overcome this it has been proposed by Mr. Lewis Johnson, a park commissioner, that 40 New Orleans citizens should subscribe \$2500 each, and he opens the list by putting his name down first. His generous incentive is greatly appreciated.

* * *

The special agent of the government land office who was sent to the petrified forest of Arizona to investigate the advisability of forming a national park of the region, will report favorably on the project and will advise that territory 18 miles by nine miles be included in the park. In this area lie four different groups, or forests, of fallen trees, although it does not include all of the groups of petrifications in the valley. There are millions of tons of the agatized wood in the proposed park territory. Many tree trunks were measured 165 feet long and as large as four feet in diameter. One group of petrifications, locally known as Rainbow park, is the most remarkable spectacle of color even seen, and the effect of the sunshine on the brilliant confusion of stone fragments was dazzling.

* * *

At a recent meeting of the executive committee of the American Society of Landscape Architects, held in New York, resolutions were adopted opposing the location of the Soldiers' and Sailors' monument, as at present proposed in Riverside Park, near 89th street, on the following grounds: "That a monument of such importance in that locality should be placed on the axis of Eighty-ninth street, as well as of Riverside Drive. That the monument as at present designed cannot be placed at the intersection of the axis of Eighty-ninth street and Riverside Drive without blocking the promenade of Riverside Drive. The monument placed as proposed will involve the destruction of a considerable area of primeval forest. The character of the design contemplated obviously requires a much larger area of land about it treated in architectural harmony with it."

* * *

The magnitude of the requirements for planting purposes in the Chicago park system may in a measure be judged by the following. During the past four months there have been planted out in the parks and boulevards of the South park system 209,092 trees and shrubs, divided thus: Jackson park 94,440; Washington park, 65,880; Drexel Boulevard, 19,550; the Midway, 15,130; Drexel square, 10,930; Garfield boulevard, 2,778. Of the above only 500 were purchased, the remainder coming from the Jackson park nursery, which is estimated to have saved the board \$20,000 during its three years existence. There are at present some 60,000 trees and shrubs in the nursery, which will be increased in due course to fill requirements. This seems a strong argument in favor of establishing nurseries for park systems.

* * *

In the recent annual report of Supt. Wilcox of the Yosemite, Calif., National Park, he recommends the government to buy out the owners of patented lands within the park limits and so remove one great source of trouble and destruction. Among other recommendations are fixing of penalties for violation of the park regulations; obtaining authority from the state of California to establish a camp for troops within the Yosemite valley for patrol purposes, a permanent camp to be constructed at Wawona; a systematic burning of fallen and dead timber, to prevent forest fires; and some decisive action to prevent diverting the waters flowing into the park. The report says the deer within this government preserve are fairly plentiful and tame, bear, quail, squirrels and trout are numerous, arc mountain lions and lynx are in evidence.



CEMETERY NOTES.

Plans have been submitted to the authorities of Mount Muncie Cemetery, Leavenworth, Kan., for a private vault, 16 by 20 feet, to cost \$10,000, constructed of granite. The plans have been approved.

* * *

A crematory is to be constructed in Cleveland, O., by the Cleveland Cremation Company, a corporation of \$50,000 capital, owned by Cleveland people. A permanent plant will be erected at a cost of some \$15,000.

* * *

In every city or town in the Netherlands, says an exchange, you will find a Rosemary street. In olden days only undertakers lived in them, the rosemary being, in the language of flowers, specially dedicated to the dead.

* * *

The report of the Fair Haven Union Cemetery Association, New Haven, Conn., shows 66 lots under perpetual care, the fund amounting to \$6,663.52. All these lots "have a bronze metal sign bearing the inscription 'perpetual care,'" and the committee hopes that all the 213 lots will before many years bear this inscription.

* * *

The forty-ninth annual meeting of the Mount Royal Cemetery Company, Montreal, Canada, was held last month. The report showed a perpetual care fund of \$47,606, and a balance from receipts and expenditures of \$6,481.82. During the year there were 1,354 interments, and there are 3,542 lot owners owning 7,420 lots.

* * *

Negotiations have been consummated by the New York syndicate for the purchase of 450 acres of land between Richmond and Giffords, Staten Island, N. Y., for the location of two large cemeteries to be known as St. Agnes and Seaview. The company proposes to expend some \$400,000 on improving the property.

* * *

A worthy action is that of Mr. Edward Severin Clark of Cooperstown, N. Y., who in commemoration of the 88th anniversary of the birthday of his grandfather, the late Edward Clark, presented to the trustees of Lakewood Cemetery a check for \$3,885, the amount of the indebtedness of the association. This unexpected gift leaves the permanent lot-keeping fund unimpaired, and affords brighter prospects for the future.

* * *

The annual meeting of the Riverside Cemetery Association, Cleveland, O., was held last month. The receipts for the year amounted to \$23,284.53, of which the sale of lots gave \$19,918, and there is a balance in the treasury of \$19,460.88. In the report of the president he says: "The rule dispensing with Sunday funerals has proved a wise one, and has already resulted in much good to the cemetery."

* * *

An innovation in cemetery etiquette is certainly that of Mr. Krueger, who recently held an inspection reception in his mausoleum at Fairmount Cemetery, Newark, N. J. The dimensions of the mausoleum, which is built of granite and cost

\$100,000, is 25 by 26 feet exclusive of wings. The height from the ground to the top of the surmounting figure, symbolic of eternal life, is 46 feet.

* * *

The two granite piers at the entrance of St. Agnes Cemetery, Albany, N. Y., have been completed by the addition of two marble statues placed thereon by the Messrs. Harrigan Bros., in memory of their parents. The subjects are the "Immaculate Conception" and "St. Agnes." and bronze tablets are added containing inscriptions. The statues were cut in Italy from original models and from statuary Carrara marble.

* * *

A receiving vault has recently been completed in Fairview Cemetery, Little Falls, N. Y. It is on plan 34 ft. by 32 ft., and is constructed of sandstone with slate roof; the interior is lined with buff brick. The floor is of marble tile and the ceiling is of stamped steel. Catacombs and external trimmings are of Vermont marble. Cost \$6,000. There is ample room and convenience within for the holding of brief funeral services.

* * *

The trustees of the cemetery department of Boston have issued a statement in connection with the much discussed question of the erection of a monument by the Victoria Club over the remains of the British soldiers, killed in the Revolutionary battles about Boston, and buried on Boston Common. The trustees are in favor of granting permission if it can be satisfactorily proved that the remains of the soldiers are interred in the Common and the exact place can be determined.

* * *

The reports rendered at the annual meeting of the lot-owners of Oakland cemetery, St. Paul, Minn., to October 31, 1899, showed net receipts of \$20,805.04 and net expenditures, \$19,813.52. Among the receipts were: Lot sales, \$7,505; single grave sales, \$1,098; interment fees, \$1,628; greenhouse sales, \$4,338.95; interest of perpetual care working fund, \$4,397.99. The expenditures included: pay rolls, \$12,660.57; greenhouse, \$755.48; greenhouse construction, \$1,727.71. Thirty-six monuments and 101 markers were erected. The number of interments for the year were 295 making a grand total in the cemetery of 13,510.

* * *

At the expense of the Chinese government, the bodies of 65 Chinese buried in the cemeteries of Chicago have been exhumed and shipped to China, to be buried in sacred soil in accordance with their religious requirements. Sixty of these were buried in Rosehill cemetery, and three in Graceland. One who died of small-pox will have to remain, the health department refusing to allow the body to be disinterred. The disinterment will be accompanied with elaborate ceremonies, peculiar to the Chinese. Only the bones of the dead are to be moved, for each body has been left in the ground until every vestige of flesh has disappeared. These will be placed in boxes of zinc and carefully nailed up to prevent the influence of evil spirits. Incense will be burned and incantations performed until the sacred soil is reached, after which time all danger from evil spirits is passed. After they are buried food will be placed near the graves for many weeks in order that the dead may not suffer. The cost of transporting the bodies is about \$500 each. The railroad and ship companies will not accept them unless they are securely boxed, and have a certificate that there is no danger of contagion. No extensive shipments of bodies have been made from Chicago for six years, as the bodies must lie buried for that length of time.

The Michigan State Horticultural Society.

A report of the committee on Improvement Associations or Clubs has been kindly furnished by Mr. Will W. Tracy of Detroit, chairman. The meeting was held December 6th last. After referring to ruling conditions it says: "It is true that while this work must be largely done through individual effort, people can be induced to make such effort most effectually through the work of an association or club. A few women, even if not more than four or five in number, united in a club for the improvement of the four-corners of the village, can have vastly more influence over individual owners, the highway commission, the village council, or to prevent injury to trees by a telephone company, than their aggregate influence if exerted as individuals. Many such associations have been organized and have accomplished marvelous results in changing unattractive, dirty villages and streets into such places of beauty as to lead city people to make their summer homes there and induce others to locate permanently, to the great improvement of the social life of the town, and last, but perhaps not least in the eyes of many, the adding to the money value of every lot in the village.

"Our society strongly recommends the formation of such associations and surely there could be no better time for this organization than the closing year of the century."

The committee presented a form of constitution and by-laws for such a society, and information as to where further suggestions as to their work may be found.

LEGAL.

A LAWFUL BUSINESS.

The supreme court of California declares that it cannot concur in the view that the establishment of a cemetery for the interment of human bodies is an avocation which may be well presumed to have an injurious tendency, or that a cemetery is a nuisance per se, that is, in itself, or, at least, may be so regarded in measuring the extent of the police power to regulate it. Nor is it willing to concur in the position that the business of conducting a cemetery is an avocation presumably having an injurious tendency. But it does say that there are many considerations, too obvious to require enumeration, which bring cemeteries within the power of reasonable regulations by both city and county municipalities.

Continuing, the court says that it is not unlawful to establish a cemetery for the burial of the dead, deriving profit therefrom as a business enterprise. To provide for the repose of the dead is as lawful as to provide for the comfort of the living.

There are reasons why the burial of the dead should be subject to reasonable regulation which may not justify similar restrictions or regulations as to the homes of the living, but the court insists that it can see no more reason why the right to establish cemeteries in a county should be subject to the will of the supervisors than that the right to engage in any other lawful enterprise should be so circumscribed. There is a wide difference between regulation and prohibition,—between regulatory provisions as a condition imposed for the exercise of a lawful occupation, and making the right itself to depend upon the unrestrained will of the municipality. It would hardly be contended that an ordinance declaring it to be unlawful to engage in the business of farming or merchandising in the county without the permission of the supervisors would be a reasonable exercise of legislative power, or could reasonably be said to be exercising the power to regulate.

And, for these reasons the court holds, in the case of Los Angeles County against the Hollywood Cemetery Association, 57 Pacific Reporter 153, that an ordinance is invalid which makes it unlawful to establish, extend, or enlarge any cemetery within the limits of the county without the permission of the supervisors.

The court also holds such an ordinance unconstitutional as being unequal in its operation, because, as the ordinance is silent as to interments in cemeteries already established, it necessarily permits burials in such cemeteries without restriction, and thus allows the owners of cemeteries already established the right to exercise privileges denied to others. Nor does it consider that the fact that the supervisors reserved the power to place all persons on an equality by granting permission relieves the ordinance from this objection.

✻ ✻ CORRESPONDENCE. ✻ ✻

LYNN, MASS., Jan. 6, 1900.

Editor Park and Cemetery.

SIR:—There is no rush of work at the present time and certainly no reason why some of us cannot contribute to the columns of your valuable paper that has done so much for us. Naturally our minds are now turning towards spring which always brings plenty to do. Many of us can see important improvements we would like to make should funds be available, but there are always small improvements that can be made at little or no expense, and our lot owners will notice them.

Since the last convention I spent a day with Mr. McCarthy at Swan Point, Providence. Whoever has not seen Swan Point, take the first opportunity, and if one cannot learn something he is either dull or knows everything. At least he can learn how to utilize boulders if he has them to utilize. The picturesque ride on the river road, the fine evergreens, the display of hardy shrubs all help to make this one of the finest cemeteries in the country.

Both Mr. Creesy and myself have received visits from Mrs. Hay of Erie, Pa., and several of our western superintendents, all of whom we endeavored to impress with the beauties and excellencies of our cemeteries by the sea. It is my conviction that our New Haven convention was a grand success.

It was with sincere regret that I read of the death of Mr. Chaffee, stricken down in the vigor of manhood as it were. He was loved and respected by every member of the association, and how can we spare him? The stricken family I know will receive the sympathy of every member of the association.

William Stone.

* * *

In a recent communication Mr. John G. Barker speaks as follows in connection with a trip east: While in Boston I visited Mt. Auburn cemetery. Their new offices, statuary room and chapel are very fine, commodious and convenient as any such office I was ever in. The whole cost \$60,000. The chapel is beautifully finished, and the crypts for temporary use, when remains come late at night, are as convenient as such an arrangement could possibly be. The old chapel is being remodeled into a crematory, and every detail of the most approved methods is being put in for incineration purposes. The upper part is being finished for niches for urns, and when completed I expect the work will be in every way excellent, for there is plenty of money to draw upon. The mausoleum built by the Van Amringe Granite Co., is a fine structure, eligibly located in the centre of the beautiful plot of ground which is well arranged with attractive landscape effects. On my way back west I spent a few hours at Fairmount cemetery, Newark, N. J., with Father Nichols, who notwithstanding his 80 years piloted me around as nimbly as men many years his junior. I had an opportunity of inspecting the costly Krueger mausoleum just completed.



SELECTED NOTES AND EXTRACTS.

Pansy Plants.

Pansy plants, which were planted out-of-doors several weeks ago will in some sections, be showing flower where the weather has remained mild as in many sections. As each plant has from 6 to 12 shoots springing from the root the present is a good opportunity to take cuttings of the finest flowered kinds. Pansies flower better from plants raised from cuttings than from seed, and this method should be given a trial for raising seedling plants. The cuttings should be taken with a piece of the small solid stem, as they will then root in a few days, the larger succulent green stem taking a much longer time to root. The cuttings will do best in a frame, in a mixture of sand and leaf soil.—*G. W. O. in Florists Exchange.*

* * *

Uses of Evergreen Branches.

The number of uses to which the evergreen bough or smaller branches can be put is never wholly appreciated. For winter protection of Rhododendrons and other broad-leaved evergreens, they are unsurpassed. In place of the unsightly board structure or corn-stalks frequently arranged around the plants, drive four or five stakes, or as many more as deemed necessary, around the bed or group, as close to the plant as practicable; string wires to each, and stack and fasten the cut branches around and partly over them. After completion, from a distant point, the group simply represents a mass of evergreens quite appreciable in winter. Hemlock branches are most adaptable, being neat and graceful, and will last well through the winter. They may be used to great advantage in the cemetery for covering freshly made graves, where it is impossible to sod or cover with vines before spring or early summer. Neatly arranged, the effect is very grateful. The custom of "lining" graves with evergreens, fastened in a wide-meshed wire cloth, is getting quite common, and is, indeed, a pleasing thing. Besides Hemlock Spruce, the arbor-vitæ is found desirable, and particularly adapted because of the flatness of the twigs. Larger boughs are used to weigh down leaves, where used as a mulch, preventing their displacement by the winds.—*Meehan's Monthly for January.*

* * *

Pruning Evergreens Too Close.

It is well known to the landscape gardener that in the planting of deciduous trees late in Spring, after they have push-

ed into leaf, while proper to shorten in the young shoots considerably and to partly defoliate them, it is almost sure death to the trees to strip off every leaf. It is necessary that a few be left on to have success. The same law governs both deciduous and evergreen trees though but few persons ever give it a thought. Evergreens shed an annual crop of leaves in the Autumn just as other trees do. The difference in other respects is that there is always a crop on an evergreen, a later one than that which falls off. There are two or three crops of leaves on the tree at one time. It is because of there being so many on at one time that so many errors are made in the pruning of them in transplanting. The knife or shears is used freely, the branches are clipped in quite close, and, as there appears plenty of leaves below the cut, everything is thought to be all right. But pretty soon this closely sheared tree dies, and then, perhaps, on inquiry, it is learned by the operator, that he has cut off every living leaf and that those he left are the old ones, which are just about to drop off. The crop which drops in October is practically useless for months before that, so that a tree sheared of all but these is in just the same plight as a deciduous one stripped of its leaves in late Spring, and it dies. It is as effectually killed as if it was sawed off to its bare trunk. This, no doubt, is news to a great many, and may account for the death of many a choice evergreen. We have known of whole hedges of evergreen which have lost every plant in them because of too close clipping at transplanting, the fact being demonstrated by the living of some of the same plants set near them without being clipped. It will be news to many persons that a transplanted tree can be killed by too close pruning, especially an evergreen, but such is assuredly the fact.—*Joseph Meehan in the Practical Farmer.*

* * *

A Strong Plea for the Sparrow.

Mr. James Jensen, Supt. of Humboldt Park, Chicago, in a recent article in "*American Gardening*" gives his reasons for changing from enmity to friendliness for the Sparrow. After touching upon such recorded facts as have been given in the despised little bird's favor, Mr. Jensen continues: "But these very facts made me still skeptical on this question, until this summer, when the fall army

worm, *Laphygina frugiperda*, infested our lawns by the millions. Simultaneously with the detection of the worm appeared the Sparrow in hundreds, devouring the worm as fast as he reached the surface. The Sparrow gained one point in my estimation and a big one at that. But it was just the other day that I became completely converted, when, from my office window, worrying over a new crop of dandelion which, through the destruction of the grasses by the army worm, had been encouraged, I noticed a colony of sparrows busy picking the seeds from the feathery heads of this so much despised weed. I had previously noticed swarms of sparrows feeding on lawns infested by the dreadful English crab grass, also in such places where the common plantain had made its home; but I never asked the question why? But I have learned something, and adding all these lawn pests to the food list of our supposed enemy, I most sincerely proclaim peace and goodwill to that poor friendless wretch, the Sparrow."

* * *

Seashore Plants.

Three kinds of hedge plants are commonly used in towns along the sea-coast, euonymus, tamarisk and California privet. The first and last are well-known by sight and name, but the tamarisk is not. Its leaves and general character are, however, so very different from others, it will be readily recognized from a slight description. The wood is slender and willowy, of a reddish-brown color; while the foliage resembles that of some evergreens, giving the whole a feathery appearance both odd and pretty. I recently saw used for the first time along the coast a hedge of osage orange, and its clean, thrifty appearance pleased me much. At intervals of about ten or twelve feet plants were permitted to grow up, and had been neatly trimmed up to tree form with a clean trunk of about eight feet. They made excellent specimen trees, and suggested a more general use for that purpose where they could be properly started and kept in tree form. Willows thrive well along the coast, but people need to be educated to the fact that there are willows and willows. *Salix pentandra*, with its broad, shining leaf is superior, in a sense. Of course, it does not make as much of a tree as others, but for a bushy specimen it is excellent. Sassafras, also, does well. The assortment of available plants is larger than usually supposed, and it is strange more effort to test them is not made. It seems evident that those with thick, heavy leaves will do best, and it will pay to work along this line.—*S. Mendelson Meehan in Florists Exchange.*

Park and Cemetery.

ESTABLISHED 1890.

An Illustrated Monthly Journal.

Devoted to the advancement of Art-out of Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Association, etc.

The regular contributors to PARK AND CEMETERY are among the most eminent Landscape Architects, Landscape Gardeners and Horticulturists in the United States, whose practical articles make the journal one of great value to any one identified with landscape work.

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Officials of Parks and Cemeteries are requested to send copies of their reports.

Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

Association of American Cemetery Superintendents.

WM. STONE, "Pine Grove,"
Lynn, Mass., President.
GEORGE M. PAINTER "West Laurel Hill,"
Philadelphia, Vice-President.
H. WILSON ROSS, "Newton,"
Newtonville, Mass., Secretary and Treasurer.

The Fourteenth Annual Convention will be held at Cleveland, O.

The American Park and Out-Door Art Association.

CHARLES M. LORING, Minneapolis, Minn.,
President.
WARREN H. MANNING, Tremont Building,
Boston, Mass., Secretary.
O. C. SIMONDS, Chicago, Treasurer.

The next meeting of the Association will be held at Chicago, Ill.

The American Society of Landscape Architects.

JOHN CHARLES OLMSTED, Brookline
Mass., President.
SAMUEL PARSONS, JR., St. James Bldg.,
New York, Vice-president.
CHAS. N. LOWRIE, 156 Fifth ave., New
York, Treasurer.
DOWNING VAUX, New York, Secretary.

The Board of Park Commissioners of Baltimore, Md., has elected Charles L. Seybold, formerly superintendent of Carroll Park, to the position of landscape architect. This office takes the place of that of civil engineer, a position which was abolished by the board some months ago. The salary is fixed at \$1,800 per annum.

Prof. Charles E. Bessey, Acting Chancellor of the University of Nebraska, has been appointed collaborator in the divi-

sion of forestry in the U. S. Department of Agriculture. Dr. Bessey has given particular study to the treeless prairies and will follow this line in his new work.

In a note in the last issue concerning the Clark mausoleum erected in Homewood cemetery, Pittsburgh, Pa., the cemetery was inadvertently mentioned as Allegheny, Pa., instead of Pittsburgh.

The botanical department of the University of Nebraska is progressing rapidly with its work on the "Descriptive Catalogue of the Plants of Nebraska," which should be a valuable addition to botanical literature.

Cemetery officials in the neighborhood of Boston are warned, in a communication just received from a victim in that vicinity, against a "bunko" man now operating. His method is to purchase a cemetery lot and offer in payment a worthless check for an amount considerably in excess of the purchase price, expecting to get the change. Before putting in an appearance a telephone message is received at the superintendent's office from a local undertaker, the undertaker's name being used, saying that a man is on the way to the cemetery to select a lot. The man arrives at dusk after banking hours, and represents himself as coming from a distance to perform an act of kindness for a relative of small means. He presents a check upon a well-known bank in the town he claims to hail from, made payable to himself and he endorses it, expressing a hurried desire to catch a train. He has a confederate trying the same game while he is out inspecting lots with the superintendent. This is a warning which may be accepted for any locality.

American Society of Landscape Architects.

The American Society of Landscape Architects held its annual meeting and dinner at the Hotel Martin, New York City, January 9. A majority of the members, many from distant cities, were present. The officers elected for the ensuing year were: President, John C. Olmsted, Boston; Vice-president, Samuel Parsons, Jr., New York; Secretary, Downing Vaux, New York; Treasurer, C. N. Lowrie, New York. William H. Manning of Boston was elected a member-at-large to constitute with the four officers, the executive committee. A feature of the occasion was a discussion of the relation of the society to Municipal Art.

Photographs Wanted.

Mr. Wm. H. Tolman, secretary of the League for Social Service, New York City, is desirous of securing photographs of country cemeteries "before" and "after:" that is photos that will show a cemetery before improvements have been started, and the same cemetery after improvement. PARK AND CEMETERY is also anxious to obtain such photographs and cemetery officials and superintendents are earnestly requested to forward to this office if possible duplicate photos, showing the conditions mentioned above.

Knight & Hopkins is now the firm name of the Stanwix Engineering Company, Rome, N. Y. This firm which has been advertising under the latter name in our columns for some time, is engaged in

municipal engineering, as a general term, including landscape work. The firm solicits correspondence on all matters pertaining to their line of work.

Kingfisher College, Kingfisher, Oklahoma, is working to establish an efficient Horticultural department. The college itself is planted in this territory on the New England plan. At present it must depend for its development on the friends of education and is especially invoking the aid of the Eastern horticulturists for this new departure. The Rev. C. S. Harrison, the well-known horticulturist is the financial secretary, with address for the winter 30 Moreland St., Roxbury, Mass.

Books, Reports, Etc., Received.

The Empire of the South. Its Resources.

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Rules and Regulations of the Wilmington and Brandywine cemetery, Wilmington, Del., with the By-laws, constitution and act of incorporation, 1899. The previous issue of this information was eleven years ago, and the pamphlet now distributed, which is well illustrated, contains all amendments and additions to date, and special references to the modern sections and perpetual care.

Annual Report of the Board of Park Commissioners of the city of Worcester for the year ending November 30, 1898. With half tone engravings of some fine effects.

Report of the Public Schools of Carthage, Mo., for the year 1899-1900. By courtesy of W. J. Stevens, superintendent, A very complete and suggestive report, illustrated with many half tones of prominent features of Carthage.

Reports, Etc., Received.

By-laws, rules and regulations of the Northville Cemetery Association, Northville, N. Y. These have been revised and amended to conform to modern practice as far as possible.

Report of the South Park Commissioners, Chicago, to the Board of County Commissioners of Cook County. From Dec. 1, 1898 to Dec. 1, 1899.

Annual report of the Park Commissioners of the city of Taunton, Mass., for the year ending Nov. 30, 1899.

Central Experimental Farm, Department of Agriculture, Ottawa, Canada. Catalogue of the Trees and Shrubs in the Arboretum and Botanic Garden at the Central Experimental Farm.

Cornell University Agricultural Experiment Station, Bulletin 174. The Problem of Impoverished Lands. Being suggestive for Investigation and Experiment. Compiled by L. H. Bailey.

U. S. Department of Agriculture. Division of Forestry. Bulletin No. 26. Practical Forestry in the Adirondacks, by Henry S. Graves.

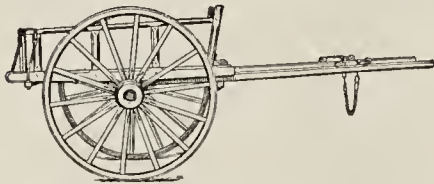
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The above illustration is a fine specimen of the Colorado Blue Spruce, Picea Pungens; is 12 years old and stands 15 ft. in height. Its beautiful silvery foliage makes an attractive contrast with the other evergreens. It is perfectly hardy and worthy of planting where any conifer will grow.

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CONTENTS.

EDITORIAL—The Appalachian National Park—Harvard Course in Landscape Gardening—Arbor Day—Women as Park Landscape Gardeners—Improvements in Memorial Designs.....	245, 246
*The Clark Memorial, Forest Hills Cemetery, Boston, Mass. Arbor Day.....	247, 248
Water Lilies and other Aquatics.....	249
*The Parks of Mansfield, O.....	250
*An Avenue of Castor Oil Plants.....	252
*Magnolia Glauca.....	253
*Improvement Associations.....	254
Plant Nomenclature, III.....	256
Grafting of Trees.....	257
Printed Labels for Living Plants.....	257
*Garden Plants—Their Geography, L.....	258
Park Notes.....	259
Cemetery Notes.....	260
Correspondence—Legal.....	261
Selected Notes and Extracts.....	262
Reviews of Books, Reports, Etc.....	263

*Illustrated.

IT would be scarcely possible to select a section of country more desirable for a National park than that which the Appalachian National Park Association is agitating to secure. The tract comprises the territory contiguous to the great Smoky Mountain Range, extending into Tennessee and West North Carolina, on either side. Its western boundary is the western line of Graham County, N. C., and its eastern line is the east side of Yancey County, N. C., and it probably contains in the neighborhood of 500,000 acres. Within its suggested bounds is some of the grandest and most beautiful scenery in the world; primeval forest, mountain peaks and flowery vales, waterscape and landscape as varied as can be conceived, and withal a climate that lends itself to nature's choicest pictures as well as to reinvigorating exhausted humanity. It is gratifying to note that the association is receiving much encouragement from all sections of the country. The location is central; it is within easy distance of an immense population, it offers advantages not surpassed, if indeed equalled, by any of the areas already set apart by the government, and besides the park idea, it demands public care in that it is the watershed of a large area of country, which if submitted to the grasp of commerce will mean vast discomfort and possible disaster to large communal interests. Congress cannot err in favorably acting upon the petition of the association and it devolves upon individuals hav-

ing any influence in our national affairs to use it in the direction of securing prompt action.

LANDSCAPE gardening is to become a special course of study in Harvard University, a preliminary announcement having been issued by the Lawrence Scientific School of that institution. The course will be of four years duration and it will finally lead to the degree of S. B. Theory and practice will be combined to assure a thorough training for the calling, and the Arnold Arboretum and Bussey Institute will contribute their share to this end. The *American Architect* sounds a warning on the point that the other universities will follow Harvard's lead with the possible result that the profession, which now has probably more practitioners than paying commissions offer for their practice, may be overcrowded. This happened many years ago in the case of the civil engineering profession when serious financial depression followed an era of unparalleled railroad construction, and the ranks of the civil engineers which had been crowded with recruits from every known college in the country, found literally no employment and salaries at laborer's rates. As in that case so would it be in the present; the education imparted is of such a broad character that other channels of occupation are open, and the final result a more diffused enlightenment in matters of art for which there is always great need.

ALTHOUGH over the increasing sentiment in relation to the improvement of the surroundings of our homes and public buildings can be traced, more than to any other cause, to the recognition of Arbor Day and the exercises then conducted. It has always been held, and correctly too, that to promote with any degree of certainty as to results, a reform which affects the life of the people, we must begin with the young in the public school, so we realize that the institution of Arbor Day finding its best function in the public school, has already exerted an influence far reaching in its potency. There can be no more beneficial exercise for the young intellect than nature study, it promotes the investigating spirit, and as each new development is reached, interest is sharpened and the study becomes pleasure. This forms an excellent auxiliary for the work to be promoted by Arbor Day. Interest and love of plant life are-

ates fervor for that day, and its exercises impress upon the young with more permanent effect the object of the appointed day and the responsibilities it imposes upon such of those who comprehend its import. On another page will be found much suggestive matter in connection with Arbor Day, which will, as the successive state days are appointed, be more generally observed this year than heretofore. The necessity for the work which the day suggests throughout the country is daily becoming more apparent. The contrast between a naturally beautiful town and a neglected one is so reproachful to the general good sense, that the fact that Arbor Day exercises point out such possibilities of rapid improvement, spurs a general desire to better conditions. Arbor Day is safely one of the greatest institutions of the last years of the nineteenth century.

* * *

It is not alone in the improvement of home and urban conditions that Arbor Day finds its justification. It is exercising an immense influence in encouraging state and federal effort towards rehabilitating our forest areas and reclaiming waste lands. The lumberman and pioneer has well nigh reduced the country to a condition of forest bankruptcy, notwithstanding that science had long decreed the economic value of forest tracts in the country's climatic and agricultural welfare. Our statesmen had not given any attention to this important phase of government. Arbor Day has become the pivot about which there yearly revolves the important questions of forest preservation and development, and the necessity of tree culture and tree planting in the various developments of our national life.

THE appointment of Mrs. A. E. McCrea to the position of landscape gardener for the Lincoln Park Commissioners of Chicago is a step which is attracting attention, and the active preparations on her part to carry out important changes in the planting schemes of that well known park are creating somewhat of a stir among practitioners in landscape art. This opportunity of following the development of park planting and its results on so large a scale under the ruling guidance of woman's more delicate taste, will be watched with interest, and as her plans which are on quite a radical scale have been approved by the commissioners we may expect to see many changes in the landscape and decorative features of Lincoln Park. It is quite to be expected that there will be more delicacy and refinement in arrangement and color effects, due to the natural characteristics of womanhood, and if this proves to be marked in its degree, it will be an object lesson to landscape architects of

the sterner sex and set a standard for further advance. In a general way there is far too much stereotyped formality in park designs and plantings and it will be to the advantage of the cause, if the Lincoln Park appointment fulfills its promises.

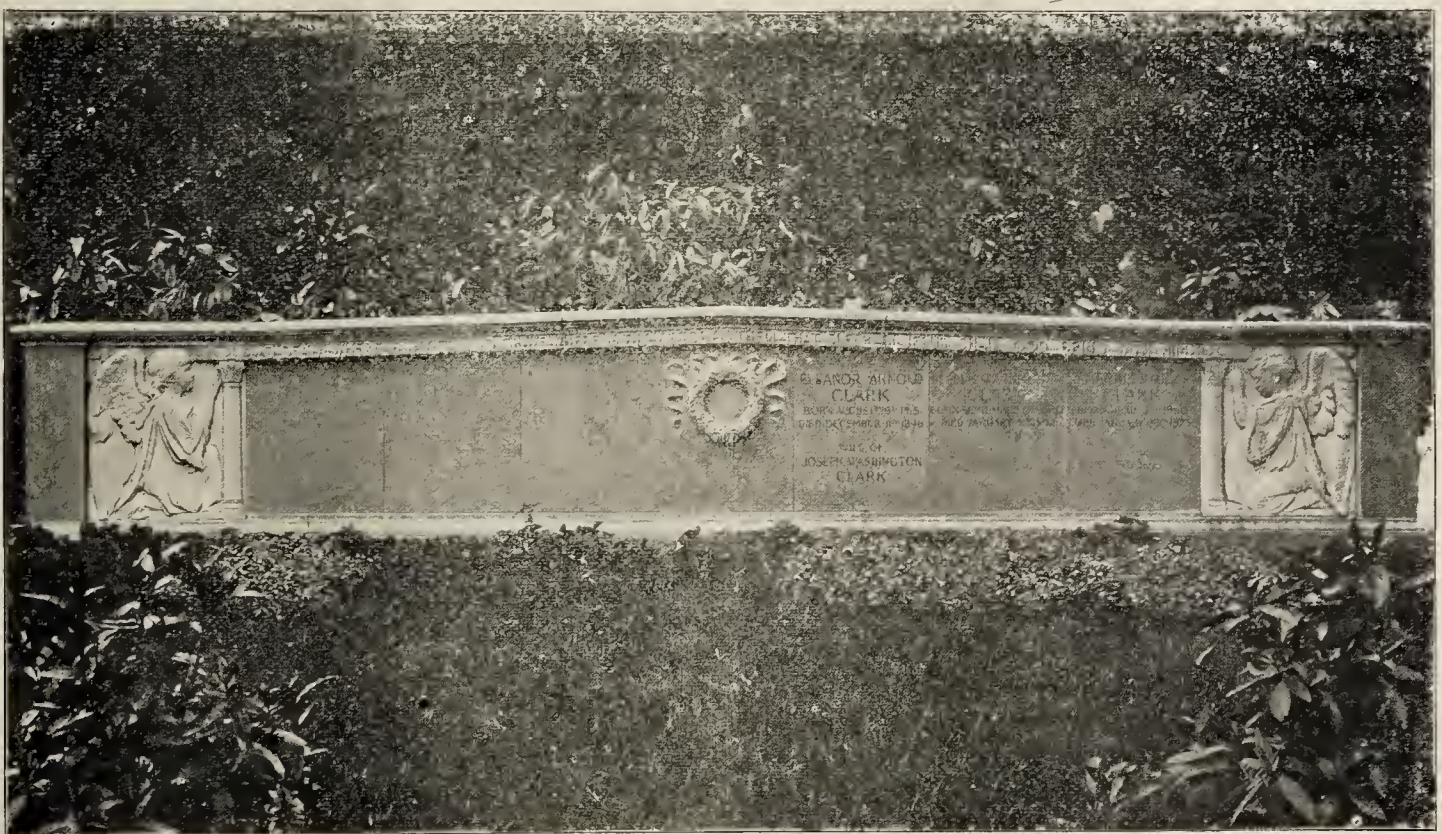
ONE of the most noticeable features in the monumental work of to-day, as regards cemetery memorials, is variety of design. We speak of course of the better class of such monuments, for unfortunately there is still far too much monotony in form and style in cemetery work of the smaller class. But in the line of memorials more generally permitted in the larger cemeteries, there is distinct improvement in all the details governed by artistic and architectural demands. After all, the arbitrary rules instituted in the larger cemeteries when the "lawn plan" idea took possession, have exercised a very salutary influence in the monumental industry in its broader sense, and especially that rule which prescribed that duplicating designs would not be allowed. This arbitrariness has developed a higher ability in designing, has demanded more study of the subject, and has brought to bear on the production of original designs in memorials, the wide possibilities of true art in its prolific sources of both inspiration and application. When one looks over the vast fields of artistic production, what has been accomplished, its variety and excellence, there need be no fear that the future will not yield as good a harvest, and that the opportunities for originality and the means to satisfy it will not be forthcoming and at hand. Just as we note to-day the improvement in design both as to form, proportions and ornament, so may we expect continued progress as long as the conditions which create the demand for improvement continue in advance. We are of opinion however that we have not yet met all the transformation in design that the true import of the "lawn plan" in cemetery practice demands. If we are to continue to use the materials now common in the production of cemetery memorials, we must continue to exercise our artistic brains to the end of designing a memorial that will more nearly meet the æsthetic considerations of harmony and appropriateness in relation to the landscape. The landscape architect of the cemetery, as the art progresses, finds his efforts in the direction of ultimate effects marred by the obtrusive monument, and becomes an advocate of reform. This is an important suggestion and a timely one—to design a form of memorial that while involving the highest taste in composition and ornament, shall yet admit of variety in the arrangement of its details, and conform more nearly to the requirements of the landscape architect.

THE CLARK MEMORIAL, FOREST HILLS CEMETERY, BOSTON, MASS.

The memorial illustrated herewith is a monument of more than usual interest in that it is so radical a departure from the form which has become so stereotyped in cemetery practice—that commonly called a pile of masonry. It is becoming recognized in the cemetery, cast, so to speak, on modern lines, that there must be an entire change in the system of monumental memorial work if the landscape plan and the memorial features are to harmonize. In the majority of examples to be seen to-day, even in cemeteries of most recent establishment and where there have been no financial re-

suggests the conditions contiguous to it. It is located on a side hill but graded level with the avenue in front; the trees in the rear are lower than the lot, but form a beautiful background and improve the setting of the monument. The monument is cut from Tennessee marble, and the reliefs were modelled by Mr. D. C. French, the eminent sculptor. The arrangement of details as to inscriptions and accessories can be understood by reference to the picture, which gives an impressive idea of the simplicity yet originality of the design.

The planting about the memorial is also simple but effective, harmonizing suggestively with the monument itself. The shrubs at the back are En-



THE CLARK MEMORIAL, FOREST HILLS CEMETERY, BOSTON, MASS.

strictions, landscape effects are marred by the too obtrusive monument and when this is multiplied for every lot, the effect is altogether detrimental. The future will witness one thing or the other, the abandonment of the landscape plan in its higher phases, and the making of it a mere setting for the monuments without distinctive character, or the monuments must be made to conform to the landscape. To effect this means radical departures in design and adaptation not only to immediate surroundings but to the landscape as a whole. But we are passing through wonderful periods of advancing thought and diversified activities and we shall doubtless gradually accustom ourselves to change upon change, until higher conditions prevail.

The illustration herewith of the Clark memorial

glish Bay Laurels. On the front of the lot, not shown in the picture, the planting consists of mixed evergreens. Along the front of the monument is a strip of English ivy, one foot in width, and to complete the planting scheme the graves are covered with myrtle.

It is unfortunate that the English Bay Laurel is only half hardy and that special care has to be taken of the shrubs in the winter. The treatment of the lot however is very suggestive; it is a happy departure from the stereotyped manner of arranging cemetery plots, and while it may carry a secluded appearance, it is quite admissible in locations such as are indicated by this description. The monument and its surroundings afford an attractive change in cemetery development.

ARBOR DAY.

February reminds us that Arbor Day must now be the timely object of general interest. What benefits are already apparent from its observation in the past must be considered in the light of incentives for the future, and it is plainly discernible that no movement of late years over the broad area of the country is fraught with more benefit both to the present and future than what results from the lessons and practice involved in the teachings and practice of Arbor Day exercises. Excellent suggestive material will be found in the following:

* * *

The circular issued in 1899 to the teachers of Illinois by Alfred Bayliss, superintendent of Public Instruction, as a supplement to the Governor's Arbor Day proclamation, is so good that we republish it here:

"I need not dwell upon the educational value of a proper observance of this day. The value of pleasant school surroundings cannot be over estimated. A school-house without a tree or shrub outside, or a flower or picture, will not be a source of pleasant memories. Indeed, he is a good teacher who succeeds in making such a place the source of anything but citizens who are fit only for 'treasons, stratagems and spoils.' I, therefore, second the governor's appeal to those who are responsible for schools in that condition. Let us make all such things of the past in Illinois.

"For grounds where there are no trees it is neither necessary nor sensible to go to the expense of procuring exotics. Plant indigenous trees first, preferably rapid growers. But bear in mind that 'timber trees are the children of centuries,' and for every tree of rapid growth plant at the same time a sturdy one to take its place when it becomes unsightly and is cleared away.

"Few people know how to plant a tree. Transplanting is an artificial process, requiring both knowledge and care. If there is a skilled tree planter in the neighborhood, interest him in Arbor Day, take his advice about the better trees to plant first and their location, and get him to see that roots and branches are properly pruned, that the holes are of proper size and depth, that the soil is filled in around the roots as it should be and that the tree is properly protected. If he will let the older pupils assist him in doing the actual work and afterward talk to them in a simple way about the care of the trees, so much the better. Be sure to give him the opportunity.

"The literary exercises may be varied according to circumstances. The thoughtful teacher will know how to use the opportunity. Unless profitable exercises can be prepared it is not advisable to interrupt the regular school programme. The programme I offer is merely suggestive, and can easily be abridged or otherwise modified. It is always advisable to include an address by some local friend of the school, especially when one is available who can be trusted to be brief. Where the excellent custom of naming the trees in honor of favorite authors or distinguished Americans prevails the exercises may well include brief sketches of their lives or quotations from their writings.

"Finally, if the children of this generation are to deserve the blessings of those who come after them, they must be taught to plant trees. 'If the trees go, men must decay.' Above all do not fail to teach them that, as Ruskins says: 'It is better to know the habits of one plant than the names of a thousand; and wiser to be happily familiar with those that grow in the nearest field than arduously cognizant of all that plume the isles of the Pacific or illumine the mountains of the moon.'"

* * *

How far reaching is the consideration of Arbor Day the following extracts from a communication to the Halifax, N. S., *Chronicle*, will serve to show:

This annual celebration should foster among our youths a love for trees on the ground both of ornament and utility. The feeling should not cease with the sentiment of school days, but in after life should manifest itself in the adoption of measures for the increase of shade trees around our homes, on our streets and our farms, and for the preservation of our forests which are threatened with destruction. * * * A traveller from the older countries notices that while our towns and cities are fairly well supplied with shade trees our rural districts in general have been left neglected. Not unfrequently a large farm is seen with its buildings unadorned by bush or shrub, and its fields unfurnished with a tree large enough for a robin's nest.

Arbor Day it is hoped, will induce our boys and girls to plant trees about their homes, and to take special care of trees already planted by shielding them from the ravages of the universal jack-knife, and from injury by an unwary reckless Jehu or his hardly less thoughtful friends the lower animals.

Arbor Day ought also to create a public taste which would find work in securing legislation for the protection of our forests. That lumberers simply slaughter our forests, may for example be seen in the small size of many of the logs which supply our saw mills. The cutting of trees of but a few inches in diameter, provided they yield only a narrow plank should be strictly prohibited. But even the woodman's axe, destructive as it is, sinks into insignificance compared with the injury inflicted by fire. Choppings are burned regardless of danger arising from the extensive spread of fire; thoughtless boys and still more thoughtless men who go fishing or picknicking, often leave smoking embers which the wind may fan into a flame to destroy hundreds if not thousands of acres of valuable timber. It is sad to notice in our provinces what a vast area of barrens has been created in this way. Climate too is affected by the destruction of the forest. In a treeless country the process of evaporation is rapid and streams dry up. The writer well remembers brooks of considerable size, the habitat of smelts, trouts and the juvenile owners of miniature saw mills. The forest and the brooks have long since disappeared from the landscape. This mischievous habit of unnecessarily starting forests fires and the recklessness sometimes displayed in burning choppings irrespective of the direction of the wind should be followed by a heavy fine. Here our legislators have an important duty to perform.

WATER LILIES AND OTHER AQUATIC PLANTS.

Aquaculture has been attended with marked results; no style of gardening or the art of decoration or embellishment of parks and public gardens, cemeteries, etc., have been more satisfactory than where water lilies in all their varied forms, with their associate plants such as bamboos, ornamental grasses, sub-aquatic plants and hardy perennial plants have been employed.

Where a commencement has been made a fuller and wider development is constantly taking place. Success achieved by a fellow-worker in the same sphere is always a stimulus to others to do likewise and there are numbers who contemplate making a venture in this particular line this coming season.

Now is the time, while field operations are stayed, to lay plans for future work. The site for the pond having previously been determined the size, shape, depth, etc., should now be decided upon and the approximate amount of soil to be removed, labor, cost of materials, etc. This naturally exceeds the amount necessary to purchase stock for planting the pond, but where there are natural ponds, much labor and expense are saved, but as a rule these natural ponds are not in the right location where one is desirous of making a grand display, but these should not be abandoned, they should be utilized as well as their surroundings and planted with suitable plants in harmony with the landscape.

If those who purpose giving aquatics more than a passing consideration, and intend to grow a few plants in a small way, I would say "don't." You may say well, if I succeed I can make a larger pond another year, but why go to such needless expense as to build a small one this season and a large one next.

The success that has attended the efforts of other growers, should be conclusive that you can do likewise, and commence with the determination that you will succeed and instead of having a few tubs or a small tank, if you have to build an artificial one, make one large enough to contain a fair collection of say about twenty-five plants and as each plant would cover a surface space of say ten to fifteen feet each in diameter it would require a pond of at least 2,500 superficial feet. But while several may feel disposed to carry out such advice there is in most cases a limit, and no appropriation could be secured to accomplish such an undertaking. All I can say under such conditions, do the most you can, and make as large a pond as you can, for if you commence in a small way with only half a dozen plants, you will soon find there are so many more good varieties that you must have and the result is that you are obliged to build another addition, or you may crowd the plants into less than

half their wanted space and the result will be poor and undersized flowers, disappointment, and it may be said the water-lilies were not a success. Whatever the size of the pond avoid over crowding. If you desire the greatest variety in a given space then select the moderate growers. These as a rule give a larger variety in color, and the choicest, but they do not attract as do the big fellows.

To have large healthy attractive plants, provide wooden boxes about 3 feet square and 1 foot deep, (presuming it is an artificial pond to be planted) these should be placed about 10 feet apart, and filled with a rich compost composed of two-thirds turfy loam and one-third cow manure. If cow manure cannot be had then the best rotten manure that can be procured and if possible have the sod dug and composted with the manure and turned two or three times before using.

The following selection will be found very good for commencing with and as they are all standard varieties and embracing the four cardinal colors, red, white, blue and yellow, hardy and tender, day and night blooming they will prove very satisfactory not only as a selection but as to reasonable cost.

HARDY NYMPHÆAS.

N. Carnea, N. Odorata rosea, N. Candidissima, N. Albida, N. Chromatella, N. Odorata sulphurea.

TENDER NYMPHÆAS.

N. Devoniensis, N. Deaniana, N. Dentata, N. Jubilee, N. Zanz Azurea, N. Cœrulea.

NELUMBIUMS OR LOTUS.

N. Speciosa, N. Abum grandiflorum. If the latter are included in the collection a larger space than a three foot box should be provided. The best way is to make a division near the side of the pond by building a wall of single brick to confine the roots to the given space, the wall need not be any higher than is necessary to hold the soil. The size should be in accordance with the whole. A space 9 ft. by 3 ft. would be about the size. Where as many as twelve plants of Nymphæas are grown two such spaces can be utilized. The proper time for planting depends very much on the location. April and May will do for the hardy varieties, providing the season is surely advancing, and evidence had by vegetation all around. Tender varieties should not be planted until settled warm weather, and when it is safe to risk tender plants out-of-doors the best way is to procure dormant tubers of the tender varieties early and grow them in-doors; small tubers started in four-inch pots and kept in a warm greenhouse will make strong plants for planting out in May. Where a tank is not at command tubs can be used, always placing them where they will derive the full benefit of the sun with free ventilation.

W. Tricker.

PARK AND CEMETERY.

THE PARKS OF MANSFIELD, O.

The development of the parks in this country becomes a matter of surprise when we consider that fifty years ago very few public parks were in existence. In the large eastern cities there were isolated instances; and public squares which were to be found in most of the prominent towns, while totally inadequate to fulfill the idea of recreation grounds, were the principal representatives of the parks of to-day. In the middle states and west, the court house, standing oftentimes in its barren block, was about all the average citizen knew of a park.

To-day a city fails in an essential element of its communal prosperity if it has no park, or at least if there is no concerted action apparent to secure the land for park purposes.

In Mansfield, O., in 1850, the only public ground owned by the city was the square now known as Central park. Then there was nothing to



THE LAKE HEINEMAN PARK, MANSFIELD, O.



PLAN OF SHERMAN PARK, MANSFIELD, O.

denote any park-like aspirations, neither trees nor grass, and it remained so until 1852 when Perkins Bigelow was elected mayor. Soon after he interested some ladies in raising \$200 to enclose it, for which an ordinance was carried through the city council; but even this caused a protest from that class of the community, many of whom are still in obtrusive evidence in most places, with whom the dollar bill is of far more importance than the progressive welfare of their fellow man. A fierce legal contest ensued but the city was successful, the fence was built, and the square became Central Park. The mayor's enthusiasm continued and volunteer tree

However on the return of General R. Brinkerhoff, a park enthusiast, from a trip, during which he had visited the system of Minneapolis, Minn., an agitation of the subject was inaugurated in the local press and another citizen, Mr. A. J. Heineman, offering to donate a tract one mile north, money to buy the intervening lands was soon raised, and a park project was fairly under way. These lands were finally secured by condemnation proceedings.

The park area comprises altogether some 80 acres of diversified landscape situated on the western side of the city, and mostly within the city limits, extending about a mile and a half from end



FROM LOOKOUT POINT, SHERMAN PARK, MANSFIELD, O.

planters were called in, but as history has it, they lacked the knowledge and enthusiasm of the mayor and to-day nearly all the trees in that park are of Mayor Bigelow's personal planting.

In 1869 the old court house was condemned and the new one built on another site, which left Central Park clear of buildings and open to improvement and it is now a sightly breathing spot. Several unsuccessful efforts were made by interested citizens to provide more park areas, but for over 30 years this little park was the only one Mansfield possessed.

It had been known for a long time that Senator John Sherman had intended to present a beautiful woodland tract to the city for park purposes, but the city authorities felt they were not in a position to accept it under the conditions named by the senator.

to end. It is divided into three parts by two streets crossing from west to east. The land south of Park avenue is known as Sherman park, north of Leesville road, Heineman park and the intervening tract as Middle park.

Through the courtesy of Senator Sherman, Mr. William Saunders, of Washington, for many years the landscape gardener of the Agricultural Department, visited Mansfield and gave general directions to the park commissioners, who by the way assumed their duties in 1887, as to development. His suggestions have been largely followed, and now after thirteen years are mostly completed.

In character, the park is diversified, and contains much charming scenery, which has been maintained largely in its natural state, the roads and paths being laid out to command the best effects.

There is considerable lake area and a brook meandering through the valleys, crossed by foot and road bridges, adds much of interest to the grounds. Park accessories are provided, including boating, and a casino and other buildings contribute to the public comfort.

The most remarkable feature connected with the Mansfield park system is its cost and the methods adopted to secure the means for completing the project. Compared with the expenditures of larger cities the cost appears absolutely insignificant.

The amount expended by the commissioners from the date of their organization April 30, 1887, until the end of 1898 is \$35,998.88. From 1887 to 1889 the city's finances were in such condition that while possessing the lands, there was nothing for improvement purposes; so the commissioners took the unusual step of borrowing the necessary money on their own notes, and pushed the work with energy on the means thus obtained. This was made good by act of legislature from the water work's fund in 1889. The commissioners were still hampered until 1894, when the legislature passed an act authorizing a levy to be made annually. This amounts to about \$1,350 a year, a small sum, but the results obtained are a source of great pride, and well may be, to those whose active interest has been so determined.

AN AVENUE OF CASTOR OIL PLANTS. (*Ricinus*.)

The grounds of John T. Morris, Chestnut Hill, Philadelphia, are known as one of the most beautiful of the many handsome ones of that vicinity. The mansion stands on an eminence from which can be viewed the country for miles around, far as the eye can reach. The grounds are extensive, consisting of hill and dale, and along their boundary on the one side, flows the Wissachickon creek, its banks heavily wooded with a natural growth of trees and shrubs. The hills and valleys offer unusual facilities for the growing of a great variety of trees, shrubs and plants, and Mr. Morris being a rare lover of plants, and having in his gardener, Frank Gould, a first class gardener, one is prepared to see much of horticultural merit on the place, and a visitor is never disappointed.

I wish now to mention what was to me an unique arrangement I saw there last summer, in the shape of an extended avenue of the common Castor Oil plant. On one side of the estate, near the boundary the vegetable garden exists. The idea was conceived to connect the two portions of the pleasure grounds, by forming an avenue of castor oil plants between them, extending through the vegetable garden along its extreme edge, shutting out from view the vegetable portion entirely.

This was successfully accomplished, and in a most pleasing way, by setting out three rows of the castor oil plants, one on the outside line and two on the inside, the plants alternating in the row. What the avenue was just before the advent of frost is well shown in the illustration herewith presented. It was successful in every way and was, certainly, one of the most unique plantings I had ever seen.

Although the total length of the avenue was 356 feet, no one entering it had the least idea of such a thing, as by skillful planting, the end was supposed to be in view many times when it was but a turn in the avenue. One such turn is shown in the illustration.

Mr. Gould tells me there are two or three varieties of castor oil plant, one of smaller growth



AN AVENUE OF CASTOR OIL PLANTS.

than the type, and another with bronzy purplish leaves. He saves seeds from them, keeping each kind separate, and can thus plant his avenue to better advantage. For instance the dwarf one forms the inside row, on the side two rows are set, and the purple leaved one is alternated with the common green one. This purple leaved one is grown under the name of *Gibsonii* in European collections.

Mr. Gould gave me details of his work in forming this avenue, from which I gather that he sows the seed about the middle of March, in boxes in the greenhouse. The plants are potted up when large enough, and when spring has advanced a little, say about the first of May, they are placed in a

cold frame, to get a little hardening, and are planted in their permanent positions about the close of May.

The location of this avenue was where the soil was naturally deep and good, but nevertheless a little manure was given each plant, as a send off, resulting in the magnificent growth the picture represents.

The walk itself was $6\frac{1}{2}$ feet wide, and the plants set 7 feet apart. The outside branches were not disturbed, but the inside ones were tied some to the right and some to the left, as they appeared. At the time of the taking of the photograph, which was at the close of autumn, the plants were 16 feet in height.

The castor oil plant is, botanically, *Ricinus communis*. As with some other plants, though but an annual plant with us, it is an arborescent shrub in warmer regions. Castor oil is yielded by the seeds of the plant. Besides its common name, it is also known under another, Palma-Christe.

Its flowers are disposed in racemes at the apices of the branches, the upper ones male, the lower ones, female.

The castor oil plant is naturalized in most all tropical regions, but its home is thought to be of tropical African origin.

There are many other objects of horticultural interest in Mr. Morris's grounds, but I must content myself without mentioning them on this occasion.

Joseph Meehan.

MAGNOLIA GLAUCA.



AMONG the most beautiful and interesting of our native ornamental trees, is the Sweet Bay, or *Magnolia glauca*. "Sweet Bay" is local.

It has a long coast range, generally growing in swamps, from New Jersey and Massachusetts, through the Southern States, around to Galveston, Texas, and in Southern California. The tree is strictly evergreen south of Maryland, but further north is deciduous.

Contrasted with *Magnolia grandiflora* in the south, the Sweet Bay is charming in its wild growth. The tree is less in size, the leaves are less, and the flowers perfect miniatures of *M. grandiflora*, smaller, sweeter and whiter. The *M. grandiflora* has large creamy white flowers like upturned goblets and *M. glauca* has silvery white upturned flowers, like small porcelain cups.

Although a forest tree, Sweet Bay is univer-

sally popular for arboretums, gardens, parks, and, in some cases, for streets. The neat size recommends it for narrow streets; and for wide streets it is adapted in double rows, making a shaded avenue lovely to behold.

In 1584 the chronicles begin of the *Magnolia*, or "Swamp Laurel", on Pamlico Sound as a fragrant and comely tree. The name, *glauca*, specific, was given by Linnæus, to describe the light, silvery green under surface of the shining leaves; but the old name *Magnolia lauri-folia* clung to it until this century. From the first discovery, the tree was admired. Specimens were sent to England in 1690 and were planted successfully in the Episcopal garden, by the Bishop of London. It is recorded that in 1690, the Rev. Cotton Mather, prosecuting



MAGNOLIA GLAUCA.

witches, on one of his journeys from Salem to Gloucester, was attracted by exquisite fragrance issuing from the wooded depths of a piece of swampy land. Investigation proved the source to be *Magnolia glauca*, then called Bay, Laurel and Beaver-tree. The latter name still clings to it in some localities, as beavers are fond of the roots and feed upon them.

The Rev. Cotton Mather gave prominence to the land thereabout, which has been since known by the town Magnolia.

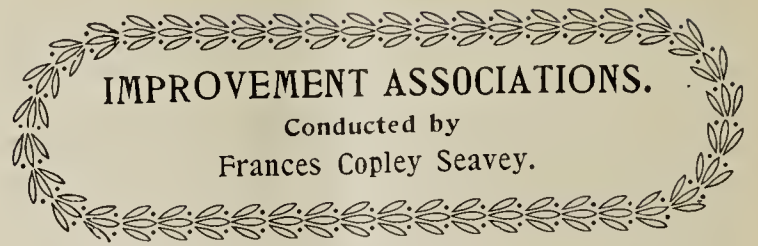
This tree has a history, as one of the first rare discoveries in the forests of North America. Its popularity extended to Europe and we read of frequent demands for new shipments of cones for planting, sent to this country. As a shrub in some places, and as a tree in other localities, its popularity has not waned.

Its most common form is that of a shrub from six to fifteen feet high. In this form it is grown in tubs for ornament, and ranks with Azaleas, Oleanders and other flowering, hard-wood shrubs, that grow to large sizes in their natural habitat. It exceeds Azaleas and Oleanders in the delicious perfume of the pure white flowers, and rivals the Camellia Japonica in handsome form and rich, shining foliage. The young plants naturally develop several shoots that remain almost vertical until the plant is well above surrounding shrubbery, when the branches and the leaves spread literally. The growth is healthful and lush, ranging from six inches to five feet in one season, and the flowering branches develop three growing points, the central one generally outgrowing and somewhat extending beyond the other two, in quite a graceful manner. The contrasted surfaces of the leaves, which are from three to six inches long, thick, and brightly enamelled on the green upper surface, and silvery whitish green on the under, flashing in the sunlight, makes the tree beautiful when not in bloom. A student of botany would, at once, with no previous knowledge of the Sweet Bay, pronounce it a strong and vigorous tree, merely from examining the leaves. The upper epidermis is very thick; there is a double and frequently a triple row of palisade cells, and the lower epidermal cells are extended into two celled needle pointed hairs as long as the leaf tissue is deep. Besides this mat of silky down, there is wax on the lower epidermis, so the leaves have immense assimilative and self protecting, inherent powers. The blooms are succeeded by small cones filled with pendulous red seeds, alike, except in size, to the *Magnolia grandiflora*. Even the cones are showy. In fact this lovely tree has not a single homely feature.

Transplanted to arboretums, or grown in tubs in northern cities, the writer is confident it will be a favorite, and success will attend the experiment. While not an iron-clad tree in northern sections, it is one of great adaptability.

From the car window, or deck of a steamer, during the months of May and June *Magnolia glauca*, in the edges of the wild-woods, in fourteen states, lifts its shining green crown, sparkles in the sunlight and sheds abroad exquisite perfume from thousands of gleaming cup shaped flowers, never failing to attract the attention of all on board, that have any love of nature, or appreciation of the beautiful. As a tree for shading lakes, or waterways it is unsurpassed. Trees are like people; the right one in the right place, frequently merits more praise than a conservative person takes the risk of expressing.

G. T. Drannon.



Leave the World a pleasanter place than you found it.
PLAY GROUNDS FOR SMALL CHILDREN.

As the subject of small parks in the poor and densely populated districts of cities is being actively considered in various parts of the country, this seems a good time to suggest that the rights of children to small or too frail to battle for a chance to amuse themselves with older, stronger or rougher children, deserves consideration. The necessity for such playgrounds is not limited to large cities nor to poor and densely populated districts. They are needed, oftentimes, where they would at first thought be supposed superfluous.

This does not necessarily mean elaborate or expensive preparation and need not mean a park even in name, though trees, groups of common, hardy shrubs, and vines allowed to build themselves into natural bowers, will add immensely to the enjoyment of the children. But even a vacant lot fitted up with temporary shelter from sun and rain, with swings and sand piles, and from which large quarrelsome boys and girls are strictly excluded, would prove a boon to scores of children even in small towns where there would seem to be space and to spare for their games in home gardens. Children are gregarious, and it is right that this quality should be encouraged. No lesson in life is of greater importance than learning to live with one's fellow creatures. It is of such importance that to older persons it sometimes seems to be life's lesson. Youth is the time to acquire with ease this as well as other knowledge. Only children, (those without brothers or sisters), are numerous in America and they are frequently at a disadvantage when old enough to enter school, because they have not come in contact with other children in every day life. They have to learn how to meet them and the trials of early school days are greatly increased in consequence.

It is true that the natural liking of small children for each other leads them to seek such companionship, but, too often, they are driven to the street to find it, and that is a dangerous play ground for little people.

Some parents may object to allowing their children to frequent a public playground—but that is illogical for they will play with other children some where if they are to be found, and it would seem better to know that they are at an appointed place

where they are at least comparatively safe. Such grounds will in most instances be found quite practicable, and here the little ones may amuse themselves while they unconsciously learn to understand human nature—a lesson that will serve them well in after years.

* * *

With an acknowledged play ground for the smaller children, a water-garden over by the mill, pleasantly shaded streets, well planted church and schoolhouse grounds, a remodeled cemetery, and with nicely improved railway station grounds and railway rights of way, any Improvement Club or Association has justified its existence and may well feel pleased with its progress. There is small likelihood of such an one being inclined to discontinue its pleasant efforts or to abandon the self appointed task of increasing the beauty, comfort and healthfulness of a community.

Everything that tends to increase the small happinesses of daily life is worth striving for not for one's self alone but for others, particularly for those who have little opportunity to think or work for anything beyond daily necessities. Often the fullest appreciation will be found among this class and it goes without saying that no other class stands more in need of the results of such efforts.

Raising the plane of living for individuals is lifting the general plane. That knowledge should compensate for many disappointments and annoyances as well as for much thought and labor.

* * *

It is said that each resident of North Stonington, Conn., seems to have constituted himself a village improvement society on his own account. A most happy state of affairs.

* * *

In many eastern towns and villages business firms and individuals are glad to donate funds for the use of the local organized improvement club in the development of the general interest and attractiveness of the place. No doubt the same would be true of progressive western business men were they suitably solicited. A word to the wise is sufficient.

* * *

Last year Arbor day was elaborately celebrated by the schools of Terre Haute, Ind., the protection of wild birds being a feature of the various programs.

The following suggestive program was given at the eighth district school: Song "America" by

school; Reading of the Governor's proclamation; Song "Octobers Party"; Reading "When the green gits back in the trees"; Song "Battle Hymn of the Republic", by school; Reading "October's bright, blue weather"; Describing a Bird; Reading "Woodman, spare that tree"; Song "Arbor Day Anthem" by school; Reading "How the Woodpecker knows"; Song "Arbor Day March" by school.

* * *

The very general interest and pleasure taken in a colony of squirrels, established in the town by some lads of Brighton, Ill., by means of nests of young squirrels brought from the woods in early spring, suggests the desirability of including a hint on the subject in Arbor day exercises.



NATURAL ARBOR OF WILD GRAPES.

Any thing that adds to the interest and to the beauty of a village as a place of residence adds also to its commercial interests.

Every one has heard of the hundreds of squirrels that make their homes in the public squares at Memphis, Tenn. They are a never failing source of interest and amusement to residents and strangers. Even the street Arabs take a proprietary pride in the little fellows. They have legal protection, no boy dreams of injuring or frightening them—would be punished, indeed, if he did either, and they are so tame that they will take food from any hand that offers it. Such a colony should be acceptable in any town, and by learning to protect the small but lively residents boys may learn to spare and admire the wild animals and birds that add so greatly to the charms of country life.

Such education of young boys will be felt in many directions. Soon they will learn to respect trees and flowering shrubs grown outside private grounds for the general good.

F. C. S.

PLANT NOMENCLATURE, III.

The rules that it is expected will solve the difficulty are given below, a brief explanation when necessary accompanying each:

RULE 1. Priority of publication is to be regarded as the fundamental principle of botanical nomenclature.

Names may be given for the glorification of authors. This rule tends to bring into common usage only one name and therefore only one author, and in time this can be omitted. In a sense this will deprive many authors of honor that must be perpetuated by great inconvenience to students or be obliterated in the interests of science. Further it means a personal sacrifice by which few of the older students can hope to benefit. The object however is not to deprive anyone of honor for the sake of doing it but rather in interest of science.

RULE 2. The botanical nomenclature of both genera and species is to begin with the publication of the first edition of Linnæus' "Species Plantarum" published in 1753.

This has been selected as the oldest work where descriptions are at all clear, exhaustive or recognizable as well as adopting the binomial system. Accordingly no work of previous date is considered and this therefore marks the starting point.

RULE 3. In the transfer of a species to a genus other than the one under which it is first published, the original specific name is to be retained.

It sometimes happens that the genus to which a plant was originally assigned, additional knowledge of the plant decides its name more properly belongs to a different genus and must therefore drop its original name for the right one. In such a case the specific name would still be retained thus:—from Linnæus' genus *Polypodium*, several genera have since been made and his *Polypodium cristatum* has its generic name altered to *Dryopteris*, but the specific name remains and we therefore have *Dryopteris cristata* and to give credit to the original author it is written *Dryopteris cristata* (L.) Gray, signifying the retention of Linnæus' specific name but denoting that Gray is the authority for the correct name. According to this rule we obtain such duplicate names of *Sassafras Sassafras*, *Benzoin Benzoin*, *Dier-villa Diervilla*, etc., where the generic and specific names are the same. This happens thus:—Linnæus' was the author of the name *Asplenium Scolopendrium* and when the genus was divided this plant was placed with *Scolopendrium*. The earliest authority for this last name was Karstin who gave it the name *Scolopendrium*, *Scolopendrium* (Deutsch Fl. 278. 1880—83) therefore the correct name of the genus is *Scolopendrium* taken from Karstin and the specific name *Scolopendrium* taken from Linnæus which equals *Scolopendrium Scolopendrium* Karst, or it could be written *Scolopendrium* (Karst) *Scolopendrium*.

RULE 4. The original name is to be maintained, whether published as species, subspecies or variety.

This is merely a plank inserted in the platform opposed to confusion.

An instance may be cited in our native Yew the elder Michaux in 1803 calls it *Taxus baccata* var. *minor*;

whereas in 1806 Willdenow called it *Taxus Canadensis*. Both referred it to the correct genus but Michaux's specific name being the older that would have the preference. In this case however the plant he reduces to a variety of the European Yew was raised to specific rank and his varietal name was made the specific thus *Taxus minor* (Michx.)

RULE 5. The publication of a generic name or a binominal invalidates the name for any subsequently published genus or species respectively.

Thus *Halesia* a name given to the Silver Bell by Ellis in 1756 was later found to be wrongly placed and the name *Mohria* was proposed—this was the name of a fern and upon discovery (after publication) it was substituted by *Mohrodendron*.

The generic name is therefore *Mohrodendron* but Linnæus' specific name is retained which makes it *Mohrodendron carolinum* (L.) Britton. According to this rule one name only is preserved for a genus or species—the first one used unless it rightly belonged to another in which case the next oldest is to be used. Occasionally it happens that by mistake or without full knowledge of other names the same name is given to two different plants, thus the soft or white maple has long been known as *Acer dasycarpum* according to Ehrhardt and the Rock or Sugar maple was called *Acer saccharinum* by Wangenheim. It happens that Linnæus called the Silver maple *Acer Saccharinum* in 1753 which therefore superseded Ehrhardt's name given in 1789. Wangenheim gave the rock maple the name of *Acer Saccharinum* in 1787 and Marshall named it *Acer Saccharum* in 1785 therefore the latter is correct for the Rock maple. Supposing this tree had not been referred to any species previous to Wangenheim, even though it would then have been the oldest it could not be used because Linnæus had used the same name 32 years before and the procedure would have been to use the next oldest name for the Rock maple which would have been *Acer barbatum*, Michx (Fl. Bor. Am. 2:252. 1803.)

RULE 6. Publication of genus consists only, (1) in the distribution of a printed description of the genus named; (2) in the publication of the name of the genus and the citation of one or more previously published species as examples or types of the genus, with or without a diagnosis.

RULE 7. Publication of a species only, (1.) in the distribution of a printed description of the species named; (2) in the publishing of a binominal, with reference to a previously published species as a type.

RULE 8. Similar generic names are not to be rejected on account of slight differences, except in the spelling of the same word.

RULE 9. In the case of a species which has been transferred from one genus to another, the original author must always be cited in parenthesis followed by the author of the new binominal.

RULE 10. In determining the name of a genus or species to which two or more names have been given by an author in the same volume, or on the same page of a volume, precedence shall decide.

Emil Mische.

GRAFTING OF TREES.

The grafting of trees, besides being a profitable undertaking usually, is an exceedingly interesting one, the union of the two different sorts on one tree being something of a mysterious operation to those who do not understand how the wood of trees is formed and how the union of parts is accomplished.

On nearly every place there are trees which might be profitably grafted, some with much better sorts and others with new kinds to be tested. Cions required for grafting purposes should be cut some time in the winter while quite dormant. The shoots to cut are those made last summer. Those of about half inch diameter are of suitable thickness, though a little more or less won't matter. These shoots have to be kept fresh and quite dormant until wanted for use, which will be when the buds on orchard trees are commencing to swell in early spring. They may be buried up entirely out doors or covered over with sand or soil in a cave or quite cold cellar. They must be in a cool place, as when used they must be in a less forward condition than the tree they are to be placed on. The length of cion to be used in grafting depends somewhat on the distance the buds on it are apart. There are usually two buds allowed above the part inserted in the cleft of the branch, though one is enough; and in fact, one only is usually permitted to grow if both start. But as one sometimes fails to push out, the cion is permitted to carry two, one being rubbed out—the lower one—should both push out. There is hardly any limit to what trees may be grafted. All fruit trees as a rule may be and with reasonable hope of success, and very many ornamental trees are multiplied in the same way. Those who raise trees in large quantities, such as nurserymen and fruit growers, procure small, one year old seedlings. These they cut off at the collar, and graft the root. This is carried on in doors all winter long. As the seedlings are grafted they are labeled, tied in bundles, packed in boxes of sand, the tops only not being covered, and set away in a cool place until spring comes, when they are set out, close together, in rows, out of doors. As a rule, home made grafting wax is used, both for indoor and outdoor grafting. This is made by heating together in some iron vessel 1 pound rosin, $\frac{1}{2}$ pound beeswax and 2 pounds tallow. After a thorough melting it can be easily warmed up at any time for use, a little oil lamp contrivance answering for the purpose very well. After the cions have started to grow, the wax will have to be removed on one side sufficiently to permit of the cutting of the strings holding together the stock and cion, or the strings will cut in to the wood as growth proceeds.

J. M.

PRINTED LABELS FOR LIVING PLANTS,

The discussion in many quarters on the labeling of trees, plants, etc., so as to increase and fasten public attention upon them, is leading to the production of a label that will afford the most satisfactory service. Professor W. A. Kellerman in a recent issue of "*The Agricultural Student*," describes a label he has devised. In the course of an article he says:

"The importance of a plain and easily legible label for living herbs, shrubs and trees in conservatories, botanic gardens and public parks has been underestimated. To the absence or illegibility of labels is largely attributable the ignorance, even on the part of cultured people, of trees and other plants. Our native plants are largely unknown to the people who have opportunity to see them almost daily.

"The pot labels used in greenhouses are extremely unsatisfactory and generally useless to the public. The writing is mostly done with a lead pencil and is quite generally illegible to the visitors. But the main objection is that the name is vertical instead of horizontal. Labels to out-door plants when written or painted on stakes, are sometimes vertical instead of horizontal, but always less easily read than when printed in plain broad-faced type. The large zinc strips nailed on trees in parks or other public grounds, on which are painted the names, are wholly unjustifiable. Both for plants in the conservatory and out-of-doors I have adopted the printed card label which is very satisfactory and in the long run comparatively inexpensive.

"I have devised a label holder which consists of a piece of sheet brass, No. 24, cut the length of the card label, but one-half inch wider and the upper and lower edges are bent over (this is done with a tinner's brake,) under which edges the card is slipped.

"Three plans are adopted to support the labels; for pot plants in the conservatory, for outdoor herbs and shrubs, and for trees respectively. The first consists of a stiff wire, bent hairpin shape, soldered at the back of the brass holder, the two free ends being a few or several inches in length suitable for thrusting in the soil of pots of varying depths. These supports are bent backward slightly but uniformly at the lower edge of the label holder so as to give a proper bevel or angle to the card label.

"The label holder for the outdoor plants consists of a steel rod five-eighths of an inch wide, one-eighth of an inch thick and twenty inches in length. At the middle of this iron stake two bends are made, one very sharp, (heating is required,) so as to present a square shoulder allowing the use of a hammer or mallet in driving the stake to the proper depth, the shoulder being at the surface of the soil when the stake is placed is not observed by the visitor and it insures a uniform depth of the stake and height of the label. The uppermost portion (two inches) of the stake is bent backward so as to present the proper bevel or angle for easy reading of the label. It is on this part that the brass label holder is riveted with copper rivets (iron would discolor the label.)

"For trees the label holder is placed on the trunk

about five feet from the ground. Two nails are used inserted in the two holes that were for the rivets. A very thin piece of mica is used to prevent contact of the card label and nail heads.

"The method adopted for protecting the printed label is simply the insertion of a thin piece of mica of the same size in front of the label. Though water enters at the ends behind the mica and dampens the label during every rain it is not at all to the detriment of the printing. It will be many months before the discoloration of the card is such that a fresh label need be inserted. Renewal once a year will be sufficient, though to change them both in early spring and early fall gives better satisfaction. The size adopted for our greenhouse plants is one by two and a half inches and for outdoor plants two by four and one-half inches. The iron stakes are painted black before riveting on the label holders. The mica should press close to the card label otherwise the moisture will condense and collect in visible quantities when the sun shines directly on it. The labels we use in the Botanical Department gives the common name in large black type occupying one line, and below this in smaller type the scientific name is given, also the family to which the species belongs and the country in which it is indigenous."

The subject of properly labeling trees and plants in our public places, and the necessity for so doing in order to secure the educational values, is one that is receiving much attention. It is a matter of considerable importance.

GARDEN PLANTS—THEIR GEOGRAPHY, I. POLEMONIALES.

THE POLEMONIUM, CONVULVULUS AND SOLANUM
ALLIANCE.
(Concluded).

Iochroma, in 15 species, are from the Andean regions of tropical America. *I. fuchsoides* and others are shrubs with orange, scarlet and purple flowers. One or two are in California.

Solandra is a genus of South American shrubs and climbers. *S. grandiflora* promises well in southern California.

Datura has 12 species, some of which have become cosmopolitan in warm regions. The large shrubby drooping flowered kinds have, some of them, become naturalized on the Mexican border. *S. suaveolens* is sometimes hardy as to its roots at the lower

south. *S. sanguinea*, Peruvian originally, although hardier in constitution, is less commonly seen in the states for some reason. There are several large flowered, sometimes fragrant annuals more or less grown.

Cestrum is a large genus, which now includes *Habrothamnus*, several are in cultivation and one or two are naturalized in the southwest.

Nicotiana is the tobacco genus with about 40 species in tropical America, the Pacific Islands and Australia. Several are adventive or native to the warm parts of the United States. Several have fine foliage, and some have fragrant showy flowers, such as *N. alba*, upright, and *N. sylvestris*, drooping.

Fabiana has 11 species natives of Chili, Bolivia and Brazil. *F. imbricata* seems to be the only one cultivated. It is a pretty ericoid shrub with white flowers. It is apt to get bare at bottom, however, and should have attention in pruning and frequent propagation.

The Salpiglossideæ contains many plants of such favorite garden genera as *Peunia*, *Nierembergia*, *Schizanthus*, *Salpiglossis*, *Browallia*, *Streptosolon*, *Brunfelsia* and some others, which have often been included in the alliance which is to follow. It will be seen by the mere enumeration that there can be no difficulty in furnishing the groups with showy plants. In the absence of good examples the difficulty lies in appreciating the possibilities.

James MacPherson.



Sylvestris.

NICOTIANAS.
Tomentosa.

T. Variagata.

PARK NOTES.

Springfield, Ill., on January 9, at a special election, voted to adopt a system of parks and boulevards.

* * *

The park commissioners of Cleveland, O., have decided upon adding another park to the Cleveland system, at the south end of the city, which will contain some 150 acres. This project has been under consideration for a long time, and it will form a connecting link for those already provided. The land will cost about \$80,000.

* * *

Unless the Washington authorities hasten to include the famous Calaveras, California, grove of big trees in some national park scheme, it is probable they will be converted into lumber, as the property may pass into the hands of a large lumber firm. A number of associations are actively at work on projects to save the grove, the destruction of which would be a public scandal.

* * *

The Pennsylvania State Forestry Commission held a special meeting last month and discussed the purchase of additions to the state parks. Of the lands purchased by the commission so far about 20,000 acres are on the headwaters of the Delaware River. The remainder, about 39,000 acres, are on the Susquehanna water shed. There are also in sight now, with the prospect of a speedy purchase, about 40,000 acres more, providing terms and conditions can be agreed upon. The lowest price paid was 50 cents per acre; the highest price was \$2 per acre.

* * *

In October next the Chicamauga and Chattanooga National Park Commission will hold a general inspection of the work of the commission to secure the greatest possible accuracy as regards text on tablets and monuments, landmarks designating lines of battle and important localities on the seven battlefields included in the park project. At the time named there will be between 1,300 and 1,400 tablets for inspection, over half of which are the large historical plates, and 228 of which are the historical plates on monuments. There will be 511 locality tablets for verification, 350 regimental markers of fighting positions, beside those occupied by the regimental monuments, and 178 battery tablets, making, with 50 to be erected during the coming season, over 2,000 tablets for examination, besides several hundred battle positions of brigade lines.

* * *

At the annual meeting of the Minneapolis Park Commissioners in January, a report was read from Mr. Warren H. Manning on the conditions and possibilities of the Minneapolis park system. Last summer he made a careful study of the parks and some of his suggestions were acted upon. In the report he discouraged the maintenance of a large number of animals at Minnehaha park, and advocated the spending of the money necessary to keep them on the natural scenery. He believed that it was proper to get a collection of Minnesota flora and fauna, but considered sea lions and exotics an expensive luxury from which no great benefit was derived. He further advocated the care of the bluffs along the Mississippi, saying that outside of the Palisades of the Hudson, there was no other city in the union that had so great possibilities for magnificent scenery.

* * *

The city of Quincy, Ill., has five parks under the care

and control of the Quincy Boulevard and Park Association, in which are four miles of drives. The association altogether looks after ten miles of boulevards and streets and 108 acres of park area. The association has been constantly exercising influence towards improving Quincy, and the interesting problems of securing funds for the purchase and improvement of the parks is an entertaining chapter in the city's history. By the aid of the citizens promptly paying taxes there is left a surplus in the town treasury after paying expenses, which by resolution is turned over to the association for park purposes. This year the amount will probably reach some \$3,000. In addition to this the dog tax is applied to the same purpose, and this is expected to realize a further \$2,000. The several parks and acreage are as follows: Madison Park, 8½ acres; Riverview Park, 7 acres; South Park, 58½ acres; Primrose Park, 12 acres, and Indian Mounds, 22 acres. The park system of Quincy most clearly demonstrates what can be done by the sustained energy of public spirited citizens, and what has been accomplished there can also be attained by similar enthusiasm elsewhere.

* * *

One of the important matters touched upon in the last annual report of the Park Department of the City of Cambridge, Mass., is that of its street shade trees, which are now under the care of the park commissioners. There were planted 147 American Elms, 51 Rock Maples, 38 White Ash and 3 Norway Maple, a total of 239. During the year 482 trees were trimmed, 720 new wire guards put on and 2,174 old guards repaired. Unfortunately a great number of trees have died or are declining, and the commissioners have instituted serious investigations into the cause. In the report of the landscape architects, Messrs. Olmsted Bros., on this subject they say: During the past summer it was generally noticed throughout the whole Metropolitan district of Boston, that certain unusual conditions of climate or the ravages of some disease had caused the decline and death of a great number of trees. * * * The examinations which we made lead us to believe that while unfavorable conditions of light, air, moisture and soil might be blamed for the death of many of the trees in the streets of Cambridge, there were evidences that other agencies had been more active in their demise. * * * We are inclined to attribute the unusual death rate to protracted hot and dry weather immediately preceded by periods of unusual moisture during a season following a severe winter.

* * *

There is much of interest in the last annual report of the South Park Commissioners of Chicago. The total area embraced within the limit of the South Parks and Boulevards is 1501 acres within a fraction, of which the parks comprise 1181 acres. There are 17.28 miles of boulevard and nearly 42 miles of improved drives. Including a balance in hand on Dec. 1, 1898, of \$83,950.24, the total receipts for the year were \$573,639.04, \$40,638.23 having been received from refectory, boats, games and other park privileges. The expenditures were \$492,272.36. The park system is lighted by electricity practically from its own plant, a small section in an outlying part is supplied from an outside company. The cost of operating the arc lamps, of which there are 494 of 2000 c. p. was a trifle over 2 cents per lamp hour, which included maintenance and repairs. The planting notes are more or less indicative of prevailing activity in the system. There were planted out from the park nurseries 208,760 young trees and shrubs, and 442 elms ranging from 3 in. to 6 in. and 8 in. diameter were set out on the boulevards. The park nursery has now on hand 63,888 trees and shrubs for future use. The park owns 119 horses, and the number of men and teams employed during the year varied from 335 men in December to 783 men and 21 teams in July, not including the park teams,

CEMETERY NOTES.

The annual report of the Bohemian-Polish St. Adelbert's cemetery at Norwood Park, Chicago, shows total receipts for the year 1899, \$22,921.38; the expenditures amounted to \$19,034.24.

* * *

At the annual meeting of the Homewood cemetery, Pittsburgh, Pa., the following figures were given: Total cash receipts were \$67,322.27 of which \$54,528.34 were from sales of lots. In the expenditures a sum of \$36,352.26 is charged to improvements and to total improvements \$314,024.50. Permanent fund amounts to over \$73,000.

* * *

The Ladies' Village Improvement Society of Columbia Falls, Me., undertook the work of putting in order the town cemeteries in which it expended some \$700. It is also pushing its energies in other directions. An improvement association in every small town can exercise the strongest influence in creating a sentiment favorable to such work.

* * *

The 46th annual report of Pine Grove cemetery, Lynn, Mass., was submitted to the city authorities in January. The total receipts were \$25,628.18 and expenditures \$25,378.18. Among the receipts were: Appropriated by city council \$9,000; sale of lots, \$5,338.37; interments, \$2,631; foundations, \$745; care of lots, \$6,242.12; sale of plants, \$997.24. The perpetual care fund now amounts to \$110,176.34

* * *

Mr. Amos Whiteley in transmitting a \$1,000 gold bond in trust to the Fern Cliff cemetery, Springfield, O., made this provision: "The interest to be applied annually, first to paying the expenses of caring for the Whiteley lots in said cemetery; the balance to the expenses of caring for other lots and grounds not otherwise provided for." This is a suggestion which abounds in promises of usefulness in cemetery care.

* * *

Babylon, N. Y., Rural Cemetery Association has recently adopted resolutions tending to bring the grounds and management a little more in harmony with the lawn plan: "That hereafter no gravel or soil paths be made between lots; that said paths be kept in sod and the grass cut by the association. That hereafter no stone (other than monuments placed near or in centre of lot) shall be more than three feet nine inches high, and only one stone shall be placed to a mound."

* * *

The annual report of the cemetery commissioners of Cambridge, Mass., gives the total expenditures at \$19,910.23. The amount appropriated at the beginning of the fiscal year was \$21,500. There was a large increase in the requests for perpetual care, some 26 lot holders having deposited \$3,329.20 to this end. The fund now amounts to \$46,512.98, representing 341 lots. The number of interments for the year were 644, making a total of 22,840.

* * *

The annual meeting of the Little Lake Cemetery Company, Petersborough, Ont., was held last month with very satisfactory reports, the receipts exceeding expenditures and leaving a good working balance on hand. It is gratifying to record the continued effort to improve the cemetery on modern lines. Foot stones, lot markers and grave mounds are being lowered to al-

low of lawn mower work, and a number of fences and railings have been removed from lots leaving only seven such objectionable features in the cemetery. Notice of motion was given to increase the price for perpetual care from \$100 to \$200, a move in the right direction. Considerable planting and road work was done during the year. The sales of lots and graves amounted to \$1,691 and the total receipts by the superintendent were \$3,174.90.

* * *

The 63rd annual report of the trustees of the Rural cemetery, Worcester, Mass., for the year ending Dec. 31, 1899, shows a perpetual care fund of \$81,069.15, an increase for the year of \$2,919.91. The general fund amounts to \$84,769.76. Lot sales reached \$1,832.70. There were 24 foundations for monuments and 27 for headstones put in, and 11 curbs and 4 iron fences removed. Number of burials 80. During the season the work of caring for lots was greatly increased by the alarming presence of the muckworm. They work most voraciously on new and well kept lawns, avoiding the rank weeds and grasses of the neglected lots. No less than 700 private lots were stripped of turf, the soil treated with salt and fertilizers and then re-seeded. Similar work was done on large areas of the ground reserved for grass, shrubs and trees. Bushels of muckworms were gathered and destroyed. It is thought that the unusual conditions of climate in the spring caused the disastrous visitation.

* * *

Morningside cemetery, Brattleboro, Vt., is being developed to become one of the most attractive burial lots in New England. It is located on a plateau overlooking the Connecticut Valley to the north and south and completely set in a framework of trees and shrubbery. It comprises 100 acres of grounds admirably adapted for cemetery purposes. The roadways have, so far as it is possible until spring, been completed. The receiving vault, 24 feet by 31 feet will be constructed of Dummerston, Vt., granite with slate roof, with interior lined with white glazed brick, floor of marble tiles and ceiling of steel. It will contain 42 catacombs and a convenient chapel for funeral services. On the exterior is a roomy porch supported by four granite columns, and the windows are of cathedral glass. Improvements will continue when spring opens. The officers and stockholders comprise many of the wealthy and influential citizens of Brattleboro who are deeply interested and ambitious to provide their town with a cemetery unrivaled in the state.

* * *

Fairmount and Riverside cemeteries, Denver, Colo., have been consolidated, and both are now under one management, the former having bought Riverside outright, assuming obligations and liabilities in regard to endowment fund which amount to over \$60,000. Riverside has about 160 acres not occupied, with fine buildings and improvements. It was organized 20 years ago on the plan of annual assessments on lot owners, and those wishing to receive endowments on their lots, which as the cemetery grew older required constant attention to maintain satisfactorily. Fairmount was organized 8 years ago strictly on the "endowment" plan. This endowment fund, now amounts to over \$100,000. It has some 8,000 interments, and is kept up on advanced lines of modern cemetery practice. While both cemeteries were organized for profits to stockholders, up to date no dividends have been declared, the stockholders of both cemeteries being wealthy men, the profits accruing have been used in beautifying and improving the grounds. The expenses are large owing to the arid climate, every drop of water for irrigation and other purposes having to be purchased. Each cemetery has its own water rights. A crematory is to be built to cost \$10,000 patterned after the experience of the leading cemeteries operating them.

At a meeting of the Young Men's Assembly of Watertown, Mass., among many important subjects discussed were the cemeteries, and a resolution, moved by Rev. E. A. Rand, was passed urging the improvement of the Common Street cemetery. In the course of the remarks Mr. Rand said: The Common Street cemetery, is not a pleasant spot to look upon. Some of the old trees should be removed and a few elms planted so that in a few years they would afford shade. The cemetery should be made attractive with shrubs and well kept paths. The Common Street cemetery is the centre of the town, and is seen by many travelers, and is not attractive. The town will soon have three cemeteries, and the nearer they come to gardens the more it will be to the credit of the town. The Common Street cemetery is the site of the old meeting house. Its location could be marked for a small amount of money, and a tablet, with more complete description, might be erected. In some way this resting place for the dead should be improved and made a beautiful place.

* * *

The annual report of Greenlawn Cemetery, Columbus, O., shows total receipts amounting to \$45,108.39, and expenditures, \$45,027.12. The receipts included sales of lots, \$15,513.42; vault fees, \$4,957; graves, \$4,020; labor on lots, \$2,920.05. In expenditures, the labor bills amounted to \$20,640.70. Some \$250 were expended in trees, plants and flowers.

* * *

The Savannah Ladies Aid Society of the 2nd Georgia regiment, organized for the Spanish American war, has undertaken to further a movement for a memorial to the dead of the regiment. A boulder of Georgia granite as best suitable for the purpose, six feet long, the same in height, and three feet in width was decided upon. A cross is to be cut on the boulder and inscribed at the head with the words "In Memoriam." At the foot of the cross will be the words "Second Georgia Regiment." On either side of the cross will be inscribed the names of the deceased members of the war organization. It will be erected immediately opposite the main entrance to Laurel Grove cemetery on the chapel green, and the Park and Tree Commission will superintend the improvement of the site.

The statue, erected by the children of the state of New York in memory of the noted educator, Dr. Edward Austin Sheldon, was unveiled in the Capitol at Albany, January 11. The statue is in bronze and represents Dr. Sheldon in a sitting posture. At his side is a child to whom he is imparting knowledge through an object lesson, a sphere being held in his left hand by which he is demonstrating his lesson. The work was modelled by John Francis Brines. Two hundred thousand school children contributed, creating a fund of \$3,539.60.

CORRESPONDENCE.

In reply to a correspondent desiring a list of hardy shrubs, herbaceous plants, etc., adapted to ornamental planting on the prairies of Western Nebraska, the following from Prof. Samuel B. Green, of the University of Minnesota Agricultural Experiment Station offers a fine choice for decorative effects:

ORNAMENTAL SHRUBS. Red Twigged Dogwood, Hardy Hydrangea, Tartarian honeysuckle, Syringa, Golden spirea, Buckthorn, Japanese Rose, Missouri currant, Spirea, L. van Houttei, Ash Leafed Spirea, Spirea, Buffalo berry, Lilac, High bush cranberry, Snowball, Cornus stolonifera, Hydrangea paniculata grandiflora, Lonicera, Tartarica, Philadelphus, in variety, Physocarpus opulifolia, var. aurea, Rhamnus catharticus,

Rosa rugosa, Ribes aurea, Spirea Van Houttei, Spirea sorbifolia, Spirea Obovata, Sheperdia argentea, Syringa vulgaris, in variety, Viburnum opulus, Viburnum opulus, var. sterilis.

HERBACEOUS PLANTS. Columbine, Lily of the valley, Larkspur, Bleeding heart, Baby's breath, German iris, Colored daisies, Herbaceous peonies, Double yarrow, Aquilegia vulgaris, Convallaria majalis, Delphinium hybridum, Dicentra spectabilis, Gypsophila paniculata, Pyrethrum roseum, Paeonia sp., Achillea ptarmica, flora plena,

VINES. Virginia creeper, Bitter sweet, Virgin's bower, Wild grape, (staminate form) Ampelopsis Virginica, Celastrus scandens, Clematis Virginiana, Vitis riparia.

LEGAL.

UNWARRANTED REGULATIONS.

The attempted delegation, in section 47 of the New York law governing cemetery association to fix a fine for the violation of a regulation made by the association, a trial term of the supreme court of New York, Fulton county, holds, is not a valid exercise of legislative power. The court further holds, in the case of the Johnstown Cemetery Association against Parker, that, where the deeds to lots reserve the right to each proprietor to cultivate trees, shrubs and plants (and growing grass must be considered as a plant, being embraced within the definition of a plant) upon the premises, this carries with it the right of the lot owner to enter upon, and cut from time to time the grass and remove the weeds growing upon, the lot.

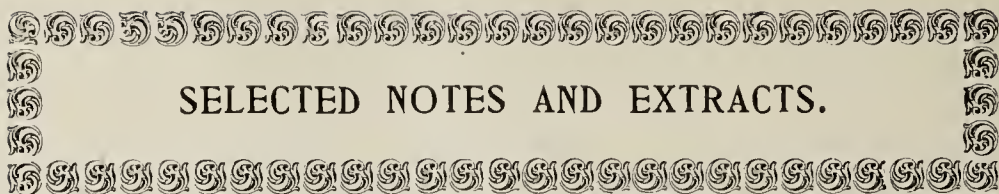
Again, the deed transferring the entire title to the property, subject only to the regulations that were attached to it, the court holds that it gave to the owner the absolute use and control, except so far as they were inconsistent with any right which was to be exercised under the deed by the cemetery association. It gave to him the absolute right of ingress at any time, to enter upon the lot for any of the purposes that were consistent with its use and occupation. In such a case, it insists, it is the absolute and unqualified right of the owner to enter upon that lot, and to do anything thereon, as an owner, not inconsistent with any right which the cemetery association may have.

The right to prescribe rules for the government of the grounds, the court goes on to say, does not extend to the right to curtail the right of an owner to occupy his lot. He may occupy it despite any rules or regulations of the association, so far as it does not affect any right of theirs. If they can make a regulation that the superintendent shall do all the work upon the lots, they may make a regulation that no monuments shall be erected except by the superintendent.

And more especially does the court here hold unreasonable, under such circumstances, a rule or regulation the object of which is to compel lot owners to employ the superintendent to care for and take charge of their lots, so as to produce a revenue for the association.

Even assuming that a right was reserved by the association to pass regulations governing the care of the lots, the court holds that such a regulation as that suggested would not be a reasonable one. It is not reasonable to deprive the owner of a lot of the right to cultivate flowers, plants, grass, and shrubbery upon his lot, so long as he does not violate any right of the cemetery association. He has the absolute right to do as he pleases, and to use the lot, within those limits, as free from hindrance as he has his own household premises.

On the other hand, the court suggests that the association might regulate the hours at which work might be done upon lots (that is, within reasonable limits;) they might say that no work should be done upon a lot during a burial in the vicinity; and, generally, they might make reasonable regulations.



SELECTED NOTES AND EXTRACTS.

Lawn Making.

One of the greatest problems in general gardening is the production of a good turf and maintaining it. Yet it is easy to solve, too, if carefully attended to. The chief thing is to start right. There should be a good, rich, loamy top-soil, six inches in depth, at least, in which the seed should be sown. Unless for some very good reason, which would seldom be the case, one kind of grass only should be sown, which will make an even, regular growth—if cared for. Dishonest contractors are occasionally to be met with who do not hesitate to "skimp" with the top-soil, and a weak, stunted and tufted growth of grass is the result. Kentucky Bluegrass is the most popular and best for more northern States, being very hardy and close-growing. It is a famous pasture grass, and thrives in almost all soils. For excessively dry soils, where it has been found difficult to establish ordinary grass, Sheep Fescue, a very fine, "silky" grass, will be found admirable. Around the base of large trees, where it is not also shady, it will grow right up to their trunks. This is also recommended for sowing in sod which is troubled with annual grass or weeds, as it may be cut very close, and the annuals prevented from seeding. While telling what to do, it is well to add what to avoid. Whatever kind of grass is employed to seed with, it should be of a slightly creeping, and not of a tufty character. It is impossible to make a close, even carpet with a tufty grass.—*Meehan's Monthly*.

Decorative Grasses.

One of the best of the Decorative Grasses is unquestionably *Gynerium argenteum*, also known as pampas-grass, which thrives especially in the southwest of our country and is not hardy east of the Rockies. But it can be raised with protection as far north as Maine, requiring only a litter of straw in the winter time. Its silky silver-white plumes, which it bears in the summer, are very showy. It does well in dry situations, a fact that commends it to the arid belt.

Erianthus Ravennæ is another decorative grass of great value in the ornamentation of the garden. It is a perennial and requires several years to reach perfection, but it does not need as much protection against Jack Frost. It lacks

the plumes of the pampas-grass but, as though nature wanted to make up for this, its foliage is far more attractive.

Gymnothrix latifolia is not as well known in the United States as it should be. It is sown under glass in February and transplanted in May, that is to say out of doors. It develops rapidly, and until September attains considerable height, but is killed by the first frost that comes along. It resembles the bamboo, and its leaves do not look unlike that of corn. It can easily be wintered in the cellar or pit and obtains great size with age.

Bambusa aurea is another plant that should be more common in our gardens. It may be wintered in the open ground with slight protection and looks very fine with its clusters of delicate leaves and golden hued stalks.

Eulalia is a desirable grass for the open lawn or border of shrubbery.—*Dr. Hugo Erickson, in Vick's Magazine*.

* * *

Fall and Winter Work Against Injurious Insects.

Many of our most destructive insects pass the winter either among matted prostrate grass, among fallen leaves or especially along osage hedges, lanes and fence corners. Whenever such places can be burned over in late Fall, Winter or early Spring, the effect will be to destroy many of these. Instead of having our annual clearing up in May, as many do who clear up their premises at all, this should be done during the seasons above mentioned, as by May many of the destructive insects have left their Winter quarters and are beyond reach. In the orchard, the falling of the leaves will reveal cocoons and even insects upon the trees that cannot be easily detected while the foliage is still hanging to these trees. Many insects pass the Winter within a folded leaf that is attached to the twig to prevent it from dropping off and in this way deceive the eye of the orchardist. It will pay to go over the orchard and remove all the cocoons and dried leaves still clinging to the trees.—*Horticultural Visitor*.

* * *

Wild Flowers for the Garden.

When planing for the early flower garden do not forget the wild flowers. Select a moist, shady spot, remove sufficient earth and fill in with carefully

selected leaf mold from the forest. Fringe the bed with pretty maidenhair and other small ferns, fill it with spring beauties, anemone, wild hepatica and violets. The spring is the best time to make a wild flower bed, but as the plants are more hardy than cultivated ones, little difficulty will be experienced in their safe removal at any time if taken up with a ball of earth adhering and kept well watered and shaded.—*The Minnesota Horticulturist*.

* * *

Magnolias.

Few flowers are better appreciated by the public generally, than the magnolia. Such a display of large flowers is seldom seen on a tree of any other kind. Coming early, before the leaves, of fine form and strong, sweet odor, they are indeed attractive. To many persons a magnolia, is simply a magnolia, varieties or species disregarded. But some consideration of the kinds is quite to be desired. To me the prettiest, *Magnolia Soulangeana*, popular taste or knowledge usually puts aside. It is intermediate between the purple and the pure white, having a deep suffusion of pink at the base of the petals, shading out to clear white. It is in less of a hurry to blossom in the Spring than the white, *M. conspicua*, therefore less likely to be frozen in the bud; although if planted on the eastern side of buildings or sheltered from the sun there is less tendency to blossom too soon. *M. Soulangeana* makes a handsome growth, rapid and strong, with large leaves. In this respect it is quite unlike the purple, which makes numerous slender stems, suckering from the base to form a large clump. The purple color is, of course, a good one, especially in contrast with the white. *Magnolia Lenni* is a very dark purple, of better form as regards the petals, which have more rounding tips and last longer. The growth is heavier than that of *M. purpurea*. These three are the better known of the shrubby magnolias; but there is another more rare, yet well appreciated in certain quarters. It is *M. stellata* or *Halleana*, a dwarf species, quite distinct in habit, leaf and flower. Four or five feet is the approximate height, though I have seen some old specimens quite 7 feet in height, and very broad. The leaves are rather narrow, not unlike in shape to those of *M. glauca*. The flowers are earliest of all, yet seldom injured by frost, being better protected by its dwarf habit. The petals are very narrow and numerous—it might be termed a semi-double flower. It is a bush that will be found just suitable for many positions, and very interesting in every way.—*S. Mendelson Meehan in Florists Exchange*.

Park and Cemetery.

ESTABLISHED 1892.

An Illustrated Monthly Journal.

Devoted to the advancement of Art-out of Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Association, etc.

The regular contributors to PARK AND CEMETERY are among the most eminent Landscape Architects, Landscape Gardeners and Horticulturists in the United States, whose practical articles make the journal one of great value to any one identified with landscape work.

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Correspondence solicited on subjects pertinent to the columns of the journal.

Officials of Parks and Cemeteries are requested to send copies of their reports.

Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

Association of American Cemetery Superintendents.

WM. STONE, "Pine Grove,"
Lynn, Mass., President.
GEORGE M. PAINTER, "West Laurel Hill,"
Philadelphia, Vice-President.
H. WILSON ROSS, "Newton"
Newtonville, Mass., Secretary and Treasurer.

The Fourteenth Annual Convention will be held at Cleveland, O.

The American Park and Out Door Art Association.

CHARLES M. LORING, Minneapolis, Minn.,
President.
WARREN H. MANNING, Tremont Bldg.,
Boston, Mass., Secretary.
O. C. SIMONDS, Chicago, Treasurer.

The next meeting of the Association will be held at Chicago, Ill.

The American Society of Landscape Architects.

JOHN CHARLES OLMSTED, Brookline,
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SAMUEL PARSONS, JR., St. James Bldg.,
New York, Vice-president.
CHAS. N. LOWRIE, 156 Fifth Ave., New
York, Treasurer.
DOWNING VAUX, Bible House, New
York, Secretary.

A notice concerning Audubon Park, New Orleans, given on page 239 of the last issue requires correction. Mr. Lewis Johnson, a park commissioner, writes that the \$100,000 referred to has no significance in estimating the ultimate cost of improving the park under the designs of Olmsted Bros., of Brookline, Mass. Further the credit of offering to contribute \$2,500 toward a fund of \$100,000 to be donated to Audubon park for improvement purposes, should be given to Mr. Frank R. Johnson, a public spirited and esteemed

member of the community. The liberal offer is indicative of the development of public sentiment in New Orleans in favor of large public parks.

The Green River Cemetery Co., Greenfield, Mass., contemplate changing their by-laws, rules etc. in view transforming the cemetery to conform to the lawn plan. Mr. F. O. Wells, president, would thank cemetery officials, who have recently issued revised rules etc., to mail such to him.

The annual meeting of the Board of Directors of the Missouri Botanical Garden, the Shaw Garden, St. Louis, Mo., was held January 10, and the reports show an excellent condition of affairs. Prof. Trelease, the Director, gives the number of living plants now in the collection as 9,127. The attendance last year was 54,429, persons on week days, 7,755 on the open Sunday in June, and 8,837 in the open Sunday in September; total 71,021.

W. J. Stevens, superintendent of the public schools of Carthage, Mo., has issued a circular to the pupils containing particulars of a series of money prizes to be awarded for successful gardening work, ornamental and useful. Three classes of such work is listed: Vine-planting, raising flowers, and boys' vegetable garden. This is a splendid work which will redound not only to the welfare of the town, which is already beautiful, but to the education in higher things of the children of the public schools. Let every town in the country do like-wise and the effect would be marvellous.

In the annual report of the Park Commissioners of the city of Taunton, Mass., occurs this interesting paragraph: The act of the Legislature delegating to the Park Commissioners of this city the custody, care and control of the public cemeteries, rendered it necessary that the duty of electing the superintendents of said cemeteries be transferred from the City Council to our Board. Accordingly at the first meeting of the Board in January, 1899, we proceeded to the performance of the duty thus assigned to us. We had previously become satisfied that the gentlemen who were holding these offices were doing good service; and we re-elected them.

The work of planting the 4000 trees ordered by the Shade Tree Commission of Passaic, N. J., the contract for the supply of which was awarded to Frederick W. Kelsey of New York, has begun. Trees will be planted at intervals of 25 feet where none exist at present.

Obituary.

We regret to record the death of Mr. John F. Boerckel, Supt. of Springdale Cemetery, Peoria, Ill., which occurred January 28th last. Mr. Boerckel had held the position of superintendent of Springdale for 24 years and at the time of his death was in his sixty second year. He was an active member of the Association of American Cemetery Superintendents.

Wanted.

Copies of the September issue of PARK AND CEMETERY for 1895 are wanted. Will subscribers having such to spare kindly address the publisher.

BOOKS, REPORTS, ETC., RECEIVED.

Seventh annual report of the board of Park Commissioners of the city of Cambridge, Mass. Illustrated with maps and photogravures.

Schedule of prizes offered by the Massachusetts Horticultural Society for the year 1900, and programme of lectures and discussions during the season of 1900 to be held at Horticultural Hall, Tremont St., Boston. The amount appropriated for prizes and gratuities is \$8,150. The Society is constantly enlarging its sphere of influence and doing great good.

Annual report of the Park Commissioners of the city of Taunton, Mass., for year ending November 30, 1899. Illustrated with many views.

Bulletin No. 54. Maine Agricultural Experiment Station, Orono, Me., Nuts as Food. The bulletin contains the results of all available American Analyses of nuts and discusses the value of nuts as a food for man.

Bulletin No. 55. Cereal Breakfast Foods. A valuable investigation into the merits of commercial cereal food.

Cornell University Agricultural Experiment Station.

Bulletin 174.—The problem of Impoverished Lands. L. H. Bailey.

Bulletin 175.—Report on Japanese Plums. L. H. Bailey.

Bulletin 176.—The Peach Tree Borer. M. V. Slingerland.

Bulletin 177—Spraying Notes. L. H. Bailey and others.

From Mr. Sid. J. Hare, superintendent Forest Hill cemetery, Kansas City, Mo., a number of views taken by himself in Tower Grove Park and Shaw's Garden, St. Louis, Mo., with names of plants, etc., seen on the views. This is a very complete method of recording what a photograph represents when filed away for future reference and we have to make use of them in some future issue.

Part 2, Vol. 3. Proceedings of American Park and Out-door Art Association. Paper 32. "The Relation of Reservoirs to Parks," by Frederick Law Olmsted, Jr., with half tone illustrations, diagrams and maps.

History and By-laws of the Woodlawn Cemetery Association, Kansas City, Mo. With half tone illustrations.

"A Garden Spot and its Uses." A very attractive and profusely illustrated little brochure, describing West Laurel Hill cemetery, Philadelphia.

Fifty-seventh annual report of the business of the Lowell cemetery, Lowell, Mass. Illustrated.

U. S. Department of Agriculture. Report of the Forester for 1899. By Gifford Pinchot. The pamphlets issued by the Department on this subject are of timely interest, and will form a most instructive addition to the literature already existing.

Mr. Sid. J. Hare, superintendent Forest Hill cemetery, Kansas City, Mo., is using an effective card method of advertising progress in cemetery development. It is a diminutive booklet, the front cover being the superintendent's business card and the inside 8 pages, illustrations and information concerning the cemetery under his charge.

Books, Reports, Etc., Received.
(Continued.)

Mount Hope cemetery, Chicago, issues a handsome 4 page folder, with engraved title and letter press, and an attractive half tone of a fine memorial, announcing removal of their office.

Report of Lafayette Cemetery, Philadelphia, Pa., for year ending Dec. 31, 1899.

Trade Literature.

The Philadelphia Lawn Mower Co., Philadelphia, Pa., have issued a very attractive 1900 calendar, in 12 separate cards, printed in colored inks with views showing various styles of mowers. Their 1900 catalogue is handsomely illustrated with views of public grounds at which their lawn mowers are in use.

Waukegan Nurseries, R. Douglas' Sons, Waukegan, Ill. Evergreens, Forest Trees and Ornamentals.

Pinehurst Nurseries, Pinehurst, N. C. Evergreens, Ornamentals, trees, shrubs and vines. Also surplus list of collected American seeds.

Highlands Nursery, Kawana, N. C. Harlan P. Kelsey, Boston, Mass. Wholesale list Hardy American plants and Carolina mountain flowers.

Farquhar's Catalogue of seeds, plants, bulbs, tools, etc., 1900. R. & J. Farquhar & Co., Boston, Mass.

Henry A. Dreer, Seeds, plants, etc. Philadelphia, Pa. Dreer's Garden Calendar for 1900.

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The Storrs & Harrison Co., Painesville, O. Spring of 1900. Seeds, Trees and Flowers.

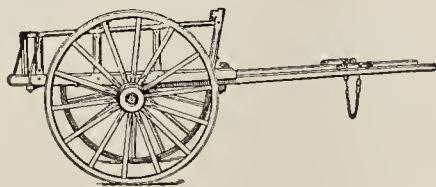
Aquatics, Water Lilies, Geo. B. Moulder, Lily Park, Smith's Grove, Ky.

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	100	1000	5000
American Beech, 8 to 12 in.....	\$ 50	\$2 50	\$10 00
" Linden, 10 to 12 in.....	50	2 50	10 00
" " 1 to 3 ft.....	1 00	5 00	20 00
Cornus Florida, Wh. Fl. Dog., 1 to 3 ft.....	1 00	7 00	
" " Wh. Fl. Dog., 3 to 4 ft.....	2 00	15 00	
Carpinus, Americana, Water Beech, 1 to 2 ft.....	1 00	8 00	
Cladrastis Tinctoria, Yel. Wood, 1 to 3 ft.....	1 50	9 00	
Chionanthus Virginica, white fr., 10 to 20 in.....	1 00	7 00	
Dirca Palustris, Leatherwood, 10 to 20 in.....	75	5 00	20 00
Hamelis Virginica, Witch Hazle, 1 to 2 ft.....	1 00	8 00	
Laurus, benzoin, Spicewood, d. 8 to 12 in.....	75	5 00	
Red Cedars, 10 to 20 in.....	75	5 00	
" " 1 to 2 1/2 ft.....	1 25	10 00	
Red Bud Judas Tree, 10 to 20 in.....	80	6 00	
Liquidambar, Sweetgum, 1 to 2 ft.....	1 00	5 00	20 00
" " 2 to 4 ft.....	1 25	6 00	24 00
" " 4 to 6 ft.....	2 25	16 00	
Tulip Poplar, 1 to 2 ft.....	1 00	5 00	20 00
" " 2 to 4 ft.....	1 25	6 00	24 00
" " 4 to 6 ft.....	2 25	16 00	
Sugar Maple, 1 to 2 ft.....	50	2 25	10 00
" " 2 to 4 ft.....	75	2 50	14 00
" " 4 to 7 ft.....	1 25	10 00	
Sycamore, plane tree, 6 to 12 in.....	65	4 00	
" " 1 to 3 ft.....	80	5 00	
" " 4 to 6 ft.....	1 50	10 00	
Magnolia Acuminata, 1 to 2 ft.....	1 25	7 00	
" " 3 to 4 ft.....	2 25	17 00	
" " Tripatala, 1 to 2 ft.....	1 00	5 00	
" " 3 to 4 ft.....	2 25	15 00	
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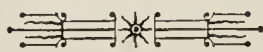
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VOLUME X.



March, 1900 – February, 1901.



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INDEX.

A

- *A Home Planting..... 279
- *A Modern Burial..... 240
- *A Study in the Arnold Arboretum. 14
- *A Summer Scene in the Isle of Wight 208
- A Universal Flower..... 162
- *Adams Monument, Rock Creek Cemetery, Washington, D. C... 213
- *Administration Building Oak Hill Cemetery, Evansville, Ind.,.... 115
- *An Ideal Cemetery..... 8
- Annual Banquet, St. Louis, Mo., Henry Shaw..... 239
- Arbor Day—Thoughts on its Practical side..... 12
- *Art, Municipal,..... 61
- Association of Park Superintendents New England..... 118
- Aquatic Plants—**
- American Lotus 46
- Water Lillies and other Aquatic Plants..... 20, 45
- Associations—**
- Society of American Florists 159
- American Park and Outdoor Art Association..... 5, 7, 63, 79, 139
- Association of American Cemetery Superintendents 151
- New England Association of Park Superintendents 118

B

- *Bonney Memorial, Lowell Cemetery Lowell, Mass..... 235
- *Burial, A Modern..... 240

C

- *Cambridge Field, Cambridge, Mass. 29
- Chicago Flower Show, The..... 211
- Coal Cinder Walks and Paths..... 186
- *Cemetery, An Ideal..... 8
- *Cemeteries Modern Drives for 158
- *Cemeteries, The Use of Shrubs in.. 176
- *Crematory, Chapel and Administration Building, Mt. Auburn Cemetery, Cambridge Mass..... 38
- Composition, Trees in..... 91
- Construction and Destruction..... 104
- Cemeteries—**
- A New Law on Cemetery Lots, N. Y..... 98
- All Saints Day, Paris, France... 242
- Allegheny Cemetery, Pittsburg, Pa..... 121
- Amherst Mass, Cemetery..... 23
- Aspen Grove Cemetery, Burlington, Iowa 266
- *Bloomington Cemetery, Bloomington, Ill 277
- Census of Dead, Cleveland 170
- Christ Church, Philadelphia, Pa. 194
- Chrysanthemum Day, Knoxville, Tenn..... 170
- Country Cemetery Needs..... 146
- Cremation in England 72
- Crematorium, Montreal, Canada 445
- Deputy Marshals in Cemeteries.. 145
- Dog Cemeteries..... 194
- Electrical Burial Device..... 170
- Evergreen Cemetery, Elizabeth, N. J..... 49
- Fairmount Cemetery, Newark, N. J..... 23
- Ferncliff Cemetery, Springfield, Ohio..... 49
- Findlay, Ohio..... 170

- Forest Hill Cemetery, Boston, Mass.,..... 49
- Forest Home Cemetery, Milwaukee, Wis..... 72
- Fort Snelling, Minn..... 242
- Galveston Catastrophe..... 218
- Garden Street Burying Ground, Cambridge, Mass..... 194, 242
- Glenwood Cemetery, Sherbrooke, Prov. Quebec, Canada..... 121
- Gold Street Burying Ground, Hartford, Conn..... 121
- *Graceland Cemetery, Chicago... 258
- Graceland Cemetery, New Castle, Pa..... 286
- Granary Burying Ground, Boston 170
- Green Lawn Cemetery, Columbus, Ohio 23
- *Greenlawn Cemetery, Syracuse, N. Y..... 131
- Harmony Grove Cemetery, Salem, Mass..... 49, 286
- Hollywood Cemetery, Los Angeles California 121
- Holy Trinity Roman Catholic Cemetery, Brooklyn..... 242
- Homewood Cemetery, Pittsburg, Pa..... 286
- *Hope Cemetery, Barre, Vt. 232
- Lakewood Cemetery, Minneapolis, Minn..... 242
- Lake View Cemetery, Cleveland, Ohio..... 98
- Lancaster, Pa..... 194
- *Lowell Cemeteries, Lowell, Mass. 285
- Magnolia Cemetery, Charleston, S. C..... 98
- Marion Cemetery, Marion, Ohio 49
- Mt. Auburn Cemetery, Cambridge, Mass 23, 38, 286
- Mt. Pleasant Cemetery, Newark, N. J..... 49
- Morningside Cemetery, Brattleboro, Vt..... 121
- Morningside Cemetery, Syracuse, N. Y..... 218
- Mortuary Chapel, Pittsfield, Mass. 218
- Mount Hope Cemetery, Boston.. 98
- Mount Royal Cemetery, Montreal, Canada..... 49
- Mount Royal Cemetery, Pittsburg 170
- Mt. Albion Cemetery, Albion, N. Y. 98
- Mountain Grove Cemetery, Oakland, Calif..... 286
- New Electric Funeral Train..... 264
- New Interment Law, N. Y..... 72
- Newton, Mass., Cemetery 145
- *Oak Hill Cemetery, Evansville, Ind..... 115
- Oak Hill Cemetery, Lebanon, Ind. 98
- Oak Ridge Cemetery, Springfield, Ill..... 218
- Oakland Cemetery, St. Paul, Minn 266
- *Paxtang Cemetery, Paxtang, Pa. 139
- Pine Grove Cemetery, Lynn, Mass. 266
- Pittsfield Cemetery, Pittsfield, Mass..... 98
- Prospect Cemetery, Vergennes, Vt 49
- Report Pittsfield Mass. Cemetery 72
- Riverside Cemetery, Cleveland, O 266
- *Rock Creek Cemetery, Washington, D. C. 213
- Saltillo, Mexico..... 145
- St. Agnes Cemetery, Albany, N. Y. 49
- Skaneateles, N. Y., Cemetery ... 23
- *Spring Grove Cemetery, Cincinnati, Ohio..... 88, 218
- Suit for Removal of Body, Grand Rapids, Mich..... 23

- Swan Point Cemetery, Providence, R. I. 23, 286
- The Color Line in Arlington Cemetery, Washington 145
- Utica Cemetery, Utica, N. Y..... 72
- Vandalism in Carson City, Mich. 194
- Vandalism in St. Agnes Cemetery, Albany, N. Y. 72
- Vault Designed to Obviate Premature Burial 266
- Vine Street Cemetery, Hazelton, Penn..... 218
- West Davenport Cemetery, Davenport, Iowa..... 170
- *West Park Cemetery, Cleveland, Ohio..... 224
- *Wildwood Cemetery, Williamsport, Pa. 68
- NOTES..... 23, 49, 72, 98, 121, 145, 170, 194, 218, 242, 266, 286

Correspondence—

- A Correction 264
- A Drainage Problem 264
- Anent Cana Flacida 73
- A Plea for Walks 73
- Azaleas..... 146, 168, 191
- Monuments in Cemeteries 191, 216, 264
- Planting Single Graves..... 146
- Rhododendrons 263
- The Cottony Scale—Pulvinaria Innumerabilis 146

D

- *Decorative Planting for Railroad Station Grounds..... 10
- Destruction and Construction..... 104
- *Dresden, Germany, Subterranean Irrigation of Street Trees at 228
- *Drives for Cemeteries, Modern.. 190, 158

E

Editorial—

- A Duty of Improvement Associations 125
- A good Example to Follow..... 54
- A Happy New Year 221-
- A Photographic Exhibit of Landscape Art..... 78
- An Association of Village Officials 126
- An Important Convention..... 27
- Annual Convention of A. A. C. S. 125
- Another Improvement Agency .. 174
- Apathy in Cemetery Welfare 28
- Art Out-Doors 174
- Boston Honors Mr. Olmsted..... 245
- Care of Street Trees..... 1, 198, 215
- Cemetery Improvements 269
- Cemetery Reform 173
- Children in Out-Door Work 27
- Children's Playgrounds and Gardens 102
- Country Cemeteries..... 2
- Forestry in Our Cemeteries 149
- Free Baths..... 126
- Further Influences of Arbor Day 53
- Improve the Cemetery 102
- Improve the Vacant Places..... 54
- Inspiration for Improvement Associations 77
- Interest in Small Cemeteries 198
- Landscape Art in Cemeteries 78
- Municipal Art 150
- National League of Improvement Associations 173
- National Parks 245
- Need of Improvement in Our Smaller Cities 54

- Out-Door Improvement..... 222
 Park and Cemetery Appoint-
 ments..... 1
 Park Consolidation..... 78
 Park Finances..... 269
 Park Flower Shows..... 197
 Perpetual Care..... 270
 Politics in the Parks..... 126
 Preservation of Public Monuments 173
 Progress in Cemetery Work..... 246
 Progress in Out-Door Improve-
 ment..... 270
 Protection of African Fauna..... 222
 Public Interest in Landscape Gar-
 dening..... 77
 Public Statuary..... 222
 Quincy, Ill.; Parks and the People 27
 School Gardens..... 126
 Small Parks..... 150
 Small Parks in Chicago..... 126
 State Parks..... 27
 Statuary in the New York Parks. 28
 The American Park and Out-
 door Art Association..... 53, 77
 The Appalachian National Park .
 101, 269
 The Bill-Board Nuisance.....
 101, 197, 221, 245, 270
 The Care of School Grounds, etc. 174
 The City Beautiful..... 1
 The Cleveland Convention of the
 A. A. C. S. 149
 The Fall Arbor Day..... 174
 The Galveston Disaster..... 150
 The Palisades of the Hudson..... 246
 The Preservation of Scenic and
 Historical Places..... 221
 The Sunday Funeral..... 198
 Tree Planting Associations..... 2
 Tree Wardens in Massachusetts.. 101
 Two Important Conventions..... 197
 Work for the Women's Clubs.... 53
 *Electrical Omnibuses, Types of... 189
 English Gardens, On..... 262
 *Entrance and Office Building,
 Bloomington Cemetery, Bloom-
 ington, Ill..... 277
- F**
- Flower, A Universal..... 162
 *Flower Garden, The Symmetrical
 and the Natural..... 160
 Flower Show, the Chicago..... 211
 Forest, Notes and Comments on the 272
 *Fountain, Lee, Mass., Memorial. . 233
 Fragments..... 164
 *Funeral Car—The Sunday Funeral. 157
- G**
- Gardens, Old English..... 262, 280
 *Grand Avenue of Pere Lachaise,
 Paris, France, with Its Monu-
 ments and Characteristic Feat-
 ures, The..... 260
 *Garden Plants—Their Geography:—
 Asarales—The Nepenthes, Raf-
 flesia and Aristolochia Alliance 282
 Chenopodiales—The Mirabilis,
 Amaranthus and Cocolaba Al-
 liance..... 214, 237
 Lamiales—The Verbena, Monarda
 and Ajuga Alliance.... 142, 167, 187
 Personales—The Leucophyllum,
 Tecoma and Acanthus Alliance
 21, 46, 69, 95, 119
 Podostemales—The Tristichia,
 Podostemon and Hydrostachys
 Alliance..... 263
- H**
- Hedges, Japanese Privet..... 232
- Henry Shaw Annual Banquet, St.
 Louis, Mo..... 239
 H. W. S. Cleveland..... 261
- I**
- Improvement, Municipal..... 92
 *Improvement of Railway Station
 Grounds..... 57
 Installment Plan, Perpetual Care of
 Cemeteries on the..... 38
 *Irrigation of Street Trees at Dres-
 den, Germany, Subterranean.... 228
Improvement Associations—
 *A Little Object Lesson..... 185
 *A Woman's Work..... 273
 *An Example..... 231
 *Annuals and Bulbs for Home
 Grounds..... 134
 *Herbaceous Perennials in Rela-
 tion to Home Grounds..... 114
 Improving the Home Grounds.. 36
 *Interesting the Public in Im-
 provement Work..... 254
 *Prizes for Planting..... 203
 *The Necessity for Improving the
 Home Grounds..... 64
 *Vines for House Grounds..... 90
 Weeds..... 163
 Work for Women's Clubs..... 16
- J**
- Japanese Privet Hedges..... 232
 *John S. Pillsbury, Minneapolis,
 Minn., Monument to..... 175
- L**
- Labels for Plants and Trees..... 41
 Liming the Soil..... 112
 London Burial Places, Notes Chiefly
 Historical on..... 42, 66, 117, 165, 235
Legal—
 Right of Action for Disinterring
 of Bodies and Defacement of
 Gravestones..... 192
- M**
- *Manchester, England, The Park
 System of..... 199
 *Manila, Paco Cemetery..... 184
 *Mausoleum, Spring Grove Ceme-
 tery, Cincinnati, O., The Fleisch-
 mann..... 88
 *Memorial Day at Muskegon, Mich. 112
 *Memorial Fountain, Lee, Mass.... 233
 *Memorial, Graceland Cemetery,
 Chicago, The George M. Pullman. 258
 *Millis, Mass., Station Grounds... 253
 *Modern Drives for Cemeteries... 190, 158
 *Monument of Gov. John S. Pills-
 bury, Minneapolis, Minn..... 175
 *Municipal Art..... 61
 Municipal Improvement..... 92
Monuments—
 *Adams Monument, Rock Creek
 Cemetery, Washington, D. C.. 213
 *Bonney Memorial, Lowell Ceme-
 tery, Lowell, Mass..... 235
 *Memorial Fountain, Lee, Mass. 233
 *Monument to John S. Pillsbury,
 Minneapolis, Minn..... 175
 *Pullman Memorial, Graceland
 Cemetery, Chicago..... 258
- N**
- *Natural Flower Garden, The Sym-
 metrical and the..... 160
 Newnham Park, England..... 278
 New South Wales, Australia, Pub-
 lic Parks and Recreation Grounds,
 Sydney..... 256
- Notes and Comments in the Forest. 272
 Notes, Chiefly Historical, on Lou-
 don Burial Places 42, 66, 117, 165, 235
- O**
- *Office Building, Bloomington Cem-
 etery, Bloomington, Ill.; En-
 traunce and..... 277
 *Office, Chapel and Receiving
 Vault, Wildwood Cemetery, Wil-
 liamsport, Pa..... 68
 Old English Gardens..... 262, 280
 Ornamental Planting, Flowering
 Trees for..... 183, 202, 248
 Our Association, The Work of.... 140
- P**
- Parks—**
 A Celebrated Birch Hedge, Scot-
 land..... 241
 An Indiana Tree-Planting Law... 71
 Annual Report of Boston Parks... 97
 Annual Report, Public Park Asso-
 ciation, Providence, R. I..... 265
 Annual Report, San Francisco
 Parks..... 48
 Audubon Park, New Orleans, La.
 48, 265
 Bill-Board Nuisance..... 144, 169
 Bluff City, Kansas..... 120, 144
 Bronx Park, New York City..... 241
 Cambridge, Mass..... 285
 Central Park, N. Y..... 97
 *Cleveland, O..... 5, 120, 285
 Clinton, Ia..... 48
 Children's Help in Montclair, N.J. 97
 Children's Playgrounds and Public
 Baths, St. Louis..... 265
 Children's Playgrounds, Buffalo,
 N. Y..... 120
 Cost of Small Parks in New York. 217
 Dayton, O..... 97
 Denver, Colo..... 265
 Design for Bi-Centenary Memorial,
 Detroit, Mich..... 22
 Detroit, Mich..... 169
 Essex County, N. J..... 120
 Evansville, Ind..... 265
 Forestry in Michigan..... 71
 Forestry in Pennsylvania..... 22
 Griffith Park, Los Angeles, Calif.. 22
 Hartford, Conn..... 169
 *Hubbard Park, Meriden, Conn... 223
 Idaho National Park..... 217
 Improvement Association, Sag
 Harbor, L. I..... 241
 Jersey City, N. J..... 120
 Joliet, Ill..... 217
 Keney Park, Hartford, Conn..... 285
 La Salle, Ill..... 71
 Las Vegas, N. M..... 144
 Lincoln Park, Chicago..... 285
 *Lord's Park, E'gin, Ill..... 226
 *Manchester, England..... 199, 279
 Memorial Park to Daniel Webster,
 Mass..... 22
 Model Lawn Competition, Kansas,
 City, Mo..... 120
 Nancy Hanks Lincoln Memorial,
 Indiana..... 71
 National Parks in California..... 193
 New Orleans, La..... 120
 Parks in Havana, Cuba..... 73
 Peoria, Ill..... 144
 Pittsburg, Pa..... 169
 Proposed Appalachian National
 Park..... 97
 Proposed National Park, Minne-
 sota..... 71, 193, 241
 Proposed National Park, New
 Mexico..... 264
 Public Baths, St. Paul, Minn..... 169

Report of Gettysburg National Park Commission.....	22
Riverview Park, Quincy, Ill.....	217
Roadside Trees in Massachusetts .	97
Rogers Williams Park, Providence, R. I.....	285
*St. Paul, Minn.....	106
Sanitary Work of Improvement Association, Northfield, Minn..	97
Shade Trees in Baltimore, Maryland.....	71
South Park, Chicago.....	285
Starr Garden Park, Philadelphia, Pa.....	144
Statuary in Central Park, N. Y....	71
*Tacoma, Wash.....	128
Taunton, Mass.....	169
The Advantages of Parks to a City	217
The Elm Borer in Cincinnati.....	193
The Grant Memorial, New York City.....	97
The Minnesota-Wisconsin Interstate Park.....	217
The New York Park Commission Law.....	241
The Niagara Falls Reservation....	265
Toledo, O.....	241
Tree Planting Association, Johnstown, Pa.....	193
Tree Planting, Macon, Ga.....	241
Tree Planting, Minneapolis, Minn	144
Tree Planting, St. Paul, Minn....	193
U. S. Forestry Exhibit, Paris, France.....	48
Waukegan, Ill.....	120
Yonkers, N. Y.....	48
York, Neb.....	144
PARK NOTES.....	22, 48, 71, 97, 120, 144, 169, 193, 217, 241, 265, 285
*Paco Cemetery, Manila.....	184
Park Roads.....	106, 130
Paths and Principles.....	259
Paths, Coal Cinder Walks and.....	186
*Pere LaChaise, Paris, France, With its Monuments and Characteristic Features, The Grand Avenue of...	260
Perpetual Care of Cemeteries on the Installment Plan.....	38
*Planting, A Home.....	279
*Planting for Railroad Station Grounds, Decorative.....	10
Plant Nomenclature.....	278
*Plants and Trees, Labels for.....	41
Plants, Refinement in.....	60
Plant Patterns among the Graves ...	60

Playgrounds, Public.....	31
*Point of Observation, The.....	44
Propogating Euonymus Radicans... ..	127
*Public Meetings in the Manchester, England, Parks.....	279
Public Parks and Recreation Grounds, Sydney, New South Wales, Australia.....	256
Publisher's Department	
.....	25, 51, 75, 100, 123, 148, 172, 196, 220, 244, 268, 288
R	
*Railroad Station Grounds, Decorative Planting for.....	10
*Railway Station Grounds, The Improvement of.....	57
*Receiving Vault, Paxtang Cemetery, Paxtang, Pa.....	139
Refinement in Plants.....	60
Roads, Park.....	106, 130

S	
*Scene in the Isle of Wight, A Summer.....	
Seasonable Suggestions	
.....	39, 65, 94, 116, 137, 161, 179, 210, 271
*Shrubs in Cemeteries, The Use of..	176
*Some Ornamental Shrubs.....	17, 34
*Station Grounds, Millis, Mass....	253
*Statue of Daniel Webster, Washington, D. C.....	234
Street Trees.....	252
*Subterranean Irrigation of Street Trees at Dresden, Germany.....	228
*Sunday Funeral—Funeral Car, The	157
*Symmetrical and the Natural Flower Garden, The.....	160
Shrubs and Plants—	
*Azalea Mollis and Ghent Varieties.....	103
*Daffodils and Jonquils.....	135
*Diervilla Præcox.....	251
*Elaeagnus.....	180
Euonymus Radicans, Propagating.....	127
Hydrangea Quercifolia.....	136
Kalmia Latifolia and Rhododendron Maximum.....	19
*Ornamental Shrubs.....	17, 34
Rhododendrons.....	103
Some Native Climbers.....	188

Selected Notes and Extracts	
.....	24, 50, 74, 99, 122, 147, 171, 195, 219, 243, 267, 287

T

*The Arnold Arboretum, A Study in	14
The Man with the Shears.....	15
*The Viburnums.....	275
Thoughts on Its Practical Side—	
Arbor Day.....	12
*Tower at Hubbard Park, Meriden, Conn.....	223
Trees in Composition.....	91
Trees, Street.....	252
Tree Warden Law of Massachusetts, The.....	212
*Types of Electrical Omnibuses....	189
Trees—	
Salix Babylonica.....	56
*Beech Trees.....	247
*Birches.....	3
*Camperdown Elm.....	55
*Araucaria Excelsis, The Norfolk Island Pine.....	209
Flowering Trees for Ornamental Planting.....	183, 202, 248
Live Oaks ...	33
*Magnolia Kobus.....	14
*Magnolia Soulangiana.....	69
Maples.....	55
*Weeping Hemlock, Sargent's... ..	104
*ThurLOW Weeping Willow.....	251
*Western Boulevard Trees.....	87
Two Beautiful and Valuable Trees... ..	127

U

*Use of Shrubs in Cemeteries, The .	176
Utilization of Waste Lands in Towns	111

V

*Viburnums, The.....	275
----------------------	-----

W

Walks and Paths, Coal Cinder.....	186
Warden Law of Massachusetts, The Tree.....	212
*Washington, D. C., Statue of Daniel Webster.....	234
Waste Lands in Towns, Utilization of	111
Western Boulevard Trees.....	87
Work of Our Association, The.....	140

PARK AND CEMETERY

and Landscape Gardening.

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CONTENTS.

EDITORIAL—Park and Cemetery Appointments—The City Beautiful—Care of Street Trees—Country Cemeteries—Tree Planting Associations.....	I, 2
*The Birches.....	3
*The Parks of Cleveland, O.....	5
*An Ideal Cemetery.....	8
*Decorative Planting for Railroad Station Grounds.....	10
Arbor Day—Some Practical Thoughts.....	12
*Magnolia Kobus.....	14
*A Study in the Arnold Arboretum.....	14
Improvement Associations.....	16
The Man with the Shears.....	17
Some Ornamental Shrubs, I.....	17
Rhododendron Maximum and Kalmia Latifolia.....	19
Water Lilies and other Aquatic Plants.....	20
*Garden Plants—Their Geography, II.....	21
Park Notes.....	22
Cemetery Notes.....	23
Selected Notes and Extracts.....	24
Reviews of Books, Reports, Etc.....	25

*Illustrated.

PARK AND CEMETERY APPOINTMENTS

Recent events in park affairs in certain sections of the country have served to emphasize the suggestions frequently made in these columns in connection with the appointment of park and cemetery officials, and while it is not within the province of this journal to discuss politics, their entire divorcement from the control and management of public grounds, we are compelled to strenuously advocate. It is a matter of vital importance to the community, and one reason alone is in itself convincing. The comparatively brief term of office of the average municipal appointment affords scant opportunity for the development of the plans of a conscientious and capable superintendent or engineer in the improvement of public places, and beyond this the very uncertainty in tenure of office embarrasses ability and diverts intelligence to a greater or less degree. The development of a park or cemetery is the work of years, and given a capable official, his efforts should be untrammelled by any political considerations whatever. It should only be a question of aptness and ability to enable the problems to be worked out to the fullest fruition for the benefit of the people. Here is an opportunity for civil service reform in a line of work which is only now receiving the attention it has urgently called for, and which needs to be carried on under well nigh ideal conditions.

THE CITY BEAUTIFUL

While the year 1899 witnessed abundant evidence of the trend of the times towards more artistic consideration in the improvement of our municipalities, it may fairly be anticipated that the current year will mark the beginning of practical attainment. Education is becoming more transfused through the masses, and education leads to refinement in all our walks and objects in life. We cannot now endure as in days gone by treeless streets, crude and inappropriate architecture, and makeshift efforts to tide things over to the future. Education has shown as that there is something more in life than mere living to accumulate wealth or to attain selfish ends, that man cannot live by bread alone, and that he needs good food for his senses as well as for his physical necessities; and to fill a share of this need he requires now that our cities shall keep pace with the growth of his intelligence. So that we find in our large municipalities organizations devoted to the building up of sentiment, ethical and practical, looking to the end that all future work having artistic associations shall be carried out under the most enlightened views governing such work. The latest issue of *Municipal Affairs* is devoted to "The City Beautiful," and contains a number of articles of great value on the several components connected with the idea. It is of absorbing interest to progressive citizens and suggests a future city of delightful associations. We are reminded while thinking of this that the next meeting of the American Park and Out-Door Art Association will be held in the Art Institute of Chicago in the first days of June. The work of the association has already been far reaching, and the auspices under which it will carry through its Chicago Convention promise to react in an ever widening activity throughout the country.

CARE OF STREET TREES

In many cities a very wise provision is made in that of placing the care of the shade trees under the control of the Park Commissioners. This avoids the attention of the tree butcher, who at the call of various interests practices his ignorance to the detriment of the health and appearance of the street trees. The care of trees requires great intelligence in the application of our knowledge to their needs, and only properly qualified

men should attempt to interfere with them; and it is on the presumption that the park officials can command such intelligence that the care of the shade and ornamental trees are trustfully consigned to them. But the plaint of these officials in certain localities has been that the city will not supply sufficient funds for the work, and we believe it is well founded. The shade and ornamental trees of a city should be regarded as among the most sacred obligations of the city fathers, and the last place to practice a questionable economy should be there. It takes years of patient endeavor to make up for the neglect of one, and in some cases it is never made up. All such facts in connection with tree life should be forcibly impressed on city governments, so that no mistaken economy may be brought to bear upon the public trees to their permanent injury.

COUNTRY CEMETERIES There is a broad field for improvement in the small country cemetery is a statement which will remain unchallenged, and yet it must be admitted that up to a recent period, there has been little of an educational character disseminated widely enough to attract attention and promote enthusiasm among those interested. The most elementary principles of landscape gardening have been as a sealed book to the average citizen in the country place, and the utter lack of art instinct, which characterizes the great majority of our rural population, has shut their eyes to all possibilities of beauty in connection with their surroundings. It has been largely a case of awaiting education and opportunity. Knowing nothing better, and resting upon the idea that money spent on cemetery improvements was money wasted, the rural burial ground has been left to take care of itself as a whole, its poor appearance, however, often accentuated by some particular lot better cared for than the others. Times are happily changing and the rapid introduction of nature study into the public school, the influences of Arbor Day and the characteristically educational nature of the literature now finding its way into the country town has done a great deal in the way of awakening sentiment in favor of improvement. The first great need of the country cemetery is organization of citizens for the purpose of improvement, the next is the adoption of a pre-arranged method of improvement, and finally a determined effort to improve. The advantages accruing from these successive steps are too self evident to need explanation. *PARK AND CEMETERY* has discussed details in its columns oftentimes, and it is always ready to afford what information lays in its power to help this cause. The clearing out of weeds and objectionable accumulations of vegetable debris, the mending of roads and paths, the

mowing of grass where it is worth saving, and the sowing of it to create lawn surface, are among the first steps to renovate the country burial ground. Then might follow the planting of shade and memorial trees, the filling in of exposed and vacant places with appropriate shrubs, and the planting of vines and trailers to embellish the boundary fences. With the improvements carried so far, it might be a good time to formulate and adopt rules looking to the preservation of what had been done, as well as to the continued care of the grounds by the lot owners and all interested. This would make a good beginning and carried thus far, what would naturally follow would be comparatively easy of accomplishment, and the whole community would have undoubtedly become personally interested in the results. To revolutionize the conditions of the country cemetery, it is the first step that counts. Progress thereafter in the natural order of things seems bound to follow.

TREE PLANTING ASSOCIATIONS A word in connection with the work of "tree planting associations" may be suggestive. Where such have been organized and conducted with intelligence, energy and spirit, great results have been accomplished, notably in Brooklyn and its neighborhood, where great changes in the condition, number and care of the trees have been brought about. By persevering effort the city fathers have been induced to pass ordinances looking to the protection of street trees against vandalism and carelessness generally, making it a misdemeanor subject to fine. But the most far reaching influence of such organizations is the educational one, whereby the abutting property owners are led to take a personal and pecuniary interest in their trees, and this brings about a policy of care which is constant in its application, and redounds to the welfare of the trees themselves and to the increasing beauty of the avenues and thoroughfares they grace. As a word of encouragement it may be said, that there is no more powerful agency in provoking enthusiasm in man than nature herself contributes. Once get a community interested in trees, their utility and beauty, and energetic missionaries find little difficulty in formulating and prosecuting plans for improvement. A striking example of this is Kansas City, Mo. About a year ago a Tree Planters Society was formed, since which time 7,000 trees have been planted, 5,000 more are provided for and in addition to these efforts of the society, the park commissioners have let contracts for 6,000 trees. This is one year's work. And the children of the public schools are credited with considerable honor in the result.

THE BIRCHES.

In the decorative planting of public or private grounds, the different birches, native and foreign, are exceedingly useful. In graceful beauty, delicate spray of the branches, cleanly habits, they are hardly excelled by any other trees. With about two exceptions most of them respond readily to cultivation.

The European birch in its numerous forms has been and is well known in cultivation. The pyramidal, cut-leaved, purple leaved, Young's weeping, and other forms of it have been largely planted, and when they are properly individualized and placed they are respectively pretty. During the past few years, though, just when these varieties are developing into arborescent beauty in numerous localities throughout the country, particularly the cut leaved form, they turn sick and die. A species of borer gets in its deadly work inside the bark and death is only a matter of a short time, and so far as we are aware there is no remedy except cutting the trees down. Every recurring season we receive questions from parties inquiring what is the matter with their dying birches, and upon examination we find the borer to be at work, and are always sorry to tell them there is no known remedy.

So far as we have observed here, the pyramidal or fastigate variety is much less attacked by this borer than the other varieties of the European birch. How widely this experience occurs we do not know. But even if a majority of them die in their youth, the enjoyment of their temporary beauty is a desideratum.

The canoe birch, *Betula papyrifera*, a native of the North American forests, in a general way resembles the European birch, when fully developed. The bark has a chalky white color and easily detaches in large sections. The leaves are ovate, dark green, and large, and it does in its best condition get to be a tree 80 feet in height. It is perfectly hardy, easily transplanted, does well in poor soil, and is very ornamental.

The so called American white birch *Betula populifolia*, native from Delaware northwards, found growing usually in the poorest kind of soil, and has a habit of often springing up on burnt lands where it is indigenous, is a much more slender tree than the former and seldom grows over forty five feet in height. The leaves are deltoid, not large, and have a tremulous habit. The bark is smooth and white. It is useful in large grounds and parks, but it is not long lived.

The red birch, *Betula nigra*, is often found growing native along the banks of streams from Massachusetts southwards, and is found growing further southwards than any other birch. It has a

somewhat slender habit and grows occasionally from sixty to seventy feet in height, with long drooping arched branches that gives it an exceedingly graceful appearance. We have a particular admiration for this tree. The leaves are egg shaped and medium sized amongst birches. The bark is reddish brown and hangs to the stem of the tree in loose clusters throughout the winter months, and renders the tree quite attractive during winter. It is one of the easiest of trees to transplant. In fact,



CUT-LEAVED WEEPING BIRCH. *Betula Alba Pendula*.

it is, in our experience a remarkable thing to see it fail in any situation.

The yellow birch, *Betula lutea*, is, as all lumber men know, a tree of great economical value and is found growing from the Allegheny mountains far northwards, and frequently attains a height of one hundred feet. It grows to a height of eighty and ninety feet in damp soil in West New York. It is called the yellow birch on account of the gray yellowish tinge of the bark. The leaves are usually about four inches long and two inches wide, and when they first unfold are somewhat downy at first and turn quite smooth towards the end of summer. The yellow birch should always be planted in damp

soil, and when it attains any considerable size it is very sensitive to root disturbance. It should be planted in a small state and the young wood well cut back. When it is well individualized and gets an opportunity to throw out its branches it is very ornamental.

The black birch, or sweet cherry birch, *Betula lenta*, well known in many country districts on account of its sweet tasting branches, has a wide native range and is found growing from Georgia to Newfoundland, and is a very common tree of northern forests. It is of great economical value, and largely used for choice cabinet work. It usually grows in a native state in much drier conditions than the yellow birch, and the leaves are generally about the size of the yellow birch. The bark is smooth, dark chestnut brown, and when it is in good condition it is an ornament to any grounds. Its beauty greatly impressed Michaux, who spoke of it "as being eminently adapted, from the beauty of its foliage and the agreeable odor of its flowers, to figure in parks and gardens." It is with us about the most difficult of any of the birches to transplant successfully, if the trees are of considerable size. It is best transplanted in a small state and should be well cut back.

The dwarf birch, *Betula Pumila*, which seldom grows over twelve feet tall, with small leaves, and which is found growing in a wild state in damp conditions far north, is somewhat straggling in habit. It seems to be well adapted for undergrowth in large plantations, and does well with us in ordinary dry soil.

Another dwarf birch, *Betula nana*, is found growing in damp conditions on the North American and European continents, and seldom grows over four or five feet tall. This will make a compact pretty little bush in time, and is not particular as to soil.

The Japanese birch, *Betula Maximowicziana*, as an ornamental hardy tree, is perhaps one of the most important introductions of recent times. It was observed by Prof. Sargent in his travels in Japan in 1892, growing in the forests of Yezo, and was said to range from there northwards to Manchuria, and attaining a height of eighty or ninety feet, with beautiful, pale orange colored bark. The leaves are the largest of all the birches, and are from four to six inches in length, and from four to four and a half inches wide, and flutter beautifully on long slender stalks. Seedlings, raised from seed collected by Mr. Sargent, were disseminated from the Arnold Arboretum, Boston. The largest plants we have seen of this birch are in the Ellwanger & Barry nurseries, and are about fifteen feet in height. The plants in the Rochester parks are from five to

six feet tall. It appears to be of easy cultivation. It would be well for nurserymen to make efforts to get up stock of this handsome tree. The trees first raised in this country must very soon be in a seed bearing condition.

The Indian paper birch, *Betula Bhojpattra*, from the Himalayas, with handsome heart-shaped leaves, is not uncommon in cultivation. It is not quite as hardy as some of the other birches.



AN AVENUE OF BIRCHES.

We thought we had Erman's birch, *Betula Ermani*, but it turned out when it developed to be *Betula alba* var. *Japonica*, a Japanese form of the European birch. At present the stems of this birch are brownish red and the branches quite warty, and it promises to be quite ornamental.

Birches, as a rule, once they are established, require very little pruning attention, and what little pruning they may at any time require, should better be done in late summer, as the wounds will heal over quickly, and they will not "bleed" as they will when they are cut in late winter or spring.

John Dunbar.

Mr. and Mrs. J. W. Pinchot of New York City, and their sons Gifford Pinchot, Yale, '89, Chief of the Division of Forestry, Washington, and Amos R. E. Pinchot, Yale '98, have provided a fund of \$150,000 to found a school of Forestry at Yale University. The thanks of the country are due these generous donors for so wise a benefaction.

THE PARKS OF CLEVELAND, O.

One of the finest park systems of America is that of Cleveland, O. From small beginnings it has developed into a total area of 1326 acres, distributed among 22 parks, public squares and boulevards. Cleveland has been very fortunate in the fact that considerable of this acreage has been donated by public spirited citizens or men of prominence interested in the city.

The principal parks and their areas are as follows: Ambler, 45.85 acres; Brookside, 149.43 acres; Edgewater, 98.66 acres; Garfield, 162.70 acres; Gordon, 112.52 acres; Rockefeller, 260.43 acres; Wade, 83 acres; Edgewater Parkway, 27.33 acres; Woodland Hills, 53.25 acres.

Every variety of scenery is represented in this large acreage, from the storm swept shores of Lake Erie back into the solitude of the woodlands, and nature and art are combined in the development of the system to produce the finest effects possible in park scenery, and the requirements of the public park for the welfare and enjoyment of the city's inhabitants. Nature, as far as consistent with a proper care, has been permitted to retain her naturalness, and the fine trees, to which Cleveland owes her title of the Forest City—have been preserved and cared for as a prominent feature of the development.

Cleveland's park system may be said to have begun in 1893, when the Board of Park Commissioners, as at present constituted, took charge. At that date, the foundation consisted of only some 100 acres. From the beginning the commissioners planned to encircle the city with parks and parkways, and the work has already reached the proportions indicated. Much of the land when secured, was wild but beautiful. Its improvement has called for ability of a high order, and the results have justified the commission in its methods and plans.

The park system has a well equipped forestry and nursery department, which has proved a means of considerable economy to the commissioners, while at the same time it affords opportunity for the production of all classes of plants as may be desirable for the improvement and embellishment of the grounds and buildings.

The buildings and bridges, where required and appropriate, have been constructed of materials looking to permanency, and have been carefully studied as to design. There is much, however, yet to be done in this direction, and the last report of the commissioners suggests the construction of



BROOK AND GLEN, GARFIELD PARK, CLEVELAND, O.

large bathing pavilions on the beach at Edgewater and Gordon Parks. An increase in the number of shelter houses, public comfort buildings and drinking fountains is also urged, and a significant suggestion in the report is the following, which will undoubtedly be carried out in the future: "Encouragement should be given to projects to erect suitable monuments, statues and memorials to

PARK AND CEMETERY.



ABOUT THE LAKE, ROCKEFELLER PARK, CLEVELAND, O.



ANOTHER VIEW IN ROCKEFELLER PARK, CLEVELAND, O.

worthy subjects, and the Circle in Euclid avenue, now under process of construction, should be made an imposing and beautiful central entrance or gateway to the park system, while similar entrances to the various parks are also greatly to be desired."

The views given are of characteristic scenes in three of the parks, for the use of which we are indebted to the Park Commissioners by Mr. F. C. Bangs, secretary. They need no explanation, but speak for themselves. Rockefeller Park, the gift to the city of Mr. John D. Rockefeller, contains many pleasing scenes of varied beauty, and will prove a popular park from its beautiful drives and walks. Garfield Park is rich in sylvan scenery. Shaker Heights Park is still in process of general improvement. It possesses characteristics peculiarly its own, having numerous springs, and a wealth of picturesque beauty connected therewith.

Like most of our larger cities, Cleveland is in need of small down town parks, and it is gratifying to note that the important question is receiving due consideration.

The smoke nuisance has very deleterious effects on the planting of the parks and squares contiguous to manufacturing districts, and Cleveland suffers from this like her sister manufacturing municipalities, but the question is carefully studied to keep up the best appearance possible under the circumstances. The nursery, at the close of 1899, contained the following: 22,004 trees, 49,153 deciduous shrubs, 11,093 evergreen shrubs, 21,898 coniferous evergreens, 7,198 vines and climbers, 35,971 hardy perennials, 4,311 bedding plants; in all 151,628 plants, valued at \$23,588.30. During the year 1899 there were planted out over the system 70,121 plants, which correlating with the inventory of the nursery, emphasizes the value of such adjuncts to a park system.

There are many interesting details given in the last report of the commissioners, not the least important of which is that regarding "Children's Day," which is a day set apart by the Board to be celebrated each year in a fitting manner. The last day of May is the appointed date, and the park authorities try to make it a more especially interesting and attractive occasion for the children. All

the lawns are opened and everything possible done for their comfort and pleasure. There is an excellent suggestion in this feature of park management, for there can be no more vital agency to make the public parks understood and appreciated than to create an interest in the minds of the young. The



VIEW IN SHAKER HEIGHTS PARK, CLEVELAND, O.

value of leading children to practically consider their own personal interest in the city's parks can hardly be overestimated in many directions.

Many of the bridges in the parks are very massive in their construction, and designed as monumental features. They have been planned for solidity as well as for beauty and will long remain as striking objects of park embellishment. In

many cases these bridges have been built to overcome or abolish grade crossings, a question which is even yet agitating many municipalities.

The commission has had under consideration many other plans for improving the system, mainly in the direction of completing the connecting links between the several park tracts. This is a matter of considerable importance, due to the fact of the increasing cost of land, especially in the thickly populated districts, and the sooner it is accomplished the better.

From 1893 until December 31, 1899, there has been expended upon the Cleveland parks \$3,411,529.13, which includes \$378,585.12 provided by the Rockefeller fund. In detail this gives \$902,656.97 for land, \$1,763,734.35 for improvements, \$395,137.81 for maintenance, and \$350,000 for interest.

Over the system there are some 28 miles of roadway and 32 miles of walks. When the park system of Cleveland shall have been completed on the lines laid down by the present commission, it may readily be prognosticated that she is not likely to be rivalled, relatively speaking, by any other city of the country.

AN IDEAL CEMETERY.

An imaginary plan may need to be defended; it savors to some of an amusing, but rather futile experiment. But the imaginary plan (under certain circumstances) is endorsed by Edouard Andre, and when no completed work exists that would satisfactorily illustrate an idea, the invention of one would seem to be justified.

This ideal cemetery is one in which the innumerable ghastliness of tombstones is mollified and replaced by foliage and turf. The general scheme will be clear at a glance. The slopes of a valley and sides of a bluff (shown by the contour lines) are covered with planting, the bottom with open lawn and water. The water level is taken as zero. The planting is needed to mask the monuments, the lawn and water to set off the planting, and to give the familiar contrasts of lawn and planting that nothing else can replace. Roads and walks are made to give access to all parts, and for no other purpose. The road passes around and across the park, and in one place by a subway through a high bluff for the sake of an easy grade. Where this road emerges from the tunnel the steep banks at its sides are supported by rock work covered with trailing and other plants. Principal vistas are shown by broken lines.

But the justification of this design is in the arrangement of the planting. Seen from above or below it will appear a practically unbroken mass of

foliage, relieved here and there by the most conspicuous monuments. To any one walking through it, it is a framework of trees (drawn separately in the plan) clothed with shrubbery (tinted darker) and enclosing many small and separate lawns. In every nook and recess of this shrubbery is room for a burial plot and one or more monuments. Each little leaf-encircled lawn is a park dedicated to those buried therein, distinct from the other little parks, and thus in a sense private. Every headstone is retired from view, yet more conspicuous in its own leafy sanctuary than a large obelisk exposed in a huge and naked graveyard and lost amid a multitude of others. No monument but has its squareness and bareness, not multiplied by the others like it, but softened and set off by contrast of leaf and waving branch. No inscription but has its background of verdure so genial and suggestive of life renewed. Here the variety and grace of nature are the essentials, the monuments the incidents; yet only in such a place would the monuments become really individual.

No gaudy pattern beds or pretentious subtropical plants are admitted; they do not consort with the dignity and solemnity of a burial ground, yet flowering shrubs and herbaceous plants abound. Even at the entrance it is thought better to trust to stately trees, and their impressive masses of foliage than to "color effects."

Sites for monuments of all sizes are suggested in one corner of the plan. From these it will be clear how large a number could be set in the whole park. Trees should generally be of the more compact and less spreading kinds to minimize the dripping of water from them on to the monuments.

More plots could be cut out of the average chess-board cemetery than out of such a one as this, yet it would admit a very large number, and it might even pay as well or better than the average cemetery; the lots would sell for more in a place that is and will be preserved beautiful, and the cost of maintenance would be less. All planting would be done by the directors. Monuments would be discouraged in number and size, and the natural rough boulder, or one made like it, to invite the growth of moss, with a planed-off surface (with some device to protect it from overhead drip) for the inscription, should be introduced.

There is no need to defend here the practical side of this idea. Its spirit enters, more or less scantily, into most of our cemeteries, and into all of our best ones. If such a burying ground is found to be needful, it will soon be found to be practicable. It merely means the assembling of the best features, accidental or not, of existing cemeteries into a coherent scheme.

H. A. Caparn.



H. A. Capron, Landscape Architect.

PLAN OF AN IDEAL CEMETERY.

The dotted straight lines are view lines, indicating vistas and scenic possibilities.—The curved broken lines, in connection with the figures, are contours giving the relative surface levels of the tract.

PARK AND CEMETERY.

DECORATIVE PLANTING FOR RAILROAD STATION GROUNDS.

The subject of decorative planting for railway station grounds should interest the American people for we are pre-eminently a nation of travelers.

Such planting has been done to some extent in the East for several years, and is constantly being extended. Not only are new lines taking it up, but pioneers in the work are doing more and better planting each year. It is getting to the point where nothing but the best in landscape design is good enough for railroad officials, who are nothing if not "up to date."

At first the work was limited to summer bedding, probably because the matter was left entirely to gardeners, whose knowledge, while thorough as far as it goes, is too often limited to plants of the bedding order. Some of the most successful efforts of this kind must be credited to the gardeners of prominent railroad companies, notably the Pennsylvania lines, the

Boston and Albany, the Philadelphia and Reading and the Michigan Central railroads.

But advancing taste, in considering what constitutes good planting, now demands something less formal than the old-time carpet-bedding, which, though admissible in some instances, is not deemed artistic by artists and art critics.

It must be admitted, however, that a certain part of the public clings to these showy results of

skillful gardening—and it is only just to say that great skill is essential to the production of the elaborate designs that seem to be in a sense popular—and that a certain amount of such planting may be desirable at some stations. But it is a mistake to entirely ignore the hardy vines, shrubs and trees that insure beautiful effects even in winter, and which are especially attractive at the seasons when space devoted to tender material is a dreary blank.

Even where greenhouse plants are used, the results will be far more pleasing when a background and setting of permanent material forms the basis of the planting. Indeed, the demand for something more in line with the canons of art, as applied to other branches of art work is becoming so strong and insistent that it is felt in the realm of railroad planting as well as elsewhere, and a change is already being made.

This change of taste is fortunate, both for railroad companies and travelers—fortunate for the

companies because landscape planting is less expensive than formal bedding; and fortunate for travelers, because broad and beautiful landscape effects may be established and maintained at such slight expense that all the station grounds on a line may be redeemed from barrenness and made to blossom as the rose.

The fundamental factor of landscape planting is the use of strictly hardy material that, when once



1. View on Station Grounds of Michigan Central R. R. at Niles, Mich.
2. Planting showing combination of Tender and Hardy Material on the same grounds.

established, practically takes care of itself while increasing in beauty year by year. Neither greenhouses, propagating plants, nor an attendant corps of gardeners are necessary to this more artistic style of planting, although the services of a landscape gardener is a necessity, and the establishment of a small nursery might possibly be desirable in some cases.

Probably the problem of railroad planting will be solved by continuing the use of tender material at points where greenhouses are already established, and placing the entire line in charge of a competent landscape gardener, who will design and superintend all planting.

Our illustrations show one view on the station grounds of the Michigan Central Railroad at Ypsilanti, Mich., which are celebrated for a remarkable annual display of elaborate carpet-bedding of the most formal character, including such specimens as a battle ship, locomotive, society emblems and other subjects of difficult and complicated construction that may well stand as monuments to the skill, ingenuity and patience of John Laidlaw, the amiable and popular gardener in charge; and two views on the grounds of the same corporation at Niles, Mich., where the accomplished gardener, John Gipner, each year shows successfully executed designs in summer-bedding, largely informal and attractive in style, and further softened and improved by a charming setting of permanent,

hardy material, the effect being further heightened by broad expanses of smooth, green turf—as restful to the eye as they are essential to good composition.

At both these stations the pretty custom of presenting a flower or a nosegay to each woman pas-



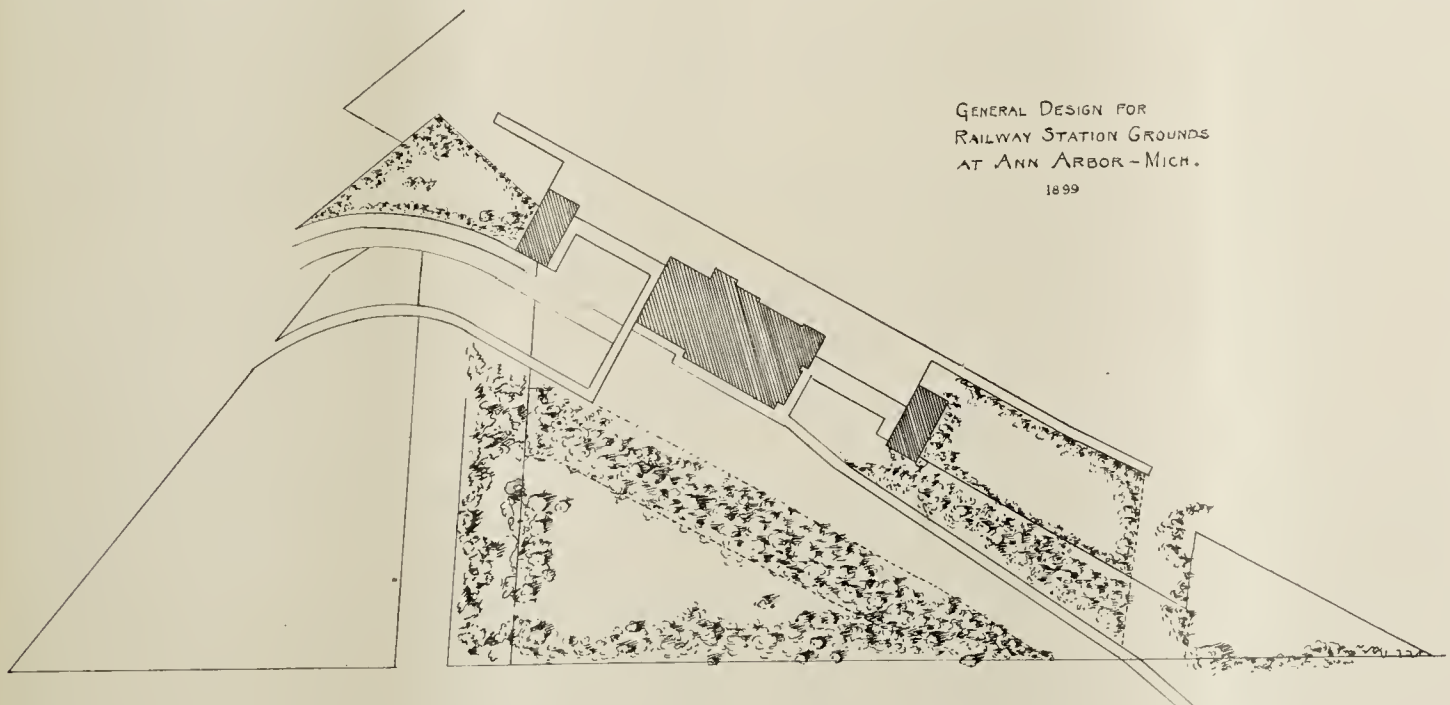
GENERAL VIEW OF PLANTING, STATION GROUNDS, YPSILANTI, MICH.

senger on through trains is systematically followed.

The plan of the writer for the improvement of the station grounds at Ann Arbor, Mich., for the same company, shows on a greatly reduced scale the work done there under her supervision last October. It is strictly landscape work carried out with hardy materials, and is a new departure in railway planting in the West, as well as for this road; although as already shown, the planting at Niles is a step in the same direction.

The irregular surface of the ground suggested the use of rather picturesque effects in the treat-

GENERAL DESIGN FOR
RAILWAY STATION GROUNDS
AT ANN ARBOR—MICH.
1899



Scale 50'-1"

FRANCES COPLEY SEAVEY.
LANDSCAPE GARDENER.

PARK AND CEMETERY.

ment of the bolder features, and the large triangular piece of ground which rises as a hillside back of the station, has all of its sharper slopes set with shrubs and vines that are intended to form a close cover in time. These plantations are composed of small trees, shrubs and vines, comprising native plants, such as thorns, sumach, elder, hazel, June berry, Indian currant, wild grape, bitter-sweet, prairie roses, etc., and of cultivated material of somewhat unconventional habit, including syringa, Japanese barberry, rosa wichuraiana, etc. The planting to the east and to the west of the station is more gardenesque, and includes Japanese snowball, hydrangea, exochorda, clematises in variety, akebia, etc., as well as herbaceous material and a generous supply of bulbous plants of informal habit, such as narcissi in variety, Japanese lilies, and several thousand crocuses in the borders and sprinkled through the lawns. Several sharp slopes are, however, so planted that the ground will eventually be clothed with a dense mass of vegetation, it being considered inexpedient to attempt to maintain turf on such sharp grades, as well as more artistic to follow nature's method of planting such surfaces.

The effect of this planting will be watched with interest, and when established, the result, as well as the condition of the ground before planting, will be illustrated.

Frances Copley Seavey.

ARBOR DAY—THOUGHTS ON ITS PRACTICAL SIDE.

Arbor Day is now observed in some forty-two states; in the majority of cases the day is appointed by proclamation of the governor. In some states the Board of Education names the date, but in whatever manner the day is set apart, it is a fact that it is becoming one of the most universally observed days of any in the American calendar of public ceremonials.

As its objects and methods of observance have been better understood, it has enlisted the sympathies and co-operation of the intelligent citizen, and prominent educators have become so impressed with the results likely to be attained, that the programmes arranged for Arbor Day in the public schools, are marked by not only features designed to captivate the young mind and those of older growth, but have an educational value scarcely rivaled by any of the usual school exercises.

There can be no doubt but that the denudation of our forest areas has had vast and deleterious effects on large areas of the country which will take many decades to remedy. Such results were very long ago anticipated by the other enlightened nations, and they have not only retained their forest areas in a condition of thorough usefulness, but have done so at little or no cost to the government,

the excess products reimbursing in large measure the outlay in care and cultivation.

Arbor Day has given immense impulse in this country to the forestry question; it is affording practical instruction in the variety, habits and usefulness of trees, both those of the forest and those particularly adapted to shade and ornamental purposes, and the study of such a subject for the young not only affords a knowledge, highly useful in later years, but refreshes and enlightens the mind, while at the same time that mind is refined by the softening influences of nature.

A more practical feature of Arbor Day exercises is the actual planting of trees and shrubs. This has been hitherto confined largely to the adjacent school-house grounds, though in isolated cases trees and shrubs have been planted in the public square, park and cemetery.

There is one important fact that must be borne in mind in relation to this indiscriminate planting, and that is, to be effective and fulfill its mission, it should be done under the supervision or guidance of one more or less familiar with landscape gardening operations. And each tree or shrub planted should be disposed of as a part of a thought out plan. By a proper consideration of this main fact, every tree and shrub planted this year may, under proper conditions, be supplemented by what the scholars do next year, until finally a beautiful school ground will result. This, however, will be impossible of accomplishment unless attention is first given to ruling principles unerringly adhered to. The incentive, however, of Arbor Day might be emphasized by securing a plan of improvement for the grounds, and with Arbor Day set apart for inauguration ceremonies among the scholars, its influence might be extended to other appropriate times, and as much as possible of the preliminary work of improvement carried out during the current year. A very few years would create a picture for all time to come.

Another practical object for the activities of Arbor Day should be the village park, or where no such area existed, the public square, or the blank, arid spots about the village hall or other public buildings. There is a lamentable number of our minor towns, villages and hamlets either altogether lacking in the natural adornment to which plant-life contributes, or are subject to so much neglect that they might as well be so. Here are the places for the local Improvement Association, and here is the great opportunity for joining hands with the Arbor Day of the schools, to take up the work of planting trees and shrubbery where needed. And as a rule the amount of material close at hand is for the present, generally so abundant, that it is

not so much a question of expense to improve a vacant place, as one of time and energy. All the prominent landscape architects advise the use of local material for planting out purposes. What is needed most is intelligence in selection and arrangement, and if this is lacking, which in most cases it probably is, a moderate fee will secure a plan of improvement in the small town or village which will be the best paying investment, in more senses than one, that the community ever made.

The cemetery is another point deserving of a share of the interest and energy of Arbor Day. The deplorable appearance of the majority of country cemeteries is a serious reflection on the people concerned. And in connection with the cemetery, an excellent idea to be entertained and encouraged is the planting of memorial trees. A tree is always an appropriate memorial—a memorial that carries within itself a wealth of association, and whose characteristics are peculiarly fitting to adorn the last resting place of man and carry memory along with its growth. But where also is the country cemetery that would not be benefited by some properly placed shrubbery? Our native shrubbery is so rich in effect, and so varied in kind, that pictures for all seasons of the year can readily be arranged under intelligent direction. But apart from memorial trees, shade trees of permanent and suitable varieties should be more freely used in our rural burial places, they not only add to the value and beauty of the cemetery itself, but they will improve the general landscape, and by association, the community.

In connection with memorial tree planting, and in fact with tree planting generally, a feature of great importance and educational value is the provision of a permanent descriptive label, or other method of giving information concerning the tree. It is only telling half the story to describe the occasion and object of the tree and its planting; its own name and other particulars should be added, so as to make the matter complete.

But we can come nearer home with the influence of Arbor Day if we will. Our own dooryards, as the home lots are sometimes called, afford opportunities, the adornment of which would transform the appearance of nearly every town in the country. Aside from the effects of Arbor Day there are other influences at work in this direction. In a few of the large manufacturing districts of the civilized world, some enterprising corporations, finding it mutually advantageous to improve the home surroundings of its artisans, have encouraged, by example, practice and more solid inducements, aided by the advice of expert landscape gardeners, plans

for improvement about the house lots that have had astonishing effects, not alone in the immediate vicinity, but with the community at large.

There is not a village in the country that would not be materially advanced in many ways, by a determined effort to induce residents to plant out and care for their home lots. As was said before, the expense need be but small, the material may be found, in all probability, in the neighborhood, and a small outlay for a few annual seeds and other necessities, would, in the results obtained, afford endless gratification, and encourage a love of home from an external standpoint.

Considering all the channels by which such missionary work could be accomplished in our smaller places, none appears quite so appropriate for the work as the "Woman's Club." The usefulness of such organizations beyond the work of self-culture, would find an absolutely permanent record in the lines herein suggested: Shade trees for the streets and public places: Improvements in the parks and cemeteries, where no regularly appointed officials controlled their care: The promotion and active participation in the improvement of home surroundings. Here is a programme of sufficient expansiveness to meet the most ardent reformer, one that will not only promote the welfare, moral and physical, of the community, but will also offer a recompense in the pleasure enjoyed in prosecuting the work, and its after results more satisfying than any perhaps we poor mortals enjoy, because we have had good old mother nature for a partner.

In an address on Arbor Day by Mrs. Cora C. Jones, of Boston, delivered before the Women's Clubs of Massachusetts, not long ago, among other points made the following will be of interest:

"What are the possibilities for Womens' Clubs as Arbor Day history is yet to be written. What greater service can Womens' Clubs do to first inform themselves on the subject of forestry, and seek to impress the present generation with the imperative need of tree planting and tree preservation. It would be a most worthy ambition to infuse into our school system, reaching as it does the life and heart of every child, the purpose and the will to exert every effort to change this destructive process to one of increase, in every state and territory, and teach those habits of thought and feeling in regard to the benefits and uses of tree planting, to deter them from the destruction of our lawns and parks.

"We can encourage the organization of forestry associations in every city, town and school district. As part of our educational program, we can plan attractive Arbor Day exercises, and interest the teachers in our vicinity to use them. * * * Every graduating class should hear a few practical lectures on forestry. Use less and waste less should be taught in the primary schools, for, as the Germans say, "What you would have appear in the national life, you must introduce in the Public Schools." * * * Lessons in the care of camp fires will decrease the horrors of forest fires. Plant trees in our door yards and our streets will soon be bordered. Lead a few horses away from trees being gnawed to their death and wire guards will follow.

"I believe the easiest way to solve great problems is to begin with individual effort. Try, however simply, to right the wrong, and growth will follow."

MAGNOLIA KOBUS.

It is not uncommon to meet with photographs of magnolias showing their flowers, but to see them illustrated when in fruit is a treat we rarely meet with. Yet many of them, the *Magnolia tripetala* for me, is more to be admired when in fruit than when in flower, as its large oblong pods of carmine color, set in their background of large green, tropical looking leaves, form a lovely picture.

There is another one, *M. Kobus*, from Japan, as its name would indicate, which attracts more because of the oddity of shape of its pods than anything else, though its numerous carmine colored pods in late summer are far from being unattractive. This species when young is sparing of its flowers, but as it adds to its years it does also to the number of its flowers, so that in the course of time it



MAGNOLIA KOBUS.

eclipses in its productiveness almost every other species of the same age and size. One reason for this floriferous feature is that it is a very twiggy grower. Ordinary magnolias make a few stout shoots and but few small ones. *Kobus* does just the opposite. It is almost as twiggy as a horn-beam, and each twig or shoot is surmounted with a flower bud, as other magnolias are, which is the reason for the great wealth of bloom. The flowers are of fair size, yet much smaller than *conspicua*, the well-known Yulan, or Chinese white, in color, white, and they come in advance of the foliage, as do all the Chinese and Japanese sorts.

I have mentioned the odd-looking fruit this species, *Kobus*, presents, and knowing the readers of this publication would be pleased to see it, I had some photographs of it taken last autumn. Though the mass of foliage somewhat hides many of the pods there are enough of them visible to show their grotesque forms. A very common form is that of a newly hatched young bird. Hundreds of pods on the tree these shoots were taken from were just of this shape. The bulging parts of the pods are

caused by the seeds within. There is a seed under each protuberance. In time, when the seeds are ripe and the time has come, the pods crack open and display the orange red seeds within. When thus open the singular look of some pods is increased. If the reader will look at the cluster of twigs in the vase there will be seen a pod which has opened and displayed two seeds, giving, with the assistance of the foliage, a singular resemblance to the head of a poodle. Last summer a botanical class happening near this tree was attracted to it and nearly every member took a pod along as a great curiosity. This species is much admired for its handsome habit of growth, as well as for what has been said of it. It forms a large tree, with a broadly conical outline, and so regular is its growth that but few would believe it was made without having been pruned at all. This growth it assumes at the start, and does not wait till it is full grown before accomplishing it, as so many trees do.

When first introduced it was under the name of *Thurberi*, and it is yet in some collections under this name, but *Kobus* is correct. Now, a word or two about the planting of this and all other magnolias. There is no disputing that as a class there are none of them easily transplanted. But the kinds mentioned in these notes are not so hard to transplant as are the tree species of our own country, such as *acuminata*, *tripetala*, *Fraseri* and the like. But one and all should be transplanted in spring only and should be closely pruned. Taken just as they are about to grow, in late spring, cut back about one-half, but little loss will occur, otherwise many of the tree sorts may miss. As a rule, it is useless to transplant in the fall. Some nurseries are growing them in pots that they may be planted at any time at all.

Joseph Meehan.

A STUDY IN THE ARNOLD ARBORETUM.

When one enjoys both analysis and pictures, one analyzes pictures of course. We have tried to analyze the illustration, a view in the Arnold Arboretum, which we have enjoyed studying and attempting to discover what in its design is good, what not so good but necessary to use as part of an Arboretum, and what is not good at all.

This scene, while it is a pleasing landscape, would probably never be chosen for representation upon canvas. Utilitarian purposes as an Arboretum, prevent its becoming a good composition. The necessity of using all available room for exhibiting trees and shrubs make it lacking in both unity and breadth. Yet its elements, the sweep of the hill, the general pastoral effect and its trees, are indi-

vidually attractive, and are on so large a scale as to make the landscape agreeable. Such a hill is not so agreeable as a view between hills where the eye is led into the distance. Now we look straight upon it and see no nook into which to search, no distance which we wish to discover. It is well known also that convexity permits less area to be seen than concavity which makes the hill seem smaller than it really is.

It is to be regretted that the usefulness of this landscape requires the dotted planting on the hillside. How much more agreeable it would be if the whole hillside were left in grass without a tree except to bound it. Its openness and simplicity would be its strength as a pastoral scene. Now it looks cramped and spotted. The eye asks also to be carried farther into the distance, and not be

to be regretted that the Ashes at the left should have all been placed unmixed with other trees and so widely apart since they look like a cloud of skirmishers advancing from cover rather than a related group.

Much is lost without a proper foreground. The quiet curve of the hillside finds no quietness in the foreground to re-echo it. There is too much of the spottedness of the hillside. In other words it does not harmonize.

An agreeable feature is the skyline of the trees to the right in the background, that is, the manner in which it unites with the quiet curve of the hill. It is an observation among artists that lines harmonize when they approach at an acute angle. The real genius in the picture, however, if it was not an accident that produced it, was the retention of



A STUDY IN THE ARNOLD ARBORETUM.

confined simply to the bounding growth. From this point of view the right of the two groups of pines and its adjacent trees were best removed and the lawn extended as far as can be seen. To some degree as well would we bring the lawn down to our very feet.

But since the trees in this landscape are necessary we may say that the grouping itself is happy, and the trees and shrubbery at the top of the hill good, since they break the hardness of the outline, a hardness which is attractive only in the case of a mountain where hugeness and grandeur are predominant characteristics. The group of Ashes midway up the hill at the left advance easily from the side of the picture and melt into the meadow. The smaller group of Catalpas at the centre repeat the idea without hardness. The latter, with the Elms scattered in front of the border at the right, carry the eye a short way into the distance. It is

the two heavy framing groups of trees which occupy the same relative position from whatsoever point we look at the hill.

But this is not an artist's picture only a utilitarian landscape. The trees of the Arboretum had to be shown as specimens and to the best advantage. They are the Arboretum. They were grouped with the greatest care to produce both landscape effect and the orderliness of systematic botany. They were best exhibited and adorned by this beautiful lawn which now is secondary. This picture is chosen to show what compromises the landscape architect must make to utilitarian purposes to show how a mere collection of botanical specimens may become very like a picture, and to exhibit the possibilities of any piece of ground, large or small, when left to the genius of a true artist. In detail it is delightful, but it is not an artist's picture.

A. P. Wyman.

IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

WORK FOR WOMEN'S CLUBS.

“There are not only art galleries to establish, but parks and squares to decorate—western life its self to be made beautiful! Surely there is enough for the clubs to do.”

The note struck in this sentence apropos of work undertaken by womens clubs by Lorado Taft, sculptor, lecturer and art critic, is so opportune and so suggestive that it should be prolonged and emphasized.

No one is likely to take issue with the assertion that it is eminently woman's place to make home, home-like, and surely by right of precedent and unwritten law, it is her right and pleasure to beautify the world.

No home can be home-like without decorative planting and there is no better, or more necessary way to beautify the world than by the exterior decoration of homes individually and collectively.

By their horticultural deeds shall ye know them, is to a large extent true, for while only a few see the interior of homes, the exterior is seen by all. Yet, too often, nothing but horticultural *misdeeds* are visible.

Neither women as individuals nor women strengthened by club organization may hope to find a better, more useful or more satisfactory field of labor than that which lies waiting on every hand in every community. Work that is not only suffering to be done, but the public is suffering because it is not done.

The study of art and of artists is good, but the work of preserving the love of the beautiful inherent in our species, is better. This love of beauty is latent in the childhood all about us, but is actually starving from lack of food. Shakespeare says “the eye must be fed.” Think of the nature of the sustenance supplied in most communities!

Simple natural beauty—grass, trees, flowers—is the birthright of every child, but our artificial manner of living has obliterated it for thousands and so the simple, legitimate pleasures of childhood and of youth are denied to the direct damage of manners and morals. To remedy such a state of affairs should be a duty and a pleasure to those who are earnestly looking about for opportunities to better the world. To leave the world a pleasanter place than one found it is as honorable—if, indeed,

it is not synonymous with leaving it better than one found it.

Both children and adults who live among attractive surroundings are in some degree prepared to appreciate and profit by the study of art and of literature. They cannot know how pictures of landscapes should look until they have become accustomed to such scenes as they represent.

It is quite possible to make every dooryard a picture that an artist would be willing to use as the subject of a painting. Not only is this strictly true, but hundreds and thousands of people who would delight in such growing pictures cannot—or at least, will not, learn to appreciate the picture of the picture.

A whole community will derive benefit from one barren door yard that is redeemed by good planting, will enjoy the shade and refreshment of one row of street trees.

What would result if an entire community, neglected before, should be so transformed? Would not the children rejoice and the old people and the invalids be glad? If so, then what about the busy house mothers who rarely have time or opportunity for a pleasure trip, a day on the river or at the lake shore, or any break in the dreary monotony of existence. They may not go to the mountain, but a charming fragment of the mountain, or the plain, or the lake shore, or the woodland or any bit one elects as suitable, may be carried to them, and they may have it not for a day only but for the entire season.

If a bit of landscape is not possible (but it usually is) there can at least be a garden, and an attractive one, to replace the ash-heaps, tin cans or sun baked inclosure. There is not a piece of ground that cannot be made to grow something that will make the place look better than it looked before.

If one half of the earnest endeavor put forth by womens clubs in this country last year should be intelligently expended this year on replacing the present lack of planting, or the present hit-or-miss style of planting of home grounds; on regenerating the present scorched, dusty wildernesses known by courtesy, as schoolhouse grounds; on relieving the ordinary cheerless and barren church yards; on making little parks out of neglected, unused ground or on railway station grounds; on planting well chosen trees in the right places and shrubbery and vines where they will do the most good and on hosts of other good—really good—work along these lines, the face of the country would be visibly altered for the better.

The study of the best in painting or in sculpture when one's own door yard is a wilderness of every-

thing unbeautiful, would seem equivalent to sending money to Borrioboola Gha when one's children are starving.

* * *

I am in receipt of a letter from Mr. A. C. Long, Excelsior, Minn., asking advice regarding a constitution and form of government for their proposed Improvement Society, and can not do better than refer him, as well as others interested in such organizations, to this department of the March, 1899, issue of PARK AND CEMETERY. The simple form suggested there is admirably suited to the needs of all young Societies, and by the time that anything more elaborate is needed, any Club will be competent to broaden its scope to fit its own requirements.

Mr. Long's letter is most interesting in that it gives a vivid picture of the sudden awakening of an intelligent community to a necessity for better things in the way of environment for every day life. His words also suggest charming possibilities and unusual possessions in the direction of "winding streets leading out of the town" and "native growths of sumach, ampelopsis and wild roses." True, he speaks of these rich treasures as being in danger of being "improved" out of existence—but doubtless all that will be looked after by the vigorous young Improvement Club. We trust that its success will be prompt and complete. It is delightful to hear of the formation of new Societies, and to learn that one's earnest attempts to be helpful are not wasted. *F. C. S.*

THE MAN WITH THE SHEARS.

Just now is the time when myriads of patient bushes in thousands of trim gardens take on the aspect of a gentleman whose hair has suffered a "pompadour" cut. The man with the shears goes his rounds, gains the ear of the unheeding and trustful householder, and, in the name of pruning, whittles his weigelias, mock oranges, snowballs and spiræas into the shapes of pumpkins or fungi. This is done presumably because the shrub is supposed not to know its business of growing into a beautiful form, and must have its vagaries restrained by the cold steel of the "artist" who really does know it. So the unresisting thing has its shoots shorn flush, so that none shall project beyond another, and for a few weeks presents an appearance of unimpeachable smugness, but in the last degree forlorn. But presently, forgetting its lesson, it tries again to grow in its own way, and puts forth twigs as a brush puts forth bristles, until the shearer returns. Thus it grows yearly more discouraged, develops an unnatural amount of dead wood and dies prematurely, just about the time it ought to be coming to perfection. Has nobody

told these men or their employers that this is the exact opposite of true pruning? That it destroys the character of the plant instead of helping its expression? That it encourages dead wood instead of removing it; that it crowds the plant instead of ventilating it; that it cuts off the young growth instead of the old, and destroys the most and best of the season's blossoms? Surely no one ought to be allowed to tamper with the pruning knife who does not know that most of our common shrubs flower in the spring on the growth of the preceding year, and that only a few like hydrangeas, althæas and clethras can form their blossoms after a spring pruning. All the pruning most shrubs require is the excision of the growth that is dead or least likely to produce vigorous shoots, or that is crowding better growth than itself, or that is weak or ungainly and straggling. This may be done either when the plant is leafless or as soon as its flowers have faded; if the latter, more care must be used to avoid cutting off too many leaves and thus weakening the plant. But all this requires some knowledge and judgment, while the ordinary style requires no knowledge and little judgment, and that of the wrong kind. And then, after a bush has been properly pruned, the effects are not immediately very obvious, while, after its customary shearing, anybody can see that something has really been done. So uncounted bushes are yearly mutilated to attain that bald and monotonous neatness, that planed-up primness of lawn and planting that ruins the home-like look of many an American house and lot. What is the use of all these different spiræas, deutzias, snowberries and golden bells, if they are all to be stripped of their blossoms and shorn into the same naive shapes of depressing ugliness? Away with them and put in California privet, which will grow into a nice regular shape without any cutting at all. When the intelligent householder begins to pay as much attention to his bushes as he pays to his wall paper or the pattern of his trousers, he will wonder how he could have been so illogical as to plant them for their beauty and then to deface it, to exchange for gross and ugly forms the peculiar grace and variety that each was created to express. *H. A. Caparn.*

SOME ORNAMENTAL SHRUBS.—I.

In planting shrubberies for parks or other ornamental grounds it is necessary to know the character of all the plants that are employed. Their needs as to soil and climate must be carefully studied in order to get the best results and their habit of growth, time of flowering and size at maturity, must all be taken into consideration. It is also of great importance to know their relative

effect in the living picture that we are trying to produce, both at the flowering period and at other seasons.

The skillful landscape gardener will not use too many high lights in these garden pictures. Very conspicuous shrubs can be massed here and there, or used singly or in groups of two or three at advantageous points where they harmonize with their surroundings, but it is poor taste to use too many of them.

A large shrubbery, composed entirely of blood-red Japanese Maples, purple Berberries and Hazels, and golden-leaved Elders, Spiræas and Philadelphuses, would be more bizarre than beautiful, and would be a weariness to the eye. But the same plants, used with discretion and to give variety amid masses of green, are capable of very effective arrangement.

In the crude days of our gardening experiments we planted what we still call the Golden Shrubbery at Rose Brake. We set out some dozens of yellow-leaved Spiræas, Elders and Philadelphuses, some purple-leaved Hazels, Plums, Berberries and Birches, and the effect was—disappointing. That shrubbery still exists, but has been softened by the addition of Magnolias, Flowering Apples, Kolerutias, Forsythias, Corchoruses and some evergreen shrubs, planted in later years. It is a pretty spot, and is on lower ground than the rest of the grove, and in a corner farthest away from the house. It is the only spot at Rose Brake that I blush to show to the friends of the *naturalistic* style of gardening, and, if I like it myself, it is because one cannot help loving the garden one has planted in happy days, and the shrubs and trees that one has watched over from their infancy. Yellow-leaved plants, and plants that have yellow blossoms predominate in this unique little garden at Rose Brake, and certainly it is a sunny spot, cheerful even on the gloomiest days.

I propose in this article to describe some of the most conspicuous shrubs that I have called the high lights of the pleasure grounds.

As a general thing I give the preference to flowering shrubs over those which have brightly colored foliage, because the flowering shrubs cannot weary the eye by their sameness. A garden adorned by the plants I will describe, changes from day to day. The beauty of April is not the beauty of May, or of June, or of midsummer, while the red and purple and golden-leaved plants have a monotonous effect. It is for this reason that they should be sparingly used in *decorative* gardening. In *naturalistic* gardening they are out of place because they do not look natural. One does not see

such plants in our native woods and wilds.

Some of the Magnolias, such as *Magnolia Stellata*, come under the head of conspicuous shrubs rather than trees, for they do not grow to a large size and are covered with showy blossoms very early in the spring before the leaves appear. A few of these Magnolias are very desirable to group on the margins of plantations of small trees, or in conspicuous places on the lawn.

Forsythias bloom about the same time as these early Magnolias, and are among the most sunny and brilliant of the April bloomers. They flower in showery weather when their beauty is much enhanced by diamond spray, and I have frequently seen their golden blossoms smiling and blinking beneath a bridal veil of snow. Some of these charming shrubs should find a place in every park and garden. The yellow brown of their branches makes them useful also for their effect in winter amid red-stemmed Cornels, bright-berried, and evergreen plants.

The common Japan Corchorus, with double yellow blossoms, blooms a little later than the Forsythia, and is conspicuous about the middle of April or the first of May, according to the climate. It is a most persevering bloomer, giving us flowers throughout the summer and fall. Indeed it is often the only shrub in flower in late November, and I have gathered its last sprays of bloom within a fortnight of Christmas. When every flower has faded and every leaf yielded to the blasts of winter, it is still pretty and cheerful with its graceful, bright green wands of branches, which retain their coloring throughout the months of snow, a cheery object in the garden.

Among the smaller showy shrubs the dwarf flowering Almonds should have a place. Little groups of three or more may be made here and there in front of larger bushes or near the foundations of houses where they can receive a little shelter. They need good soil and some care in pruning as they are apt to grow one-sided and straggling, especially if planted in partial shade or crowded by other plants. We like to combine the white and pink varieties.

Many Spiræas come under the head of conspicuous shrubs when in bloom. Perhaps the most effective are *S. prunifolia*, which blooms with the Corchorus, *S. Van Houttei*, *S. ariaefolia*, *S. crata-gifolia*, *S. Reevesiana* and *S. callosa*. *Spiræa rotundifolia* has balls of bloom which give it some resemblance to a snow-ball, and the red-flowering kinds are almost all pretty and desirable.

Danske Dandridge.

(*To be Continued.*)

RHODODENDRON MAXIMUM AND KALMIA
LATIFOLIA.

Within the last few years the extensive work of construction going on in parks and private estates with the general desire for immediate effects, has served to demonstrate the advisability of planting collected plants of Great Laurels and Mountain Laurels.

In keeping with the sensitiveness of the Ericaceae these plants are very particular as to soil and moisture, and in general may be said to be unadapted to soils that contain much lime or iron, although sometimes naturally found on soil containing a large per cent of lime. They prefer and almost demand a location where the roots may always reach moisture, a soil of a peaty and sandy nature and thorough drainage. Shade is not harmful, neither is it essential, but it is well endured.

Rhododendron maximum grows in low woods, on steep and ledging hillsides, usually predominating on the north side and along the small streams of the mountains and vales. It ranges from Nova Scotia where it is found sparsely, through the Berkshire hills of New England where it is more abundant, with a southern outcrop in Rhode Island, thence very rare until the Adirondacks, Catskills and Pennsylvania Alleghenies are reached, when in the last vicinity it occurs in great profusion. It follows the Alleghenies southward to Georgia and extends across Pennsylvania to Ohio.

Kalmia latifolia ranges from New Brunswick westward to Ontario and southward, especially along the Alleghenies to Florida and Louisiana. It is usually found on dry stony hillsides, and in the south in moist sandy locations. It is most abundant along the mountain sides from New York to Georgia, especially in Virginia.

Their evergreen quality, gorgeousness and profusion of flowers, tempt their use in large quantities. Their domestic abundance and cheapness preclude their importation on a commercial basis. It has been questioned whether they could be collected and transplanted with a degree of success sufficient to warrant such method of procurement. Sufficient tests have now been made to declare it entirely feasible and exceptionally cheap. In the case of both of these plants success attends transplanting collected stock only when dry and planted with good-sized balls of earth attached to their roots. Aside from digging, the selections of plants is most important. Those growing in the open fields in turfy and well drained loam are by far the best. They should have been growing in isolated positions and burnt over within the last two years before collecting. Such burning destroys all interfering young tree and shrub growth and herbs, and serves to cut back as it were the Rhododendrons and Kalmias, causing them to push out numerous and strong shoots from the roots. Within two years after burning the plants will have recuperated to the extent of having from ten to forty stems starting from the ground; they will be low, compact and densely clothed with foliage on the top and all sides down to the ground. In such condition they are prime plants for collecting. If grown in groups, clumps or masses they "draw," look unsightly when separated,

and, if transplanting is to be successful, they must be cut back about one-third, and even then their welfare is not assured. If isolated plants have been burnt over and grow in open situations in turfy loam all sizes from ten inches to six feet can be dug and transplanted with success.

In planting, the drainage of the ground in their new locations should be perfect, and, if low lying and moist, with open and porous soil, peat should be provided for their reception. Pure peat mixed with one-quarter of sharp, clean river sand is admirable, or a mixture of fibrous loam and peat in equal parts with one-quarter its bulk of sand is good.

In planting, a hole should be dug large enough to receive the ball of earth and roots of the plants without crowding, but rather to allow of the roots being spread out in a natural position; the plant should be set at the same depth at which it was previously growing; soil is to be worked in among the hollows of the ball and among the roots and then thoroughly formed. All the soil should then be again thoroughly tamped by treading with the heels. At the time of planting the soil on the roots, and that in which the plants are to be planted, should be in a friably moist state as nearly equal to each other as to moisture as possible. After planting a mulch of straw, leaves, long manure, hay or other moisture retaining material should be spread over the entire soil area surrounding the plants. Such a mulch should be evenly spread to a depth of from six to eight inches, and if light and loose even more, but if of a nature apt to ferment preferably less. That of an open and loose nature is best as allowing the air free access to the roots. Water should not be applied until two or three days after planting, and then the entire volume of soil should be thoroughly saturated. This operation is to be repeated only when the plants show signs of drouth.

Various sizes can be handled with success—but six feet tall is about the limit—the best considering effectiveness, least per cent of loss and easiest established vary from one to four feet. If all of one size two and a half feet will be best. The principal cost of collected plants is involved in freight charges and teaming to the cars.

Plants collected in sandy soil usually lose all the earth from around their roots during transportation, and although such plants could be severely cut back and grown in nursery rows for a season for the purpose of establishing them, they are upon the whole unsatisfactory. Fair to good specimens, two to four feet, are offered at a ridiculously low rate, but the eventual cost balanced from the larger proportion of those dying with those that live suggest their use as being of doubtful economy.

Recalling that the commercial use of collected plants on a large scale has developed within the past five years, it is a matter of national gratification to know that with characteristic American versatility men who are able to adapt themselves to the times, quickly arise and bring tangible results with a rapidity and cheapness that is astonishing. To-day the collecting

of Rhododendrons and Kalmias on a commercial basis is a matter of fact, not experiment.

Epigæas and Gaultherias have also been collected but their transplanting and establishment is both difficult and of treacherous reliability. The best success is obtained when these plants are collected in frozen clumps, and, after transplanting, if they are covered with straw or hay to a depth of one foot they thaw out gradually and pass through the ordeal in better shape. But both of these latter require partial shade for the best success, and during the first season after transplanting they should be given additional shade to that afforded by the trees if the trees are not of wooded density.

WATER LILIES AND OTHER AQUATIC PLANTS—II.

On page 249 of the last issue is given a list of twelve *Nymphæas*, standard varieties for an artificial pond, which will prove excellent for the purpose, but as there are water lilies and water lilies, I append here a list of twelve choice varieties, which growers who have already succeeded in their venture, may handle just as readily, and with certainty of success, as with those before recommended, or any of them. These have all been thoroughly tested and proved to be of exceptional merit, and are recommended for their rare, exquisite and unique colors, large flowers, profusion and length of flowering season.

Hardy: *Nymphæa Gladstoniana*, white; *N. Chromatella*, yellow; *N. Marliacea rosea*, rose; *N. rubra punctata*, rosy purple; *N. Laydekeri purpurea*, wine red; *N. Robinsoni*, orange red.

Tender: *Nymphæa O'Marana*, rosy red; *N. George Huster*, crimson; *N. rubra rosea*, carmine; *N. gracilis*, white; *N. Wm. Stone*, blue; *N. Pulcherrima*, blue. These, as well as the former, may be planted in natural ponds or artificial ponds with natural soil bottom.

The following hardy varieties will be found most desirable for natural ponds, or for naturalizing in large ponds or lakes: *Nymphæa odorata gigantea*, white; *N. O. maxima*, white; *N. O. rosea*, pink; *N. O. Luciana*, rosy carmine; *N. O. Caroliniana*, clear pink; *N. O. sulphurea*, yellow; *N. tuberosa Richardsoni*, white; *N. T. rosea*, pink.

The following lists embrace twelve of the best hardy and tender varieties:

Hardy: *Nymphæa Chromatella*, yellow; *N. Gladstoniana*, white; *N. Marliacea*, rose; *N. Laydekeri purpurea*, wine red; *N. Odorata Caroliniana*, pink; *N. O. exquisita*, carmine; *N. O. Luciana*, rosy carmine; *N. Robinsoni*, orange red; *N. rubra punctata*, rosy purple; *N. O. sulphurea*, yellow; *N. Laydekeri lilacea*, lilac rose; *N. tuberosa Richardsoni*, white.

Tender: *N. cœrulea*, light blue; *N. dentata*, white; *N. gracilis*, white; *N. Jubilee*, white; *N. O'Marana*, rosy red; *N. Geo. Huster*, crimson; *N. Pulcherrima*, blue; *N. rubra rosea*, carmine; *N. Sturtevantii*, rosy red; *N. Wm. Stone*, blue; *N. Zanzibarensis*, purple; *N. Z. rosea*, carmine.

Among the *Nelumbiums*, the following are six of the choicest; *N. Album Striatum*, white and carmine;

N. Kermesinum, pink; *N. speciosum*, rose; *N. Shiroman*, white (double); *N. Pekinensis*, rosy red; *N. luteum*, yellow.

A number of cultivators still consider that great results can be achieved by growing water lilies in tubs, and they are going to try that method. It is not uncommon to hear of cases where the plants are grown in pails.

This method of treatment—not culture—is very much like the Japanese nananized pine trees grown in pots, the object apparently being to see how small a tree can be grown and yet live. Give plants and trees a rational course of treatment and then see what a grand and noble specimen can be grown by assisting nature.

If no other resource can be had, by all means grow them in tubs, but do not plant such varieties that produce gigantic flowers when grown in a pond, and thus save disappointment. For ordinary tubs, usually less than two feet in diameter, the following will be found most satisfactory: *Nymphæa Pygmaea*, white; *N. Helvola*, yellow; *N. Laydekeri rosea*, light to dark rose; *N. L. purpurea*, wine red; *N. L. lilacea*, lilac rose; *N. Robinsoni*, orange red; *N. odorata minor*, white; *N. Mexicana*, yellow; *N. elegans*, blue. *N. Zanzibarensis* varieties are worth growing, they are such free flowering varieties, that in spite of the fact that the leaves will not keep within the limits of a tub, the flowers are so pleasing, as they are so constant; their color and rich fragrance always make them welcome. If *Nelumbiums* must be grown in tubs, get the largest tubs procurable; depth is not so important as width, therefore get hogsheads or wine barrels, these when cut in two will make excellent tubs for the purpose.

There are other plants suitable for tub culture, namely, Water Hyacinth, Water Poppy, Fairy Water Lily, Water Snowflake, *Jussiaea longifolia*, Parrot's Feather, Water Lettuce, *Sagittarias* in variety, *Villarsia*, various rushes and the sweet scented *Aponogeton distachyon*.

Victorias: The Royal Water Lilies must not be omitted wherever there is room for them to be grown. The best results are obtained from artificially heated ponds, but where this can not be done, good results can be obtained by planting out towards the end of June when the weather is settled and warm. It is useless to plant in unheated ponds, especially in high altitudes, and where the nights are cool in summer. The Victorias are tropical plants and require real summer weather, and although *Victoria Trickeri* succeeds well in a lower temperature than *V. Regia*, even this suffered last year in the Eastern States, also in many mountainous districts where cold nights were experienced, although in the neighborhood of Washington self-sown seedlings attained large proportions, and produced flowers in August. In sections as warm as Washington, and even Philadelphia, seed of *Victoria Trickeri* may be sown—where it is intended the plants should be grown—in April and May, and equally as good results can be secured as in Washington.

W. Tricker.

(To be Continued.)

GARDEN PLANTS—THEIR GEOGRAPHY, LI.
PERSONALES.THE LEUCOPHYLLUM, TECOMA AND ACANTHUS
ALLIANCE.

This is a widely diffused and extensive group with 32 tribes, 471 Genera and 5,358 species. All manner of growth is represented—aquatics, annual, biennial and perennial herbs, epiphyte, shrubs, woody and annual climbers, and trees a few of which extend to temperate regions. Speaking broadly, they

are distinguished from the previous group by the irregular structure of flowers so well expressed by the genus *Bignonia*; in fact, Lindley's term "Bignoniales" seems to be quite as happy a name for the group as the one now employed—a replication of the "Personatæ" of Linnæus. In Dr. Lindley's words, "the Bignonial alliance may be regarded as the centre of a particular portion of Exogens, round which several others are stationed in



Verbascum Olympticum "Gardening."

nearly equal degrees of contiguity," and called "Bicarpellatæ," I believe. The tribes of the series have been greatly confused and shifted about, and will continue to be so until the desirability of a set of good full tribal characters is recognized. When these are gotten out and compared a whole tribe may be moved from one group to another in the books or the herbarium without violence to the framework of the system. At present, if there is a framework, it is sure to be out of harmony with all others, and to move an order destroys it.

Leucophyllum is a small genus of shrubs found

in Mexico and Texas. They have silvery pubescent foliage, purplish flowers an inch or so across, and they grow from a foot to six or eight feet high.

Verbascum "mullien" has 100 species or more, many of them almost cosmopolitan in temperate regions. The species found in the states are naturalized from Europe. They are often coarse weeds, yet striking effects are had with the better kinds, such as *Olympticum*, *Phœniceum Kelwayi*, *phlomoides*, *niveum*, *Songaricum* and others. The foliage is woolly, nearly silvery sometimes, and the flowers, though fugitive, are produced in succession for quite a time, and are yellow, whitish or purplish.

Calceolaria is a genus of annual and perennial herbs in 120 species, all from sub-tropical parts of America, with a few from New Zealand. About eight species are nearly hardy in the south of England besides hybrids, and it would seem that several could be grown in parts of California without much difficulty.

Alonsoa, in 6 or 8 species from the Andes of Peru and Mexico, are not so much seen as they once were.

Anarrhinum is an allied genus without a nose to the flowers. There are 11 species in Mediterranean countries. A few blueish and whitish flowered kinds in cultivation are quite pretty.

Maurandia, including *Lophospermum* as a section, are mostly Mexican climbers with white, purple or reddish flowers. *M. Wizlizeni* is Texan and has pale blue flowers. *M. Barclayana* and *M. scandens* are both popular plants.

Rhodochiton volubile is a closely allied Mexican climber with handsome rosy or red flowers and colored calyxes.

Phygellus capensis is generally understood to be from South Africa, but the Kew handbook (*Herbaceous*, 1895) says South Europe. It has stood with protection in New England. It has rosy red flowers with a yellow throat. There is another species, and it may possibly be the one sold from Washington, which seems almost able to care for itself in New Jersey.

Scrophularia is a genus of mostly rank herbs in 120 species. *S. aquatica* is European. *S. coccinea* is a native. They are generally found in wet grounds on all the continents.

Halleria, in 8 species, are from South Africa, Abyssinia and Madagascar. Those in cultivation are shrubs with scarlet flowers and may do in California.

Chelone is now limited to the four North American species—*C. glabra*, *obliqua*, *Lyoni* and *nemorosa*.

James MacPherson.

PARK NOTES.

Roses and the south go hand in hand as it were. The committee on flowers, plants and trees of the Park Board of Atlanta, Ga., have been considering bids on 10,000 rose bushes for Grant Park.

* * *

If every improvement association would, as opportunity offers, agitate in favor of parks where none exists, and of their improvement and care where they have been established, such organizations will add another important section to their usefulness. This is suggested by a discussion on parks recently held at Aiken, S. C., by the Improvement Society.

* * *

The Daughters of the American Revolution of Philadelphia, and many other localities, have joined hands to preserve the neighborhood of Valley Forge and its historical points as a National Park. There is no more suggestive spot for government care and protection than Valley Forge, and it should receive the attention requested.

* * *

Akron, O., has recently received a gift of 80 acres of land for park purposes, located in the southern part of the city, from Col. George T. Perkins. The value of the gift is stated to be \$100,000. Some minor conditions are attached looking to proper protection and a strict observance of Sunday as to sports, etc., etc.

* * *

The attention of congress is being called to Griffith Park, near Los Angeles, Cal., with a view to establish a national arboretum. The park, which was the gift to Los Angeles of Mr. G. J. Griffith, contains over 1,000 acres, is well watered, and has such varying altitudes and soils that numberless varieties of trees and plant life can be acclimated, and an excellent experimental and botanical station created.

* * *

Governor Stone of Pennsylvania will make forestry a feature of his administration, and is in hearty accord with the plans of Prof. J. T. Rothrock, the State Forestry Commissioner. Just now special attention is being given to the purchase of lands suitable for State reservations, and several thousand acres have already been secured and the titles placed in the Commonwealth. Other mountain lands are being negotiated for, and a special meeting of the Forestry Commission will be held to confirm additional purchases. This idea of forest reservation is becoming a popular question.

* * *

A new departure in shade tree planting is to be inaugurated this spring in Philadelphia. Hitherto, shade trees have been planted by property holders, and, practically, neither system nor results have been studied. Now, the city will provide the money and the city forester will attend to the work. It is proposed to plant trees along Broad street from Moyamensing to Germantown avenue, and 1,400 will be provided. There will be diversity enough in the species of trees planted to settle the question for the future as to the best kind of trees to plant along city streets. The trees for this initial experiment will include maples, oaks, planes, lindens, ginkos, tulips, poplars and elms. This will be a practical effort to solve the shade tree question in regard to city shade trees.

* * *

There was recently introduced into the senate of the Massachusetts legislature a petition for an act to establish a

memorial park to Daniel Webster, and to preserve the Webster homestead and burial place at Marshfield. The legislation provides that the state shall acquire the Webster homestead by purchase. The legislature has also been asked to pass an act "to the end that the land embracing Mt. Tom and Mt. Nonotuck, in the counties of Hampden and Hampshire, be acquired by the Commonwealth and held for the purposes of a public park." The bill provides for the appointment of the Mt. Tom State Reservation Commission of five persons—two of them to be Hampden residents and two Hampshire—to take not over 4,000 acres, and to have the powers of the Metropolitan Park Commission.

* * *

In connection with the proposed bi-centenary of the city of Detroit, Mich., an elaborate scheme of memorializing the event has been designed by Mr. Stanford White in collaboration with Augustus St. Gaudens, Frederick MacMonnies, T. W. Dewing and D. W. Tryon. It is to be located at the flat below the point of Belle Isle Park, and consists in the main of a Doric Peristyle of white marble, the principal feature of which is a great Doric column, the highest in the world—surrounded by groups of sculpture in the water—treated in the character of the memorial columns of classic times. The column is to be surmounted by a tripod, which would be a torch at night illuminated by electricity or natural gas. The design further contemplates as a support and surrounding to the column a great basin flanked by flights of steps, supporting colonnades, in the centre of which would rest the statue of Cadillac, or a group of sculpture embodying with the statue of Cadillac the story of the discoverers. Cost, \$1,000,000.

* * *

The Gettysburg National Park Commission, in a recent report, shows that, since their appointment, they have purchased 517.68 acres of land at a cost of \$21,657.52. Since the appointment of the Commission they have completed 12.6 miles of avenues at an average cost per mile of \$8,582.68. Two hundred and eleven gun carriages have been placed upon granite foundations, 363 tablets of iron and bronze for divisions, brigades, etc., have been placed in position, 242 ten-inch and thirteen-inch shells have been set upon granite posts at avenue curves. The cost of monuments, markers and tablets erected in the park by the various States, and by military organizations since the appointment of the Commission, has been \$130,100. The estimated cost of monuments, etc., erected under similar mediums prior to the establishment of the park, and transferred to the United States since the appointment of the Commission, is \$1,500,000, and a request is now made for more liberal appropriations by Congress for a continuance of this work.

* * *

"There is a great deal of room for improvement in our parks," said Ralph Clarkson, chairman of the organizing committee of the Municipal Art Association of Chicago, in an interview in the *Tribune*. "To begin with, something should be done to rid their approaches of the obtrusive display of hideous signboards which abound everywhere along our boulevards, and particularly around the edges of Lincoln and Washington Parks. A great deal depends upon the first impression which one receives in visiting a park. I detest the system of laying out parks in an artificial way. Parks should be somewhat wild. The use of statuary in parks is perfectly proper, but it should not be indiscriminate. Sculptures in parks should be in keeping with the surroundings, and for that reason allegorical or mythological figures or groups are more appropriate than portrait statues. The latter should be placed near the approaches to the parks instead of the atrocious signs and billboards. The ultimate object of parks should never be lost sight of, and they should be extended as much as possible."

CEMETERY NOTES.

The committee appointed for the purpose of collecting funds to improve the entrance to the Center Cemetery, Winsted, Conn., early in February had secured \$2,630 out of the required amount of \$4,000.

* * *

The directors of the Evergreen Cemetery Association of New Haven, Conn., propose the building of a new mortuary chapel on the cemetery grounds this year. There is a fund of over \$8,200 which is available for this purpose, but it is estimated that it will require about \$15,000 to erect the chapel.

* * *

The cemetery syndicate, which has acquired so many cemeteries in the east, is extending its operations to the south. It has now purchased land on Seawell's Point road, Norfolk, Va., for the creation of a modern cemetery. The organization is under the name of the Atlantic Park Cemetery Company.

* * *

The annual report of Green Lawn Cemetery Association, Columbus, O., gave the following figures: Sale of lots, \$15,513.42; vault charges, \$4,957; graves, \$4,020; with a grand total in receipts of \$45,108.39. Disbursements included: Labor, \$20,640.70; salaries, \$1,900.

* * *

At the annual meeting of the Fairmount Cemetery Association, Newark, N. J., the treasurer's report gave the following: Total receipts \$56,526.18, which included, sale of 98 lots, \$36,199; sale of 513 single graves, \$7,878; opening graves, \$4,702.10; labor on lots, \$3,980.04. The expenditures were: \$28,670.96, which included, labor and salaries \$20,874.45; flowers, fertilizers, etc., \$740.30; Civil engineering, \$524. etc.

* * *

At the annual meeting of the Amherst, Mass., Cemetery Association recently held, it was voted to accept the gift of Mrs. Joseph Dickinson, amounting to over \$5,000, for the purpose of building a chapel on the grounds, and the thanks of the association were conveyed to her for her very generous gift. Mr. Olmsted, the landscape architect, has made several important improvements in the grounds of the cemetery and its outlook to the hills beyond, which have added much to their attractiveness and beauty.

* * *

Here is another good chance for salutary discipline by the courts. The cemetery of Trinity Church at Georgetown, near Wilkesbarre, Pa., was invaded recently and much damage was done. Memorials were thrown down, and the larger ones, too heavy to be moved, were battered and chipped, evidently by hammers. Particular spite was manifested against the big granite cross over the grave of Anthony Reggles, for whose murder two years ago six men were put on trial and acquitted for lack of evidence. The arms of the cross were broken off, and the part that remained standing was badly damaged by the hammers. Graves were also trampled and abused.

* * *

The annual report of the cemetery commissioners of Skaneateles, N. Y., for the year ending March 1, 1900, gives some interesting figures as relating to the country cemetery. The trust fund for the perpetual care of the lots now amounts to \$4,214.85, covering 49 trusts, an increase of 8 during the past year. The total receipts were \$2,838.99, which included \$549 for sale of lots and \$488.15 for care of lots. The balance on hand is \$1,555.68 an increase over that of last year, and there is no outstanding indebtedness nor deficiencies to be made good. The improvements last year consisted chiefly of sewerage and

additional water supply, with other permanent improvements. There were 51 interments last year making a total in the cemetery of 2524. The showing is an excellent one.

* * *

A suit has been commenced in Grand Rapids, Mich., by a Mr. Russell K. Brown against the members of the board of cemetery commissioners, with damages at \$5,000, for the removal of the body of his wife into the potter's field without his sanction. The offense is alleged to have been committed last August, and he did not learn of the act until a few weeks later, when he went to visit his wife's tomb. He also alleges that he has been unable to locate the exact burial place of the remains of his wife. It is further stated that the commissioners procured the possession of the lot for a site upon which to erect an office for the cemetery superintendent, and when the remains of his wife were removed he was not notified, and he is now unable to distinguish the mound of his wife from that of other persons buried in the cemetery. This may be serious for the commissioners, for the sanctity of burial is held in peculiar reverence by the courts throughout the country, and the greatest care has always been advised in such matters.

* * *

The sixty-eighth annual report of the trustees of Mt. Auburn Cemetery, Cambridge, Mass., has just been submitted. Among the principal points to be noted are the following: The perpetual care fund amounts to \$1,054,841.50, the increase of the past year being \$68,576.06. The permanent fund, accumulating for the care of the cemetery after all its lots have been disposed of, amounts to \$403,970.85, showing a gain of \$10,171.53. The general fund, which may be used for construction and other purposes, stands at \$128,760.34, an increase in one year of \$10,611.87. The chief work of the year was remodelling the old chapel for the purpose of a crematory. As a result, Mt. Auburn now has a crematory chapel, containing retorts in its basement nearly finished, which will be ready for use early in the present year, on final approval by the state board of health. The total number of interments for the year ending Dec. 31, 1899, was 505. The entire number of interments in the cemetery is now 32,920. The treasurer's report shows a balance on hand of \$18,148.47.

* * *

The Fifty-second Annual Meeting of Swan Point cemetery, Providence, R. I., was held last month. The total receipts for the year 1899, from all sources, were \$106,275.57, which included: Sales of lots, \$16,422; Labor and material, \$12,791.13; Tomb rent, \$379.25. The total expenditures were \$105,822.51, leaving a balance of \$453.06 for January 1, 1900. Among the expenditures were: Stone crusher, steam roller and building for same, \$6,221.49; Labor in the cemetery, \$27,444.09; Labor in greenhouse, \$884; Labor, teamsters, etc., \$4,402.92; Lumber, brick, cement, etc., \$5,570.23; Greenhouse shrubs, trees, plants, coal, repairs and manure for grounds, etc., \$2,053.49; Salaries, \$7,300. The perpetual care and bequest fund amounts to \$283,239.15, and the permanent fund to \$60,796.65. The improvement of certain portions of this cemetery has been carried on vigorously, and the purchase of stone crushing machinery and a steam road roller ensures perfect roads. The following is given in the report of the directors. The expenditure of money during the year upon the stone crushing plant and roller, and the labor in finishing the work along the boulevard at the new entrance, have engrossed the attention of our Superintendent, who has successfully completed what would ordinarily have taken a number of years to accomplish had it not been for his energy and the concentrating of labor to this end, and therefore no progress has been made in the construction of a new receiving tomb, chapel and crematory, but it is hoped that we shall be able to report at the next meeting of the proprietors that the work has been begun.

SELECTED NOTES AND EXTRACTS.

Are Ants Injuring Trees?

Complaints concerning the injury done fruit trees by ants are very common, yet in about 99 cases out of 100 the ants are not doing the injury but merely accompany other insects which do more or less harm. Almost always when ants are found on a tree, a careful inspection will show that it is infested with some kind of plant louse, psylla or scale insect. All of these insects excrete a sweet, sticky fluid, known as honey dew, which forms a large item of food with the ants. In fact, the ants actually raise the young plant lice and care for them, almost the same as we do cattle, so that later on they may secure the honey dew from them. This they secure by gently stroking the plant lice with their antennae, when they readily give up small drops of the coveted liquid.

In the case of many plant lice, which live both on the roots and leaves of trees, the ants often may be found carrying the lice up onto the trunk, if observed early in the season, which I have noticed with the black peach aphid. Recently I met a man from Vermont who was complaining of ants injuring his pine trees. No doubt the pine trees were affected with a scale, which occurs very commonly on them, known as the pine kermes. This, like many of the larger scales, gives off a similar secretion while it is still young and before the scale becomes hardened, and is attended by ants for this reason. The plant lice and scales may be destroyed by spraying with kerosene emulsion or whale oil soap.—*A. D. S., in Minnesota Horticulturist.*

Woman Among the Flowers.

One woman has a seed farm from which come special, choice things—notably wonderful pansies of a glowing red shade, found nowhere else, says the *New York Commercial Advertiser*. One woman who makes a specialty of petunias now enjoys the distinction of growing the finest petunias in the world. She began her work six years ago, and in that period has evolved from the dull-colored flower of old-fashioned gardens blossoms that rival orchids in their delicate beauty. Others are of such gorgeous tints that they look like living flames. She shades and blotches, and tints the flowers in her gardens with almost as much certainty of results as if she were using a brush and colors. The cosmos has been developed in another woman's garden from a tiny blossom into a great, satiny flower four inches across, showing a wide range of colors.

Pruning Briar Roses.

As a rule rose bushes out of doors are all pruned when Spring comes, and it is right to prune them, as the flowers are better for it. Hybrids need a moderate pruning, and teas and like partly tender sorts a closer one. But there are some kinds which need scarcely any, and these are the various kinds of briars. The yellow briar, sweet briar and the prairie roses are in the list. The beautiful yellow briar, *Rosa Harrisoni*, is a lovely bush when left to grow as it will. The twigs spread in a way to give a deal of natural beauty to it. And just the same does the sweet briar. To prune these as other roses are done adds no perceptible size to the flowers, while destroying their native beauty and lessening the number of their flowers. It is better to let them entirely alone than to cut them too much, and most decidedly so in the case of the beautiful yellow briar. Prairie roses need but little cutting. In the way of pruning, in the sense it is generally understood, they need none at all, because flowers come on shoots of the previous season. All they need is to have about as much as a grapevine receives. The shoots need topping, if longer than are necessary, and here and there an old one wants cutting off quite low down, to cause a vigorous one to take its place, to give flowers the season after. The *Prairie Queen*, *Gem of the Prairies*, *Baltimore Belle* and the common wild species, *setigera*, are all of this kind. And these remarks are applicable to all sorts of roses that flower from shoots made the previous season. It is a good thing to remember this when pruning any kind of a flowering bush, or you may prune away the greater part of what would give the flowers.—*Joseph Meehan in the Practical Farmer.*

* * *

Clematises as Wall Climbers.

The merits of this climber demand many more to be planted than is the case at present. For walls or stems of trees these climbers are unsurpassed.

Clematises are more accommodating as to situation than many suppose. The variety *Jackmanii*, so well known for its mass of violet-purple blossoms, will succeed well on a northern aspect; coming into flower there later than it does on a south wall, the period of flowering is prolonged. This variety is well worth a place in the center of a flower bed, where it will annually give an immense crop of flowers if it is pruned to within an eye or two of the ground every year in February

and its roots freely supplied with manure at the same time. The culture of the clematis as a wall climber is not at all difficult.

Soil that is heavy and retentive of moisture is unsuitable for Clematises, because it delays growth in the spring too long. A suitable compost would be turfy loam three parts, one part peat or leaf-mould, and one-sixth part of half-decayed horse manure with a sprinkle of road grit, sand or wood ashes to keep the whole porous. The middle of March is a good time to plant clematises; even a month later will do, as the plants are always raised in pots, and they can be turned out of the pots, without injury to the roots. After should the weather be hot and dry for a time, mulch the surface 2 feet round with manure or leaves to prevent evaporation of the moisture. Mulching ensures a cool, moist rooting medium. When the plants are growing freely, liquid manure copiously given to the roots will promote vigorous leafage, which means a corresponding return in flower.

Pruning Clematises is perhaps the only point about their cultivation that requires special treatment. The sections require separate treatment.

As previously noted, that popular variety, *Jackmanii*, requires close annual pruning, as the blossoms are produced upon the current year's shoots. The white form of *Jackmanii* requires then the same treatment, and so do the following varieties: *Star of India*, reddish violet-purple, with red bars; *Rubella*, velvety claret; *Lilacina floribunda*, pale grey-lilac; *Tunbridgensis*, bluish-purple; and *Flammanula*, small white blossoms.

Varieties of the lanuginosa section produce their blooms from the previous seasons growth therefore require but little pruning. This section includes *Alba magna*, pure white, purplish-brown anthers; *Duchess of Teck*, pure white, delicate mauve bar when first opening; *Lady Caroline Nevill*, blush, mauve bars; *Grand Duchess*, white flushed rose; *Henryi*, creamy white; *Duchess of Albany*, bright pink, deeper down the center, softening to lilac pink round the margin of the petals; *Mrs Hope*, deep lavender; *Mme. van Houtte*, white; *Louis van Houtte*, deep violet-purple, with darker veins; *Albert Victor* deep lavender.

The Florida and patens section should be left untouched. Amongst these are *Duchess of Edinburgh*, double white, free, vigorous, and fragrant; *John Gould Veitch*, lavender blue; *Devoniensis*, bright azure-blue; *Miss Bateman*, white, chocolate anthers; *Sir garnet Wolsey*, pale blue, plum red bar; *Mrs Quilter*, pure white; *Standishii*, lavender blue; and *Mrs S. C. Baker*, pink.—*The Garden.*

Park and Cemetery and Landscape Gardening.

ESTABLISHED 1890.

An Illustrated Monthly Journal.

Devoted to the advancement of Art-out of Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Association, etc.

The regular contributors to PARK AND CEMETERY are among the most eminent Landscape Architects, Landscape Gardeners and Horticulturists in the United States, whose practical articles make the journal one of great value to any one identified with landscape work.

John W. Weston, C. E., Editor.

R. J. HAIGHT, Publisher,
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Eastern Office:

1536 Am. Tract Society Bldg., New York.

Subscription \$1.00 a Year in Advance.

Foreign Subscription \$1.25.

Correspondence solicited on subjects pertinent to the columns of the journal.

Officials of Parks and Cemeteries are requested to send copies of their reports.

Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

Association of American Cemetery Superintendents.

WM. STONE, "Pine Grove,"
Lynn, Mass., President.
GEORGE M. PAINTER, "West Laurel Hill,"
Philadelphia, Vice-President.
H. WILSON ROSS, "Newton,"
Newtonville, Mass., Secretary and Treasurer.

The Fourteenth Annual Convention will be held at Cleveland, O.

The American Park and Out-Door Art Association.

CHARLES M. LORING, Minneapolis, Minn.,
President.
WARREN H. MANNING, Tremont Building,
Boston, Mass., Secretary.
O. C. SIMONDS, Chicago, Treasurer.

The next meeting of the Association will be held at Chicago, Ill.

The American Society of Landscape Architects.

JOHN CHARLES OLMSTED, Brookline,
Mass., President.
SAMUEL PARSONS, JR., St. James Bldg.,
New York, Vice-president.
CHAS. N. LOWRIE, 156 Fifth ave., New
York, Treasurer.
DOWNING VAUX, Bible House, New
York, Secretary.

At the recent meeting of the Columbus Horticultural Society, Columbus, O., the principal paper was read by Prof. Herbert Osborne on the "Distribution and Control of Insects." In horticulture this has come to be as important a question as any other.

Mr. Philip Pease has been appointed by the Cemetery Board of Terre Haute, Ind.,

to the position of superintendent of cemeteries to succeed Mr. James Bain who died in October last.

We have received from Mr. Wilfred A. Brotherton, Rochester, Mich., cuttings from a newly described species of spruce, *Picea brevifolia*, which he believes will be prized by admirers of evergreen trees.

Guy J. Chaffee, son of the late B. F. Chaffee, has been appointed superintendent of Oakwood Cemetery, Syracuse, N. Y., to succeed his father, whose lamented death was recorded in these columns.

In response to a recent suggestion in the correspondence column Mr. B. H. Dorman, superintendent, Mountain Grove Cemetery, Bridgeport, Conn., informs us that there has been erected in that cemetery a new Receiving Vault, 20 ft. by 16 ft., with provision for 17 bodies. The interior is of polished Tennessee marble. Cost about \$3,000. A new front fence of steel, has also been erected by the Van Dorn Iron Co., of Cleveland. The substructure of the Dr. Warner mausoleum has been completed, and it is expected that the building itself will be finished in a few weeks.

St. Agnes Cemetery, Albany, N. Y., has quite recently acquired an addition of some 75 acres to its already extensive grounds. The property was known as the Hart estate and adjoined the cemetery on the south. It was conveyed to the cemetery corporation for \$60,000, but had cost the late W. H. Hart some \$400,000, which covered fine improvements. These included a family mansion, stables, barns and outbuildings, which will be utilized by the cemetery. It is already proposed to make a chapel of the mansion for regular services. The additional grounds will afford the superintendent fine opportunities for landscape work and refined improvement.

In opening the bids for nursery stock required by the different parks of Pittsburgh, it was found that Thomas Meehan & Sons, the nurserymen and landscape engineers of Germantown, Philadelphia, Pa., were the lowest of all bidders. This firm was awarded the contracts for every section, amounting in all to nearly ten thousand hardy trees, shrubs, vines and evergreens.

At a meeting of the New England Society, Orange, N. J., held March 3rd, resolutions were unanimously passed endorsing the measures now before the legislatures of New York and New Jersey looking to the preservation of the Palisades, and providing for the appointment of commissioners to act jointly in the interest of both states in acquiring the necessary land for a suitable reservation, and advocating the early enactment of legislation on the lines indicated.

Edward Failing, of Corbett, Failing & Robertson, Portland, Oregon, for 18 years clerk of Riverview Cemetery Association, Portland, died at his residence on Feb. 28th, deeply mourned by his associates. Mr. Failing was born in New York City, December 18, 1840, but was a pioneer in Oregon, reaching that state with other members of the family in the early '50's.

At a meeting of the Board of Cemetery Trustees, Portsmouth, O., in February, resolutions of respect and regard were passed upon the death of Captain James P. Jack, who had been elected secretary of the board annually for the past 25 years.

Books, Reports, Etc., Received.

Fourth Annual Report of the City of Barre, Vt., for the year ending January 1, 1900. With map of Hope cemetery.

Maine Agricultural Experiment Station Bulletin No. 56. Apple Insects of Maine. Bulletin No. 59. Feeding Stuff Inspection. Bulletin No. 60. Fertilizer Inspection.

"A Future Need and a Present Duty." A handsomely gotten up, illustrated brochure of Cedar Lawn cemetery, Paterson, N. J.

Fifth Annual Report of the Board of Cemetery Commissioners of New Bedford, Mass., for year ending December 4, 1899. A handsome, descriptive pamphlet, beautifully illustrated with half tones, and with rules and regulations of cemeteries.

Seventeenth Annual Report of Board of Park Commissioners City of Minneapolis, Minn., 1899. Replete with information regarding park affairs, and copiously illustrated.

Department of Agriculture, Washington, D. C. Report of the Secretary of Agriculture, 1899.

City of Cambridge, Mass., Annual Report of the Board of Cemetery Commissioners for year ending Nov. 30, 1899. Illustrated.

A few observations on Landscape Gardening. By Edward L. Raymond, 410 Boylston street, Boston, Mass.

Seventeenth Annual Report of the Board of Park Commissioners of the City of Cleveland, O., 1899. Illustrated with many half tone plates.

Rules and Regulations Mount Hope Cemetery, Toronto, Canada.

Cedar Hill Cemetery Association, Newburgh, N. Y. Illustrated, descriptive pamphlet, containing by-laws, rules, regulations, etc.

Tenth Annual Report of the Cemetery Commissioners, being the 49th annual report of Wildwood Cemetery, Winchester, Mass., for year 1899. With map of the cemetery.

Trade Catalogues, Etc.

The Wm. H. Moon Company, Morrisville, Pa. Illustrated catalogue for 1900, of trees, shrubs, fruits, etc.

Elm City Nursery Co., New Haven, Conn. Illustrated price list of specialties for 1900.

Ellwanger & Barry, Mount Hope Nurseries, Rochester, N. Y. General catalogue of fruit and ornamental trees, shrubs, hardy border plants, etc.

Pamphlets issued by the National Burial Device Co., Coldwater, Mich., illustrates their Casket Lowering Apparatus, and gives a number of cemeteries in which the device is used. The company have received a large number of testimonials from prominent cemetery officials speaking in high terms of the apparatus.

Trade Catalogues, Etc.

(Continued.)

Chas. B. Hornor & Son, Mt. Holly, N. J. Wholesale catalogue of choice nursery stock.

Folding Casket Lowering Device Works, Ovid, Mich. Illustrated descriptive circulars and testimonials from numbers of cemeteries and cemetery officials.

Meelian's Nurseries, Germantown, Philadelphia, Pa. Fall of 1899 and Spring of 1900. Wholesale Trade List.

P. S. Peterson & Son, Chicago. Nurseries. Illustrated Botanical List of varieties and sizes offered.

Rhododendrons, laurels and other hardy plants for special and general landscape effects. J. Woodward Manning, Boston, Mass.

F. R. Pierson Co., Tarrytown-on-Hudson, New York. Illustrated catalogue of seeds, bulbs, plants for 1900.

Westbury Nurseries, Westbury Station, N. Y. Trees for Long Island, with much information on tree planting and care.

Hardy Ferns and Flowers, etc. Edward Gillett, Southwick, Mass.

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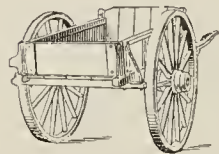
LARGE MAPLES.

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These are grown wide apart, have good fibrous roots, straight trunks, single leaders and symmetrical tops. Car lots. Hardy trees, shrubs, vines and flowers in variety.

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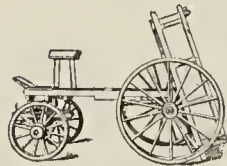
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An avenue of Sugar Maples planted about ten years.

There are many SHADE TREES suitable for STREET and AVENUE planting, but the

SUGAR MAPLE

combines more attractive features than any other tree. It is a moderately rapid grower, and in some soils and conditions its growth is equal to that of trees which are considered "fast growers."

The branches are not brittle and storms will not break the tree.

Its habit is somewhat of a pyramidal character—yet sufficiently spreading to give ample shade. Its trunk and branches have a clean, straight growth.

The foliage is clean, neat and attractive. It has not the density of the Norway Maple, consequently while making shade the breeze is not obstructed.

Few trees surpass the Sugar Maple in the beauty of its autumn coloring—every shade of color, from a yellow to a deep crimson, can be found when the tree is in its brilliant autumn dress. This is a most desirable feature. As a specimen tree or for setting on the lawn in groups it has no equal.

The Sugar Maple thrives in almost every soil and position excepting a low, boggy ground.

The illustration shows an avenue of Sugar Maples—planted about ten years. They are now about twenty-five feet in height and the trunks are about six inches in diameter.

We grow Trees and Shrubs especially adapted for Park and Cemetery planting, and if you have not received a copy of our Wholesale Trade List and our New Illustrated Descriptive Catalogue we would be pleased to have you write for them at once.

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SEEDS of Victoria Regia and Japanese Lotus should be planted now. By so doing, better plants can be secured than by having them sent by express later on.

DREER'S GARDEN CALENDAR for 1900 is free to all,

and gives descriptions and illustrations of a complete line of Aquatic and Decorative Plants. Also a select list of Hardy Perennials. Also choice Flower and Vegetable Seeds, Bulbs, &c. We are always pleased to make selection of aquatics for either small or large ponds; also to give estimates and practical suggestions.

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No. B. 870. Arch.

The above illustration represents our No. B. 870 wrought steel Arch with our No. B. 75 Drive Gates, and No. B. 238 Ornamental Walk Gate Posts. It also represents three styles of fences, "C." "D" and "K." It also shows two methods of finishing fences next to arches.

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Notes.

The ladies are working to retrieve the oldest cemetery in Waco, Texas, from the ravages of time and neglect. The movement has been indorsed by all classes.

* * *

Another instance of the growth of the cremation idea is that of Portland, Ore., which proposes to establish a plant with all modern appurtenances and appliances.

* * *

The city of Terre Haute, Ind., controls two cemeteries — Highland Lawn and Woodlawn. Under the system adopted both cemeteries are self-sustaining and improvements are being carried out in both cemeteries without discrimination as to either. A water plant is to be provided for the Highland Lawn Cemetery.

* * *

The fact that a large new cemetery is about to be opened on Staten Island for the burial of the dead of Greater New York has brought the other fact that out of the 60,000 people who annually pass away in the metropolis only 600 are cremated.

Always mention "Park and Cemetery" when writing advertisers.



I have a fine stock of Fruit Trees; 15,000 Evergreens, all kinds and sizes; 20,000 California Privet, 2 to 5 ft.; 20,000 Shade Trees, 8 to 16 ft.; 10,000 Shrubs; 10,000 Hardy Roses, including Crimson Ramblers; all extra strong; own Roots, Clematis and other Vines; Rhododendrons and Hardy Azaleas, 2 to 3 and 4 ft. Landscape Architects, Supers of Parks and Cemeteries, should call on me or address
STEPHEN CRANE, Prop'r Norwich Nurseries, Norwich, Conn.

THE BEAUTIFUL AZALEA (RHODODENDRON) VASEYI

AND RARE AND RARE introduced by us, is planted by thousands in Franklin Park, Boston, Prospect Park, Brooklyn, and other leading parks of America. A mass of pink and white flowers in early spring. Unequaled in cemetery work. It can be seen now in every large cemetery.

Strong Budded Plants, 18-24 in.....\$15.00 per 100.
" " " 2- 3 ft..... 35.00 " "
" " " 3- 4 ft..... 50.00 " "

Many new and rare species of Hardy American Plants and Carolina Mountain Flowers. Wholesale catalog to Park and Cemetery officials and the trade generally.

Correspondence solicited. Address

HARLAN P. KELSEY, Tremont Bldg., BOSTON.

Proprietor Highlands Nursery, Kawana, N. C.

Three Favorite Flowers 6¢

Sweet Peas—
Over 50 varieties of the best European and American named sorts.

Perfect Royal Snow Pansies—
Over 100 colors and markings, all the finest European varieties and largest flowering strains.

Nasturtium Dwarf—
The best ever produced, and not surpassed for gorgeousness of color and brilliant effects.

One full-sized packet of each variety for only 6 cts, and addresses of two of your flower loving friends, will also include a copy of "Floral Culture," which tells how to grow flowers from seeds, and the daintiest catalogue published, devoted exclusively to flower seeds.

Miss C. H. Lippincott - The Pioneer Seedswoman of America
319 6th street South Minneapolis Minn.

PARK AND CEMETERY

and Landscape Gardening.

VOL. X. Chicago, April, 1900. NO.2.

CONTENTS.

EDITORIAL—An Important Convention—State Parks—Quincy, Ill., Parks and the People—Children in Outdoor Work—Apathy in Cemetery Work—Statuary in the New York Parks.....	27, 28
*Cambridge Field, Cambridge, Mass.....	29
Public Play Grounds.....	31
*The Live Oak.....	33
*Some Ornamental Shrubs, II.....	34
*Improvement Associations.....	36
*Crematory Chapel and Administration Building, Mount Auburn Cemetery, Cambridge, Mass.....	38
Perpetual Care of Cemeteries on the Installment Plan.....	38
Seasonable Suggestions.....	39
*Labels for Plants and Trees.....	40
Notes, Chiefly Historical on London Burial Places, I.....	42
*The Point of Observation.....	44
*Water Lilies and other Aquatic Plants, III.....	45
*Garden Plants—Their Geography, LII.....	47
Park Notes.....	48
Cemetery Notes.....	49
Selected Notes and Extracts.....	50
Reviews of Books, Reports, Etc.....	51

*Illustrated.

AN IMPORTANT CONVENTION

The approaching convention of the American Park and Out-door Art Association to be held at the Art Institute, Chicago, in the first week in June, is now within measurable distance so far as time is concerned. The several committees charged with the duties incident upon the success of the convention are busy on the plans, and it may freely be anticipated that the coming convention will have a most important bearing not only on the progress of out-door decoration as regards landscape work, but also in connection with municipal improvement generally.

STATE PARKS There is a suggestion in a recent issue of the Portland, Me., "Board of Trade Journal" concerning the setting apart of a particularly beautiful lake with its forest and scenic surroundings as a state park, and advocating its immediate acquisition to avoid its desecration at the hands of commerce. To come at once to the point, it has now become a duty for every state to set apart special natural features which may be possessed, not only for the recreation but the education of its citizens. The failure to do this in the past by the older states has become a source of keen regret to the people, and is costing large expenditures to secure what is now possible in this direction. The establishment of public state parks means much to any state; it

provides opportunities of enjoyment and travel to large numbers of its citizens, and invites attention from the people at large. It may be made a strong educational feature by affording a means of conserving the flora and fauna of the state, and properly cared for will be a standing monument to the wisdom of the generation providing it. Another suggestion is that the power of the state press should exercise itself to the end of securing such tracks, and there are several of such national importance as to call for urgent work, notably the Calaveras grove of Giant Sequoias, in California, the Appalachian park in the south, the Minnesota National park., etc. The newspaper is a power for good, and the field presented is worthy of much hard work to secure results.

QUINCY, ILL., PARKS AND THE PEOPLE

Devotion to a cause and sustained effort in advocating it at every possible opportunity is the secret of the success of many an important public measure. This is excellently illustrated in the work accomplished by the Quincy Park and Boulevard Association of Quincy, Ill., an association of interested citizens, who appreciating the ethical and material value of parks for a growing city determinedly set to work to secure the boon. The effect of their continued effort has been the acquisition of a considerable area of improved parks, and with prospects of greater facilities and means for their care and maintenance. The freedom from political influence and bias has secured to the gentlemen of the association not only the respect of the citizens of affluence but that of the working men also. One of the latter recently remarked to the secretary that: "If your association is willing to labor so hard without pay for the improvement of our beautiful parks that the working men, their families, and the public in general may have beautiful and free out-door places in which to enjoy their Sundays and evenings, I feel that the least we working men can do is to vote for the one mill increase in the park tax, as it will be a mere trifle to each tax-payer."

CHILDREN IN OUT-DOOR WORK

One of the hitherto unlooked-to factors in the problems pertaining to village improvement and out-door home surroundings is that of the children, but a great deal of attention is at last being given to the question.

Wherever the improvement of out-door conditions about the homes of the masses has been undertaken on a large scale, the boys and girls have been requisitioned and have brought about marvelous results, not only to themselves, but to the work they were called upon to do. And it will always be found to be a natural fact, that once get the children, of eligible age, interested in garden and out-door improvement work, and the love of nature inherent to them and the persistent effort they will make to succeed under encouraging conditions, will be a stimulant to the children of older growth who need a constant spur to keep ambition alive. The adaptability and enthusiasm of children to work out such details of improvement work as come within their intelligence and strength should be recognized far more fully than it is. In the manifold directions in which village improvement societies find duties awaiting them, much of the detail could well be relegated to organized child effort, and such encouragements could be readily arranged as would by creating healthy emulation, ensure the best of service. Little hands and bright eyes have through all the ages been afforded affectionate recognition for usefulness and brightness, and we find as the world grows older duties to perform which are real pleasures after all, and duties in which a great part of the education and character training of the child may be incorporated, and in which the little hands and bright eyes may also be made of real usefulness to the community at large.

APATHY IN CEMETERY WELFARE Apathy is at the root of much of the carelessness and neglect observed in the management of our smaller cemeteries, and some of the larger ones too for that matter. It is a condition which when once fairly established in a community leads rapidly to retrogression instead of progress, putting matters at a standstill as it were, which soon develops into decay. In all public affairs this must be vigorously fought, and there is no better channel through which to keep up a constant warfare against possible stagnation than the public press. But even the press is powerless unless armed with facts and induced by systematic direction to prosecute a campaign of education in the desired field. The proper persons to take up such work are those officially entrusted with the care of the cemeteries, be they trustees or civil committees. It should be a constant and persistent work on the part of such authorities to keep the press educated to the requirements of the situation, and encouraged to take every opportunity to impress the necessities of well kept cemeteries before the minds of the people. In some places the public press is keenly alive to the

situation and freely gives space. In others the lack of appreciation and more frequently lack of knowledge dulls it to a sense of the importance of the work, and here it is manifestly the duty of those having the care of the cemetery at heart to inspire by constant effort a proper regard for the resting place of the dead as a leading factor in the welfare of the people. All the literature of an educational nature on the subject of the cemetery should be published as far as possible in the local press, and the advent of spring makes this an opportune time for awakening an interest in cemetery improvement among lot owners, officials and the community generally.

*STATUARY
IN THE
NEW YORK PARKS*

The recent rules formulated by the Board of Park Commissioners of New York to regulate the acceptance and location of statuary in the parks of that city are a move in the right direction, which may well be adopted by the park authorities of all our large cities. They are as follows:

"No statue, bust or memorial building shall be erected in any part of any park where the scenery is of a predominating natural character, and statues shall be placed only as adjuncts to buildings, bridges or viaducts.

Statues of great national, civic or universal interest and of great artistic beauty may be placed in any of the small parks at the intersection of two or more avenues.

No existing natural scenery, rock, woodland, drive or lawn shall be destroyed or altered to accommodate any statue or memorial.

No statuary, however satisfactory as a work of art, shall be accepted unless it will help to heighten the beauty of the landscape.

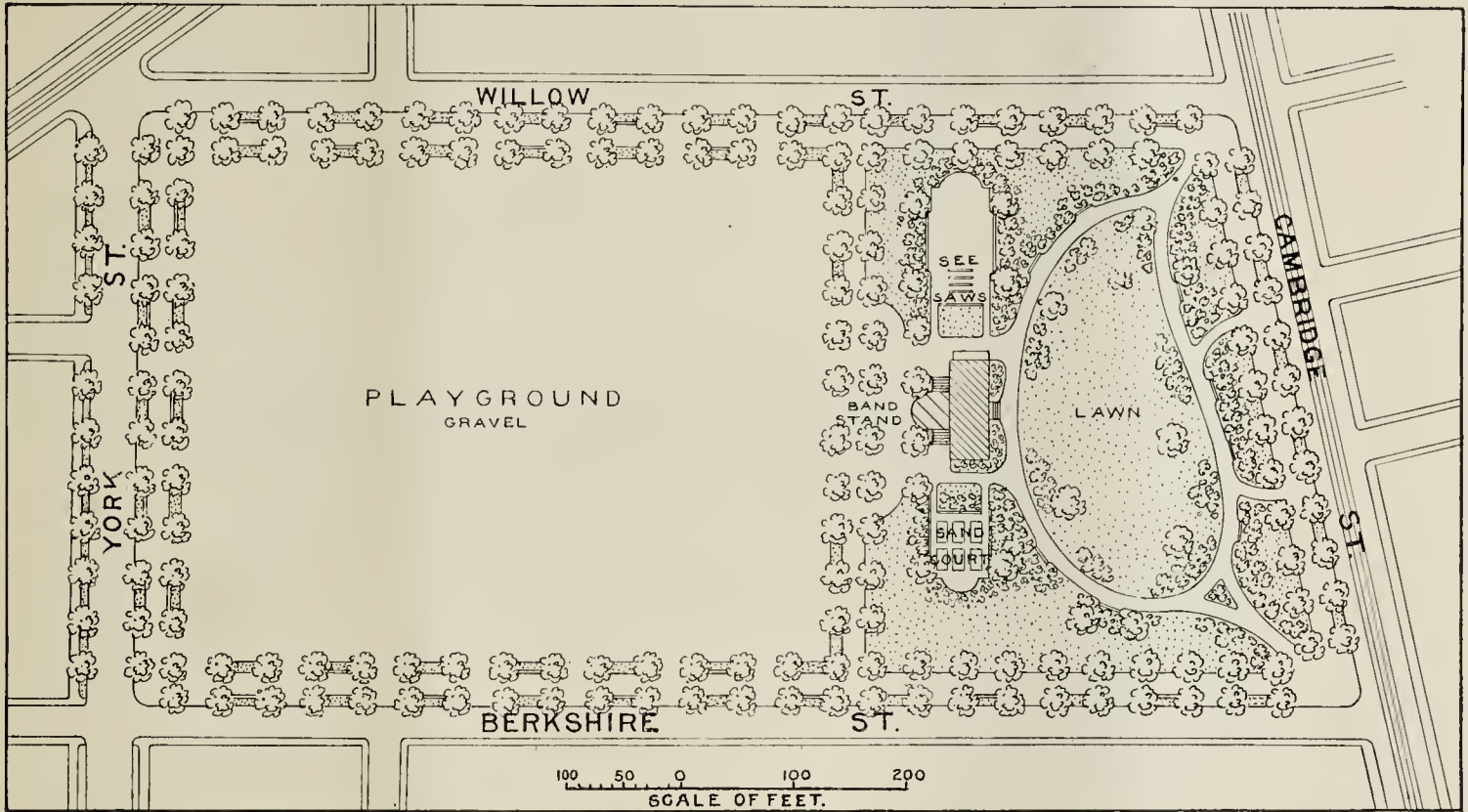
Statuary and structures already in the parks, if not placed in conformity with these rules, may, if condemned by the art commission, be removed by the commissioners of parks."

There have been many grave blunders made in the acceptance and location of statuary in the public parks and squares as well as in the city streets, due largely to the question of sentiment connected with the gift or giver, and a check to this false position in regard to public art is quite timely. On their face the rules however, read somewhat arbitrary, and there is a seeming contradiction between the first and fourth paragraphs, which will tend to lessen the apparent arbitrariness. As a matter of fact neither the landscape architect nor the sculptor can prescribe hard and fast rules in relation to the application of his art. The question of appropriateness is a broad one and a park created on purely landscape lines may include exceptionally good sites for an ideal group or figure which would have a recreative or educational interest, akin to the pleasure of seeing a stag or group of deer standing at attention in a picturesque glade of the woods.

CAMBRIDGE FIELD, CAMBRIDGE, MASS.

After many years Cambridge threw off her lethargy and awaking to her needs appointed a committee to consider the best means of providing pub-

are met, the æsthetic and practical have their place. Broad walks three-fifths of a mile in length, shaded on either side with trees and adorned with shrubbery circuit the entire field. Of the area remain-



PLAN OF CAMBRIDGE FIELD, CAMBRIDGE, MASS.

lic open spaces. By systematic investigation the committee discovered the denser the population the less the public land provided, and as a relief for these crowded districts, playgrounds were recommended and eventually secured.

ing about one-third is given to the æsthetic tastes and gentler sports, while the larger portion is an open gravel playground.

In one notable district, East Cambridge, an area

Entering at Cambridge street the simplicity and



VIEW OF GIRLS PLAY PLACE, SHOWING SEA-SAWS.



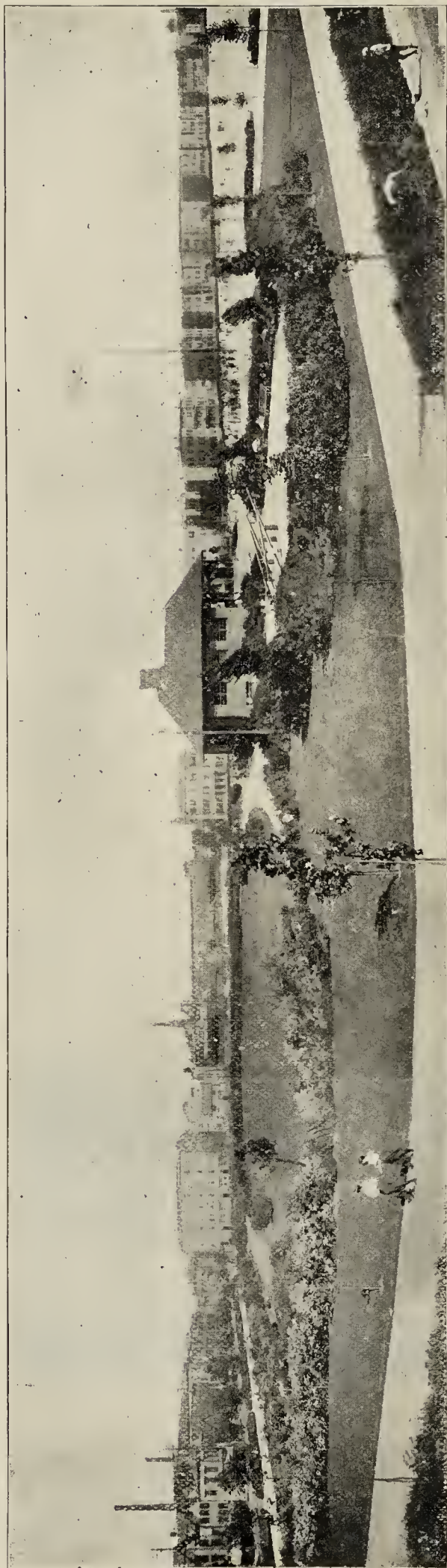
VIEW OF SAND COURTS.

of about twelve and six-tenths acres was found available. Skillful advisers were sought and a plan adopted that would develop every square foot of ground, providing the greatest good for the greatest number.

effectiveness of the open lawn surrounded by walks, seats and shrubbery lends a feeling of quiet and repose. Facing the open lawn is the field house the key of the whole design. Built of brick in a neat

The recreative needs of all ages and both sexes

PARK AND CEMETERY.



Cambridge St. Mall.

Open Lawn.

Sand Court.

Field House.—Sea-Saws.

Boys Playground.

PANORAMA OF CAMBRIDGE FIELD, CAMBRIDGE, MASS.—Designed by Olmsted, Olmsted & Eliot, Landscape Architects.

substantial manner it appeals to the visitors to make use of and not abuse the privileges offered.

On either side of a central hall, which serves as a gathering place and protection from the weather, the necessary lavatories are provided, besides rooms for the superintendent, janitor and the sale of refreshments. In the basement ample space provides for the storage of bicycles and the changing of the athletes clothing. A deep and broad porch serves as a bandstand facing the playground giving opportunity for occasional concerts.

On either side of the field house an area enclosed by hedges surrounded with seats serves as a play place for small girls and smaller children. The girls area at present contains see-saws but it is proposed to place eventually a frame work containing ladders, swings, etc. The enthusiasm that brings children in the middle of winter to use the see-saws is astonishing.

The busy scene is in the sand courts on the other side of the building. Bare-footed, bare-headed, digging in the yellow sand, many happy childhood hours are passed. They fairly swarm the six pits, building castles that will be destroyed in a twinkling. On very hot days an awning is stretched over this area.

The boys delight in the open gravel play ground where two back stops allow scrub games of base ball. Other field sports are also indulged in, while in winter the whole gravel area is flooded for skating. The estimated skating attendance in one day is between 2,000 and 3,000 people. On holidays and occasional evenings men in large numbers enter the field for recreative exercise and on hot days the crowds stay late into the night.

Occasional match games regulated by permits are allowed but as the play ground was designed for the school age, such use is discouraged. The boys usual sport before the advent of the field was to acquire an agility in dodging teams and electric cars; now a different motive imbues their growing minds and bodies.

The play ground is so arranged that there is no conflict of sports, order is the law of the field. It is in charge of a superintendent with a matron, janitor and one policeman to assist.

From the boys earliest arrival at the field an effort is made to surround him with habits of clean conversation, respect for authority, regard for the special rights of the weak, fair play towards his equals, personal cleanliness and many more of the virtues that make a good citizen.

It is interesting to note the cost of the play ground and its relation to the surrounding property. The total cost was \$194,733.00 or about 37c. per sq. ft., including land and all cost of construction.

In 1893 the assessed value of the land and buildings within the limits of influence was \$936,100.00; inside of five years their value had increased to \$1,661,600.00 making a total net gain of \$725,500.00.

The taxes from the increased valuation nearly pay for the interest and sinking fund. What better argument can any community desire when objection is raised that so much taxable property will be

lost, thereby endeavoring to stop all progress for the needy community.

Unlike Charlesbank in Boston there is no benevolent organization or heigenic association interested in its control, it being a purely municipal affair, under the control of the park commission. The cost of maintenance including salaries is about \$6,300.00 per year.

Herbert J. Kellaway.



GRAVEL PLAYGROUND AND FIELD HOUSE.

PUBLIC PLAY GROUNDS.*

All young and rapidly growing cities, like our own, provide their inhabitants with municipal problems and weighty responsibilities, which positively clamor, to those who have ears to hear, for attention, improvement or reform!

Accordingly though our citizens are sometimes undeniably slow in practical response to the appeals of a new movement, yet it must always be remembered that philanthropic societies, benevolent objects and altruistic schemes fairly fill the field, and he must be indeed prodigal of time, strength and money who denies none and satisfies all!

Age and a larger accumulation of wealth, in the older cities, count for much; and we cannot hope, as yet, to vie with their well established and beneficent enterprises, which, oftentimes, makes our hampered efforts, in similar directions, by comparison, seem paltry in their insufficiency.

But to balance this, the conditions which we have to meet here, are less involved; and we can use such opportunities as are vouchsafed us for doing good with as high spirits, strong hopes and tender hearts as though the accumulated wisdom and wealth of ages were at our disposal. The playground movement in Minneapolis is yet in its infancy, but any one who visited the two places set apart for this purpose last summer, or the school grounds,

on the east side, the previous year, must have recognized the need of such spots, and the benefit conferred by them, notwithstanding their crudity.

And, in this connection, allow me to remind those, who are not yet fully informed regarding the existing local conditions, that with the limited means likely to be at our command for some years to come, a perplexing problem will face the managers of this enterprise each spring. It caused much deliberation last season; it is already breeding thought this season, and it will continue to present a sphinx-like appearance to our troubled minds until we possess an assured and generous income which will satisfy all requirements and solve the present puzzle.

Plainly, is it best to have *one* model play-ground, with gymnasias, kindergarten tents, special teachers and perhaps manual training for the older boys, or distribute our scanty funds over a more extensive, if less impressive field? Weighty arguments can be adduced supporting either side of this question, as can be realized by a moment's thought. As for myself, I have been, and am, in sympathy with the larger, more comprehensive policy. As one road to this conclusion, let us ponder a second on the facts so frequently and ably presented (in which there is no division of opinion,) the principle that during school vacation, with no other obvious and convenient outlet for surplus energy, mischief and criminality among juveniles increase with alarming ra-

*A paper read before Woman's Council of Minneapolis, by Mrs. Florence Barton Loring.

pidity. One bit of testimony on this point, because of its striking character, may be pardoned. As many may already know, the social settlement of the N. W. University of Chicago established in 1896, a roomy play-ground capable of accommodating three or four thousand children—and this is an extract from an interview with Lieut. Kroll of the police force, there: “Young boys under sixteen, who are not occupied loaf around street corners, they have no place to go, they get into the saloons, they annoy passers-by or form crowds, they resent the interference of the police, and finally they are arrested. We hate to do this, as it is the first step in pushing a boy downward into the criminal class. Since this play-ground has been opened, and they are permitted to come in here, they give us no trouble whatever, and juvenile arrests in the vicinity have decreased fully $33\frac{1}{3}$ per cent.” It was also proven that youthful crime, in July and August, in one ward, *had* been 60 per cent. greater than during the rest of the year.

Now my position is this: Is it not better to give 1,000 or 1,500 children healthful resorts, free from bad influences, even if the equipment be meagre, than to confine our efforts to one favored locality, thereby producing a “show” exhibit for visitors, rendering 3 or 400 children virtuous and happy, but leaving the other thousand youthful souls and bodies in the same old, monotonous, uncared for condition? I plead for several play-grounds in the thickly populated portions of the city, where the poorer children abound; these to be supplemented by corners in our more accessible parks to be thrown open for the same purpose. Loring Park has a small space devoted to this good cause—and I hope that is the entering wedge that will yield noble results in this direction. It availeth not, in the present emergency, to wait idly until we own grand parks, like English estates, or can compass all the appliances for which we long. A righteous cause, like a city, an organization, or an individual must simply make the best use of what it *has*—employing thrift, judgment and enthusiasm, as far as may be, to supply the place of what it *has not*; watching for an increase of favorable opportunity and meantime being consoled for the too apparent lack by the reflection, that imagination can always convert the mean object into the mighty when good will is present, as a spur.

If Richter thought “the little work-tables of women’s fingers are the play-grounds of women’s fancies, and their knitting needles are fairy-wands by which they transform the whole room into a spirit-isle of dreams,” how much more true is this of children, and pre-eminently of children unaccustomed to luxury. What may seem painfully in-

adequate to you or to me, will be welcomed with a brightening eye, a sigh of relief or a thankful smile, by the average child of the play-ground. And I wonder, sometimes, if they could not give us new definitions for play and work were they fitted to translate their feelings into thoughts, the thoughts into reasoning, and the reasoning into clear and logical language. As it is, they only afford us stray hints and leave us to theorize as best we may! If Spencer argues that play is merely the result of surplus energy; if Frœbel asserted that play is the business, the life of a child; if prominent educators affirm that “the characteristic of play is not ease, but the feeling of power in doing things more or less difficult without constraint and compulsion,” none the less does the child inured to hardship, make play of what his otherwise more favored companion would esteem work. Youth, as a rule, in the poorer districts, regard the school-room as a haven of rest, study as a relaxation, and teachers as guardian angels. Is this idea generally prevalent among the offspring of the wealthy? And, in this direction, the influence of the former class upon the latter is a gain not to be lightly estimated.

At any age, there is an advantage in viewing human nature in different aspects—the lesson must be learned sooner or later, of adapting oneself to human creatures whose point of view is necessarily different from our own. Like many other kinds of knowledge, perhaps this is most easily acquired—unconsciously assimilated—in youth. And not only the school-rooms, but the public play-grounds will soon provide a place where children from luxurious and humble homes will meet, on a perfect equality, in neutral territory. For, else, what are to become of the children born and bred in apartment houses? These buildings recommend themselves more and more, by their evident utility and convenience, and, once within, the child may feel no lack, and the word “home” may retain its usual significance. But, from the moment his footsteps leave that building, what more does he see, know, or own of nature, with all its beauty or of out-of-door freedom, with all its enchanting delight, than the lonely waif of the slums. The street is his only resource—his pathetic plight not to be ignored.

And so we learn from those whom we fain would help or instruct—and I, for one, would regard it as a distinct loss in my *own* progression and understanding of life did we fail to give these children a few opportunities which came so freely and naturally to most of us, when of their age; opportunities which they crave and perhaps turn to far better account than did some of us—and when we gaze at the youthful faces in our own family circles, and

imagine for a moment, those dear, familiar eyes filled with wistful longing—longing for some pitiful privileges of sunshine, sand and space, our hearts throb with sympathy for the army of little ones we have always with us, and (each in his or her own way) we make some new resolves—resolves that fetch their blessings to us, in the *present* and *will* bestow their blessings upon *others* in the future.

THE LIVE OAK. (*Quercus Americana*.)

The oak is the grandest tree of the forest. From the days of Abraham who sat, in the heat of the day, under the "Oak of Mamre," to the Greeks, who held it sacred, the Romans, who dedicated it to Jupiter and the Druids, who worshiped under its shade, the oak has been king of the forest.

Quercus Americana, the live oak, in historic interest exceeds all of its own class as well as all other native trees of the United States. Making allowance for individual tastes regarding trees, which since Xerxes encircled the plane or Sycamore trees of Lycia to show his partiality, tastes have differed; yet no one disputes the supremacy of the oak in the American forests. The live oak is the most striking in appearance from its majestic size and evergreen foliage.

It is a matter of history that the United States owes its naval victories, in the war of 1812, to the live oaks, out of whose gnarled trunks and limbs the war vessels were made. Naturally the limbs are at all angles from the trunk, and are gnarled, curved and turned, as well as perfectly straight, so the bows, keels, ribs, floors and all parts of the ship, except the masts were constructed of them, without altering the shape. The ready adaptability of the timbers for ship building created such heavy demands for the trees, that destruction threatened the magnificent groves. For such reasons the government reserved for its own use, such lands as were the locality of the great numbers of gigantic live oaks. Also the government reserved the individual trees on all its lands, whether for homesteads, or sold in tracts bordering on the coast.

The reservation of the live oaks has been abrogated since 1890. The governor of Mississippi, during that year, took the thirty-six sections donated to the State Industrial College, by Congress, out of the reserved tract on the Gulf coast in Mississippi. Probably there are no other trees in our country that have been protected as wards under the guardianship of the government.

The royal splendor of the live oak trees and their tropical luxuriance are but rendered conspicuous by direct contrast with the pine, cedar, magnolia, cypress, red and white oak and other fine trees. The pine, far and away, towers above the live oak and the magnolia grandiflora is a close rival that contests every claim to grandeur and beauty, yet in the felicitous whole, with its knotted, curved and angled branches, spreading in apparently eccentric, yet really very symmetrical form,



THE MARTHA WASHINGTON OAK, AUDUBON PARK, NEW ORLEANS, LA.

the live oak is the "noblest Roman of them all."

The limbs spread laterally, tapering upward, till the crown is formed on short, spreading limbs. It is dense, well rounded and beautifully proportioned; the size in circumference, rather than in height. Yet the wide circumference will in almost all cases, cause an observer to under estimate the actual height.

The rich, dark green, shining foliage, dense and abundant, imparts the finished beauty and grace to this lordly tree. The foliage is unlike every other oak in hard finished or glazed surface, that sparkles in the sunshine like the orange and magnolia. Standing beneath one, and gazing upward, among the limbs that look as if the storms of

many winters had twisted and turned them about, the observer will always be impressed with the very different aspect of the tree, viewed from the exterior. The wealth of emerald green foliage from the outward view gives but little indication of the extent of bare limbs of great size exposed on the under side.

Doubtless the nourishing and invigorating properties of the saline breezes that constantly blow in land from the Gulf, furnishes one explanation of such strength and luxuriance; but Virgil more truly strikes the key-note where he tells us that the oak sends down its roots into the earth to a depth that corresponds to the height and length of the branches. The Martha Washington oak tree in Audubon Park, New Orleans, illustrated on the previous page, measures 26 feet in circumference at 3 feet from the ground, is about 65 feet in height and has a spread of branches of 126 feet. The limbs that project on all sides are as large as the average trunks of forest trees of other kinds that have forty years of growth.

There is a live oak tree at Brunswick, Ga., that has a place in the "five hundred most celebrated views of Nature and Art." There is one at Pass Christian, Miss., that somewhat exceeds the Brunswick celebrity. It has been a land mark from the earliest days. The Spanish land grants of the past century read, "from the live oak tree," etc., as a boundary line; this special tree too, is but one among many of equal size and antiquity.

G. T. Drennan.

SOME ORNAMENTAL SHRUBS, II.

The charming family of Rhododendrons, Azaleas and their kindred will occur to any one who desires showy flowers in the shrubbery. There is no more beautiful class of plants, but unfortunately they will not thrive everywhere. Those who cannot succeed with them may console themselves with Roses and Pæonies. The so-called tree Pæonies are shrubs that will thrive in soil that is death to Rhododendrons. For the best results in growing Pæonies one must have patience, as it is only after they have been established some years that they begin to show their real beauty. They need the choicest places in the garden, plenty of sunshine, rather moist and very rich soil, often renewed. They are grand plants when well grown, and worth a great deal of trouble.

Lilacs are charming shrubs, and desirable for their beauty and fragrance of their flowers. They are propagated in many varieties, but the old-fashioned white and dark lilac kinds are as hardy and satisfactory as any, and will stand more neglect than any of the newer kinds. The Persian Lilac is

an exceedingly profuse bloomer and grows to a large size, but does not harmonize with pink or red flowering shrubs, and should not be planted too near them. The pink-flowered *Syringa villosa* comes into bloom in June after the other varieties have faded, and is desirable on this account.

All the Philadelphuses have showy bloom, especially the *P. grandiflorus*, *P. gordonianus*, which



*PHILADELPHUS CORONARIUS. (*Garland Syringa*.)

is later than the other kinds, and the beautiful Lemoine hybrids.

Of Deutzias, the double-flowered pink and white *Deutzia crenata* is perhaps the most conspicuous. It forms a large bush, sometimes eight or nine feet in height, and is covered with bloom late in May or early in June.

And now we come to the beautiful stranger from China which takes so kindly to our soil and climate, and which, if I could plant but one shrub, would be my choice for the May garden, the Weigelia. It is not, by any means, a rare plant, and there are many varieties, all beautiful. It is quite hardy, has a most graceful habit of growth, and should be allowed to develop naturally in good soil and in full sunshine. It repays care by added beauty, but will grow and flourish almost anywhere. In pruning remember that every branch that is ruthlessly lopped away deprives the owner of a beautiful garland of bloom. In its natural state it has a half pendulous habit of growth, and should not be tied up or cut back. Remove dead limbs or those that interfere or mar the symmetry of the plant. Otherwise let it alone. If it can be given plenty of room to develop naturally it will never be an unshapely object.

One of the best qualities of the Weigelia is the time of its flowering, and another is the duration of its bloom. It comes into bloom in May after

*The illustrations in this article are by courtesy of P. S. Peterson & Sons, Chicago, from specimen shrubs in their nurseries.

the early shrubs have faded, and fills up the interval before the coming of the rose. It continues to flower for several weeks, and some varieties, such as *Weigelia nivalis* give us a few blossoms throughout the summer.

New varieties are being introduced all the time. We have not tried them all, and must warn amateurs that so-called improved varieties are seldom as hardy and not always so manageable as the types from which they are derived. For general planting we know no Weigelas superior to *W. floribunda*, *W. rosea*, *W. nivalis*, *W. grandiflora* and *W. Hortensis*.

Exochorda grandiflora is another very conspicuous flowering shrub. It attains a large size, but is not in this country a very long-lived plant and seldom sets any seed, so that it is still rather scarce. We have planted two groups of *Exochordas* in prominent places where we needed a "high light" in the landscape. Each group consists of three plants forming an irregular triangle, the bushes about six feet apart. They grow tall and rather straggling, with slender, irregular branches, covered early in May with an abundance of quite large paper-white blossoms. The flowers are more delicate than the trumpet-shaped bloom of *Weigelas*, and do not last so long.

The Snowball is a very familiar example of the conspicuous shrub, but should be used with care as it does not harmonize with smaller flowers. Neither does it look at home in the wilder and

and numerous clusters of white flowers in spring. All *Viburnums*, except the two "Snowballs," are adapted to the wilder parts of the grounds, though some of them, such as *Viburnum molle* and *Viburnum pubescens* make fine specimen plants for the lawn. *V. molle* flowers at midsummer.

Perhaps the most beautiful of the hundreds of shrubs planted at Rose Brake, is a tall, stately specimen of *Xanthoceras sorbifolia*, which may almost be called a small tree. It is now about ten feet in height, and is clothed down to the ground with branches that put on, in May, a fairy-like garment of softest white bloom. The blossoms come before the leaves have fully expanded, and are large, bell-shaped and upright in habit of growth. They are white, with luminous greenish-yellow centres, and these centres have the singular faculty of deepening day by day during the blooming period, first to lemon yellow, and then gradually changing to an unusual shade of deep salmon red. The flowers last in perfection a week or ten days, and the little tree is the glory of the garden until it fades. I hope to see this very beautiful shrub more generally planted. It withstands our severest winters uninjured. It has fine foliage, of a clear, light green, and is an exceedingly ornamental plant even when out of bloom.

All the *Hydrangeas* have large showy flowers. The best among the hardy kinds are the oak-leaved *Hydrangea*, a noble shrub, flowering through June, July and August, and the very familiar *H. paniculata grandiflora*.

Flowering Quinces or *Cydonias* are beautiful objects in the spring, especially the bright scarlet and the pure white kinds. *Cydonia Moerlosii* has exquisite flowers of shaded carmine, and there are varieties that have bloom of a conspicuous orange-red, such as *Cydonia aurantiaca*, which ought not to be planted near Lilacs or shrubs with rose-pink flowers.

I believe I have mentioned the most ornamental of this class of plants, but there remains much to be said on the subject of conspicuous small trees and vines. This will have to be deferred to some future day.

Danske Dandridge.



SPIRAEA VAN HOUTTEI.

more woody parts of the park or home grounds. Its place is near the house or in the old-fashioned garden, or on the well-kept lawn, where groups of snowballs, pruned into symmetrical shape, are very effective.

All the *Viburnums* are fine shrubs and should be planted more than they are. *V. prunifolium*, the Black Haw, is very beautiful in bloom. It has re-curving, spreading branches, plum-like leaves

The school teachers of Chicago are agitating the question of setting apart small areas in the public parks, for the purpose of practically demonstrating to the school children the habits and manner of growth of some of the vegetables and other plants in which they are more or less interested. It is believed that such opportunities of instruction will serve to inculcate into the young mind not only habits of observation and study, but will tend to improve the conditions about the homes.

IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

IMPROVING THE HOME GROUNDS.

"Who sows a field or trains a flower
Or plants a tree is more than all;
For he who blesses most is blessed;
And God and man may own his worth
Who toils to leave, as his bequest,
An added beauty to the earth."

Whittier.

If that is so—and who can doubt it—Improvement Club work and workers gain dignity from the thought and from the source of the idea, for surely Whittier was written down as one who "loved his fellow men," and it is sometimes intimated that their names head the list. Consequently, all should feel good grounds for encouragement and even for enthusiasm. Indeed, my feeling is that earnest workers in this line are bound to develop enthusiasm—let me counsel that it be not allowed to dominate good judgment.

It has been justly said by Prof. L. H. Bailey, of the Cornell University Agricultural Experiment Station, that "the trouble with home grounds is not so much that there is too little planting of trees and shrubs, but that this planting is meaningless."

The truth is that every dwelling with its surrounding grounds, no matter whether large or small, should be a complete picture in itself, and this picture should be of such character that its entire effect and purpose will be evident at the first glance. The general effect must be such that the observer notices it—the sum total—rather than any of its de-

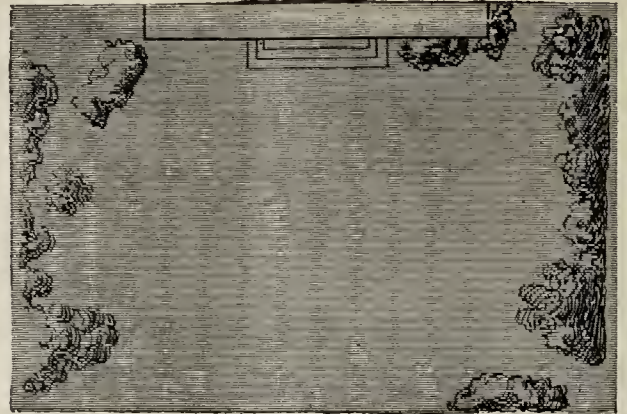


NO. 1.—THE "NURSERY" STYLE OF PLANTING.

tails. Therefore, the design is seen to be the most important step in improving home grounds.

The dwelling is the most important feature, therefore it must dominate the picture and everything else must be subordinated to it.

To this end the proposed planting must first be considered as masses of foliage, and these must be



NO. 2.—THE "PICTORIAL" STYLE OF PLANTING.

designed to form a background and setting for the house and a frame for the grounds.

It is quite possible to develop almost any desired special minor feature of planting within these masses without disturbing the effect of the picture as a whole.

The principle involved will be better understood by referring to the cuts. Nos. 1 and 2, which admirably illustrate the difference between what Prof. Bailey aptly characterizes as the "nursery" and the "pictorial" types of planting.

After fixing in mind the difference between these types it would be helpful to observe grounds and dooryards. Place each in its class, and mentally (or on paper if you will) remodel them, deciding what can be done merely by a rearrangement of the material already in use, as well as by adding fresh plants as the necessities seem to your mind to demand, or by replacing some of the plants on hand with others that better meet existing requirements. This is good practice and will lead to a clear understanding of what your own grounds need as well as prepare you to intelligently advise others.

In making this picture of home comfort, there must be an open centre so that the dwelling—the central idea and chief feature of the picture—shall be visible. On a small place, therefore, trees that are intended to furnish shade must be placed outside as street trees or at the back where they will make a background of foliage. Small trees and the largest shrubs must be placed at the back of the beds that are to form the boundaries of the yard and the frame for the picture, and those of lower growth on the inner, irregular edge of the beds next to the lawn; and along this inner edge flowering perennials may be introduced at intervals. The shrubbery belts must be not only irregular in width but also in height, care being taken to place the

taller growing material where it will serve as a screen to shut off unpleasant views or objects, and those of lower growth where there is something attractive to be seen from windows or porches. All of the trees and shrubs that form a continuous border or planting must be set in a bed spaded and prepared like a flower bed, and not in holes cut in the sod. In this way they may be easily cared for with a hoe to keep them free from weeds and to keep the soil loose on the surface, and a top-dressing of old compost is easily applied in the fall. In time, the plants in the border will meet and blend into a varied but harmonious mass of foliage, and that is the desideratum.

On small places, the widest part of the boundary border should be in the form of a promontory reaching out towards the house as a division and screen between the front and the rear parts of the garden, thus serving to shield the drying ground as well as forming an attractive background for the front lawn. This screen should not be a dense wall of leaves but should vary in thickness, in height and in quality, great care being taken to dispose the material so that it shall be dense where density is required and thin where a glimpse of the rear part of the garden is admissible. One or two clothes line posts may be placed within this part of the planting if needed for they will be veiled by the surrounding shrubs, or they may be utilized as standards for rose or clematis pillars and thus serve both a useful and an ornamental purpose. Posts for hammocks may be introduced in the same way, or perhaps, one set will answer all three uses. It will be seen that by a little thought we have already worked into our ornamental design several practical minor features, and this without disturbing the general effect of the picture of home comfort that we set out to develop. Many more may be introduced, always provided that the original picture is kept distinctly in mind and the large effect never interfered with. In this way, barns, stables, and other outbuildings, poultry yards, etc., may be shielded by shrubs or vines that shall be a part of the general mass—in effect, at least.

In short, a thoughtful plan of the planting of home grounds should enable the occupants of a house to use and to enjoy all parts of the attached ground without let, hindrance or embarrassment during the entire out-of-door season; this would be a boon to many, for out-of-door life is what most people lack, especially those who from choice or necessity are the most domestic. *F. C. S.*

* * *

At a recent meeting of the Friday Conversational Club at Monongahela, Pa., Miss Myra Lloyd Dock gave an interesting talk on "Village Improv-

ment." She laid emphasis upon the great benefits derived by humanity from the public parks and play grounds in the cities, and said "the betterment of many a community was due to these advantages. The New England states are ahead in this good work, which was first started by a woman—Mary Hopkins, in 1853, at Stockbridge, Mass. Interesting others, she formed societies, thus laying the foundation for the great reform of 'good house-keeping out-of-doors.' Among many interesting facts she stated that, in America the work is done principally by the women. In Europe it is different, the men take the lead in this line. Foreigners coming to this country miss the public baths and many parks they are accustomed to in their native land, which they leave for riches they expect to obtain here. In Paris, each spot, whereon has occurred some dark and horrible event, has been turned into a garden of beauty, thus effacing the unpleasant thoughts connected with it by beautiful landscape views. The public schools can do much toward improving the villages, and the pupils should be well instructed and interested in the matter. Among the many improvements possible to be undertaken she suggested: Swimming Baths; the organization of Roadside Leagues for the preservation of beautiful places, to open paths, place seats and drinking troughs. The organization of Township Flower Shows. The encouragement of a knowledge of Native Plants by offering prizes to school or other grounds stocked with native plants. The improvement of present methods of street planting and pruning.

* * *

"Arbor Day will make the country visibly more beautiful year by year. Every school district will contribute to the good work. The school house will gradually become an ornament of the village and the children will be put in the way of living upon more friendly and intelligent terms with the bountiful nature which is so friendly to us."—*George William Curtis.*

* * *

The results from the institution of Arbor Day is being universally acknowledged. Governor Roosevelt in his recent proclamation says: The school children of this state have planted more than two hundred thousand trees within the ten years in which Arbor Day has been recognized. Few similar efforts in recent years have been more thoroughly commendable than the effort to get our people practically to show their appreciation of the beauty and usefulness of trees. The steady tendency towards the disproportionate growths of cities renders it all the more necessary to foster the things of the country.



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THE CHAPEL, CREMATORY AND ADMINISTRATION BUILDING, MOUNT AUBURN CEMETERY, CAMBRIDGE, MASS.

CREMATORY CHAPEL AND ADMINISTRATION BUILDING, MOUNT AUBURN CEMETERY, CAMBRIDGE, MASS.

There have been under construction for some time past in Mount Auburn Cemetery, Cambridge, Mass., a crematory chapel and administration building which is now about completed in all its details, and which will be an important adjunct to the cemetery. The illustration shows the completed structure, which has been carried out from designs by Mr. Willard T. Sears, architect, and which included the remodelling of the old chapel, so well known to visitors, and its incorporation with the remainder of the buildings. The new buildings are constructed of red sandstone. The design and arrangements are on modern lines, and the general appearance is dignified and attractive.

The roof and interior side walls of the old chapel were removed and replaced by fire proof tiling, the floor and roof being supported by the Guastivino tile arch, and side aisles added, in which niches for urns may be placed. The cremation plant is similar to that in operation at Forest Home cemetery at Milwaukee, and the experience of the plant of that cemetery as well as that of Graceland cemetery, Chicago, were drawn upon to ensure the best results, for which Mr. J. C. Scorgie, superintendent, makes grateful acknowledgement.

PERPETUAL CARE OF CEMETERIES ON THE INSTALLMENT PLAN.

The difficulty most apparent in instituting the system of perpetual care of cemetery lots in the smaller communities is that of securing trust funds in sufficient relative amounts for the purpose. The majority of the lot owners will naturally be citizens of small means to whom an outlay of \$100 for the care of a small lot will appear an expense that may both readily and reasonably be postponed, either temporarily or entirely. The sentiment may appeal to them, but the money sacrifice outweighs its force. Much consideration has been given to this question by those in charge of the small grounds or cemeteries whose lot owners are largely people of limited resources, and among the successful efforts in the work is that of Flushing cemetery, Long Island, N. Y., whose superintendent, Mr. Wm. T. James, has furnished particulars of the installment plan of securing the necessary funds, a plan which has so far worked with entire success.

This cemetery was started in 1853, and lots were sold at 8 cents per foot which of course did not leave much room for care. The price was gradually raised until in 1888, 40 cents per foot on paths and 50 cents on driveways was received. In that year the perpetual care fund was agitated and instituted, charging 10 cents per foot to form a

fund, the interest of which was to be applied to the perpetual care of lots. In 1897 finding that 10 cents per superficial foot was not sufficient to give the lots the care desired, the amount was raised to 20 cents per superficial foot.

In 1895 the installment plan was originated and the following circular was sent out to all lot owners:

In order to place the "Perpetual Care," within the reach of every lot owner, payment by installments will be accepted on the following plan: Installments to be paid annually in advance. Care to commence with first installment. If installments are not kept up care to cease. When the total amount paid equals 10c. per square foot, together with the interest on unpaid balances, the lot will be taken care of perpetually, without any further charge to the owner.

Payments can be made oftener if desired and interest saved in proportion.

Your lot, No Sec.....contains..... square feet, at 10c. per square foot, amounts to \$.....if paid in one payment, in advance, in the regular way.

Should you however desire to take advantage of the
INSTALLMENT PLAN,
you can do so by paying \$.....yearly until the whole amount of 10c. per foot and interest is paid, and care will commence at once, upon receipt of first payment.

Very respectfully yours

WILLIAM T. JAMES, TREAS.
20 Main St., Flushing, N. Y.

It must be borne in mind however that from the institution of the perpetual care system in 1888 no lots were sold without it.

The following is the form of receipt used for the installment plan of perpetual care. On the back of this receipt is given in clear and legible type an epitome of the cemetery rules:

FLUSHING, N. Y.....189
Mr.....
TO FLUSHING CEMETERY, DR.,
To Care of Lot.....Section..... \$.....
.....Annual Payment.
Due.....189

Care ceases when payments are not promptly made. Payments are for annual care only, until they amount to the sum fixed by the Cemetery for the Perpetual Care of the lot, together with 6 per cent. interest on unpaid balances, then the lot will be cared for Perpetually by the Cemetery, without further cost to the owner.

Received Payment.....189
.....Treasurer.

Perpetual care has also been applied to single graves but a new section has been set apart which is conducted under rules given below. The charges range from \$5 to \$7 extra for the graves according to location, and the plan has become very popular. The price for single adult grave is \$10 and the installment plan does not apply to the single grave section. For single graves already occupied a charge of \$5 is made for perpetual care.

FORM OF RECEIPT FOR SINGLE GRAVES UNDER PERPETUAL CARE.

FLUSHING CEMETERY. Flushing, N. Y.,.....189
Received from.....\$.....
For opening grave No..... Sec. K. Perpetual Care.
For the interment of.....
.....Treasurer.

RULES REGULATING SINGLE GRAVE SECTION UNDER PERPETUAL CARE.

In order to keep this section uniform and tidy in appearance, the following rules have been adopted:
No Fences, trees, shrubs or bushes allowed.

Graves to be uniform in size and shape.

Graves will be sodded.

Graves kept trimmed and cared for perpetually by the Cemetery.

Headstones, Markers or Monuments must not be more than three feet above the level of the plot; Headstones and Markers in one piece, must not be less than four inches thick, and set in the ground three and one-half feet.

Monuments in two or more pieces must be not less than eight inches thick.

Foundations will be six feet in the ground or to the bottom of the grave. To insure strict compliance to this important rule, all foundations will be set by the Cemetery at the stated price of 30c. per cubic foot.

These graves revert to the Cemetery when vacated.

Towards the close of 1899 some 70 of the lot owners had taken advantage of the installment system, and at that time, of the 634 of the lots sold, 370 were under perpetual care paid up and the above 70 were funding in installments.

FORM OF RECEIPT FOR THE WHOLE OF PERPETUAL CARE.

OFFICE OF THE FLUSHING CEMETERY.

Flushing, N. Y.....189

This Association has received from.....
.....the sum of..... dollars.....cents
hereby agreeing to apply the interest thereon to the keeping in order the graves, and the cultivation of the grass and shrubbery appertaining thereto, in Lot.....Section.....
containing.....feet perpetually.
\$.....Treas.

The officials of the Flushing cemetery are very much gratified at the results secured by the adoption of perpetual care as a special feature of their management. The appearance of the cemetery is greatly improved and a keener interest in cemetery matters is apparent in all directions.

SEASONABLE SUGGESTIONS.

At this season of the year most of the spring planting of trees and shrubs will have been done, but it should be remembered that magnolias do very well planted late in the season. Such sorts as the Chinese species and varieties, represented by Soulangeana and conspicua, can be planted with entire safety after their blooming is over. But do not neglect to give them a good pruning, no matter whenever planted. The most successful planters prune heavily.

Tub plants and others which have been re-entered in cellars and greenhouses are often unnecessarily injured by too sudden exposure to air and light out doors. Place them in a sheltered situation, free from much wind and light for a week or so, till they become hardened. Many of these plants may be grown for years in the same tubs if in spring a few inches of top soil be removed and replaced with good manure. This carries them through the season.

With the advent of May some of the early blooming shrubs, such as Golden Bell and Cornus Mas will be out of flower. Just as soon as this occurs is the time to prune the shrubs. Cut them well

back, to produce new shoots, as the new ones must be looked to for flowers next season. Treat all the shrubs the same way as fast as the flowering is over, excepting the fall bloomers, which are to be pruned in winter.

If the *Hydrangea paniculata grandiflora* be desired to bloom later than usual, transplant some quite late in the season and cut them back almost to the ground. The transplanting and pruning checks them, causing a late crop of flowers. Another way is to stop the young growth in June, by nipping off the ends of the new growth. The shoots which succeed will flower a good while after other plants are over. Florists do this, to get a late crop of flowers.

Those who desire violets for next winter's blooming in frames, should plant out a lot of young plants now. The runners of old plants are the best. A half shady place is preferred for the summer's growth. Before freezing weather, plant them in a cold frame and if frost can be kept out flowers will be had about March and later. The single sorts seem preferred for odor.

Crimson Rambler rose rarely flowers well the first season after planting. It needs to get a good root-hold first and to make a strong shoot or two. Better not look for flowers, but cut the plants well to the ground, that a good growth may be encouraged. Then preserve a good length of new shoot for next year, and flowers will follow. It seems an extremely hardy rose.

To get flowers from daffodils in the open ground, plant them in a warm sunny spot in the garden. When in a damp shady place they rarely flower, probably from the bulbs failing to ripen.

Hyacinths, tulips and other bulbs which have flowered indoors may be planted out in some half wild place. They flower year after year, from new made bulbs, and though not as large heads as imported ones are very beautiful. The flowering of such bulbs before almost any other flowers makes them much appreciated.

Tea and other everblooming roses, set out this spring and appearing indifferent to starting growth, should be cut back almost to the ground. Indeed without this reason many gardeners treat them this way, as it is the young growth that gives the flowers. On the contrary, hybrid perpetuals so treated give no flowers, as the flowers come from the shoots of the previous season. A moderate pruning back suffices for them.

It is not too late to set out some perennials for late blooming, something to come the very last thing. For this purpose there are these: Japanese Anemones, Aster Tataricus, Helianthus Maximiliani, Boltonia latifolia, Plumbago auriculata

and others. Some of these are with us until frost, and all are beautiful. The Aster, Helianthus and Boltonia are fine for cutting for vases, the flowers being on long spikes. Good sized plants set in spring flower well the first year.

For an oval bed of flowers the following plants combine nicely. For the centre *Achyranthus Verschaffelti*, next to this variegated *Stevia*, then *Coleus Verschaffelti*, and for the outside, *Coleus Golden Bedder*. Another such bed may be entirely filled with the variegated leaved *Abutilon*, edged with the dark leaved *Acalypha*.

A round bed may be wholly filled with a pink or a scarlet flowered geranium and edged with a variegated leaved one. Both *coleus* and geraniums are indispensable for bedding.

If rhododendron and azalea beds can be formed where the sun will not strike them in the afternoon, the plants preserve their flowers a much longer time. In hot, dry times, the flowers fade in a few days, instead of lasting for a week or two as they will if in partial shade.

When pæonies are in flower the colors should be noted in order to plant the kinds looking to a combination of colors. Some gorgeous displays are made by the proper planting of an assortment of these plants.

Hollies, both native and European are proverbially hard to transplant. Landscape gardeners and nurserymen who handle them largely aver that the only safe way is to prune them back severely and then cut off every leaf from them. Under this plan, they rarely lose any. *Osmanthus*, *Magnolia grandiflora* and many other broad leaved evergreens should be treated in the same way then they rarely die.

Arbor-Vitæ, hemlock and other hedges of evergreens which are out of shape or which would be the better for pruning may have the shears applied at this time. But do not prune below the green foliage, as evergreens rarely break new growths from old wood. Neither hemlock nor *arbor-vitæ* will, nor will pines. Japanese cedars will to some extent, but it is wise to cut no coniferous evergreen below its live foliage.

It is questionable if among the whole list of ornamental evergreens there is a better all round one than the Nordmann Fir, *Picea Nordmanniana*. There are but few evergreens come out of a winter as good as they went in, but this does, looking its usual beautiful green at all times. When purchasing them stipulate for those with good leaders. This and like evergreens can be planted in most all the northern states in early May, with every chance of success.

Joseph Mehan.

LABELS FOR PLANTS AND TREES.

The best labels are those made of iron with the names cast in the surface. There are concerns which make such labels. These, however, are expensive, and cannot always be used. For home-made labels, I have never found anything better, for shrubs and low plants, than stakes which are neatly lettered with lamp black and oil. Stakes may be treated so that they will last a number of years. The zinc label, painted with lamp black and oil, makes a very excellent tree label, and will last several years. Some of the very fancy glass and porcelain labels are, of course, excellent when one can afford them.

L. H. Bailey,

Cornell University, Ithaca, N. Y.

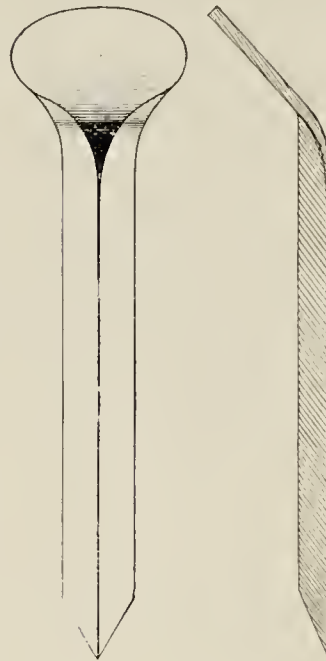
* * *

The problem of labeling trees, after they have reached a considerable size, is simpler than that of labeling other plants. I have studied the subject very carefully in this country and abroad, and, much as I like the geographic label, bearing in addition to the ordinary lettering, a map of the world, marked in color to indicate the range of the tree, I have not found any map which is capable of being re-produced so as to stand our rigorous climate, though in south-central Europe such labels are successfully used. The cost of making them is also a more expensive item with us than on the other side, but I believe that a simple map of the world could be transferred to a graniteware enamel, by the use of transfer paper, such as the manufacturers of graniteware use for putting their own lettering on their goods. We make use of an elliptical label, cast of the zinc alloy known as white bronze. Labels of this kind are rather expensive, costing from 65 to 75 cents, as I recall it, for the sizes that we use, namely $5\frac{7}{8} \times 3\frac{1}{4}$ and $8 \times 4\frac{3}{8}$, the smaller curved to a radius of 12 inches and the larger to a radius of 15 inches, so as to adapt them to the size of trees upon which they are likely to be used. The lettering is raised and, if wished, can be brought into contrast with the rest of the label, either by painting over the body of the label, leaving the letters clean, but in different color, or by leaving the body unpainted and painting over the tops of the letters. We fasten them by smooth brass escutcheon pins about an inch long (short enough so that they may draw as the expansion of the tree pushes the label out) and the pins are placed through two holes in a vertical line.



All plants too small for a label of this kind have to be marked, either by labels stuck into the ground, or twisted about or wired on to the plant. For the former, which we make extensive use of in herbaceous beds and the like, and also in front of some trees and shrubs, we employ a label stamped out of sheet zinc, of about the shape indicated on the enclosed sketch, and some 10 inches long. On this we write with a dilute solution of platinum tetrachloride, which, though more expensive than the other inks which may be used on zinc,

is more permanent. The zinc is thoroughly polished off to remove all trace of grease, before writing, and is then wiped over with a very slightly oily rag afterward, to turn water quickly.



For small labels, which are fastened to the tree or shrub, I have no doubt that thin copper labels, written on with a stylet over a soft surface, so that the writing is indented, instead of being colored, are the most successful, but a zinc label written on with platinum tetrachloride may be similarly used. These labels are in the form of very narrow triangles, tapering from, say, one inch or less to a point, in a length of say, six inches, and the smaller end is coiled round and round and

round one of the twigs. Labels of this kind, however, are not suited to display purposes, and for display purposes we use a quadrangular label, with the angles shaped to taste, and measuring about 2 x 3 inches, on which the data are written in platinum tetrachloride, while the label is hung by a copper wire very loosely twisted on to a twig. No labels of this kind, however, can be expected to remain very long in position. They require constant care. Either the electrical action set up wears the copper or the rim of the hole in the zinc label through which the copper wire is passed, or the label is neglected long enough to pinch and amputate the twig, but with reasonable care they are more likely to remain in place than labels stuck in the ground in front of the shrub.

I have tried celluloid and a variety of other labels, but do not think that any of them compare with these zinc alloy and sheet zinc labels, and yet, as you can see from what I have said, these labels are by no means all that one could wish.

I ought to say that in Kew they use sheet lead labels for these purposes, the label being of an appropriate size and of sheet lead about one-eighth inch thick, in which, with steel punches, they stamp the desired lettering. The labels are nailed by a single nail on the trunk of a tree, or hung to branches by a wire, as with the zinc labels that I have spoken of. The indented letters are filled up with white lead or something of the kind, to make them easily legible.

Wm. Trelease,

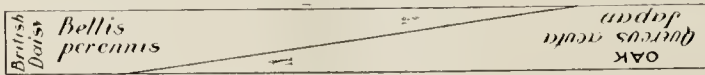
Missouri Botanical Garden, St. Louis, Mo.

* * *

Objections have been found to the greater number of garden labels. The cheap, thin wooden ones soon rot, and the writing becomes indistinct. The compensation forced upon the gardener for this, however, is the necessity of frequent renewal, and the practice he thus gains in writing and learning plant names.

The many forms of indestructible labels are either too difficult to prepare, or if made by others, they are too expensive. Cast iron ones have been used in many public and private gardens, but they are bad in many ways—they are dear, they get in the way of the mower and the scythe, or are hidden by grass, they corrode in time and even become targets for stone throwing boys. I have known them to be changed and thrown around over a wide area by the mischievous urchins! Fortunately the collection in which this happened had a gardener in charge who had a wide experience, and who in addition to the iron tallies, had a systematic system of zinc labels, which were tacked to trees, wound around small shrubs, or stuck in the ground for herbs.

For durability, cheapness and usefulness, it is doubtful if the zinc label can be improved upon. Its general



utility is all that can be desired, for thin sheet zinc can be had of most hardware men, plumbers and metal workers, and cut in any shape—the simpler the better. For general purposes strips may be cut in the manner above of any size, thus making two labels, which may either be stuck in the ground, have their thin ends lapped around a stem or branch, or the strips may be used uncut, and when written upon, rivetted to a foot of telegraph wire and form a cheap T shaped label.

There are different ways of marking these. Probably the best for public parks, where conspicuousness is required is first to paint the zinc black, and then have a painter letter them in white. Various indelible pencils and inks are also used for writing on zinc, one of the simplest of which is made by dissolving a few grains of cobalt chloride (salts) in water. This can be written with a clean pen, and probably has some magnetic action on the zinc which leaves an indelible impression. Care should be taken to avoid blotting by simply laying the written label up to dry.

Such writing will be legible after several years use in the ground, but whatever label is used nothing should prevent the necessary annual overhauling.

James MacPherson.

NOTES, CHIEFLY HISTORICAL, ON LONDON BURIAL PLACES, I.

If there are any persons who fail to appreciate the ideas that have been developed in America of late years in regard to the disposal of the dead, and the proper care of their last resting places, they would do well to bestow some attention upon the burial places of the City of London. The present writer's researches have resulted in the collection of a large volume of notes from which a careful selection has been made for these papers of such as cannot fail to be of interest. And some of them will doubtless prove suggestive, not so much of what to do as of what not to do, but more par-

ticularly as to how to deal with the evil of overcrowded burial places in over-crowded cities.

* * *

Not unlikely the whole of London is a burial place, and the foot passenger scarcely takes a step without treading upon the dust of former generations. And this may be taken in a more literal sense than the common expression that the whole earth is one vast graveyard. When one considers—in connection with the immense populations that have lived and died upon the site of the great metropolis of the Anglo-Saxon world during the eighteen centuries of its history—the one hundred and thirteen graveyards, of whose existence at one time there are authentic records, but which have now wholly disappeared, besides those which now remain, wholly or in part (by actual count three hundred and sixty-four) one realizes that there must be an enormous amount of human dust in the soil of London city.

* * *

The historical notes collected upon the subject go back to the earliest times. The Tumulus, Parliament Hill Fields, is pronounced by competent scientific authority, to be an ancient British burial place of the early bronze period. There are tumuli also in Greenwich Park and remains of Roman burial places have been discovered and investigated in various parts of the city. The information is fuller regarding the graveyards of priories and convents of a later period and of the middle ages, when churchyards were used for miracle plays, "moralities" or mysteries; and curious documents like the following are to be found in the archives of the ecclesiastical establishments: "Receyved of Hugh Grymes, for lycens geven to certen players to play their enterludes in the churchyards from the feast of Easter, An. D'ni. 1560, untyll the feaste of Seynt Mychaell Tharchangell next comynge, every holydaye, to the use of the parysshe, the some of 27 s. and 8 d." Saint Paul's Churchyard was at that time not only a religious center, (for "Paul's Cross" was there, an out-door pulpit from which sermons of more than ordinary importance were preached,) but a worldly center as well, and was the advertised scene of the drawing of a Lottery in 1569. It was a fashionable promenade as late as the beginning of the eighteenth century.

* * *

Probably the most interesting phases of these historical notes are those relating to the changes which have taken place in these burial places, all tending in the direction of the giving way of these abodes of the dead at the demands of the living.

Thus in 1549 certain buildings pertaining to St. Paul's Cathedral were pulled down and "the bones of the dead, couched up in a chanel under the chapel, were conveyed from thence into Finsbury Field, by report of him who paid for the carriage, amounting to more than one thousand cartloads, and there laid on a moorish ground, which in a short time after, being raised by the soilage of the city, was able to bear three windmills." In another case, (early in the nineteenth century,) two churchyards of considerable size were totally annihilated by the encroachment of buildings, and quantities of human remains were used to fill up some old reservoirs in the neighborhood, and several cartloads were taken to grade the approach to the entrance to a church in Bethnal Green. In still another case, as lately as 1879, in the destruction of a graveyard, the human remains were "dug up, sifted, put in chests with charcoal, nailed down, put one on top of another in a brick vault and sealed up forever—or rather till some others in time come to turn them out." For the precedents all point to the certain mutability of the burial places in London.

* * *

Close investigation reveals burial places in most unexpected places in London, so that one who is desirous of showing a proper respect for the abodes of the dead might be prompted to walk everywhere on tip toe and speak in whispers. What has been since 1780 the garden of the Bank of England is an ancient graveyard, (St. Christopher le Stock's). It is alleged that the mould from this ground was removed to a new burial ground in Tottenham Court Road about the middle of the eighteenth century, thereby saving to the newer cemetery the ordinary consecration fee. Somerset House, Strand, includes perhaps three burial places within its site; vaults under the palace chapel, closed for interments in 1777; a cemetery used for the deceased Roman Catholics of Queen Henrietta Maria's household early in the seventeenth century; and possibly a part of the original churchyard of St. Mary le Strand. In a part of the great courtyard in the Tower of London is the churchyard of St. Peter's ad Vincula, which, with the vaults under the church, was used for the interment of distinguished prisoners; and the headless body of many a noble prisoner is buried there. And in Newgate prison is a passage ten feet wide and eighty-five feet long, which has been used for the interment of executed felons.

* * *

But possibly the most curious of all these burial places in unexpected, out-of-the-way localities, are

those which were improvised in 1623 under the following circumstances: Ninety-five persons lost their lives in an accident to the Jesuit Chapel in Blackfriars. The authorities appear to have been dazed by this sudden and excessive demand upon their facilities for disposing of the dead. Furthermore the victims of the accident were undoubtedly foreigners, for the heart of England was Protestant at the time. At all events it appears to have devolved upon the foreign ambassadors to assist in the matter. Twenty bodies were buried upon the spot where the accident occurred. These were of the poorer victims. Fifty or more were buried in two great pits, "dug, one in the forecourt of the French ambassador's house, eighteen feet by twelve feet; the other in the garden behind, twelve feet by eight feet." The sites of these pits are now within the garden of Hundsdon House. Other victims were buried "within the Spanish Ambassador's house in Holborn."

* * *

To illustrate still further the number of burial places in the city, let us consider Long Lane in South London. It begins at St. George the Martyr's, Borough, where there is a churchyard about an acre in extent, converted in 1882 into a public garden. Close by, on the north side, is Wilmott's Building, erected upon the site of a burying ground attached to a Baptist chapel. A short distance further on is the Chapel Graveyard, Collier's Rents, about 620 square yards in extent, dating from 1729. Still further on, and on the opposite side, is Southwark Wesleyan Chapel graveyard, dating from 1808 and about nine hundred square yards in extent. Turning to the north, Nelson street would soon take the visitor to the disused burial ground of Guy's Hospital, about half an acre, and nearly two hundred years old. Next is the Friends' burying ground, a quarter of an acre, established in 1697. It was closed in 1844, but in 1860, when, by the opening of a street, another burying ground belonging to the Society of Friends was demolished, the bodies of the latter were brought here for reinterment, so that this is really two burying grounds in one—or, as might be said, a composite graveyard. Adjoining it is a burying ground, 220 square yards in extent, opened about a century ago, and belonging to a Baptist congregation. And finally there is the churchyard of St. Mary Magdalene's Church, Bermondsey, containing the remains of the ancient cemetery of Bermondsey Abbey. This churchyard was enlarged in 1783, and again in 1810, but is now maintained as a public garden. Yet Long Lane is only about half a mile in length.

L. Viajero.

PARK AND CEMETERY.

THE POINT OF OBSERVATION.

The accompanying illustrations very graphically describe a certain feature of landscape work, what might be stated as a grouping of pictures presented to the observer in a sort of panoramic display from a point of observation, or within a short space, hither or thither, from that point. The point of observation is the controlling point in the development of the landscape picture as compassed from that point. The more varied the views, and the greater number of points from which pictures may be viewed, and their variety and beauty in one landscape, measures the success of the designer.

The views given herewith were furnished by Mr. Sid J. Hare, Superintendent of Forest Hill Cemetery, Kansas City, Mo., and serve to explain the foregoing remarks. They were taken by him within a radius of fifty feet from a central point, and, besides illustrating the "point of observation," also show the development of a small lake, which, as pictured on page 315 of Volume VI, 1896, of PARK AND CEMETERY, was a dreary enough spot. The contrast is indeed an apt practical suggestion in the matter of "before and after" in landscape improvement.

The views were taken one day in September of

last year, and very instructively show the effect of light and shadow, and their importance in a landscape picture. We see the transformation from a light sunlit pond to a shady nook and quiet retreat.



Background.	Locust.	Locust.	Maple.	Willow.
Cyperus Alter.	Egypt. Lotus. Ny. Luteum.	Ny. Devoniensis.	Blue Heron. Acorus Jap. Var.	Typha latifolia, Striped Grass. Caladiums. Acorus Jap. Var. Ny. Zanzibar-pink

NO. 1.—NYMPHÆA LAKE, LOOKING WEST. FOREST HILL CEMETERY, KANSAS CITY, MO.

There have been many interesting developments in improvement in Forest Hill Cemetery, and the efforts put forth by the superintendent, not only in the work of producing attractive results, but also in giving publicity to the means employed and the effects produced, are of great advantage to the growing sentiment in favor of out-door embellishment. The illustrations of Nymphæa Lake given

herewith, compared with the barren outlook of the illustration referred to, in a previous issue, is a veritable object lesson, of which no amount of verbal description would give an adequate idea. And another valuable suggestion is conveyed by a comparison of the "before and after" views, and that is that in such important schemes, where shrubbery and rapidly maturing plants and trees are employed, it takes but a few short years to give perfection to the design. This imparts an added interest and importance to the question of out-door improvement anywhere. Put adapting the question to the smaller cemeteries, such practical examples of results of design and knowledge of final effects, and the comparatively



Silver Maples.	Blue Heron.	Caladium Esculentum and Thalla Divaricata.
Nymphæa Devoniensis.	Nymphæa Dewiana, Zanzibar, Devoniensis, Luteum.	Sagittaria Montevidiennis.
		Nelumbium Speciosum.

NO. 2.—NYMPHÆA LAKE, LOOKING NORTH-EAST FROM POINT WHERE BLUE HERON STANDS IN NO. 1.



short time it takes to create desirable conditions, no community, however limited in numbers, should delay another season the work of improvement. The change in appearances after a little care; the actual transformation, after a few seasons of persistent organized effort, should be an incentive not to be diverted to any other channel by other issues. An attractive cemetery in any place is a sign of the intelligence of the people, and it affords an intense gratification to realize that one can visit the cemetery at will knowing that it will be profitable mentally and physically to do so.

One has only to think seriously for a moment to realize to how great an extent a well-kept cemetery contributes to the general good.

- | | | | |
|------------------------|--------------------|---------------------------|----------------------------|
| Scirpus-lacustris. | Thalia Divaricata. | Nelumbium speciosum. | Eulalia Zebrina. |
| fluviatilis. | Eichornia azurea. | Sagittaria Montevidiensis | |
| Cyperus alternifolius. | Musa. | Nym. odor. Sulphurea. | Acorus Calamus. |
| | | | Nym. Devoniensis in bloom. |

NO. 3.—NYMPHÆA LAKE, LOOKING SOUTH-WEST.

WATER LILIES AND OTHER AQUATIC PLANTS, III.

This is a progressive age, and people are accustomed to see and look for something new and novel, and florists alive to this fact, are using energetic means to gratify the public, and any one interested in flowers will, on receipt of a new catalogue, turn to the novelty pages and scan the list of new things. Amongst them are to be found some aquatic novelties.

I am familiar with the following having given some of them a trial for three years. Amongst Nelumbiums, *N. Pekinensis rubrum*, now offered for the first time in the United States, is the darkest flower amongst them all. It is several shades deeper than *N. rosea*, and equally as free and robust in habit.

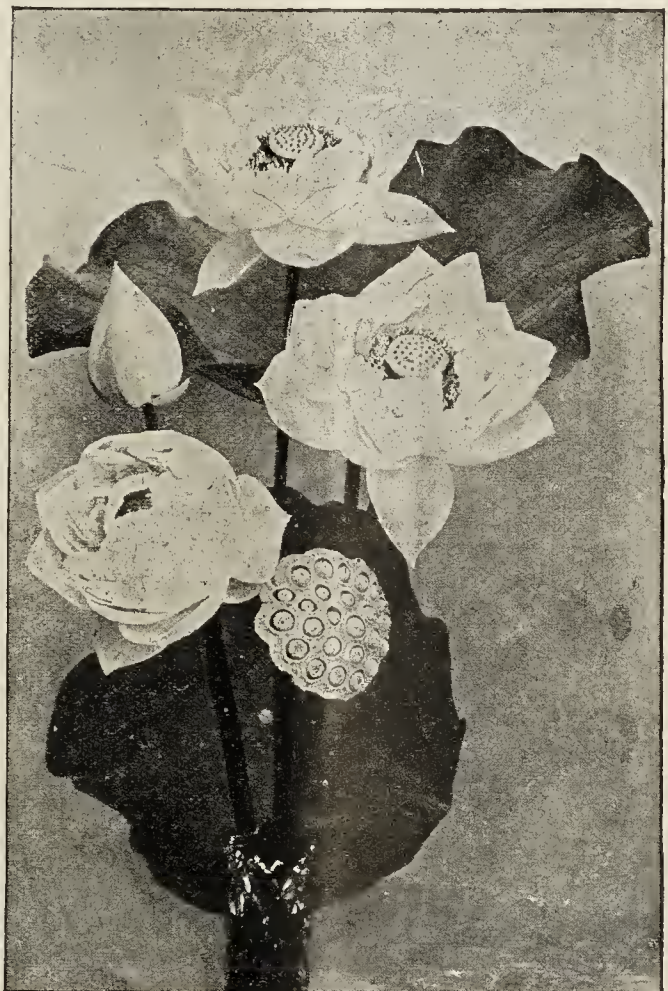
N. Pygmea Alba is a pygmea amongst Nelumbiums. It would make a fine border to a large clump, or a delicate group by itself, or can be grown in a tub, but better planted out. The flowers are white, somewhat like a large tulip, leaves fifteen to eighteen inches high.

N. Shiroman, though not new, is still quite rare, and its bold, massive flowers and giant proportions, render it so superb a variety that it is not out of place in the novelty list. This and *N. Pekinensis rubrum* require no other treatment than is usually given to *N. Speciosum*. Amongst Nymphaeas are to be found three of exceptional merit. These are of American origin, perfectly hardy, and can be grown under such conditions that other hardy varieties flourish. *N. Wm. Falconer* is the most superb water lily known to cultivators. The color, intense bright garnet, dazzling in the sunlight like a ruby, a gem amongst water lilies. Flowers 6 to 7 inches across.

N. James Gurney. A brilliant dark rose of peculiar texture, and distinct.

N. Wm. Doogue. A massive cup-shaped flower, petals very broad, a pleasing shell pink color, sepals royal pink.

Two or three French hybrids, hardy, are also



NELUMBIUMS.

offered for the first time. Amongst them is *N. Marliacea rubra punctata*. Flowers large, of a deep rosy purple.

N. Fulva. Flowers pale yellow and bright red, resembling a flower of the Tulip tree.

N. Robinsoni, while not new, is such an attractive and distinct flower, that it is worthy of special mention. The flowers are bright red, on a deep yellow ground, at a short distance, orange red denotes the color best. It is so unique and so striking as to call forth the remark, "Call it anything else but a water lily." The plant is vigorous and very free flowering, the flowers remaining open until late in the day. Amongst tender varieties *N. Geo. Huster* is the most attractive amongst the dark reds. This is a seedling from that grand variety *N. O'Marana*. The flower is as large as the latter but of more substance, petals do not droop nor open flat as is the case with *N. dentata* and *N. O'Marana*, and the color, brilliant crimson.

N. Wm. Stone is a welcome addition to the class of blue water lilies, though in reality it is not truly blue, being better described as amaranth. Stamens purple, with a rich golden center. It is a rival to the well known *N. Zanzibarensis*, and has the advantage over the latter in that the flower opens early in the day and continues open until evening. *W. Tricker.*

THE AMERICAN LOTUS. (*Nelumbium Luteum*.)

Truly America's greatest floral giant. With its huge golden blossoms 8 inches and its glossy leaves, 12 inches in diameter. This noble aquatic plant easily out measures its stately terrestrial cousin, the southern magnolia. It is purely American. No yellow lotus has ever been found in any other part of the world, and no other variety has been found in America. It is met occasionally most all over the United States, but is most frequent from Kentucky, southward. Great fields of it were under cultivation by the Indians on the middle waters of the Tennessee and Cumberland rivers at the time of settlement by the whites. Old settlers now living in those sections can remember when the Indians, after having been driven out, would come back and gather all the seed they could carry away. The seeds were largely used by them for beads, and also as an article of food under the name "Yonker-pins." They were also called "70 year acorns" because it was thought they required 70 years in which to germinate. It is evident that some of the tribes used the root also as food, while some portion of the plant, known only to the Indian, was used as a medicine. The Indians arrow was modelled almost exactly after the long flower spikes, his canoe was a crude imitation of the petals and his war club was a representation of the large seed pod. So while the sacred lotus of the Nile has had its worshippers, the sacred lotus of the Ganges,

its votaries, the sacred lotus of the Mississippi has had at least its admirers.

In all respects except color it is identical with the Oriental Nelumbiums. When it first opens the petals are a bright lemon yellow, growing paler each day until almost white. It approaches the Egyptian lotus in size but is somewhat more globular. Under cultivation it behaves similar to *N. album grandiflorum* becoming more "dwarfed" and flowering more freely in limited quarters. It submits to more rough handling than any lotus, and a smaller percentage of the roots die when transplanted. Last spring we threw some surplus tubers into a cement tank in which there was no soil. They at once started growth and produced an abundance of foliage, with considerable flowers while floating in the clear water. I have never noticed this of any of the other lotuses. They usually throw out a few puny leaves and then decay.

Yellow is the most rare color in water lilies and this, being the only yellow lotus, holds a place that cannot be filled by a substitute.

Geo. B. Moulder.

GARDEN PLANTS—THEIR GEOGRAPHY, LII.

PERSONALES.

THE LEUCOPHYLLUM, TECOMA AND ACANTHUS ALLIANCE.

Linaria "toad flax" has 130 species in the temperate and sub-tropical parts of the northern hemisphere and South America. Two are natives of the states, and three or four are naturalized. *L. cymbalaria* is hardy under south walls in the middle Delaware valley. *L. vulgaris* is often useful as a covering plant for poor ground. The annuals are pretty but sometimes short lived.

Antirrhinum has 25 species, all found in the Northern hemisphere. American botanics give nearly this number as natives. Many of these are Californian plants which climb much in the way of *Maurandias*. Others are erect annuals. *A. majus* is said to have naturalized sparingly in the Atlantic states. I have never met with it and it is commonly tender, but it does finely in California, and is often grown East as a tender annual.

Paulownia tomentosa or *P. Imperialis* (the doctors differ) is a large monotypic tree from Japan, which sometimes grows to 60 or 70 feet high. It shows a disposition to naturalize in Mercer and Middlesex counties, N. J., and this is about as far north as it can be depended upon to flower, for the buds are formed during autumn and severe winters destroy them. They are very handsome, fragrant, produced in thryses, before the leaves, and are light blue like some of the Pa-

cific coast Penstemons. The tree itself becomes tender where zero frosts are often repeated. In such localities the roots are worth preserving in



Linaria Vulgaris.

Antirrhinum Majus.

L. Reticulata.

the ground with sawdust or tan, when in summer they throw up 8 or 10 feet growths with immense leaves as shown in the engraving.

Penstemon has 75 or 85 species, mostly found from the Rocky mountains westward and south to Mexico, with an outlyer in N. E. Asia. The Pacific species, especially those from the southern coast, are mostly tender, but some rocky mountain, north western and Atlantic species are kept in gardens such

as *P. Torreyi* and its varieties orange scarlet; and *diffusus*, *Richardsonii* and *pubescens* in shades of purple. The Californians and English revel in these beautiful plants and enjoy their many beautiful forms in white, cream color, yellow and orange; lilac, purple and blue; rose, crimson and bright scarlet.



Annual Growth.
Paulownia Imperialis.

Russelia is in 4 or 5 species from Mexico and Central America. *R. juncea* does well in southern California and is often used for summer work

on the Atlantic coast. It has bright red tubular flowers, green rush like drooping branches and small leaves.

Collinsia has 14 species all North American and with two or three exceptions Californian. They are nice annuals with white, bi-colored or multi-colored flowers.

Mimulus "Monkey flower" has 45 or 50 species about half of which are from Western North America, and the rest from the Atlantic States, Asia, Africa and Australia. Six or eight species and a number of garden forms including the musk plant are grown in gardens. It is a curious fact that in Oregon some of the wild musk plants are scentless.

Torenia is a pretty genus of about 20 species natives of the East Indies and other parts of Asia, and of tropical Africa and South America. They are well known plants, of considerable use in the summer garden, but often preferring shade.

Sibthorpia is in six species from the South Western parts of Europe, N. W. Africa, Nepal and



Penstemon Barbatus Var.

Flower of Collinsia bi-color.

South America. *S. Europæa* is found in the south of England and has pretty roundish scalloped leaves. It has a variegated variety and both it and *S. peregrina* are useful in mild climates as low creepers. The flowers are insignificant.

Digitalis "fox glove" has 18 species in Europe, and in Central and Western Asia. There are several perennials in gardens with variously shaded yellow flowers, but none are so showy as the biennial *D. purpurea* and its varieties. A sowing of these should be made every year. They are disposed to naturalize in British Columbia. *D. Thapsi* is a South European perennial with smaller purple flowers.

Ourisia is a genus of 18 species from Tasmania New Zealand and the southernmost Andes. Many are handsome plants with scarlet flowers worthy the attention of Pacific coast gardeners. Only two or three are in cultivation in Europe.

James MacPherson.

PARK NOTES.

In the streets and public places of Paris, France, some 80,000 trees are planted. Of these, approximately, 26,000 are plane trees, 17,000 chestnut and 15,000 elm trees. The balance are sycamores, lindens, maples and sundry other varieties.

* * *

The village of Gaylord, Minn., though "not yet out of its teens," is still ahead of many older cities, in that it has secured for purposes of a public park, a picturesque tract of land of about thirty acres, adjoining the town site and bordering on a lake of several hundred acres. A portion of this tract has been devoted to a speeding track for driving or wheeling, and the balance will be improved as circumstances will permit, after designs by Mr. Frank H. Nutter, Minneapolis, Minn.

* * *

To secure the best plans for the improvement of Washington and Grant Parks at Yonkers, N. Y., the Park commissioners invited competitive plans, which were recently examined and passed upon with the following results: The first premium for Washington Park was awarded to Messrs. Parsons and Pentecost, New York City, and the second to Mr. Chas. N. Lowrie, also of New York. For Grant Park the first premium was given to Mr. H. A. Caparn, of New York City, and the second to Mr. Charles W. Leavitt, Jr., of the same city. Honorable mention was accorded to the plan of Mr. Austin Strong, who by the way is a nephew of Robert Louis Stevenson.

* * *

The exhibit of the Division of Forestry, Department of Agriculture, Washington, has been shipped to Paris, and it promises to be one of the most unique displays ever instituted in an inter-national Exposition. It will take the form of a hall or pagoda, the walls being designed to be used as transparencies illustrating American forest features. The walls are of double construction admitting of an electric lighting scheme within them. The relation between forestry and agriculture will be shown graphically, and protective forests, forests preserving water supply, the management of forests will be fully displayed. The extent of American timber resources will be shown by pictures, and maps will be used to give the forest distribution. Other features will be equally well presented.

* * *

The work of permanent improvement on plans laid down by Mr. Olmsted are soon to be commenced in Audubon park, New Orleans. The recuperative power of nature in the south is rapidly obliterating the effects of the disastrous winter of 1898-99, and the park commissioners are actively at work in the endeavor to make Audubon park one of note in the country. Just now Horticultural Hall is attracting much notice. It contains some of the finest specimens of palms and tropical plants in the country, many of them not yet acquired by the other leading parks. Among these is the *Trichilia palida*, a magnificent tree, with thick, handsome foliage, and bearing a blossom which, though small, fills the entire hall with a delicious odor. The flower is similar in appearance to the ordinary *Olea fragrans* only that this stranger which comes from South America, breathes a perfume many times greater and just as sweet in every respect as the above plant.

* * *

In a recent trip to Topeka, Kans, in the interests of its parks Mr Chas. M. Loring, of Minneapolis, Minn., gave the following interesting experience concerning the park system of that city, and their experience should be decisive argument on the park question anywhere: "When we started to agitate

the park question in Minneapolis the city was still small, and we were told that we didn't need any parks. We held a meeting when we had about 5,000 population for the purpose of agitating the purchase of 20 acres of land for a park. The old fogies said that the young men would ruin the town by such methods. They said the town would never extend beyond Tenth street, and that the park was away outside of where the town would ever grow to. Now I live on Nineteenth street, and the city extends to Fiftieth street, and this first park is in the heart of the city. The result of this opposition sentiment was that when we did succeed in getting an appropriation for parks, they cost a great deal more money than they would have done had we all pulled together in the first place. The work had to be taken up gradually and extended over a period of many years. It was over 20 years from the time we began until the friends of parks finally secured the passage of an act by the legislature which provided for the organization of a park commission for Minneapolis.

* * *

Clinton, Ia., recently established a Park Commission, the first members of which are: Lauren C. Eastman, John A. Nattinger and Halleck W. Seaman. It is proposed to absolutely eliminate partisan politics from the work of the Commission and the members serve without salary and are elected for a term of six years. As is usual in such matters, it requires time and the unremitting efforts of a few public spirited citizens to first awaken a general interest in park improvements. Congress appropriated \$25,000 toward improving the harbor and channel at Clinton, and this work will enable the city to utilize a considerable area of river front low ground for park purposes. Under the proposed plans Clinton will eventually possess the most extensive and best improved river front park in the Mississippi Valley. What is now called Joyce's Park or Eagle Point at the north end of town is a commanding eminence overlooking a broad expanse of river dotted with islands, and it is already famous for its picturesque beauty. This park will be taken over by the city, enlarged and improved by the Park Commission. During the summer season, Clinton is the objective point for a constant stream of excursions by rail and boat, so that when the river front parks are completed, they will add materially to the pleasure of those who journey to Clinton to obtain a view of the Father of Waters.

* * *

The 28th annual report of the Board of Park Commissioners of San Francisco, for the year ending June 30, 1899, with its twenty-one full page colored illustrations of park scenery and special features, gives a very interesting account of the park work of that city and its prospectiveness in that direction. Many valuable improvements have been made in Golden Gate Park, those especially striking being the lake system, which is to be a chain of small lakes, having different characteristic features and treatment, offering a variety of picturesque effects, a matter worthy of consideration for other large parks. Golden Gate Park has been fortunate in gifts designed for special features; Senator Sharon bequeathed \$50,000 for a childrens house, and a unique and beautiful building has been erected; a donation from Mr. William Alvord secured a small lake; Mr. Lick provided \$60,000 for the Scott Key monument; Mr. Sweeney gave the Panorama building, Strawberry Hill; Mr. Huntington with a gift of \$25,000 constructed a beautiful water-fall; and Mr. Claus Spreckels has recently erected a music stand at a cost of \$75,000. This variety of gifts is a suggestive hint as to the field in park work in which public spirited beneficence can display itself. The total area of park lands under the jurisdiction of the board is about 1,165 acres of which Golden Gate park contains 1,040. There are about 25½ miles of park drives and 25 miles of paths and other roadways. The total receipts for the fiscal year were \$251,095.96, and expenditures \$248,051.66.

CEMETERY NOTES.

The report of the 47th annual meeting of Evergreen cemetery, Elizabeth, N. J., showed total receipts amounting to \$26,161.39, and expenditures of \$20,527.21. The deeds for a new lawn section, recently improved, contains a clause providing for perpetual care. Of the old lots over one hundred are now under that system.

* * *

At the annual meeting of the Fernhill Cemetery Co., St. John, N. B., the death of the late president, Mr. J. R. Rucl, was appropriately alluded to. The total receipts were \$6,195.74 and expenditures \$5,632.49, with a bonded indebtedness of \$8,200. There are now 171 lots under perpetual care and the fund amounts to \$16,539.79. New iron entrance gates have been erected.

* * *

At the annual meeting of the Ferncliff Cemetery Association, Springfield, O., reports showed very satisfactory conditions. The total receipts were \$15,065.04; which included sales of lots \$10,027; graves, \$3,426.50; foundations, \$481.04. The expenditures were \$10,177.70; which included pay rolls \$4,954.13; salaries, \$2,430; expenses, 1,433.84. There were 405 interments. There is a permanent fund of \$13,300, and as a commencement for a perpetual care fund there is placed in trust \$3 500.

* * *

At the Annual Meeting of Harmony Grove cemetery, Salem, Mass., held in February, it was reported that 2,940 square feet of lots were sold, all under perpetual care, and that 30 old lots were also endowed. In the way of memorials, 93 headstones were set and 11 monuments erected. Thirteen iron fences and one curbing were removed. The greenhouses furnished 35,681 plants for the cemetery. All lots are now sold under perpetual care. The number of interments last year were 163, making a total in the cemetery to Jan. 1, 1900, 10,098.

* * *

Fountain Park cemetery, Winchester, Ind., is another example of a cemetery in a small town which is a credit to the place through the personal interest of members of the community. Winchester is a town of 3,500. The cemetery grounds of 40 acres, were donated by Gen. A. Stone, 20 years ago, and they are maintained in fine condition. There are 4 miles of graveled roads, two lakes, seven fountains, residence, office and barn, and \$3,000 cash in hand, with no outstanding debts of any kind.

* * *

Mount Greenwood cemetery, Chicago, has issued a circular of suggestions to undertakers in regard to carriage funerals, in which clear directions are given to govern the movement of the hearse and carriages, to facilitate movement and prevent confusion. The hearse stops 50 feet from the lot, the carriages pass the hearse, unload at the lot and drive around section to rear of hearse. The casket is next unloaded when the cortege is in line just as it entered the cemetery ready to take the mourners again to leave the cemetery.

* * *

The recent acquisition of a large additional area by St. Agnes Cemetery, Albany, N. Y., has attracted much attention from the local press. The *Argus* of Albany has recently reprinted a paper previously given in PARK AND CEMETERY written by Mr. B. D. Judson, the superintendent, on "Thoughts on Cemeteries," which offers many valuable suggestions. The president of the *Times-Union* of Albany, Mr. John H. Farrell is a trustee and treasurer of St. Agnes, and recognizes the value

of press influence in the cause of the cemetery, and such examples should be followed everywhere.

* * *

The report of the Marion Cemetery Association, Marion, O., shows a very satisfactory condition of cemetery affairs in so small a city. The total receipts for the year were \$11,464.82, and expenditures \$9,226, leaving a balance of \$2,238.82. The expenditures included the purchase of an additional 7½ acres of land. The endowment fund is now \$17,455.56, and the total available assets, April 9, 1900 amounts to \$34,004.99. During the year \$1,350 was expended in grading and improving. These facts should encourage the smaller cemetery associations to endeavor to do likewise.

* * *

At the annual meeting of Mt. Pleasant cemetery Newark, N. J., reports showed receipts amounting to \$36,299.68, which included lots sold \$7,250, labor \$2,729.54 and interments \$1,354.50. Expenditures were \$37,391.37. The general manager in his report said: "To modernize an old cemetery is a most difficult task, yet in this Mt. Pleasant is well advanced with every prospect of early and final success. Three years ago the removal of all hedges was sought and so gratifying was our success in obtaining consents that all were taken out within one year."

* * *

Some important improvements have been begun in Mount Royal cemetery, Montreal, Canada. The inadequate vault accommodation is to be replaced by a commodious chapel-conservatory combined with vaults. A stone porch gives access to a large conservatory chapel 80 feet by 40 feet and 39 feet high, making it the largest building of its kind in Canada. Cost \$11,000. By the will of the late J. H. K. Molson, \$10,000 was bequeathed to the cemetery in trust for the erection of a cremation plant, but the officials have decided that their charter does not permit its erection in the grounds. It is expected however that the matter can be arranged.

* * *

The annual report of the Prospect Cemetery Association, Vergennes, Vt., a town of less than 2,000 inhabitants shows very satisfactory conditions. The perpetual care fund for which in 1898 \$100 was received, was increased by \$700 in 1899, showing greater interest by lot owners. A memorial gateway was donated and erected last year, the gift of Miss Eliza S. Stevens in memory of her parents, and great improvements in the grounds have been effected. Altogether the association has received \$1,100 for perpetual care, and a sum of \$2,000 as a gift to establish an endowment fund for the care of the cemetery. Prospect cemetery presents an excellent example of a small cemetery made attractive and creditable to the community by the consistent and devoted attention of its trustees.

* * *

The 32nd annual report of Forest Hills cemetery, Boston, Mass., gives details of the affairs of the cemetery to February 1, 1900. The area is now 242 acres having been recently increased by about 30 acres. The Perpetual Care Fund was increased during the year by \$35,319.46, making a total of \$737,839.73. The fund for the permanent care of the cemetery was increased by \$6,551.68 and is now \$53,005.86. Taken altogether the year had been a prosperous one. The total receipts were \$89,480.46, which included: Lot sales, \$33,348; graves \$3,773; Receiving tomb, \$2,409; interments \$6,836; foundations, \$4,533.75; annual care of lots, \$11,123. In the expenditures the labor account called for \$41,836.86; material, \$7,690.47; repairs and improvements, \$3,043.90. The total number of interments for the year were 798 making the total number in the cemetery, 32,134. Monuments erected, 84; headstones, tablets and markers erected, 336; curbing removed, 3; number of lots sold, 88; graves sold, 213; average number of men employed 76.

SELECTED NOTES AND EXTRACTS.

The Russian Olive.

The Russian Olive as a decorative tree is rapidly gaining friends, and it evidently possesses a number of desirable qualities. The following paragraph is a further testimony:

In a late issue there is an item about the Russian Olive, asking some questions about it, and noting some observations of its remarkable endurance and beauty as an ornamental tree. C. S. Harrison, of Nebraska, says it will grow faster than the cottonwood, and it thrives in Dakota, much to his surprise. As Mr Reinish said the Mennonites brought the trees to this country, and I secured a number of the small trees at that time, and have kept a few on hand ever since. Growing from seed is the best way to grow them cheaply, but they do not all produce alike; but they all have the same silvery foliage as they get age, the greatest difference being seen in the production of the seed and the size of it.

The sweet fragrance of the flower is wafted on the winds and can be traced for half a mile, and yet it is not strong or repulsive when confined in a room as is the case with the Tubrose.

About the merit of the wood, there is no case on record as to its uses, but it is hard, fine grained, would work well in fancy finish.

It is one of the rarely beautiful trees little known.—*A. H. Griesa in American Gardening.*

* * *

An Early Flowering Shrub.

Prunus tribola is a handsome early-flowering shrub which might be oftener planted to advantage. In fact, it seems to be little known, though my observation may be at fault on this point. As I have seen it, it is a prettier shrub than the much commoner flowering almond, *Prunus Japonica* (*P. nana*.) The flowers are large, double and a beautiful rose pink. They appear early in the spring, along with the wild violets. The shrub is neat, clean, six feet high and healthy and hardy, so far as I have observed.—*F. A. Waugh, in Gardening.*

* * *

Golden Elder and Purple Hazel.

One of the most effective combinations of hardy foliage trees in the garden can be made by the employment of Golden Elder and Purple Hazel. The only condition needed to make this quite effective is an open situation fully exposed to the sun, so that the full golden leafage may be perfectly developed. If there is the

least shade from over-hanging trees, the Elder then assumes a dull green and is quite ineffective. No plant that I know will grow better under what might be termed unfavorable conditions as to soil; it will grow in any kind, heavy or light, and as to its propagation nothing is easier. Stout cuttings one foot long of the current seasons wood taken off in October, cut square across below a joint, and firmly dibbled into sandy soil, will make nice plants in one year.

Instead of "dotting" the plants here and there in the shrubberies, as is too often the case, mass them together—not less than a dozen—giving them just enough room to make their annual growth. In front of the Elder plant a single row of the Hazel, giving them sufficient room to stand clear of each other. An annual close pruning of both subjects down to within an eye or two of the base will induce a vigorous growth of young shoots every year and larger leaves, which will be more intensely golden than those coming away less vigorously. During the summer, when the shoots are, say two feet long, nip out the point of each; this also emphasizes the coloring. The hazel too, may be served in the same way. This yearly pruning insures a compact growth.—*E. M. in The Garden, London.*

* * *

The Christmas Rose of Old England.

Not a rose at all, but a hellebore, *H. niger*. It is a plant deserving larger recognition than is accorded to it, interesting from association with the past, and from its time and habit of bloom; and beautiful, both in foliage and flower. The Christmas rose flourishes in cold and temperate climates. Its finest bloom is under the snow. Just outside of my window is a clump quite a quarter of a century old. It was first planted in an open, sunny spot, but failing to thrive was removed to this nook, sheltered by buildings on the south and west. Each spring, after removing the old growth, a good dressing of fine manure is applied. In summer heats liberal waterings are given, although the plant receives only the eastern sun. This plant has never been divided, cutting the root being injurious to the parent plant. In snowless winters a cold frame, improvised from the sides of a box, and a glazed sash, prolongs the beauty of the blossoms, by protection from the winds, etc. This plant seems without insect enemies. The best time for planting is the spring.—*From Vick's Magazine for April.*

Pruning and Watering.

Two very important topics are touched upon in the following paragraphs—matters that are not always thoroughly appreciated.

To be able to prune a shrub the operator must know it and all about it—when it blooms, on young or old wood, and so forth; generally speaking the best time is after the shrub is done blooming. Take for an instance the philadelphus: It blooms at a time when the plant is in active growth, making the wood for next season's flowering after blooming. The flowering wood is of little use to the plant, and by removing it light and air are admitted to the developing growth. Late bloomers may be pruned in Spring before the growth commences. A plant of this nature is *Hydrangea paniculata*. Early bloomers should not be touched in the Spring because of the danger in depriving the plant of its flowering wood. Such plants are represented by the forsythias, viburnums and shrubby *loniceras*; all of these, however, and others of their class, should be shaped, not sheared, after the bloom has gone. Roses may be gone over twice a year after blooming. If there be a profusion of young wood, part of the old material may be dispensed with; this will strengthen what is left, and in Spring the previous Summer's growth should be shortened so as to throw strength into the lateral growths on which the flowers are produced.

It has been said that only about ten in a hundred know when and how to water a plant. Perhaps that is placing the average a little too high. Watering is one of the most important items in the work of the plant grower. Too much or too little given to a plant is equally hurtful. Too little is often the case when we see a plant evidently wet on the top of the soil, and near the bottom dust dry. This state of matters is brought about by leaving too little space for water and going over the plants carelessly with can or hose. As a rule, when this happens, the plants do not show the effect by wilting, but ultimately they show it in their starved appearance. Too much water sours the soil and fills the feeding roots, bringing about the same condition. Rules can not be laid down for watering plants, and an expert waterer can only be found in a man who carefully studies the conditions under which plants grow in their native haunts; also the condition of the plant at time of watering, whether newly rooted and potted, or newly shifted, in full vigor of growth, going to rest—sub-aquatics or succulents, drainage, and the constituents, etc., of the soil. These are all to be taken into consideration before intelligent watering can be done.—*Florist's Exchange.*

Park and Cemetery and Landscape Gardening.

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Devoted to the advancement of Art-out of Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Association, etc.

The regular contributors to PARK AND CEMETERY are among the most eminent Landscape Architects, Landscape Gardeners and Horticulturists in the United States, whose practical articles make the journal one of great value to any one identified with landscape work.

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Officials of Parks and Cemeteries are requested to send copies of their reports.

Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

Association of American Cemetery Superintendents.

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GEORGE M. PAINTER, "West Laurel Hill,"
Philadelphia, Vice-President.
H. WILSON ROSS, "Newton,"
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Treasurer.

The Fourteenth Annual Convention will be held at Cleveland, O.

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The next meeting of the Association will be held at Chicago, Ill.

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New York, Vice-president.
CHAS. N. LOWRIE, 156 Fifth ave., New
York, Treasurer.
DOWNING VAUX, Bible House, New
York, Secretary.

Colonel G. B. Brackett once a very prominent citizen of Lee County, Ia., has been given entire charge of the whole horticultural exhibit of the United States at the Paris Exposition.

The trustees of Pine Grove Cemetery, Manchester, N. H., have elected Mr. John H. Erskine to succeed Mr. Byron A. Stearns as superintendent. Mr. Stearns

resigned the position after twenty years of service. Mr. Erskine has been assistant superintendent for the last eight years.

Ellwanger & Barry, of Rochester, N. Y., were recently awarded a contract for furnishing a large order of nursery stock for a gentleman's place on the Hudson. Over 30,000 trees, shrubs and plants are contained in the order. This firm has also received large orders from the Pan-American Exposition Company at Buffalo, and, so far, have shipped there ten car-loads of trees, shrubs, etc.

Cyclopedia of American Horticulture, comprising suggestions for cultivation of Horticultural plants. Descriptions of the species of fruits, vegetables, flowers and ornamental plants sold in the United States and Canada, together with geographical and biographical sketches. By L. H. Bailey, Prof. of Horticulture in Cornell University. Assisted by Wilhelm Miller, and many expert cultivators and botanists. Illustrated with over two thousand original engravings. In four volumes. Vol. 1, A-D., New York; the MacMillan Company, 66 Fifth avenue. Price \$5.00.

As a whole the first volume of this work is a credit to the editor, and a source of congratulation to the public. Territorially and geographically, America presents conditions more varied than any other country in the universe. Each locality has characteristic flora, and the united whole is distinguishably American. The cyclopedia is a review of the status of horticulture in all America, and of all Americans from Alaska to Florida, and from Maine to California. It would be difficult, if indeed it were possible, to exhaustively treat American horticulture in this work, but the general ideas can and are detailed in an encyclopedic manner.

Much of the text is not, nor cannot be new, as referring to ideas or descriptions, but the latest information is embodied in a new arrangement of the general lines upon which it has been elaborated. The method adopted is novel and refreshing, and yet, in general, terse, lucid and comprehensive. Topics are treated alphabetically. The genera of plants are disposed in alphabetic order, but the species in botanical sequence. Unfortunately, the botany follows no single one of the recently formed codes of rules governing nomenclature.

Numerous writers contribute more or less valuable articles. True, horticulture is inseparable from botany, indeed botany is the science upon which it is founded, and this volume pays a tribute of recognition to the fact. Among the contributors are botanists, horticulturists, landscape architects, experimenters and men especially fitted to write authoritatively upon the topics discussed. An encyclopedic is a census, an inventory, a statement of facts that enables one to view the happenings of the past, to be critically reviewed with a view to direct the methods and knowledge of the future in the channels and by means that trend toward material progress. In this sense this work creditably fulfills the position it assumes.

Though there are notable exceptions, the contributions are valuable as giving an intelligent review of practice by spec-

ialists of long experience in matters of vital horticultural import. A noteworthy feature is the treatment of the status and possibilities of horticulture in each state, and such as those of Arizona and California are at once concise expositions of the salient factors in the evolution, practice, the possibilities and probabilities of the science, and display an intimate and accurate knowledge of the states, their relative horticultural position with foreign countries, and their natural and most valuable resources.

In the cultivation of plants, especially hardy and tender ornamental trees and shrubs the treatment is good.

All plants in American commerce and a few others likely to be soon included are given. In discussing the hardiness of trees and shrubs, we could wish that "north" and "south" were better defined in more exact delimitations. In hardy trees and shrubs Prof. Sargent describes the Firs (*Abies*) with his usual mastery of the subject. Most of the others are written by Mr. Alfred Rehder in a praiseworthy, full and accurate manner, and as a single contributor his writings are original and exceptionally trustworthy as evidenced in the several species of *Actinidia* usually referred, but erroneously so, to Planchon as authority, whereas here the correct authority Miquel is cited.

We cannot always agree with the editors writings, as for instance, *Canna flaccida* described as "sturdy." This is our common southern species and its specific name aptly describes its habit in contradistinction to that attributed to it by the editor.

In recording local pursuits, it frequently gives interesting data.

The illustrations are numerous: the selection of matter to be illustrated is good, but most of the illustrations do not represent technical features as often or as well as could be wished.

The work is distinctively and decidedly American, no precedent has been followed; it is clearly on a plan different from that of Miller, Johnson or Nicholson, though not always advantageously so; it is an American work, admirably adapted to American use. With the numerous contributions from various sources, the volume cannot be pronounced authoritative throughout; beside the discrepancies always apt to occur in such a vast assemblage of technical descriptions, and from which a first edition, and therefore this volume is not nor cannot be expected to be free, there are a number of authors who do not display any special nor distinctly meritorious qualifications to treat the topic they elaborate. However, such orders as the *Dichodaceae* *Filici*, and *Aceraceae* are of exceptional merit. As a whole the work can be commended, and should be on the reference shelf of every gardener and horticulturist.

Books, Reports, Etc., Received.

From Wildwood Cemetery Co., Williamsport, Pa., illustrations of new office, chapel and receiving vault and views in cemetery. The special features of Wildwood will be illustrated at an early date.

Annual report, Forest Hills cemetery, Boston, Mass. 1900. The report is finely illustrated with half tones showing particularly beautiful planting effects.

Books, Reports, Etc. Received
(Continued.)

How to beautify Carthage, Mo. A circular giving suggestions, list of committees and their territory, and list of premiums offered to school children. W. J. Stevens, general committeeman.

Report of the Park Commissioners of Essex County, N. J., 1898-1899. The report contains a number of half tones showing by many of them the contrasts "before and after." Such illustrations are both suggestive and impressive.

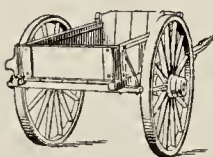
Report upon the laying out of Ridge Lawn cemetery, Watertown, Mass., the plan prepared by Arthur F. Gray was adopted by the Board.

Boston Common. Paper read by Edward J. Parker, president, Quincy Boulevard and Park Association, Quincy, Ill., at the annual meeting of the American Park and Out-door Art Association, Detroit, Mich.

Transactions of the Massachusetts Horticultural Society for the year 1899. Part 1.

Twenty-eighth annual report of the Board of Park Commissioners of San Francisco for the year ending June 30, 1899. Beautifully illustrated in colors.

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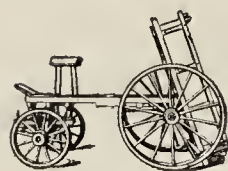


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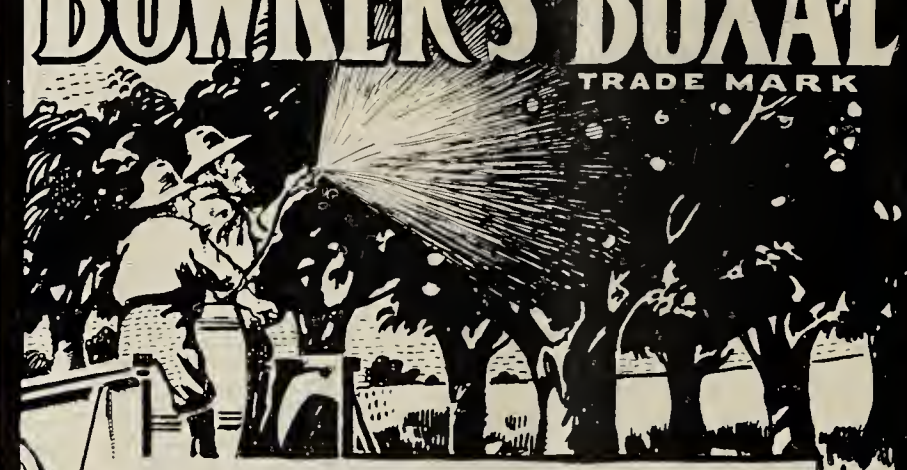
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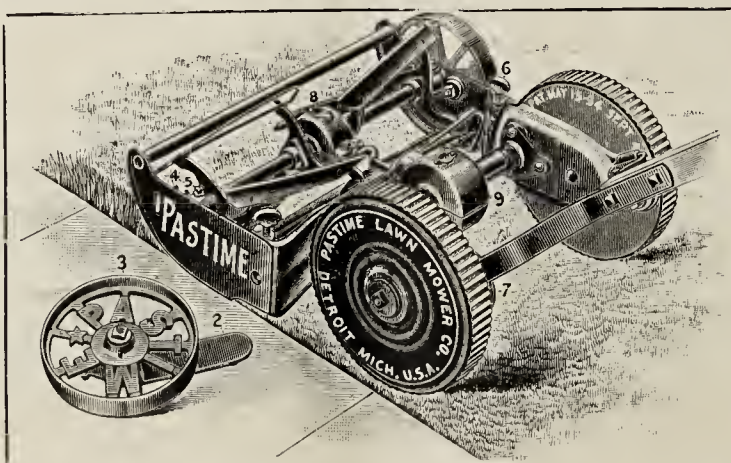
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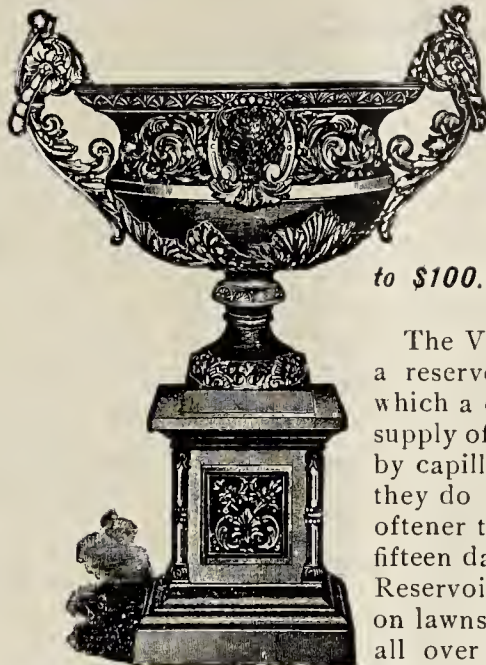
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PALATKA, FLA, Feb. 1st, 1900.

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Gentlemen:—It is now about ten years since I first took the Agency for you in this place, and during that time have sold several thousand dollars worth of monuments and head-stones, and have yet to hear the first complaint of poor material or workmanship from any of my customers. You have always treated me liberal, and my commissions have been paid promptly and in full. I have had dealings with other firms in this line, but can truthfully say that I have been treated better by you than any of them, and your work and material is so much better that I have no trouble to make a sale.

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Books, Reports, Etc., Received.
(Continued.)

Report of the annual meeting of the Franklin Cemetery Association, Franklin, Pa. Mr. Cyrus D. Phipps was again elected superintendent, a position he has held for 16 years.

From E. R. Roberts, photographs of Point Defiance Park, Tacoma, Wash.

Cornell University Agricultural Experiment Station. Bulletin 177. Spraying notes. By L. H. Bailey and others.

Bulletin 179. Introduction to Field Experiments with Fertilizers. By A. L. Knisely.

Bulletin 180. The Prevention of Peach Leaf Curl. By W. A. Murrill.

Maine Agricultural Experiment Station. Bulletin No. 57. Experiments with Potatoes.

University of Nebraska Experiment Station, Lincoln, Neb. Bulletin 62. Art III. The Feeding value of Sorghum as shown by Chemical Analysis. By R. W. Thatcher.

Harvard University. Lawrence Scientific School. Announcement of Program of courses in Landscape Architecture and the Summer School.

Trade Catalogues, Etc.

Andorra Nurseries, Philadelphia. Wm. Warner Harper, Prop. Illustrated price list of trees, shrubs, roses and fruit for 1900. Also handsome illustrated pamphlet of a few specialties.

Hiram T. Jones, Union County Nurseries, Elizabeth, N. J. Descriptive and finely illustrated pamphlet of Hardy stock for pleasure grounds. Also folder with colored illustration of *Rubus dumetorum*, a hardy handsome trailer.

Bowker Chemical Company, Boston, Mass., catalogue of Bowker's Germino-Insecticides.

Some information about the root "Sang" or ginseng and cultural directions. By Harlan P. Kelsey, Tremont Building, Boston, Mass. 2nd. edition. Price 10c. Also special surplus offers of trees, shrubs and plants, Spring, 1900.

TREE TUBS.



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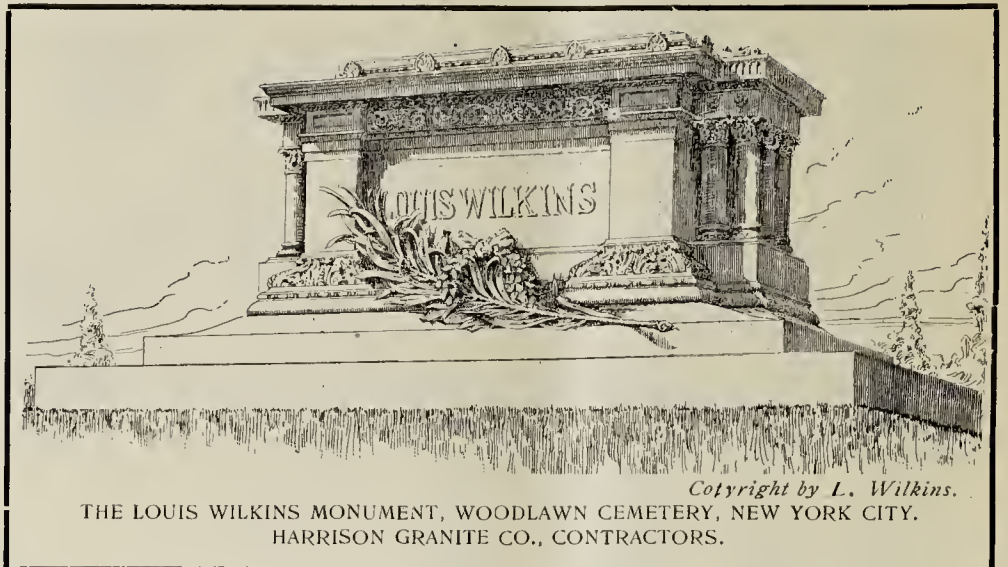
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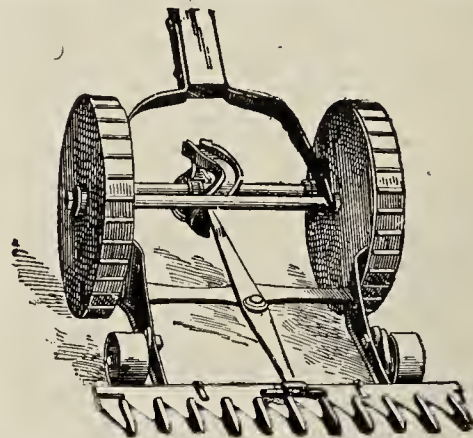
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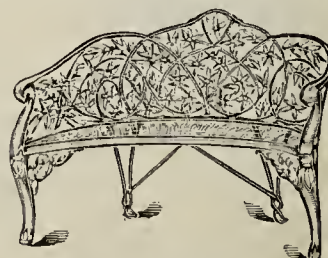
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VOL. X.

Chicago, May, 1900.

NO. 3.

CONTENTS.

EDITORIAL.—The Chicago Convention of the American Park and Out-door Art Association—Further Influences of Arbor Day—Work for the Women's Club—Need of Improvement in our Smaller Cities—A good Example to Follow—Improve the Vacant Places	53, 54
*The Camperdown Elm—Popular Maples	55
Salix Babylonica. (The Weeping Willow).	56
*The Improvement of Railway Station Grounds.	57
Refinement in Plants.—Plant Patterns Among the Graves.	60
*Municipal Art.	61
Programme of Chicago Convention of Park and Out-door Art Associations	63
*Improvement Associations	64
Seasonable Suggestions.	65
Notes, Chiefly Historical on London Burial Places	66
*Office, Chapel and Receiving Vault, Wildwood Cemetery, Williamsport, Pa	68
*Magnolia Soulangiana.	69
*Garden Plants—Their Geography, LIII.	69
Park Notes.	71
Cemetery Notes.	72
Correspondence.	73
Selected Notes and Extracts.	74
Reviews of Books, Reports, Etc.	75

**Illustrated.*

AMERICAN PARK AND OUT-DOOR ART ASSOCIATION

The convention of the American Park and Out-door Art Association to be held at the Art Institute, Chicago, June 5-7, promises to be a meeting of exceptional interest and sure to be followed by practical results, if we may judge from the after effects of previous conventions. The association while young in years has attracted wide-spread attention and is yearly growing in membership. It is an organization which includes in its membership public spirited citizens, professional and lay, who may become impressed with the vast benefits that may be derived, socially and commercially, from improved conditions in the out-of-door appearances of both city and country, and its proceedings and activities are instructive and suggestive. The main features of the programme will be found in another column, and the arrangements are in the hands of well known citizens of Chicago in conjunction with the parks authorities, and it is quite safe to predict that the meeting, under the auspices attending its proceedings, will mark a great stride in the cause of municipal and out-door improvement generally.

FURTHER INFLUENCES OF ARBOR DAY

Arbor Day, which is now a thing of the past in many states for this year, has been observed in many localities in a much broader sense than that pertaining to the simple fact of tree planting. It has come to mean much more, and where we have so much

bleakness and barrenness in out-door appearances in so many places, the term is being expanded to include out-door improvement generally. Instituted as an incentive to schoolchildren, the wisdom of its originator partook of the prophetic, and while in the schools it is becoming a day of broad educational import and a developer of latent taste and ambition in a line of endeavor of untold possibilities in relation to the public good, it has already overflowed the school into the and Arbor Day in the family is now a factor tending to urge a policy of improvement about the home, which is emphasized as each recurring Arbor Day rolls round. It has, however, also impressed its importance upon the public press, than which there is no more powerful friend in a good cause. Beginning with the cause of forestry, to which Arbor Day has lent itself with much force, and which the press has taken up with marked results, it is now pushing the question of the improvement of school grounds with much energy and it may be relied on to achieve results of lasting benefit. There can be nothing more discouraging to the ambitious youthful mind than the mean and miserably bleak schoolhouse which generally confronts him as he wanders towards his daily tasks. The scholar would have revolted long ago but for his "untutored mind;" now however his eyes are being opened and the work of improvement must be a question of the immediate future.

WORK FOR THE WOMEN'S CLUBS

The work of the Women's Clubs of the country, where the subjects of out-door art and municipal improvement has been included in their activities, has been marked by unvarying success, which might have been expected from the characteristic energy and devotion of the sex to a worthy cause. It has been exemplified quite recently in the influence exercised at Washington by delegates from Minnesota in connection with the proposed national park, as well as in practical reforms rapidly maturing in relation to out-of-door improvements in other parts of the country. It is gratifying to note in this connection, that at the convention of the General Federation of Women's Clubs to be held in Milwaukee, Wis., in June, two of the important papers are directly related to the subject: Mrs. Zulime Tatt Garland, sculptor, will deliver an illustrated lecture on "The Possibilities of Sculpture in our Cities and Towns," and Dr. George Kriehn, Ph. D., will lecture on "Municipal Art in America," which will also be illustrated. The cause of

out-of-door improvement will unquestionably be an attractive subject for the Woman's Club as its benefits are better comprehended.

*NEED OF
IMPROVEMENT
IN OUR
SMALLER
CITIES*

Need of out-door improvement is a fact made more apparent each year of the continually increasing development of the intelligence and material resources of the country. The contrast between the progressive larger city and its many contiguous smaller ones is too great to be satisfactory to an intelligent observer, who has come to realize the advantages, moral and physical, to be obtained by out-door cleanliness and well arranged surroundings. It is to be admitted however that the field of labor is a large one, and when one is forced to recognize how far behind the average town is in this direction, the work is appalling in its magnitude. A town of some 7,500 inhabitants, recently visited, presents a fair average picture of the conditions prevailing throughout the country. There was a so-called park consisting of some four blocks in area; it was crowded with a heterogeneous assortment of trees, and while there were a number of iron seats for the comfort of the visitors, there was not a shrub to check the monotony and the paths were cut out by the pedestrians hither and thither as the bent of a particular direction prevailed. There was not a single feature except some shade to recommend it or suggest it to be the town park. The place showed signs of considerable wealth, there were many pretentious brick and stone residences; the streets were wide, but there was not a single evidence of taste as ordered by the elementary rules of landscape art, in the layout of any of the residential lots that came under observation. There were of course plenty of shrubs, plenty of flowers, but all the beauty to which these might have been chief contributors was absent for the lack of organized effort and taste in the direction of town improvement.

* * *

The above is a rough sketch of the conditions which prevail in the majority of our country towns, conditions which might readily be fundamentally changed by individual enthusiasm combined with concerted action. The results to be secured are so directly conducive to higher values from a commercial aspect, that it can be made to appeal to every citizen if approached on the side most in accord with his personal interests. This matter of out-door improvement after all is more particularly a question of time rather than that of expense. Compared with the results achieved the money cost is comparatively small, and where there are citizens

willing to contribute some means and much time, the work is at once minimized. Clean streets, sightly vacant lots, well arranged door yards, well kept lawns, and the air of gentility which this all imparts raises a town out of the ordinary, gives it a reputation far and wide, and marvellously increases its own possibilities of development.

*A GOOD
EXAMPLE
TO FOLLOW*

An inspiration of the *Kansas City Times* to offer a premium of \$250 to the occupant of the Kansas City residence which has the prettiest lawn of twenty-five feet or over on July 4, 1900—flowers, shrubbery, parterres, etc., all to be taken into consideration, was the spark which has set aflame the desire to make Kansas City beautiful. It has had the immediate effect of prompting many other premiums to incite efforts in out-door improvement by residents of the city, and has moved the Board of Education to begin active work in the planting and sodding of school grounds. Where it will end it is difficult to foretell, as once such public desire for improvement is thoroughly aroused, and the incentive is maintained, new avenues will offer opportunities for continued action. The effect of the *Times'* effort has been so far reaching among the citizens of Kansas City, that it presents a potent suggestion for similar effort elsewhere.

*IMPROVE THE
VACANT
PLACES*

The appearance of the grounds about public buildings and the general lack of care observable about all the vacant places owned by town and village officials, is a sad commentary on the short-sightedness of such officials. There is nothing so detrimental to the aspect of a town or village as this neglect of an essential feature of public improvement, an improvement which should be in the minds of all authorities entrusted with the welfare of the community. The time has come when this care of public places should occupy a very prominent position in the category of duties imposed upon public officers by virtue of their office. It is coming to be recognized that out-door improvement is an essential factor in the health and wealth capacity of the community. Pleasant surroundings, clean and interesting public buildings and grounds, well arranged school yards, and in fact all that may tend to make out-door life attractive and inspiring, reacts on the citizen, infuses in him public spirit, higher moral tendencies, and makes him an enthusiastic member of the community, patriotic, law abiding and what is more, progressive. For to be a really good citizen in these days he must be progressive, and it is the duty of all public officialdom to help to make him so.

THE CAMPERDOWN ELM.

Some fifty or more years ago two or three weeping elms were brought to the United States from Scotland which were called Camperdown elms and Scampstown elms. One of these names appears in the Ottawa Arboretum catalogue as *Ulmus glabra Scampstoniensis* and is possibly the true thing, but neither this nor the Camperdown can be found in the British Arboretum lists so both may be included under *Ulmus glabra* and its varieties. Of the two the Camperdown is more loose and erratic in growth.

In other respects there seems to be little to distinguish them; nurserymen in this country do not do

than many of the elms—and when sufficiently tall is well adapted to the formation of natural arbors—the Scampstown variety especially growing as even as an umbrella.

POPULAR MAPLES.

The maple family is a deservedly popular one, for there is no other family of trees drawn on so much as this one is for shade and ornamental purposes. No doubt their ease of growth helps along their popularity, for a tree must not be an expensive one that is to be generally planted. Fashion is a little capricious in regard to trees, as it is in



CAMPERDOWN ELM, OAKWOOD CEMETERY, SYRACUSE, N. Y.

it, and there are far less likely things than to find specimens in Arboretums under one or both or several names.

The Camperdown variety is commonly sold as a low growing weeping tree whose height increases but little above the point of "working." This is almost always lower than it should be in this country, because it is most convenient to "work" low. The stocks (stems) would be better three times as high as is common.

In northern regions the Camperdown elm often becomes very beautiful, as may be seen by our engraving of a specimen in Oakwood cemetery, Syracuse, N. Y.

It is hardy as far north as Oubasis, has fine deep green handsome foliage—less liable to caterpillars

other matters. Some ten years ago the Sugar maple was the principal tree demanded of all the maples. Before that the Sycamore maple had been the favorite. Then the Norway's turn came, and today it is the favorite, though it has by no means displaced the sugar, which is still very much planted. There is again signs of returning affection for the European sycamore. It is really a good tree, is of quick growth, has clean, smooth bark and large leaves.

The only valid objection to it, and it is not a great one, is, that the seeds do not drop at once when ripe, but hang on the better part of winter. The common silver maple or white maple, used to be a favorite tree for the city, but its very large growth when of some age unfitted it for the purpose,

and to-day it is not so much used as it formerly was. But it is a fine tree for wide avenues or for pasture lots or elsewhere where its free growth will not be undesirable. The red maple is the one usually found in low situations and which is so much admired because of the fine display its red flowers make in early spring, and the brilliant hue its foliage assumes in the fall. It is a slow growing tree, but makes a large and handsome one in time.

There are many other medium sized trees and shrubs, but the tree kinds are embraced in those named. The sugar maple is planted as much for its fine autumn effect as for its shade. The bronze yellow of its foliage in the closing days of autumn is most beautiful. In this respect it much surpasses the popular favorite, the Norway, which changes color but little at all, keeping green up to the time its leaves fall from the tree. This tree is more round headed than any of the others, and has larger leaves also, excepting the sycamore. While some trees are particular as to season of planting, the maple is not; doing well set either in spring or fall, and fairly well in almost any situation.

Joseph Meehan.

SALIX BABYLONICA. (*The Weeping Willow.*)

This is one of the most beautiful of the salix or willow family, which botanically, is an extensive one. The numerous varieties are principally natives of the temperate northern hemisphere, and although one variety grows nearer the north pole than any other tree, the most beautiful specimens are of oriental origin.

The graceful *Babylonica* or Weeping Willow represents a strain native to the banks of the river Euphrates, which has been much adopted in Europe and America, and as the lithe branches have the peculiarity of drooping, or weeping, the tree has come to be associated with mourning, an emblem of grief. The Chinese and Japanese seem to be fond of the tree and represent it in their pictures as a growing, mortuary symbol. The willows of Babylon are forever associated with the children of Israel, mourning in captivity.

There is no deciduous tree so popular for cemetery planting in all southern sections, but as it is not hardy below the Middle States, is cultivated as a shrub in large boxes, or tubs, in the north. Very hardy, as the term applies to shrubs or trees that endure 40 degrees of latitude without injury, the weeping willow may safely be trusted to withstand intense cold, under shelter, without heat, keeping it dry and dormant. Early in the spring time the willow buds swell and the yellowish catkins droop all along the wand-like branches, and the linear lanceolate leaves soon follow, clothing the drooping

branches with light bright green, with a lovely silvery under-lining.

Few trees or shrubs are more graceful, more delicately suggestive, and it is seldom the weeping willow is planted elsewhere than in cemeteries. As the foliage starts early in the spring and is late in yielding to the effect of frost, as a lovely fresh green tree, it is not surpassed by any that are not evergreen.

Willows of all kinds propagate readily from cuttings, and in one season make no mean growth. From the very first lithe, graceful shoots, on up to the tree size, the weeping willow is unique and striking. Some botanists class them as semi-aquatic, and in truth, "the willow by the water side" is common, and perhaps low, moist grounds and banks of streams are best suited to the *Osiers* used in wicker work; but the writer has seen too many of *Babylonica* in cemeteries far removed from water ways to doubt that the culture will be successful wherever attempted. Water can be freely given, and the bright green leaves that make of each slender branch a perfectly beautiful wreath, will freshen and brighten with effect as good as that of blooming wreaths.

From one to four years they are handsome tub plants. After that age the trunk and roots will probably have out-grown the dimensions of a tub. Whether planted in the ground or in tubs, the trunk should be staked until it has assumed a firm, upright position. Otherwise the tendency is to droop to one side; but the slender branches may be easily trained to fall evenly all around, or as is sometimes done for effect, the trunk may be perfectly straight and the branches all trained in one fountain like fall on one side. When the trees are turned in for winter rest and protection, every branch can be cut off and new ones will put forth in the spring.

Apropos of the weeping willow and the beautiful family it represents there has been discovered in Texas three varieties of flowering willow. The main characteristics of lanceolate leaves, long slender branches and thrifty growth are theirs, in common with other willows, but on the terminus of the branches there are racemes of lovely tubular shaped flowers. *Chilopsis Linearis* or flowering willow with lavender flowers, tube shaped, lobed and beautifully crimped around the corolla with two bright gold marks, was the first discovered. *Alba* and *Lilacina* in pure white and in lilac and white, have since been discovered. They have all made free growth, as reported from Georgia, Tennessee, Mississippi and Louisiana, in private gardens, arboreta and public gardens. It is an entirely new class of flowering shrubs. *G. T. Drennan.*

THE IMPROVEMENT OF RAILWAY STATION
 GROUNDS.

A strong point in favor of permanent hardy material for Railway planting was incidentally made by Mr. Paul Huebner, Landscape Gardener of the Phila. and Reading R. R., in a paper read before the Phila. Florist's Club last fall. In speaking of the relative expense of growing and of buying the tender bedding plants used in the decorative planting of his road, he says that if bought they would cost at least \$5,000, while he is able to produce them for less than half that amount, (and here one questions if he includes in his estimate the interest on the money invested by his Company in expensive propagating plants,) and adds that the difference is even more marked when the hardy stock grown

solved the problem of how to manage this work economically. In order to show this to those interested I will give a brief account of the landscape work which is now a permanent feature of the Reading Railway system.

"In the first place it was decided that the most economical plan would be for the corporation to have its own outfit, consisting of a nursery for hardy trees, shrubs and plants, and propagating houses for soft wooded, flowering and foliage plants for Summer decorations, the necessary tools, etc., in connection with same and also help to run it. After the first year the cost of maintenance is comparatively small, the main item being for wages; but that is a small item in comparison to the expense if plants had to be bought in the open market.

"For instance, I plant every season about a hundred thousand flowering and foliage plants about as follows: 16,000 geraniums, 5,000 cannas, 18,000 alternantheras,



PLATE I.

in their nursery is considered, as its expense is covered by the first cost. The following are extracts:

ECONOMICAL LANDSCAPING FOR RAILROAD
 CORPORATIONS.

"The desirability of having the grounds around railroad stations embellished with grass plots, trees and shrubbery, and livened up with foliage and flowering plants during the Summer, is generally acknowledged to be of prime importance as an advertisement for the railroad as well as an educative influence to the public at large. Most railroad officials look at the question from the economic standpoint. They do not question the value of attractive stations along their lines, provided it does not cost too much. The matter of cost at first sight frightens a great many from entering into this improvement: but when more closely looked into it is found that there are ways of accomplishing the desired result without a large outlay. The corporation which I have had the honor to serve for a great many years in the capacity of landscape gardener has, I think,

2,000 scarlet sage, 2,000 Begonia Vernon and varieties, 2,000 ageratum, 15,000 echeverias, 40,000 coleus, 3,000 abutilon, 2,000 acalyphas, 1,000 Centaurea candidissima, 4,000 miscellaneous, such as celosias, amaranthus, petunias, zinnias, vincas, etc.

"These would cost at least \$5,000 to buy, and the whole cost of producing same is less than half that sum. To the \$5,000 would have to be added the cost of planting and maintaining, so that the economy of having an outfit is apparent. This view is still further enhanced when we consider the hardy stock in the nursery, which is all included in the first cost.

"A special feature of my work, which I think important and one which any corporation might imitate to advantage, is the planting of privet hedges as a live snow fence for the protection of lines from snowdrifts. These hedges are neat, effective and permanent, and last, but not least, they are inexpensive. The privet I consider one of the finest hedge plants for this latitude. It is almost evergreen, has no insect or fungoid enemies,

is a quick grower and does not winter kill. I have heard of some instances in other localities where it is said to have suffered during the past very severe winter of 1898-99; but with me, I am glad to be able to say positively that I have not lost a plant.

"In regard to shrubbery I use a dozen or more different subjects, such as deutzias, forsythias, spiræas, altheas, weigeliass, dogwoods, etc. One of the very best is the *Hydrangea paniculata grandiflora*. I use this quite largely and find it very ornamental and lasting. Its flowers are so showy and persistent that its season is continued much longer than others, and I value it most highly. Evergreens I consider very effective indeed; the reason I have not used them more largely so far is on account of their being of slower growth; but as my stock increases I will be able to make effective use of them. They are especially useful for the Winter landscape.

"In soft wooded plants for Summer effect I have already given a short list of the species I find most useful for my purpose.

"As to the varieties: Among geraniums I recommend *La Pilot* for scarlet; it is one of the most telling crimson scarlets today under favorable conditions. Although a French variety it does very well with me if planted early in the season. If planted late it does not do so well. For pink I use *Mme. Thibaud*, the best bloomer under all circumstances; it is a dark pink shade but very effective. For a light pink I use *Glorieuse*, a dwarf grower and very fine bloomer. For salmon, *Mrs. E. G. Hill*, also a constant bloomer. For white, *Mme. Bazaine*; I think it is the best white yet. For edging, of course, I

scaffeltii, *Golden Bedder*, *Queen Victoria*, *Nero*, *Golden Beauty* and *Mrs. Baird*. One of the most valuable bedding plants is *Begonia Vernon*, and I must say a good word for *Erfordi*. These varieties can stand the bright sun and are very showy.

"As to crotons, here I hesitate. They are certainly among the most beautiful plants for summer outdoor decoration; but to keep the plants over winter they require a good deal more heat than my other bedding plants, and consequently I am unable to use them as much as I would like to."

The illustrations accompanying our extracts from Mr. Huebner's paper evidence such skillful ability to make things grow that one laments its being wasted on the ephemeral effects of a season. It also seems a pity that the influence of such an outlay should not be in the direction of a better taste in decorative planting. It is so good in itself that we wish for it a higher plane of effort. There is such a fine opportunity for good results in educating public taste, and it is going to waste—yes it is worse than that, for thousands whose attention is directed to the advantages of decorative planting will get the impression that such tender material in such formal beds are the thing worth striving for. They will quite lose sight of the fact that large, pictorial effect is greater than detail; that the basis of true landscape effect is, and always must be, permanent, hardy material. In the hands of an artist, the

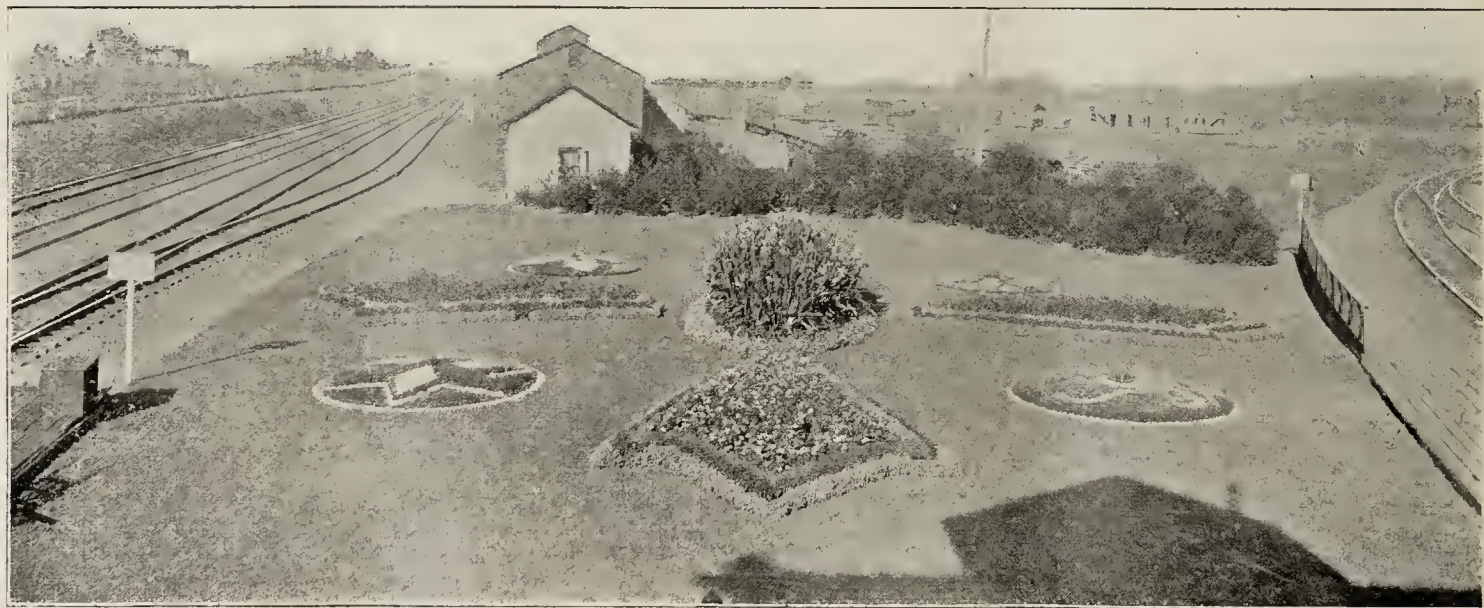


PLATE 2.

use the *Mme. Salleroi*. Among cannas, when you come down to the fine point, *Mme. Crozy* has not been beat yet in its color. For scarlet, *Beaute de Poitevine* is one of the finest. If *Columbia* were only a better keeper over Winter it would be preferred. I like *Philadelphia*, but it is a little weak; for yellow, *Florence Vaughan* and *Golden Border*, the latter a dwarf-growing variety excellent for borders; for dark foliage, *Egandale*, crimson, and *Mme. Avelian*, dark orange. In *coleus* I use *Ver-*

planting of a great Railway corporation should be a series of object lessons for the masses.

To refer to the illustrations in detail: In No. 1, would not appropriately grouped shrubs, a few vines to climb to the roof line, some dwarf Evergreens, flowering perennials, and lilies, narcissi and other bulbs at the edges of the shrubbery borders and groups be just as attractive during summer as the

stiff carpet beds? They would also be pleasing in spring and fall when those beds are a blank; and not without agreeable effects even in winter when white with snow, sparkling with frost or ice, or

beyond, adjoining the stone cliff, where the vines on the face of the rocky wall would mingle with the added foliage; then there would be a vista of beauty with the light iron bridge as a distant point of



PLATE 3.

showing ornamental fruits that cling nearly all winter, or brightly colored bark and evergreen needles. Such planting would certainly give more variety, and their season extends throughout the twelve months of the year instead of being limited to the short time when frost allows tender bedding plants to live out of doors.

Again, in No. 2: is not the back ground of hardy shrubs the most pleasing feature of the planting? And its appearance would be greatly improved by a little more variety in the sorts used or by less uniformity in pruning.

No. 3, shows a natural setting that might be developed by appropriate planting into a charmingly naturalistic landscape. The natural features fairly cry out to be utilized, and a picture for passing tourists might be easily created that would be a far reaching lesson in the artistic beauty of landscape planting. Imagine the stone walls or cliffs draped with vines—all wild; the large trees that are scattered about, massed on the side towards the unattractive street in the background, and shrubs massed in front of them to bring the body of foliage down to the lawn, from which all of the carpet beds are removed; tall shrubs grouped around the flag pole, as well as a vine, (perhaps a *Wistaria*) to climb it; the shrubby plantation in front of the cottage enlarged by additional shrubs or small trees just

interest to which all of the planting would lead.

The two trees that should be moved are too good to be sacrificed lightly, and if they are too large to be transplanted, they might remain for some years at least, while new ones are growing to screen the unsightly street from the view of passing travelers.

F. C. S.

It is high time that the great question of the preservation of our bird life received more attention, and unquestionably the Women's Clubs of the country, not to say of the world, could do no grander work than exercise their powers to prevent the ruthless slaughter now carried on largely in the interests of woman's adornment. The number of birds annually killed to supply the demand for feathers and ornaments is simply appalling in its magnitude, some investigator having placed the number at 300,000,000, with strong probabilities of the accuracy of the claim. And the pity of it is that scarcely any member of the bird family is now spared. Even the coarser birds of the sea coasts, which were once safe from commercial greed are in demand, and the wholesale manner in which they are all sacrificed necessarily leads to the early extinction of many species. Laws are being enacted quite freely to help the birds, but it needs an overwhelming public sentiment to protect our feathered friends.

REFINEMENT IN PLANTS.

The man who does not love a tree nor shrub is the same as he who has no music in his soul. The greater refinement, the greater love for nature, not because men look back to wildness with regret but because they long for that freedom and openness which nature represents. But to enjoy nature is one thing, to express her is another. When a man comes to select and place the kind of shrub which he shall plant for his enjoyment, he poses no longer as a nature lover but exhibits to the world whether he is an artist, not an artist or a barbarian.

There are good shrubs and there are bad shrubs. There are refined shrubs and coarse shrubs. It is in the discrimination and use that makes the man of taste or tastelessness. No man of means will surround himself in his home with uncouth objects but he will place before his eye in close proximity to that home a coarse ugly bush, good in its proper position but there out of place. Shrubs in proximity to refinement and close to the eye must be refined. Finish seems to express the necessary quality better than any other word. They must look well throughout the entire year. They must be compact, not coarse and open, usually not of large stature, of continuous good color, with the delicacy of the *Spiræa* without the ostentation and eccentricity of the Weeping Mulberry.

Yet coarse shrubs have their place. A dogwood at a distance from the eye is beautiful, but its coarseness must melt in distance. There in turn a finer shrub would seem out of place. Its detail is lost and so the plant itself disappears. It seems to lack as well the fostering care of the dwelling which its delicacy demands.

But what plants are refined and what not refined? There are few shrubs highly refined. The spiræas particularly the *Van Houttei* and *Thunbergii* are thoroughly so. The *Daphne cneorum* and *Iberis sempervirens* are delicate little shrubs which are always beautiful. Some of the Azaleas and the Evergreen Thorn are such. The Tree Pæony, the American Holly, the *Andromeda*s and *Box* and *Kerria* are of the first quality. Among the vines, are the Boston Ivy and *Clematis* in various species. Among large plants, the *Rhododendron* is thoroughly refined as well as the Sweet Bay, both also more or less formal.

A few steps removed are all the good old shrubs which every yard and garden has, the lilac, syringas and deutzias, the hydrangeas and privets and Japanese Quince and strange to say the Rose. Very coarse are the elders, the dogwoods and hop-tree, the dwarf horse chestnut and silver bell. Last among shrubs are those which are half trees like the hazels and filberts, which have a place only in

thickets and tangled woods where no one wants to go except to get away from conventionality and care.

The barbarous in taste like monstrosities, purple and golden leaved things, weeping trees and upright freaks, but these, happily, are cared for less and less, although in excessive formality, they have their place.

To choose the proper shrub for its proper place means taste and study, the same care and thought that is given to a beautiful costume or a well furnished room. It brings enjoyment as do these but it also gives a breath from old mother-earth with her life and vigor and restfulness.

A. Phelps Wyman.

PLANT PATTERNS AMONG THE GRAVES.

There remains enough of the planting season of 1900 to give the gardener time to stop and think about the use of bedding-plants in Cemeteries.

What kind of character ought a cemetery to have? We have grown out of the pagan notions of making burying-grounds gloomy and depressing with cypress and "dismal yew," as we are growing out of black plumes and the hideous and hopeless paraphernalia of funerals conducted by Christians in a spirit of semi-barbarism. We are using white to honor the dead, and planting deciduous trees and bushes in their resting-places. Now, nothing is more genial and cheering than deciduous vegetation. Its very death every fall is but the token of a more vigorous resurrection in the spring: and perhaps this idea underlies the instinct of a people who have not dread, but hope of something after death, and so set those who are not lost but gone before, among lilacs and violets and oaks. Thus the spirit of the cemetery is hopeful, and even joyous.

Yet it should be full of a certain solemnity. This sentiment has nought to do with the doleful dumps of liver complaint, nor the despair of the unfortunate, but is akin to the impressiveness of a forest, or a mountain range, or even a noble building. It is a sentiment only to be felt by healthy minds. It is this sentiment that made Dr. Weir Mitchell write (in *Characteristics*) of a grove of great trees with graves among them as the most fit and impressive cemetery he had ever seen.

This is the sentiment with which bedding-plants are at variance. They are mostly beautiful when not spoiled by combination, but always showy, usually pretentious, and often merely tawdry. When they are made into pattern-beds they are as crudely incongruous among the tombs as a display of fireworks. They are artificial, garish, unrestful, naive, and many other things that do not comport with the dignity and beauty of a burying-ground,

When they are made into crosses, or anchors, or crescents, or suchlike Christian or heathen emblems for the decoration of detached graves, they come perilously near the absurd; and did not the care and cost spent on them so often reveal the tender memories of the living, they would seem something like a desecration of the resting-places of the dead. Why these devices should be reasonable enough in stone, and smug and trifling in alternantheras or sedums is not quite clear. Perhaps it is because after all, plants were never made to be clipped into patterns.

Let those who have graveyards or single graves to plant get their attention off the short list of artificial bedding-plants, and look with cleared eyes on the lengthy array of perennials, annuals and green flowering bushes in and out of the nursery-men's catalogues. They are for whoever wishes to use them. They are beautiful and various, and as easy to use tastefully as bedding plants are difficult, and will give their own grace and charm and appropriateness to a place that coleus and fretwork patterns would only vulgarise. *H. A. Caparn.*

MUNICIPAL ART.*

Walter Crane, who has done so much to improve and beautify the City of London says; "The great want in modern cities is trees. I should plant trees wherever possible along the street. Frequent open places should be arranged with fountains and seats, and these again surrounded with trees. The streets should be made as interesting as possible by records of local historical events; by mural tablets and monuments."

With money we can build a house which is architecturally a gem of art, but after all it is not an ideal home unless situated on a green lawn framed with shrubs and trees. Cottages with neat lawns, clumps of shrubbery and fine trees (which we see in many cities) attract more attention than houses which cost many thousands of dollars having none of these beautiful surroundings. The majority of people love trees and appreciate them. How strongly this was emphasized at the funeral of the late M. Alphand—"The greatest funeral since Victor Hugo's", was what all Paris said, when it followed the remains of him who had changed the narrow streets to grand boulevards, closed courts, which were the haunts of criminals, and turned them into open squares; made beautiful parks of deserted stone quarries and waste places, and playgrounds where once stood grim monuments of tyranny. He was called the "King of Paris," and

in his reign of thirty-seven years he made Paris the most beautiful city in the world, and he died its most beloved citizen.

Alexander H. Shepard will always be remembered for having rescued Washington from the disgraceful condition in which it was when he began his work of making it what it is today, the most beautiful of our American cities.

As a rule municipal improvements are instigated by a few public spirited citizens, who give their time and talents to creating a public sentiment favorable to expending money for beautifying the city, and for parks and needed breathing places. Sometimes years of disappointment meet them, but the people are being educated and are learning that parks and open squares are as necessary as sewers and other sanitary improvements. Then comes the organization of Improvement Associations, in which the ladies as a rule are the active workers; an Act authorizing the creation of a Park Commission, with power to purchase land for parks is enacted; it is voted on by the people; passed by a small majority, and in a few years the public finds itself in possession of a system of parks which they would not sell for ten times what it cost, and citizens wonder why they opposed an improvement which has proven such a blessing to the poor and a source of enjoyment to all. There is no municipal property of which the masses are so proud, and which is so much enjoyed as the parks. Cities without a generous park system are so far behind those which have, that it is a wonder they have any increase in population.

Neighborhood Improvement Associations do more for making a city or village uniformly beautiful than any other organization. One neighborhood stimulates another, and creates a spirit of emulation which results in a city or village with every section uniformly attractive. Improvement Associations are invaluable educators; they stimulate the residents of a neighborhood to learn, and by interchanging views, and by united action, the people accomplish more in one year than by working singly for a life time.

The City of Detroit, Michigan, is one of the most attractive and cleanest cities in the country, and this is largely the result of work of neighborhood Improvement Associations. They provide for keeping vacant lots from growing crops of weeds, for mowing the grass borders next the walks, and for the removal of all objectionable matter from the streets. They have almost abolished the filthy practice of expectorating on the side walks and in the street cars.

The money paid by a city for parks is a good

*Extracts from a lecture delivered in Topeka, Kans., by Mr. Charles M. Loring of Minneapolis.

investment. The great landscape architect, Frederick Law Olmsted, says: "That a well arranged and



BEFORE PLANTING.—Residence of Prof. Samuel B. Green, St. Anthony Park, Minn., 1891.

attractive park adds greatly to the value of real estate in its neighborhood is well known."

Nearly all European nations have preserved large areas for parks, squares and commons, and these are among the most attractive features of their capitol cities. London has a larger number of small squares than any other city I can name, and more are being added at enormous cost. It is generally conceded that these squares and parks add to the health, comfort and pleasure of the people. I was told by the agent of the great estate of the Duke of Bedford that houses facing the small squares paid an extra rental of twenty-five dollars per year as a park tax, and that there were always several applicants whenever one was vacant.

In many of our American cities the citizens have come to realize that they must provide these health and pleasure resorts for the rapidly increasing population. Boston, New York, Buffalo, Detroit, and other places have large parks where the masses

enjoy their holidays, and many small places where children and invalids can secure a breath of fresh air. But these breathing places are not as numerous as they should be, especially in the more densely populated sections. There has been a movement inaugurated in Chicago recently for securing these much needed open squares, and London and New York have expended enormous sums of money for small areas, but at their large cost they have proven good investments, as the sanitary conditions and morals of the neighborhoods have been much improved and the death rate greatly decreased.

Prof. Ely in the article dealing with pauperism, and what can be done about it, says: "We are getting more and more to value preventative measures, and among the most valuable of these are playgrounds. A playground is to boys and girls simply a chance to grow; a city without them keeps its growing children in straight-jackets. Some become morally deformed by the treatment; all others are deprived of a fair chance."

One of the most important movements for improving the condition of working men and women is that adopted by several large manufacturing institutions in this country and Europe. Notably Krupp at Essen, Germany; Lever Bros., Port Sunlight, England; The National Cash Register Co., Dayton, Ohio, and following their example a large number of smaller institutions. In fact through



AFTER PLANTING.—Residence of Prof. Samuel B. Green, St. Anthony Park, Minn., 1898.

the influence of such organizations as the American Park and Outdoor Art Association, the Brooklyn Tree Planting and Fountain Association, and the rapidly increasing number of Improvement Associations, our cities and villages are being greatly

improved, and as a result there is a decrease of crime, less disease and happier lives.

New England villages are as a rule, beautiful in their neat white houses, nicely kept lawns and grand trees, which form arches over their streets. There are in the West, villages with neatly graded and well shaded streets, and in such places will always be found people of culture and refinement, but the majority of our western villages are without a tree or shrub to screen the rows of untidy houses, or to shade the dusty streets. In such towns children grow up with no conception of the beauties of nature. In some of our prairie towns trees are so scarce that children seldom see them, and they grow to manhood and womanhood with blunted sensibilities and without knowledge of one of God's greatest gifts to man.

Strangely enough nearly everyone thinks he knows how to plant a tree, but in nothing so simple is so much ignorance exhibited, and disappointment follows the first trial of most amateurs, but through Improvement Associations the people are being educated in this branch of horticulture, and there are schools in which nature study is given a prominent place. Among the most noted of these are the public schools of Carthage, Missouri. The children are given practical lessons in planting, and they are taken by their teachers to study the trees in the forest. If we educate the children and youth in this study the next generation will be saved from the disappointments resulting from ignorance that befell the present. More trees have died in our cities through lack of care than are now growing. Over planting is nearly as injudicious as not planting at all, as man must have sunshine and air. There are but few varieties of trees that should be planted nearer than forty feet apart.

In closing, I wish to advise you to encourage the Park Commissioners, or your Improvement Associations in their good work; give them authority to plant and care for the trees on your streets, and do not permit the political demagogues to make you believe you cannot afford to pay an annual tax of from fifty cents to fifty dollars for the maintenance of breathing places for your children.

In beautifying your homes and making them more attractive, your children will be healthier and happier, and their memories of home will be a joy through life. Plant trees on your streets, and your property will become more valuable and your neighbors more refined; beautify your city and thousands will visit it because of its attractiveness, many of whom will purchase homes, and remain with you.

Mr. Loring used about 125 slides of views, including scenes in many cities showing residence streets, before and after planting; back yards in Minnesota towns; the same after coming under the influence of the improvements associations. Reasons for planting the wrong way, and the right way: Fences, some of them covered with objectionable advertisements, factory lawns, views of small parks, and foreign views.

THE FOURTH ANNUAL CONVENTION OF THE AMERICAN PARK AND OUT-DOOR ART ASSOCIATION, CHICAGO, JUNE 57.

PRELIMINARY PROGRAMME.

The annual convention of the American Park and Out-door Art Association is to assemble at the Art Institute, Chicago, Ill., on June 5, 6, 7, 1900. As a sufficient attendance cannot be guaranteed to secure special railroad rates, each member should make the best terms he can with local agents. The Auditorium Annex hotel has been selected as the official head-quarters of the association, where rates will range from \$1.50 to \$4.00 per day.

The program will provide for papers and discussions at the morning sessions of Tuesday, Wednesday and Thursday, to which all interested are invited; stereopticon lectures will be given on certain evenings to which the public will be specially invited; and visits to the park systems in the afternoons. On Friday there will be an excursion to the drainage canal, or other places can be visited. A banquet will also be tendered to the association during its sessions.

PAPERS AND DISCUSSIONS.

Mrs. Edwin D. Mead of the Twentieth Century Club of Boston will prepare a paper upon "Municipal Improvement," and Mr. Albert Kelsey, President of the Architectural League of America, will give an address upon the same subject.

A paper prepared by Mrs. Cyrus H. McCormick of Lake Forest, Ill., upon "Landscape Gardens," will be presented.

Dr. Albert Shaw, editor of *The American Review of Reviews*, will present a paper upon some phase of outdoor art relating to our national growth.

Mr. William R. Smith, Director of the Botanic Gardens at Washington, D. C., will write upon a subject relating to the arrangement and grouping of plants about architectural structures.

Mr. William M. R. French, Director of the Chicago Art Institute, will present an illustrated paper upon "Composition," giving particular attention to the proper distribution of buildings, of artificial structures and of foliage about such structures.

Mr. J. H. Patterson and Mr. Edwin L. Shuey of Dayton, O., have consented to lead in the presentation of work that has been done in this and other countries toward making more attractive the surroundings of factory buildings and employes' homes. To this meeting the general public will be specially invited.

Mr. William Ordway Partridge of New York City will present a paper upon the proper setting of statuary in public places.

Mr. J. Frank Foster, Superintendent of the South Park system in Chicago, will present a paper upon park roads, in which he will call particular attention to their maintenance and administration.

The Rev. J. A. Rondthaler of Chicago will present a paper upon the influence of public parks upon the morality of a community.

Mr. S. M. Millard of Highland Park, Ill., will present a paper upon a subject connected with outdoor art.

COMMITTEE REPORTS.

Mr. Frederick Law Olmsted, Jr., of Brookline, Mass., will present a committee report on "Advertising Bill Boards."

Prof. William J. Beal of Michigan, a report upon "Prizes for Designs."

Dr. Wm. W. Folwell of Minneapolis, a report upon "Park Census," and

Mr. C. C. Laney will report for the committee appointed in connection with the work of the Pan-American Exposition.

One of the most instructive and interesting features of the meeting is to be an exhibit of photographs showing the good and bad treatment of various subjects connected with out-door art and the artist's conception of beauty in various objects in landscape.

IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

THE NECESSITY FOR IMPROVING HOME GROUNDS.

Before any work can be taken hold of in earnest, in a way that insures success, there must be a realization of its advisability or necessity. That the spirit shall be willing is of vital importance in the accomplishment of most undertakings. But argument to prove the necessity for decorative planting around dwellings would seem superfluous—to say nothing of proof of the necessity for a wider knowledge of what constitutes good planting. On every side the eyes are offended by door yards littered with all manner of unsightly if not actually offensive objects, as well as by barren door yards where life goes on in full view of an entire neighborhood to the direct result of a dulled sense of modesty in children and youth, and a general and pitiful hardening in both youth and adults of a sense of what home life should be. Such homes are not home-like, and without that subtle quality, there is no home—nothing but a place to stay.

In the light of these undeniable facts, restricted as their evidence is to no particular quarter but cropping out in one form or another in expected and in unexpected places, one questions if there is a more tangibly necessary work to be found than bettering the every day surroundings of the people. Indeed, it seems reasonable to conclude that the smaller the grounds and the means, the greater the need for thought and care in designing exterior decorations.

Every door yard may be made to yield results that an artist might choose as the subject for a painting, yet how infrequently is there any evidence of design, of purpose, in the arrangement of the trees and shrubs around dwellings. The meagre, unsatisfactory and meaningless results often noted where planting has been attempted is in a measure indicated by Fig 1 in the April notes of this department.

Inside of homes it is different. Most housewives know, for instance, that a fireplace is the natural,

central idea of a house or of a room, and that other things should be arranged in relation to it; that walls, floors and ceilings bear a certain relation to each other and that, in consequence, carpets should be darker than walls and ceilings lighter than either if a restful balance is to be preserved, etc., etc. The household goods are distributed with a very definite knowledge of what is desirable, and there is a good sound reason for the placing of every article.

No sooner, however, is the outside of the door reached when reasons, if not reason, take flight. It must be so, for plants of all kinds and sizes are scattered about as though dropped by chance. The result being, that after a few years good views are obliterated and unsightly spots exposed by well grown but badly placed plants.

There are certain parts of the home grounds that should be sheltered from public view. It is



EFFECTIVE MASSED FOLIAGE.

both seemly and convenient for the residents to have the partial shelter and seclusion that carefully planned planting alone can satisfactorily furnish; and it is equally agreeable to neighbors and to the passing public to have certain parts of the grounds so screened.

It is quite feasible to so group shrubbery that unpleasant views shall be shut off from one's own or from neighboring windows; to throw out a pretty, protecting, skirmish line of shrubs along the exposed side of a walk or path to outbuildings; or to make a division of growing greenery between the front and the rear parts of the garden—a division that melts into the ornamental on one side and into the practical on the other. In short the garment of verdure that we speak of as ornamental planting

may be varied to meet the exigencies of any situation. The important thing is a realization of its necessity. At present, too often the house "goes bare" or is provided with a badly-fitting, poorly-fashioned dress suggestive of the old-clothes man.

After making sure of well-proportioned masses of foliage that are effective as a whole, as suggested in our April notes, it is perfectly legitimate to select material for its composition that, while suited to the conditions, shall supply a succession of bloom through spring, summer and early fall, charming autumn color schemes, and even pleasing winter effects. Robinson says: "all hardy plants will be found to have the best effect when planted in an informal manner—not higgledy-piggledy; that is the reverse of Nature's arrangement, but in bold groups and broad colonies with some stragglers detached from the principal groups" and again, "always choose for the conspicuous groups plants that remain in flower for a considerable time, and subordinate those whose blooming period is short." These general rules hold good for small grounds where individual, specimen plants take the place of "groups."

Our illustration shows a fine effect of massed foliage in one of the glades that Mr. Simonds has so successfully evolved in Graceland cemetery, Chicago.

F. C. S.

SEASONABLE SUGGESTIONS.

What is known as creeping Jenny, also moneywort, *Lysimachia nummularia*, is a pretty basket plant, but a nasty weed when in a garden or other place where it is not wanted. It spreads, roots, and soon overruns all bounds.

Where there are large trees which it is desired to transplant it greatly conduces to the safety of the operation to root prune them a season in advance. Dig a trench around the trees now, severing any large roots met with. Refill the trench. Then next fall or the following spring transplant them. Where the large roots were cut, there will be numerous small ones, which adds to the safety of the operation.

In many parts of the country the common white pine is attacked by a white insect, not unlike the well known greenhouse pest, mealy bug. It soon spreads, and if not destroyed will kill the tree. Use kerosene emulsion for its destruction.

Mulchings of short grass are excellent for newly planted trees and shrubs, but it is not well to use it after the first year, unless very light. A continuous mulch entices the roots to the surface, which is not desirable. A dust mulch, from continuous cultivation, is preferable.

Among perennial plants are kinds to select to have continuation of flower one after the other from spring till fall. Visit some large collection and note the sorts to procure in autumn, to plant for next season.

As soon as rhododendrons and azaleas have done blooming, take a pair of scissors and cut off all the old flower heads. If not done they produce seeds, which besides being of no use, sap the strength of the plant. When seeds are cut off at once, the new growth is much superior.

It is a sad sight to see many arbor-vitæ and other trees in public gardens devastated by the bag-worm, so-called because the woven bag in which it lives is carried with it. When at work its head appears from the top of its bag; and in a short space of time it will clear a branch of its foliage. It dearly loves arbor-vitæ, though it will attack other trees as well. This pest must be hand-picked and destroyed, as sprayings cannot reach it through its bag.

If chrysanthemums have not yet been planted out for fall blooming, set them at once. Many of the large flowered ones are hardy as well as the pompones. Maud Dean and Gloriosum do well treated as hardy perennials. Mrs. Murdock is another good hardy variety.

As June roses go out of flower, a slight pruning back encourages fresh growth, which often gives some flowers late in the season. What are known as the hybrid perpetual class come under this head. The latter part of the name, perpetual, is somewhat of a misnomer, as to themselves they bloom but once.

Privet hedges, now so much in use, will be the better for a clipping before the month of June has passed. Pruning when growth is vigorous greatly aids bushiness, besides the desirability of a neat appearance.

Gloire de Dijon, a climbing tea rose, is perfectly hardy in the latitude of Philadelphia. Many porches there have this rose attached to them, where it blooms from June till November. A good plant set out now would be well established by fall. It blooms from the shoots made the previous season.

The spraying of trees has become an important part of gardening work. Numerous blights and insect pests abound among trees and shrubs. Fungi pests are to be subdued by Bordeaux mixture, eating insects by Paris green and scale and similar ones by kerosene mixtures. These enemies should be closely watched for. Sprayings not only clean the trees, but experiments prove that they grow the better for its use, even where the pests do not exist. When the larch leafs out in early spring, there is

no tree or shrub equals it in the lovely green of its foliage. Plant larches in early fall. If left till spring it often results in failure as the buds start early, and a larch won't live if moved after growth commences.

Lilacs have been blooming. Make a note that you want for your collection the one known as *Syringa oblata*. It is much like the common one, though a distinct species, but it flowers a week before any other one. Another good one is *rubra insignis*, certainly one of the best of the common sorts.

It is a great mistake to water trees in dry times by pouring water on the surface of the ground. This forms a crust and the soil loses moisture faster than before. Form a hollow, pouring water into it and filling in with loose soil when the water has well soaked away. This system is not practicable with flower beds. But after they are watered, stir the surface up the next day, keeping it loose. Loose soil holds water much longer than when it is hard and compact.

The hardy Orange, *Limonia trifoliata*, is most beautiful when in flower, which occurs quite early in May. The large white flowers are abundantly produced, though not sweet scented. Oranges of small size follow, but are too bitter to be eaten. It is hardy as far north as Long Island, may be further.

In the Middle States coleus are planted out toward the close of May, geraniums and more hardy bedders a few weeks earlier. The weather is too unreliable to trust the plants out earlier. Water lilies are set out when coleus are. Shrub magnolias which are getting too large for the situations they occupy take not unkindly to the knife. Prune them right after flowering. Not only does it keep them bushy and in shape, but it extends the flowering period in spring, as the shoots made after late prunings produce flower buds which do not open as soon as others. And these late buds often escape the late frosts which occasionally catch the earlier ones.

Flowering peaches in crimson, pink and white sorts are among the most admired of early flowering shrubs. These should be well pruned as soon as flowering is over. Also keep in mind that, as with the fruiting peach, borers attack them and must be looked for and destroyed.

The propagation of shrubs by amateurs is both interesting and pleasurable. June is the chief month for layering. Many shrubs will root from a branch bent down and buried—the top above ground, of course, but one and all root better if a slight slit be made at a joint with a knife.

Joseph Mechan.

NOTES, CHIEFLY HISTORICAL, ON LONDON BURIAL PLACES, II.

Next to engage our attention after a consideration of the suggestion made in our first paper, that in a very literal sense, London is one vast, overcrowded burial place, is the interesting nomenclature of the subject. A churchyard for example, is not exactly synonymous with a graveyard, though it may have been in every case a burial place. A churchyard is literally the yard belonging to a church. It is therefore subject to the control of the rector or clergyman of the church to which it belongs. A graveyard may be parochial or non-parochial, dependent upon whether or not attached to a parish church. If parochial, it is subject to the laws of the parish. In our researches we come across the term "Pardon Churchyard." This implied a place where in times long past executed persons and suicides were interred. The term "poor grounds" implied graveyards, (often parochial or part of the parish churchyard,) where bodies could be interred at a trifling cost or entirely at the expense of the parish. The term "private burial places" may be applied to such as belong to a particular person, or to such as were established by individuals as a means of private speculation. The latter became in London, as we shall hereafter see, subject to especial abuses.

* * *

Churchyards have a history which it might be interesting to note briefly in passing. The Romans preserved the right of erecting tombs in their country residences though very stringent laws prohibited their burying the dead within city walls, except in the case of certain classes of privileged persons. But when it was found that while it mattered little where a tomb was set up so long as the interment was without the walls, the custom of erecting tombs in the country was tending to diminish the area of land available for cultivation, sepulchres were no longer allowed in arable fields and private grounds. Very early in the history of Christianity in England the grounds in the neighborhood of the church were used for burial purposes. The south side of the church became the favorite place. Originally it was customary to bury only still-born infants, felons and suicides on the north side of the building. Later the custom arose of burying in or under the church,—at first in the porch, but afterwards as near as might be to the altar and even directly under it. Hence the erection of crypts and vaults. Some vaults in London churches were private property. Others again appear to have been owned by the church but provided for a certain class of burials. As for example, there is a "Doctors'

Vault" is St. Bride's Church, Fleet street; a "Rectors' Vault" at St. Clement Danes; and, most curious of all, because its purpose is not at all apparent,—a "Bishop's Vault" in St. Saviour's, Southwark.

* * *

Another curiosity of nomenclature is the term "Pest Field" as applied within the present century to burial grounds in which interments were still being made. This name we would think was too unpleasantly associated with the history of vital statistics in London to make it desirable for persons to apply it to grounds in which they had the deepest of all interests next to that of their own homes. These grounds originated of course in times when London was visited by the plague at frequent intervals, for a period extending over ten centuries beginning in 664. The most awful of all these visitations and probably the last was that of 1665 and the account given of the disposition of the dead at that time is so terrible that the name pest field would naturally suggest the horrors of the plague and repel people from the spot which bears it. But this seems not to have been the case in London, where there is more than one indication that a lack of reverent regard for the dead and the place of their sepulture is a popular characteristic.

* * *

Further illustrative of this is the retention of the name "Bun Hill" as a local designation. Though its origin in "Bone Hill" is very apparent, that it denotes a place of the deposit of human bones,—in other words, a burying ground, seems in no way extraordinary to the Londoners. They might on the other hand regard the designation of the same place as a "bone yard" as coarse slang, as indeed it is. There was a Deadman's place among the London streets, so named because of its proximity to a burial ground, and it was only a few years ago that a more attractive name was given to it.

* * *

Closely akin to the manner in which the burial places have been crowded into the area which now makes up the city of London of which mention was made in our previous paper, is the manner in which the burial places have themselves been crowded with human bodies. It seems impossible for the mind to conceive all that is implied in the statistics which are furnished upon this subject in cases where the recorded statistics must fall far short of the actual facts. The result has been that the widest difference has existed between the rural churchyards of England and the burial places of London. The former have produced reflections of the most exalted and reverent type. The latter have been repulsive in the extreme. Gray's thoughts in a Lon-

don burying ground could never have taken the form that could have been expressed in poetry. And we wonder at the courage of the Londoners of past ages who faced death daily knowing that after death they would be disposed of where no one would desire to visit their last resting places. Where in fact, if any one had such a desire, (and our observations in London burial places have convinced us that what is regarded as a feeling inherent in the human race, has through the gross neglect of their graveyards been suppressed in the Londoners,) he could not feel sure in every case that such a desire was possible of gratification. For the system of leased tombs which we note in Spanish-American countries, has not been unknown to London. And even where perpetual burial has been bargained for, that part of the bargain has been in many cases violated.

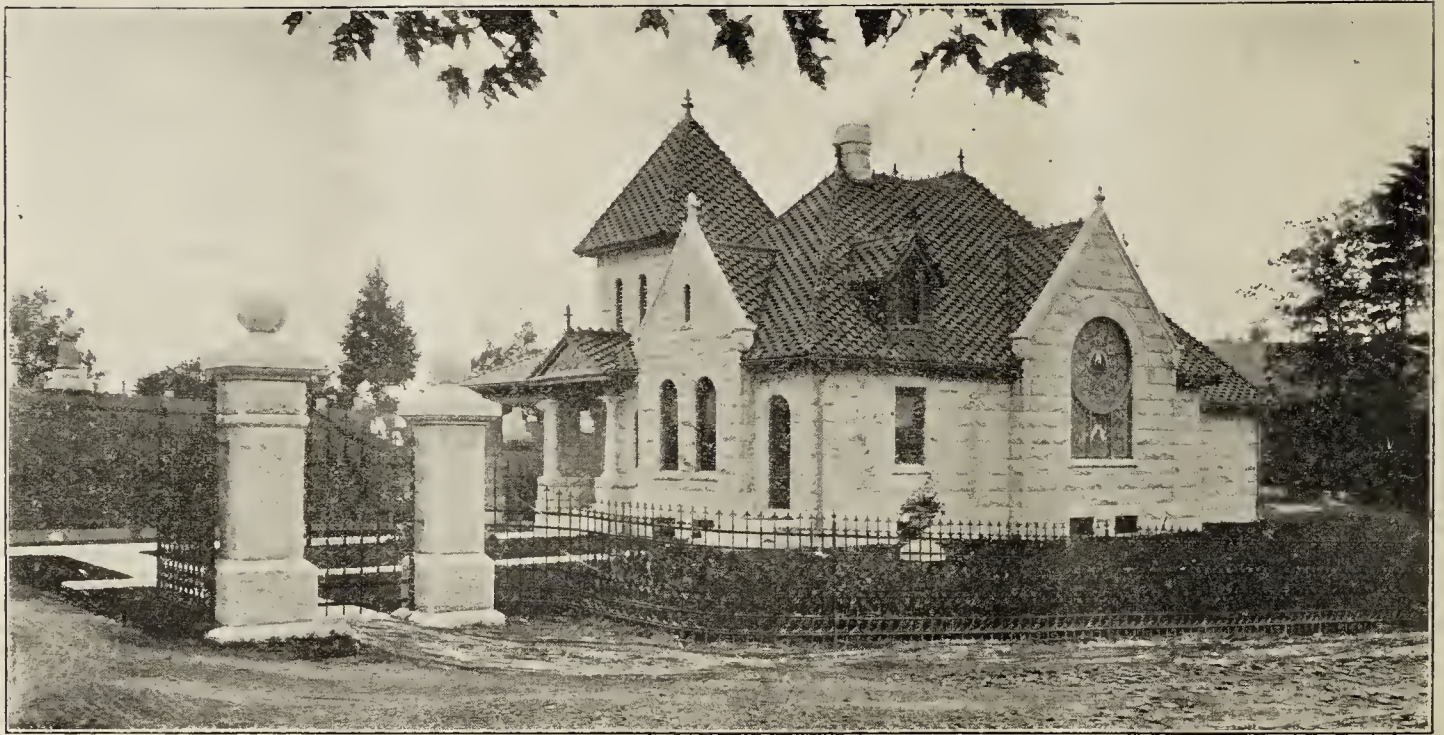
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Some notable exceptions to the generally revolting character of the London burial places we shall note in a subsequent paper. Likewise the recent efforts which have been made to correct the evil of what are literally pest fields in the midst of human habitations. This paper may well close with the mention of a curiosity among the burying grounds of London. It is that in Brady street, Bethnal Green. It is a Jewish cemetery, and there has been an unwritten law among the Jews from time immemorial, prohibiting the disturbance of the place of the dead. And as a rule the Jewish cemeteries are better cared for than some others we know. This ground became in the course of time over-crowded. One-half of the ground, the southern half, was allotted to "strangers," that is to Jews who belonged to no special congregation. About thirty years after it was full, a layer of earth, to the depth of four feet, was added to that part of the ground, its surface being thus raised to that extent above that of the other half. Thus a new ground was formed. The custom of burying six feet below the surface was adhered to as before, and so there is a space of four feet of earth intervening between the new occupants of the ground and the old. And the gravestone of the former occupant was retained with that of the new, the two being placed back to back over the newer grave.

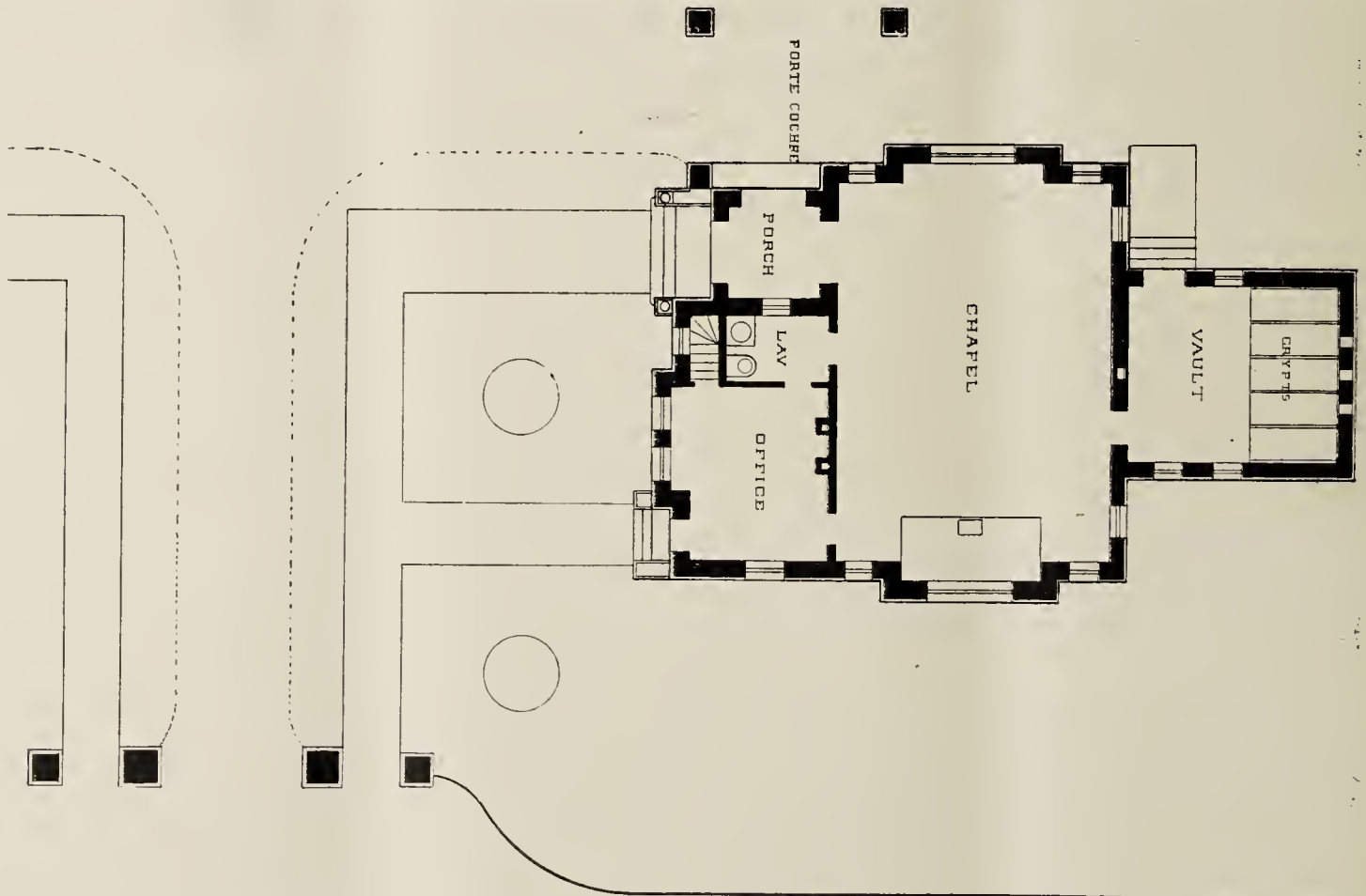
L. Viajero.

At the Pan-American Exhibition to be held at Buffalo, N. Y., next year a large amount of space will be devoted to horticulture and its development in the United States. The fact of the Exposition being held in Delaware Park will draw attention to art out-of-doors, and it may receive an impetus therefrom.

PARK AND CEMETERY.



OFFICE, CHAPEL AND RECEIVING VAULT, WILDWOOD CEMETERY, WILLIAMSPORT PA.



GENERAL PLAN

OFFICE, CHAPEL AND RECEIVING VAULT, WILDWOOD CEMETERY, WILLIAMSPORT, PA.

The illustrations above represent the new office, chapel and receiving vault recently erected at the entrance of Wildwood Cemetery, Williamsport, Pa., from designs by Mr. David K. Dean, architect, and at a cost of about \$12,000. The building is constructed of white marble laid up in regular course work, with rock face. The roof is of Spanish red tile, and gutters,

spouting and conductors are of copper. The interior woodwork is Georgia heart pine, natural finish. The crypts in the vault are of iron skeleton frame construction with tight fronts. The ventilation is secured from pipes leading from outside, and with outlets through ventilator in roof. The vault contains 25 crypts. The ports and lavatory floors are of Mosaic tile. We are indebted to Mr. John F. Laedlein, secretary, for illustrations and details.

MAGNOLIA SOULANGEANA.

This hybrid was raised by Mr. Soulange, Bodin, France, from *Magnolia conspicua* and *M. gracilis*; the latter one being the pollen parent. Its flowers are large, white inside and purple outside. In catalogues it is mentioned, outside the above name, as *M. conspicua Soulangeana* and *M. Yulan Soulangeana*.

Pretty as it is, one seldom meets with it in gardens in this part of the country and it certainly is



MAGNOLIA SOULANGEANA, HUMBOLDT PARK, CHICAGO.

worthy of more popularity both as a park and a garden plant. At this writing, May 9th, the plant illustrated, which is growing in Humboldt Park, Chicago, is past its best; but one ought to have seen it a week before, it was simply grand and finer than ever. And then it blooms at a time when flowers are scarce in the garden, and we are patiently waiting for the first blossoms of spring, so with keen interest we watch every bud to open. It then lends a certain charm to northern gardens not possessed by any other area, if I may call it thus.

Last Sunday I called the attention of a horticultural enthusiast to this magnolia when he answered. "O, I have seen it and have already been here 14 times with a different load of friends at every time." Plant something showy and the public will appreciate it. The plant shown in this il-

lustration was planted 4 years ago and has bloomed every year, increasing in size and beauty.

It has always been wrapped in straw but its roots have never been protected by mulching. The success with this one plant induced me to buy some more, and at this writing 25 plants, imported from Holland last fall, are in full bloom. They were heeled in through the winter in the nursery.

Fas. Jensen.

GARDEN PLANTS—THEIR GEOGRAPHY, LIII.
PERSONALES.

THE LEUCOPHYLLUM, TECOMA AND ACANTHUS ALLIANCE.

Veronica has 180 to 200 species of wide distribution in sub-tropical, temperate or even quite cold regions. There are several sections, New Zealand furnishing a handsome set, many of which are shrubby evergreens with handsome foliage and pretty white, purplish, lilac, pink and crimson axillary flowers. They are adapted to Pacific coast regions with mild winters. The species suited to the north are perennial or annual herbs of upright, creeping, or aquatic habit. *V. longifolia subsessilis* is one of the most popular. It flowers in autumn, but the many species cover the whole flowering season. Several of the creeping kinds are excellent covering plants.

The Gerardiæ, Euphrasiæ and Orabancheæ tribes includes a number of pretty plants several of which are difficult to cultivate because they are parasitical upon the roots of other plants. Occasionally they grow up in pots containing greenhouse plants when the soil contains their seeds — generally to the great wonderment of the owners.

Utricularia has 160 species widely distributed over the sub-tropical and temperate regions. Some of the Asiatic and South American species are very pretty tender plants, with yellow, orange,



MIMULUS CLEVELANDI.
From Garden and Forest

bluish or white flowers. Gardeners commonly treat them as epiphytes, but many species are true aquatics of which the cosmopolitan "bladderwort," *U. vul-*

garis and *U. purpurea* are examples. The floating apparatus is commonly a distended petiole.

Pinguicula "butterwort" has 30 species, distributed over the temperate regions of the Northern Hemisphere and South America. Chas. Darwin busied himself with the carnivorous instincts of these plants among others. They are found in wet ground and are often quite pretty.

The Gesneriæ, Columneiæ, *Æschynanthæ* and *Cyrtandreiæ* include a number of handsome plants familiar to exotic gardeners at the north, such as



DIGITALIS AMBIGUA.

DIGITALIS PURPUREA.
From Gaddening

Gloxinia, Achimenes, Gesnera, Columnea, Episcia, *Æschynanthus* and *Cyrtandra*. The Achimenes seem to succeed in half shady places at the extreme south, and the handsome Chilean scarlet flowered shrub *Mitraria coccinea* should be tried in southern California. The tribes yield but few plants hardy northward, chiefly among such genera as *Conandron*, *Primulina*, *Rehmannia*, *Ramondia* and *Haberlia*.

Bignonia has 120 or more species which are largely very handsome sub-tropical and tropical American climbers or shrubs with a scattering in other warm parts of the world. One species observed growing on a well sheltered wall at Philadelphia is found wild from Virginia to the Gulf states, and varies in color from creamy yellow through several dull shades of mixed red. In the nearly frostless parts of the country the more gorgeous kinds such as *B. venusta* with brilliant orange

flowers during winter, *B. Tweediana* and *B. Chamberlaynii* yellow and *B. speciosa* with purplish flowers in spring, have been tried at the south, and these together with *B. Cherere* orange scarlet and *B. floribunda* white are sometimes met with in southern California. The species often ascend to considerable elevations in the tropics, some are deciduous and are improved by close spur pruning, many are evergreen, some are shrubby, some cling by aerial roots, and a few perhaps are large tropical trees. I say perhaps because the genus has been very greatly mixed up, and I doubt if the seed vessels of anything like all to which names have been given have been seen. The arrangements of the seeds is reckoned a primary character in determining the genus. The closely related sometimes fragrant flowered *Pithecoctiniums* have 20 species in Mexico and southward to Brazil. One or two are grown in southern California.

Nyctocalos Thompsoni is a sub-scandent shrub from the N. E. parts of India. It has long tubed night blooming white flowers.

Millingtonia hortensis is a free flowering small tree with fragrant white flowers whose native country in tropical Asia is uncertain.

Oroxylum Indicum is a monotypic tree of 30 or 40 feet with a wide range in India and Malaisia. It has ill smelling white and purple flowers in racemes, and fine foliage.

Chilopsis saligna is a monotypic shrub or small tree growing from 12 to 20 feet high along streams in southern and western Texas and probably in Mexico. It is known as the "desert willow" from its linear lanceolate leaves. The flowers are in terminal racemes somewhat after the manner of the Catalpas and



PINGUICULA GRANDIFLORA.

Gardener's Chronicle.

are either mottled purplish lilac, striped with yellow within, or white in various degrees. It is a good shrub at the lower south. *James MacPherson.*

PARK NOTES.

The effort of the New York *World* to secure the creation of a small park in the district of Jersey City, known as "Little Italy," which was warmly endorsed by the Woman's Club has been crowned with success. The Board of Finance has appropriated \$10,000 for the preliminary work.

* * *

The Forestry Commission of Michigan is planning a campaign for the preservation of the forests of the state. The president of the commission has entered into correspondence with the Michigan Women's clubs with a view to securing their cooperation in the movement.

* * *

The women of Lyons, Neb., have resolved to provide a park for the town, that will be a credit to the people. A public spirited firm, Lyons Bros., has donated a four acre island, immediately west, for the purpose and enough funds have been raised to begin the improvement.

* * *

The ladies of LaSalle, Ill., have formed a Park Improvement Association, with the object of beautifying the parks and public places of the city. They hope to complete a system of parks, for which purpose they are soliciting funds from private sources and the mayor has suggested to the board of aldermen to provide an appropriation to help the cause.

* * *

There is a law in Indiana that encourages tree planting in that it practically exempts from taxation every acre of land upon which 170 trees are standing. The law is popular and has been availed of by many. A description of the land must be filed with the county auditor for record and an examination must be made by him before appraisal. No horses, cattle, sheep or goats may be pastured until the trees are 4 inches in diameter. The benefits of the law cannot be claimed until the trees are three years old.

* * *

The number of dead trees in the city of Savannah, Ga., is very large this year, probably greater than ever before. It is attributed to various causes, storms, the effect of the cold weather of February 1899, the paving of the city streets and old age, some of the trees being very old. This all suggests that every city of importance should appoint a city forester, whose knowledge of the character and needs of tree life, would be constantly on the alert to keep the city trees in good condition and provide also for the future.

* * *

The house committee on Indian Affairs, Washington, on April 26, directed a favorable report on the bill creating a commission to consider the establishment of a National reserve or park of the Leech lake, Winnebago and Cass Lake reservations in Minnesota, comprising about 830,000 acres. The commission was fixed at three members from each branch of congress and an appropriation of \$5,000 was allowed. The women delegates from Minnesota deserve congratulations on the intelligent and forceful way in which they have helped the cause at the Capitol.

* * *

The Rural Improvement Association of Keene, N. H., has been very active in the endeavor to preserve shade trees from the ravages of insect enemies and other troubles, with very marked success. Another matter undertaken by the associa-

tion has been the tagging of trees on the highways to legally protect them from injury or destruction. The trees are marked by brass washers or labels procured from the state and the work is done by the president of the association acting as the agent of the board of aldermen in whom the authority to tag the trees and make a record of the same is vested by law.

* * *

At last the memory of Nancy Hanks Lincoln, the mother of the immortal president of the United States, is to be honored by a monument and a park of 16 acres surrounding her burial place. This is in Spencer county, Ind., near Lincoln City. The monument is to be erected as a donation by the contractor for the new Lincoln monument, Springfield, Ill., from stone taken from the old Lincoln monument in that city, and a gift of \$1,000 from a source not publicly divulged has secured the purchase of the land. It will be improved and beautified and will eventually become an attractive spot for the legions of admirers of the great American.

* * *

The Board of Estimates of Baltimore are exacting a fee of 25 cents for every permit granted to residents for planting shade trees in front of the houses, the board having obtained this power by an amendment to the charter passed by the last legislature. Baltimore has been passing through quite a tempest in connection with its park affairs, the consequence of political intrusion upon such matters, and surely this last effort to raise income will bring more discredit upon shortsighted officialdom. The excuse is that it costs money to said inspectors to superintend operations. What if it does, so that the city is benefited; and surely the planting of an appropriate shade tree is worth to the city many times 25 cents. Such a narrow policy deserves condemnation and it is to be hoped that the board may be brought to its senses. A prohibitive tax on city improvement and progress is a move in decidedly the wrong direction.

* * *

In discussing the proposed location of St. Gaudens' equestrian statue of General Sherman at the foot of the Mall in Central park, New York City, Mr. Samuel Parsons, Jr., draws attention to the beautiful views from that point, perhaps the finest park effects to be found in the world. He asks in the *New York Post* whether an equestrian statue at the point suggested will not obstruct, dwarf, and even destroy the balance and proportion of the perspective as seen in three different ways from this point, and, above all, whether the site at the foot of the Mall, with its widely expanded area for subordinate groups and architectural adornments, is not in all directions—as you approach it from Fifty-ninth street as well as when you look away from it—too essentially rural, too full of rustic, changing incidents of broken land, of swelling knolls, and masses of woodland to admit of the interjection of the necessarily alien and inflexible treatment of a colossal equestrian statue and its surroundings. He further says: It may be set down as sure that to make a mistake in placing so dominating an object as the Sherman equestrian statue at the foot of the Mall, would have most disastrous and far-reaching effects on perhaps as fine an exhibition of the highest skill of park-making as can be found in the world, and which, in its way, is more valuable to a larger number of citizens than even the greatest of all statues. But the question is, as all lovers of Central park have a right to ask, whether there are not other suitable sites in New York, such as the plaza at the corners of Central park, Long Acre Square and the foot of West Seventy-second street, which would not involve the obstruction or obliteration of the one key-point of outlook from which can be seen to advantage some of the most skillfully and boldly designed park views in the world, whose loss or even injury, it should be evident, must be irreparable."

CEMETERY NOTES.

At the town meeting held last month in Brookline, Mass., an appropriation of \$10,500 was made for improvements in Walnut Hills cemetery.

* * *

The trustees of Oakland cemetery, St. Paul, Minn., are considering the question of a suitable home for the superintendent. The matter has been referred to the committee on grounds which is examining plans and expenditures.

* * *

Perpetual care is a growing factor in the welfare of the smaller cemeteries. The Mt. Vernon Cemetery Association Trustees, Abington, Mass., now hold \$4,700 in trust for the care of certain of its lots.

* * *

Another large cemetery scheme is being exploited in the neighborhood of New York. Options have been secured on some 1,000 acres of land at Northport, L. I., and the matter has been submitted to New York capitalists.

* * *

By the will of the late Viola Vose, who resided in Elkhart, Ind., for many years, a sum of \$5,000 is bequeathed to Grace Lawn cemetery, Elkhart, to provide a granite mausoleum. The fund is entrusted to the Knights of Pythias lodge of Elkhart.

* * *

The superintendent of St. Joseph's cemetery, Manchester, N. H., appears to have come into conflict with the health officers of that city, with a possibility of trouble for himself. The cause is non-compliance with the laws requiring the top of the burial case to be four feet below the level of the surrounding ground, and the violation of this law is said to amount to over thirty instances in recent burials.

* * *

In the annual report of the Utica Cemetery Association, Utica, N. Y., the years statement showed total income for the year, \$19,646.91, which included: sales of lots, \$8,655.79; interments, \$1,561; care of lots, \$5,021.87. Among expenditures were: labor, \$9,117.31; supplies, \$637.17; expenses, \$2,292.94; improvements, \$2,198.82; salaries, \$2,610. Total amount of trust funds and interest, April 1, 1900, \$76,843.15.

* * *

There have been the usual reports of vandalism at various cemeteries over the country, but a gratifying fact in connection with these depredations is that recourse to law is having a very wholesome effect on such miscreants. The decorations at the gates of St. Agnes cemetery, Albany, N. Y., consisting of bunches of palms, a custom adopted for Palm Sunday, were in part wrenched from their fastenings early the following morning.

* * *

The danger to cemeteries lying contiguous to railroad tracks was confirmed by a recent fire in the Negaunee cemetery, Negaunee, Mich. A spark settled on the fence separating the Protestant and Catholic divisions, which quickly fanned into a blaze in the high wind, and ran over about an acre in the Catholic grounds. A number of headstones were destroyed and considerable fencing before the fire department could check the devastation.

* * *

The Catholic Cemetery Association owning Calvary and Mount Olivet cemeteries, Chicago, are preparing the property

purchased some 5 years ago for burial purposes. The new cemetery called Mount Carmel, contains 160 acres of land, and is located about 14 miles west of the city. The work of constructing roads and preparing the land for cultivation was begun last fall. Mount Olivet and Calvary are being rapidly occupied, and when more ground is needed Mount Carmel will be ready.

* * *

The trustees of the cemeteries of Delaware, O., are considering the question of erecting a new office building in Oak Grove cemetery, on modern lines. In the report submitted at the annual meeting a gratifying increase was noted in the Perpetual Care Fund, which now amounts to \$4,336.27, and the trustees believe that it will continue a healthy growth from year to year. In the smaller cemeteries the main difficulty is found in providing funds for the old lots acquired years ago and in which interest has been practically lost, but in many places this has been met by the generosity of people of means who have the welfare of the whole cemetery at heart.

* * *

The annual report of Forest Home cemetery, Milwaukee, Wis., dated April 1st, shows gross receipts for the year to have been \$93,521.90. This includes sale of lots, \$21,188.90; graves, \$2,827; interments on private lots, \$2,173; cremations, \$1,100; care of lots, \$23,610.35; foundations, etc., \$3,545.33. The disbursements included, general care of cemetery, 11,846.66; work on lot owner's orders, \$12,632.76; foundations, \$1,638.72; salaries, \$7,000; cremation supplies, \$429.36. The Reserve Funds amount to \$156,453.16, of which \$26,179.08 is the Perpetual Care Fund, which increased a little over \$5,000 for the year. There were 713 interments and 44 cremations during the year. The corporation has recently issued a circular on the latter important subject giving a summary of the state laws and other information for lot owners.

* * *

Governor Roosevelt of New York, has attached his signature to the bill to regulate interments in cities of the third class in that state. The bill provides that when the Common Council of a city of the third class decides that further interments in a cemetery within the city limits would be detrimental to the city's health it may cause a notice to be served on the person or corporation owning the cemetery, and also have the notice published once a week for three consecutive weeks in a paper of the city, directing the owners to appear at a certain time and show why the city should not prohibit further interments in the grounds of the cemetery in question. The parties are to be given a hearing, and the Board may then pass a resolution prohibiting further interments.

* * *

The report of the council of the Cremation Society of England for 1899 contains considerable information on the progress of cremation as a substitute for earth burial. A stride has been made in England in the fact that many municipal corporations have applied for parliamentary power to enable them to provide for cremation, and it appears to have become the practice to insert the clauses conferring such powers in any bill promoted by a municipal corporation that does not possess them. The municipality of Hull has constructed a crematory under such powers. Besides this the London County Council is promoting a bill in parliament to enable every burial authority that desires to do so to provide crematories out of the public taxes. At the cremation society's plant at Woking there was no increase in the number of incinerations in 1899 over the year 1898, 240 being the number in both years, and the total number of cremations to date at Woking is 1,523. During 1899, 88 bodies were cremated at Manchester, 16 at Glasgow and 23 at Liverpool.

CORRESPONDENCE.

"A Plea for Walks."

Within a few years a good deal has been said about good roads. Very little comparatively has been written or said in favor of good walks. Nevertheless I will assume that a sentiment prevails in all civilized communities as commendatory towards good walks as good roads. A mistake was made some fifty years ago when the initial step was taken from the churchyard burial ground to the modern rural cemetery by making too many crude walks which being recognized as needed were never properly prepared to serve such a purpose. My own view of the matter is that every private burial lot should be provided with sufficient public open space along one of its sides to furnish ample approach for a common funeral cortege to reach the lot without improper trespass upon the rights and reservations belonging to neighboring lots. These openings are not to be treated as walks but treated as a part of the lawn, thus reducing to a proper minimum all walk exhibits and with that a minimum of expense on account of making and maintaining the very best arrangement that utility and elegance may require of the designer.

I am yet quite far from repudiating *all walks in a cemetery*. I believe a judicious lay-out of properly graded and finished walks *can add largely to both utility and beauty*. The fault in this part has been too many *so called walks*. The walk should be made worthy of its name, well finished in form and character, graceful and pleasing to the eye. Smooth and comfortable to the touch, dry and inviting when rain and dew make lawns damp and repulsive. Moreover the walk demands no apology for its use. It stands a voluntary witness of its own purpose and utility at once. An emblem of liberty and justice alike, with it there comes no suggestion of trespass beneath a sensitive visitor's feet.

In cemetery work utility suggests many more walks than a good landscape requires, and therefore for appearance sake, we may compromise on a basis commendable for prudence and the highest standard of excellence in effect.

If the walk had always been made what it should have been and then kept in repair the superintendents of cemeteries would not seek to have them obliterated, as many of them are now doing. I am not speaking without experience for I have been there, and know very well how expensive the work is *to keep the hillside canal filled with gravel*. We should have no such hillside canals and the few walks we attempt to maintain should justly be well selected and then well protected if that can be done within the scope of reasonable expense, or otherwise abandon the project of a walk *as such* and let the ground be clothed as is the surrounding lawn.

The question of justifiable expense may prove a very broad one and worthy a broad reply.

When we read as we occasionally do that some cemetery association that organized less than thirty years ago with a *borrowed* capital of less than \$10,000 is now boasting that an entrance has been built recently costing over \$30,000, we may well conclude that a walk of conceded good effects and eminently useful as a means of comfort, and perhaps leading to some elevated vista above the horizon where a beautiful view may be enjoyed will be worth all and many more times its cost.

A good smooth and impermeable walk surface can be secured by means of sharp sand mixed with heated liquid asphaltum and rolled down at a cost of less than 10c. per surface foot. Such a cost will not exceed \$5.00 per family lot located along

the walk so treated. Such a walk will seldom need repair and generally will last fifteen years in good condition without refacing. All cemeteries should have good drives and walks. Also lawns, these had, other good things will be added.

B. F. Hatheway.

* * *

ITHACA, N. Y., April 27, 1900.

Anent *Canna flaccida*.

Editor *Park and Cemetery*.

DEAR SIR:—In the notice of the *Cyclopedia of American Horticulture* in your issue for April, is the following:

"We cannot always agree with the editors writings, as for instance, *Canna flaccida* described as 'sturdy.' This is our common southern species and its specific name aptly describes its habit in contradistinction to that attributed to it by the editor."

Please allow me to call attention to three statements in the above: (1) the editor does not describe *Canna flaccida* as "sturdy;" (2) the name *flaccida* was not given to describe "its habit," but to designate the soft flaccid flowers; (3) as a matter of fact, *Canna flaccida* is a sturdy plant.

Yours truly,

L. H. Bailey.

NOTES.

The women of Claremore, I. T., after years of quiet agitation finally determined to improve the local cemetery, and in order to induce the men of the town to give the necessary services, provided meals on the grounds, so long as such were necessary. Although the weather was cold, the little burial ground was effectively improved, and this method of creating enthusiasm was greatly enjoyed. The cemetery is six acres in extent and contains many good monuments. The ladies' association has a membership of 58 and efforts are being made to enlarge the grounds.

* * *

Havana, Cuba, has twenty parks varying in area from one-eighth of an acre to eight acres, besides a botanical garden, which contains what used to be the summer residence of the Captain General. There are also seven miles of boulevards, the chief of which, the Prado, extends for a mile through the heart of the city. It is about 150 feet wide, with a centre strip of shade trees and it leads down to the Punta, or Point, precisely opposite Morro Castle. Most of the existing parks are located in well-to-do sections, but were in comparative disorder when the United States took possession last year. An effort was made to treat the parks after the American fashion of lawns and shrubbery, but considerable opposition was manifested at this offending tradition, and it has not been extended. Some playgrounds have been provided which appear to be welcome.

* * *

This year marks the 50th anniversary of the formation of the Pittsfield, Mass., cemetery corporation. The report recently issued gives an interesting account of the origin and incidents connected with the cemetery in the past, and the statement of accounts shows an improvement over that of last year. An earnest appeal is made for contributions to establish a permanent fund for the general care of the grounds. The corporation owns some 73 acres in the cemetery proper and 245 acres of other valuable land which is becoming income producing property. The receipts from all sources for the year ending March 1st last, was \$12,689.75, which includes lots sold \$2,106; interments \$1,511; care of lots and foundations \$3,689.49. Among the expenditures are: labor, \$2,752.33; materials and supplies, \$1,012.02; salaries, etc., \$1,280. The Perpetual Care Fund amounts to \$26,395.06. There were erected 35 monuments and 105 headstones and markers and 1 iron fence removed. The total number of interments in the cemetery to January 1, 1900 is 6,416.

SELECTED NOTES AND EXTRACTS.

The Care of Trees.

A properly managed tree is at all times able to take care of itself in supporting its crown, but to do this it must be trained while young. Long lateral growth and wild shoots must be prevented by judicious pruning, thereby stimulating its backbone, the trunk, to become of sufficient strength and dimensions to be able to carry the branches and leaves of its top. A top-heavy tree will become an early windfall. Shade trees on city streets require more attention in pruning than other trees planted in open spaces. The artificial surroundings will always check the natural condition for growth and development, and if not under the guiding hand of the cultivator it will often grow one sided and crippled. But under no condition should a tree be trimmed into any form or shape. A truly perfect, beautiful tree is not the one that shows man's handiwork; therefore the art of tree trimming is a knowledge of true simplicity in nature. It is a knowledge of how to assist nature in bringing out the vigorous beauty and supreme adornment of God's creation, the tree, given to man for enjoyment and pleasure.—*Fred Nussbaumer, in The Minnesota Horticulturist.*

* * *

Propagation of Mistletoe.

In the old world mistletoe is said to be propagated by birds. They eat the sticky berries and then clean their bills on the branches of the trees. The sticky seeds, thus fastened to the branches, sprout and grow. As good authority as Meelian does not know of any attempt to propagate the mistletoe in America.—*North American Horticulturist.*

* * *

An Early Flowering Shrub.

Prunus triloba is a handsome, early flowering shrub which might be oftener planted to advantage. In fact it seems to be but little known, though my observation may be at fault on this point. As I have seen it, it is a prettier shrub than the much commoner flowering almond, *Prunus Japonica* (*P. nana*.) The flowers are large, double and a beautiful rose pink. They appear early in the spring, along with the wild violets. The shrub is neat, clean, six feet high and healthy and hardy so far as I have observed.—*F. A. Waugh in Gardening.*

* * *

The Tree Lilac.

The rear of the grand procession of lilacs is now brought up by the giant tree lilacs of China and Japan, says S. C. Har-

ison of York, Neb. They have a glory of splendid white flowers the last of June. They get to be six inches through and thirty feet high. While going through one of the Boston parks, the superintendent said: "This is a Japan lilac tree I raised from seed twenty years ago." It was one mass of bloom. Said I; "That tree would measure two feet around." He thought not. I measured it three feet from the ground and it was two feet and one-half in circumference. I raised the Chinese lilac in Western Nebraska, the most trying place on earth for a tree, which has to brace against a sirocco with 110 in the shade, and then against 40 below zero, with four years of consecutive drouth thrown in. But the Chinaman never winced, but grew and bloomed amid drouth and neglect. With this tremendous reinforcement to our flowering shrubs, we can add beauty to our homes. I now graft all my choice kinds of lilacs on the root of the Chinese to make them more thrifty and to keep them from sprouting. Prof. Budd adds: We can fully endorse this high estimate of the tree lilac, but to give China and Japan the credit of developing such hardy trees is not right. Beyond all doubt the lilac family originated in the dry interior climate of North Central Asia. The tree type that does not sprout we found as a cultivated tree in most parts of Russia, in Europe and in Asia. Mr. Harrison speaks of grafting the lilac. If seedlings are grown they graft as readily as those of the apple. Lilac seed grows readily if stratified as we treat pits of the stone fruits. *The National Nurseryman.*

* * *

Speaking of shade trees in the vicinity of Honolulu, *American Gardening* in some notes on the Hawaiian Islands, says the best is the monkey-pod, *Albizia bicolor*; a tree of very dense and spreading habit and bearing beautiful purplish lilac flowers, which remind one of Giant Sweet Sultans. The tamarind thrives here, attaining a greater height than the monkey-pod, and although the foliage is much finer, it is dense and gives ample shade. Splendid specimens of banyan are also met with, one of the best being in the grounds of the late Princess Kaiulani, and nearly overgrowing her beautiful residence. There are several trees bearing remarkably showy flowers; among them *Cæsalpinia regia*, becomes when in bloom a mass of flaming scarlet, and a variety of *Cassia* commonly called Golden Shower, bears enormous golden-yellow flower clusters. The seed pods of these two trees

are usually from fifteen to eighteen inches in length.

* * *

Plant Curiosities.

Many plants in common cultivation show some striking peculiarities and when we know where to look for these odd features and how to exhibit them they never fail to be exceedingly interesting.

Schinus molle, the "Peruvian pepper," used as a shade tree in California, and often grown in the Eastern States for temporary effects in Summer, shows peculiar antics when pieces of the leaves are thrown on the surface of water. The pieces will immediately start along the surface in short jerks, sometimes varying the performance by spinning around rapidly. These motions are caused by the exudation of the resin from the bruised parts of the leaf.

When the seed vessels of *Oxalistropeolioides* are ripe a little disturbance with the hand will cause myriads of the seeds to fly in all directions.

Desmodium gyrans, known as the "Indian telegraph plant," is the only one with which I am acquainted that keeps up a very perceptible motion of the lateral leaflets without interference in any way. The leaves are formed of one large terminal leaflet and two small ones. It is the smaller ones which are continually on the move. The upward movement is slow and jerky, but the downward motion is rapid. The circuit is completed in about two minutes. Sensitive plants are numerous in cultivation; the two genera, *mimosa* and *oxalis*, supply most of them. The leaves are sensitive to the touch, and they either close the leaflets with the superior surfaces together, or the reverse. *Oxalis sensitiva*, *O. Ortgiesii* and *O. bupleurifolia* close downwards. In *Mimosa pudica* the leaflets close up and the leaf stems fall down. In a very warm house, if the end leaflets are touched very gently, those on the remaining part of the leaf division will close in pairs with great precision. In *M. sensitiva* the joints or hinges at the bases of the leaf divisions are almost white in color, but when the leaf is in the act of closing this color changes to greenish yellow.

The "squirting cucumber," *Ecbalium elaterium*, belonging to the squash family, gets its name from the singular manner in which the seeds are ejected from the fruit. When ripe a slight touch causes the fruit to become separated from the stem, and owing to the violent contraction of the rind, caused by this separation, the seeds are ejected with great force. They are, of course, mixed with the pulp, and if the mass comes in the direction of the investigator the consequences are not altogether pleasant.—*G. W. O. in Florists Exchange.*

Park and Cemetery and Landscape Gardening.

ESTABLISHED 1890.

An Illustrated Monthly Journal.

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Correspondence solicited on subjects pertinent to the columns of the journal.

Officials of Parks and Cemeteries are requested to send copies of their reports.

Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

Association of American Cemetery Superintendents.

WM. STONE, "Pine Grove,"
Lynn, Mass., President.
GEORGE M. PAINTER, "West Laurel Hill,"
Philadelphia, Vice-President.
H. WILSON ROSS, "Newton,"
Newton Centre, Mass., Secretary and
Treasurer.

The Fourteenth Annual Convention will be held at Cleveland, O.

The American Park and Out-Door Art Association.

CHARLES M. LORING, Minneapolis, Minn.,
President.
WARREN H. MANNING, Tremont Building,
Boston, Mass., Secretary.
O. C. SIMONDS, Chicago, Treasurer.

The Fourth Annual Convention of the Association will be held at Chicago, Ill., June 5, 6 and 7.

The American Society of Landscape Architects.

JOHN CHARLES OLMSTED, Brookline,
Mass., President.
SAMUEL PARSONS, JR., St. James Bldg.,
New York, Vice-president.
CHAS. N. LOWRIE, 156 Fifth ave, New
York, Treasurer.
DOWNING VAUX, Bible House, New
York, Secretary.

Personal.

J. C. Cline, superintendent of Woodland cemetery, Dayton, O., has had to decline an appointment on the Park Commission on account of his cemetery duties.

The Marion Cemetery Association, Marion, O., has engaged Mr. F. J. Van Horn of Zanesville, O., as superintendent to succeed Mr. John Wilson, whose death on

April 17th was deeply regretted by the officials of the cemetery, with whom he had been long associated.

At the annual meeting of Dell Park cemetery, Natick, Mass., Mr. N. B. Goodnow was elected to succeed himself as president for another year, with E. Clark, treasurer and I. N. Hill, clerk and superintendent. W. D. Parlin was elected trustee for 7 years. All have served in past years. The cash receipts for the year were \$1,798.85, and expenditures \$1,639.11. The grounds were surveyed and platted last fall and considerable improvement will be carried out this year.

The Association of American Cemetery Superintendents.

Substantial progress is being made by the Executive Committee of the Association in the preparations for the annual convention which this year is to be held in Cleveland, O. Information has been received that a number of important papers will be presented discussing some of the essential features of cemetery control and improvement, but to further round out and more fully cover the field the committee earnestly request papers on the following subjects: "Ideal Management and Care versus Income," "The most Satisfactory System of Pumping Water; Variety of Pumps; Methods of Distributing Water," "Perpetual or Annual Care, Provisions for Poor or Sick Cemetery Employees;" "Insects and Pests Injurious in Cemeteries (Moles, Mice, Chipmunks, Skunks, etc.," "the best Paving for Gutters." Members of the association will help the committee greatly by informing Mr. J. C. Dix, Riverside Cemetery, Cleveland, O., at an early day of their willingness to contribute papers on either of the above subjects, or on any other topic valuable to the membership.*

Another pertinent question needing immediate action is that connected with obtaining reduced rates for the railroad journey to Cleveland. Unless the assurance can be given to the railroad officials that 100 members will attend the convention it will be impossible to secure the reduction. It is highly important that every member likely to attend should send notice without delay to Mr. George M. Painter, West Laurel Hill Cemetery, Philadelphia, Pa., so that he may be fortified to make the regular application to the railroad association. Such notification on the part of members intending to be present at the convention will be of great assistance and will save much unnecessary labor on the part of the executive committee.

The effort should be made to induce a larger attendance of cemetery trustees and other officials, and the central location of Cleveland should unquestionably ensure a sufficient number to secure the reduced rates. Cleveland is a beautiful city containing much of interest, which should also favor a large delegation of ladies.

Brief questions for the Question Box are also requested. This is a prolific source of valuable discussion, generally touching upon details not always coming within the province of special papers.

A meeting was held last month in the Museum Building, New York Botanical Garden, for the purpose of organizing a horticultural society. James Wood, presi-

dent of the Eastern New York Horticultural Society presided. A committee of twenty-five was appointed to frame a constitution and nominate officers.

The Gaertner Verein Hortensia has been organized by the gardeners in the vicinity of Oakland, Cal. The officers are: Henry Mayer, landscape and head gardener of the Dunsmuir Garden, near San Leandro, president; Adolf Nissen, vice-president; Albert Mally, treasurer; Eugene Burger, secretary. The members propose to furnish information to the public on the subject of gardens and gardening.

The summer meeting of the Missouri State Horticultural Society will be held in Chillicothe, Mo., June 5, 6, 7.

At the April meeting of the Columbus, O., Horticultural Society, two important papers of general interest were read: "The Planting of Ornamental Trees and Shrubs," by Prof. Wm. R. Lazenby, and "The Relation of the Horticultural Society to Parks and Public Grounds," by Prof. F. A. Brady.

An effective remedy for the forest tent-caterpillar, maple worm, canker worm, tussock-moth, elm-leaf beetle and all other leaf-eating insects is found in "Disparene," the basis of which, arsenate of lead, has been used with great success by the Massachusetts Gypsy Moth Commission. It is used in the leading parks of the country. It is prompt in its effect. It clears infested trees of insects in from one to three days. "Disparene" adheres to the foliage throughout the season, thus preserving the trees from further insect attacks. No other insecticide does this. It is superior to Paris Green because re-spraying is not necessary after each rain storm. "Disparene" does not settle to the bottom of the spraying tank, but remains suspended and is easily applied. Paris Green and London Purple settle and require constant stirring to insure a uniform spray. "Disparene" will not injure the most delicate foliage. Hence, there is no danger from applying large quantities of this insecticide.

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Books, Reports, Etc., Received.

Report of Board of Park Commissioners, Wilmington, Del., for the year 1899. Beautifully illustrated with half tones and pen and ink drawings. Besides the usual financial and other reports the pamphlet contains a list of the native and adapted plants growing in the parks.

Journal of the Columbus Horticultural Society, Columbus, O., for 1899. This is the annual report of the society, and contains the constitution of the society, list of members and officers, and proceedings of the meetings together with papers and discussions. The papers and discussions mainly refer to fruit culture, but there are several interesting papers on forestry conditions and one on the Metropolitan Park System of Boston, designed to call attention to the park requirements of Columbus.

Mount Greenwood cemetery, Chicago. Rules, Regulations, etc. Illustrated with half tone engravings.

Books, Reports, Etc., Received.
(Continued.)

Transactions of the Cremation Society of England for 1899. Some information from this pamphlet will be found in another column.

From Rev. G. F. Houck, manager Calvary cemetery, Cleveland, O., a number of views in the cemetery, among them the Receiving Vault, entrance to grounds and hand hearse for receiving casket from Electric Funeral car.

Cornell University Experiment Station. Bulletin No. 182. Sugar Beet Investigations for 1899. By J. L. Stone and L. A. Clinton.

Annual report of the Maine Agricultural Experiment Station. Part II. Besides the usual letter press connected with the working of the station, the book contains valuable papers on important agricultural and horticultural topics. Other matters of further general interest are: "The Spraying of Plants," by W. M. Munson; and there is a very complete illustrated paper on the apple insects of Maine.

Forty-second annual report of the State Horticultural Society of Missouri. Among a large amount of interesting matter are papers on: "The Missouri Botanical Garden and what it is doing for Horticulture;" "Deciduous Trees for Street or Lawn;" "Making Lawns;" "the Ornamentation of Rural Schools and Rural Homes;" "Care and Management of Street Trees;" "Ornamental Trees and Plants;" "Outdoor Art." Tree Planting in our Cities." The volume contains a fund of information on horticultural matters in the committee reports.



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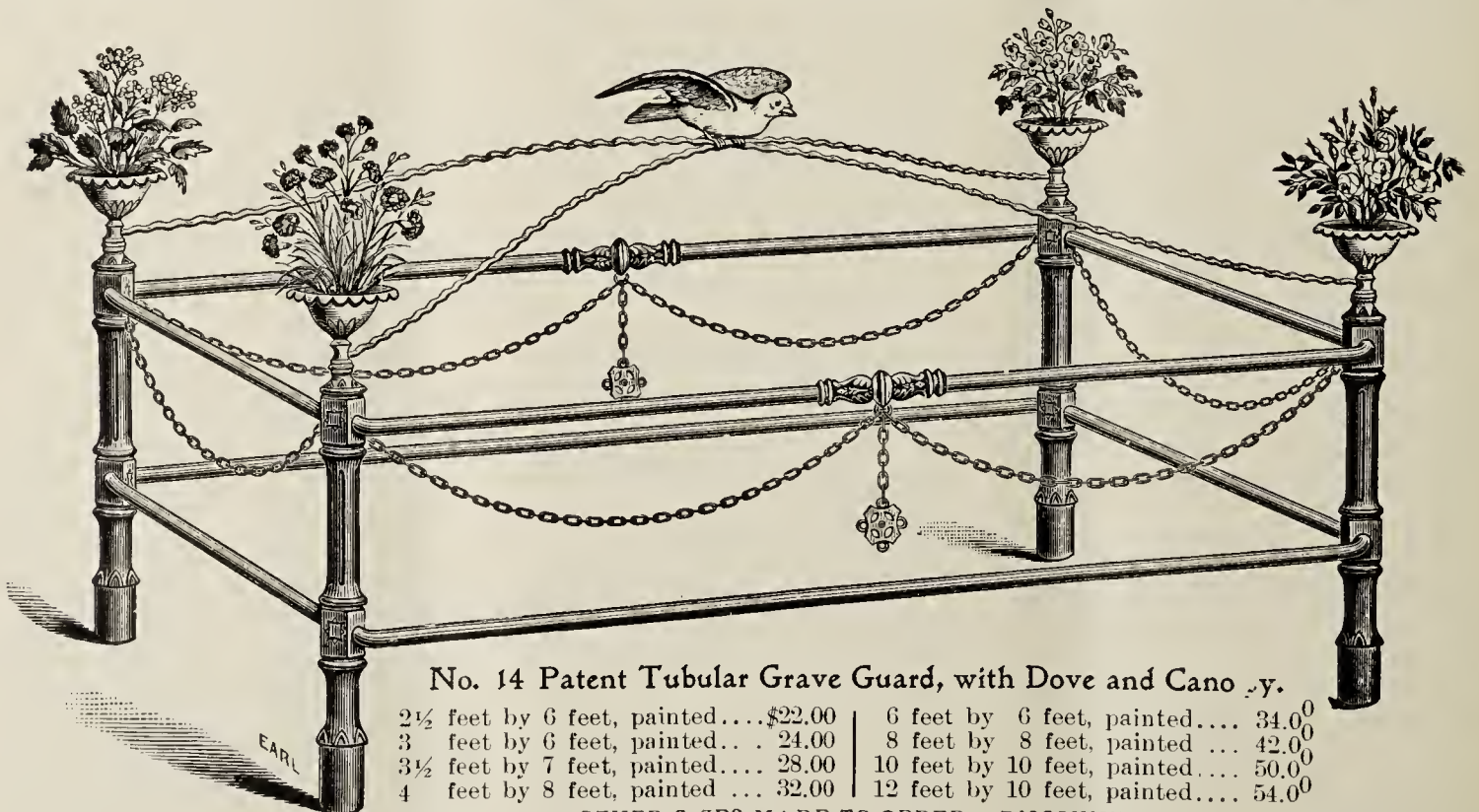
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and Landscape Gardening.

VOL. X. Chicago, June, 1900. NO. 4

CONTENTS.

EDITORIAL—The American Park and Outdoor Art Association—Public Interest in Landscape Gardening—Inspiration for Improvement Associations—Park Consolidation—A Photographic Exhibit of Landscape Art—Landscape Art in Cemeteries.....	77, 78
*The Fourth Annual Convention of the American Park and Outdoor Art Association.....	79
*Western Boulevard Trees	87
*The Fleischmann Mausoleum, Spring Grove Cemetery, Cincinnati, O.....	88
*Improvement Associations.....	90
Trees in Composition.....	91
Municipal Improvement.....	92
Seasonable Suggestions	94
*Garden Plants—Their Geography, LIV.....	95
Park Notes.....	97
Cemetery Notes.....	98
Selected Notes and Extracts	99
Reviews of Books, Reports, Etc	100

*Illustrated.

THE AMERICAN PARK AND OUT-DOOR ART ASSOCIATION.

The fourth annual convention of the American Park and Out-door Art Association held in Chicago in the early days of the month, points to a still greater stride in the progress of this association. Quiet enthusiasm seemed to prevail and the reports that were submitted by the several committees assigned to the work, showed that great activity and devotion to the cause was not a matter only of the annual meeting but was the habit of the association. The report of the proceedings and some of the papers read will be found elsewhere in this issue, and will afford instructive and suggestive reading to all desirous of improvement in the directions advocated. That the association has already entered upon its mission, and that that mission was waiting to be filled, is well illustrated by the fact that the results of each of its previous conventions has been to greatly stimulate the workers in the cause of out-door improvement and to bring about accomplished facts. In each of the cities hitherto visited in convention it is unhesitatingly declared that much good has actually resulted from the proceedings as educational facts, as well as from the influence of contact with men anxious to disseminate ideas which training and experience have demonstrated to be timely and uplifting. The effect of the meeting is already exerting a powerful influence in Chicago. It has stimulated the re-

formers to greater exertions, has shown to the public the actual need of the reforms advocated in terms suited to their intelligence, and has discussed the possibilities in so persuasive and instructive a manner, that before the enthusiasm subsides there is hardly a doubt but that steps will be taken to secure some of the advantages promised. The bill board nuisance is already before the city council for some action.

PUBLIC INTEREST IN LANDSCAPE GARDENING.

An encouraging sign of the times is the wide-spread interest observable in all that tends to improve the conditions of our out-door surroundings.

Especially is this noticeable at the meetings of societies and clubs not primarily organized to promote such matters, but which have caught the enthusiasm and are lending a willing hand in the good work. One cannot examine the reports of the current proceedings of the Women's Clubs, Municipal Art Leagues, Horticultural Societies, etc., without being impressed with the idea that the question of the improvement of public and private grounds is one that is becoming more and more appreciated as a necessity in our progressive development. Topics are discussed at these meetings which have a highly educational influence in the community, and being made important questions in associations of such diverging interests it tends to diffuse the information and beget reciprocal consideration from the masses. It is quite natural that the architectural and sculptural societies should encourage and aid in the work, as it must in a measure redound to their success. But all the efforts above referred to find further development through the Improvement Associations which are now to be found in every progressive community, and it may from this be seen what an impetus this commendable object has already received.

INSPIRATION FOR IMPROVEMENT ASSOCIATIONS.

Fresh inspiration for the cause of Improvement Associations, in which we and our readers should feel such deep interest, is bound to be the outcome of the recent annual meeting of the Park and Outdoor Art Association held in Chicago. At this meeting a woman's auxiliary was organized which will form a connecting link between the asso-

ciation and the hundreds of women's clubs throughout the country. By this means the work of the association will be brought directly before such favored women as have both the time and the inclination to do just the work that they are best fitted to do and which most needs doing, viz: improving the every day surroundings of the masses. As we have often said in these columns, no work is better worth doing, none is so greatly needed, and certainly no one can do it better than the intelligent women of the country. It may be further said that they can undertake no work that will, while benefitting others, also add so surely to their own health and happiness. For such reasons every woman who reads these lines, if she is not already a member, is urged to join the Park and Out-door Art Association which will give her the right to become a member of the Woman' Auxiliary and make her eligible to be sent as a delegate from her Woman's Improvement Club to the Federation of Clubs of her state.

PARK CONSOLIDATION. An important matter now being agitated in Chicago is the consolidation of its three park systems under one management and control. At present the three systems are the south, the west and north, the two latter dominated by the governor of the state, with all the possibilities and actualities of political influence which such a condition invariably invites. The South Park management has always had the confidence of the people and is managed by commissioners appointed by the Circuit Judges. The conditions pertaining to the north and west side systems has for some years past attracted public censure, and with little prospect of amelioration under the present form of government, and to remedy matters a strong movement has set in to create a homogeneous system of park management to supplant the existing unsatisfactory divided responsibility. It is proposed to secure legislation at the next session of the Illinois legislature providing for the appointment of a park commission who shall have charge of all the Chicago parks, and it is to be hoped that it will be so formulated as to eliminate the baneful influences which have so seriously affected park affairs in the past.

A PHOTOGRAPHIC EXHIBIT OF LANDSCAPE ART. A feature of the recent convention of the American Park and Out-door Art Association, and one that attracted considerable attention was an exhibit of photographs, which were very conveniently arranged in one of the corridors of the Art Institute. They comprised a great variety of subjects and were grouped under heads designed to explain the object of their arrangement. Such heads as the following were conspicuous: "The Value of a Simple

Tree," the Value of Foliage about Buildings," "Cemeteries," "Basins, Shore Lines and Rocks," "Sculpture and its Surroundings," "Rocks and Paths," etc. Under such heads the groups of photographs exhibited, quite adequately represented the reason for certain treatment, as well as the good and bad practice in landscape art as at present recognized. The range of subjects in which landscape art plays a part was also set forth, as also its possibilities in situations not usually recognized as capable of improvement; it also conclusively indicated that art out-of-doors offers a large field for effort and with promises of results amply justifying the activity of the association. That such exhibits might be collected and used to educational advantage in Improvement Associations generally, is a suggestion that occurs at the moment, for it is quite possible to secure photographs in this age of the camera at little expense, and as an aid in such missionary work they are of inestimable advantage.

LANDSCAPE ART IN CEMETERIES. It is a matter of sincere congratulation that the development of landscape art in cemeteries has been free from the limitations and obstructive tendencies of political machinations, so that where conditions permitted full sway to the artistic accomplishments of the superintendent the results have been generally satisfactory from every point of view. It is true that the physical requirements of a cemetery tend greatly to enhance the difficulties of the landscape gardener, particularly as regards the large area of road surface and the obtrusiveness of the monumental work; nevertheless we have many examples in the country where, with all the difficulties encountered, the landscape effects are of a high order, and of that quality which betokens untrammelled artistic effort on the part of the designer. Landscape art on the ground like landscape art on the canvas does not permit of interference for the best results. Every component detail of the finished work has been arranged in the artist's mind, each to a specified end, and the whole to form a completed picture. Interference from any direction and from any cause must of necessity conduce to at least lack of harmony in arrangement as ordained by the designer and perhaps complete failure in the end from the same standpoint. The development of the lawn plan in cemetery design and the opportunities for so high an order of landscape gardening, has done much in the great work of improving taste in out-door work, and has furthermore drawn public attention in some cities to the cemetery superintendent as a fitting man for association with the city officials entrusted with the care of public grounds, street trees and out-door improvement generally.

THE FOURTH ANNUAL CONVENTION OF THE
AMERICAN PARK AND OUT-DOOR ART ASSO-
CIATION.

The fourth annual meeting of the American Park and Out-Door Art Association convened at the Art Institute, Chicago, on Tuesday, June 5th. Previous to the opening session the headquarters of the association were installed at the Auditorium Annex, the temporary home of the visiting members, so conveniently located in connection with the Art institute, that a better combination for the

besides the attendance of friends and visitors should be considered quite satisfactory, even though it did not meet enthusiastic anticipations.

Tuesday, June 5.—Morning Session.

The proceedings of the first session of the convention opened with the introduction by President Charles M. Loring, of Dr. Howard S. Taylor, who in the absence of the mayor of Chicago, Carter H. Harrison, prevented from attending by important business, welcomed the association in his behalf. Dr. Taylor referred to the conditions attending the



VIEW IN WASHINGTON PARK, CHICAGO.

Mass planting, on site formerly occupied by formal gardening, consisting of perennials and flowering shrubs.

successful conduct of so important a meeting could hardly be devised. The beautiful building of the Art Institute with its magnificent collections of art treasures, its Fullerton Memorial Hall in which the sessions were held, a room designed expressly for such purposes, having all the accessories for the comfort, interest and æsthetic tastes of the participants in the proceedings, offered a concert of conditions most appropriate for the convention of an association so closely allied to the highest manifestations of national artistic progress.

There was a shade of disappointment apparent on the faces of those members more intimately connected with the program at the moderate attendance, but when it is remembered that the association is but four years old, and that its membership is scattered all over the country, a gathering of over 50

creation of the City of Chicago and its development and the growing sentiment in favor of municipal improvement and the provision of more small parks for the recreation and health of the masses. Among the statistics quoted was the fact that 58 millions of dollars are spent annually in drink in Chicago, one-quarter of which would provide all the necessary parks for the increasing population. He paid a glowing tribute to the results already apparent of the work of the association and closed with a warm welcome on the part of the city officials.

After briefly replying to Dr. Taylor, the president next introduced Mr. Wallace Heckman, president of the Art Association of Chicago. In the course of his remarks Mr. Heckman drew attention to the condition of the municipal art question in a number of cities, and its progress. He spoke of

the wonderful work of the World's Fair and its far reaching effects, and closed with suggestions as to the possibilities of improvement in the future of Chicago.

Mr. Heckman was followed by Mr. P. B. Wight, secretary of the Municipal Art League of Chicago, who among many good things, spoke of the suggestive work accomplished in the section of the league's operations pertaining to the improvement of homes. He also referred to the fact of the association of the league with the drainage trustees in the matter of bridge designs for the sanitary district and called attention to the beautiful water frontage of Gothenburg, Sweden, from which much inspiration can be gained.

President Loring briefly replied in appropriate terms to the words of welcome of the foregoing speakers, after which he read his annual address. He opened with a reference to the influence of the association in various directions and the great increase in the number of improvement

associations throughout the country. He spoke upon the importance of interesting and educating the public school children in questions relating to out-door art and referred to some of the practical results of this policy in several sections of the country, notably that of Springfield, Mass., where the children have become the guardians of the street trees, and have so stimulated public sentiment that a demand on the city council for \$20,000 for their care, was granted. The remarkable results attained in Carthage, Mo., under the leadership of the superintendent of public schools was commented upon, and the excellent work and its results among the children of Minneapolis, due to the women of that city was described. In his concluding remarks Mr. Loring said:

"Who can say, too, but what the longing for rural sights and sounds may not thus be cultivated, and the tendency to dangerous urban centralization receive a wholesome check? We all deplore in the present the lack of enthusiasm for country pursuits, the aversion of the farmer's son for the occupation of the father—ready to his hand, an occupation too frequently dis-

carded for penury, or at least a precarious existence in a thickly populated city. Our agricultural colleges are combating this mistaken idea in a most practical manner. First, they teach the student that brains and education bear inestimable fruit in farming, as elsewhere. Next, that more than a bare living can be made by a farmer who understands his business; comfort, even luxury, can gradually be obtained. Lastly, and most important, the philosophy and poetry, the ethics of existence, need not be banished by petty ambition or material considerations. The farmer can be the peer of his city brother in love of nature, and appreciation of the highest contemporaneous thought.

"Such institutions as the Lawrence Scientific School both ennoble, and are ennobled by, the study of landscape architecture, which combining art and science, is, at last, finding its true place in the daily economy of the world.

"A writer for the Humane Society urges that 'the criminals of the future are in our public schools to-day; we can mould them now if we wish. The future is now in our hands.' It might be added they are also in our streets and parks. Will anyone contradict the theory that the higher nature of children

is constantly appealed to when living in a city where attractive thoroughfares and beautiful parks teach them gently persuasive lessons? Such a metropolis clearly illustrates in unmistakable, if silent, language, that utility and beauty can be co-existent, that the city, as a whole, cares for the welfare and pleasure of its inhabitants, as individuals, as a wise mother cares for her children; that as they are considered and cared for, so must they consider and care for those less favored and weaker than themselves, including the dumb half of creation. Will not the boy whose attention



THE OFFICE BUILDING, HUMBOLDT PARK, CHICAGO.

has been attracted by the well-kept collection of animals in a park menagerie, where he feeds the graceful deer and clown-like bears with his own hands, and notes the solicitude displayed by the park attendants for the wild denizens of the spot, the squirrels and birds, be less apt to display cruelty to all animals thereafter? Will not the girl, as her eye is gratified by the brilliant plumage, and her ear is filled with the joyous and varied voices of the feathered songsters, ponder upon their usefulness, innocence and beauty; in other words, their right to live and be less ready to have these beautiful inhabitants of the trees slaughtered by the millions for the adornment of herself and sex? It is both sad and shameful, at the present time, that public sentiment has not accomplished what law is beginning to demand—the protection of birds.

"Ex-Mayor Hewitt, chairman of the committee for securing small parks and playgrounds said: 'In planning the city of New York the children seem to have been forgotten.' Is not that true of all of our cities? Have we provided for the physical development of the children as we should? Thanks to the few who have realized the necessity for other playgrounds than the public streets, some of our larger cities have provided, at enormous cost, small areas in densely populated sections with most gratifying results. This movement should be inaugurated in every city, and in every park there should be a section provided for the exclusive use of children. Playgrounds should be established in every ward. When our city rulers realize the truth of this, there will be a decrease of crime, and in the death rate, and an improvement in the moral and physical condition of the youth.

"I have presented this subject of the education of children.

because the experience of the past few years has convinced me that the object of this association will be more quickly realized through this source, and recommend that the delegates to this convention upon returning to their homes, promote the organization of the school children into improvement associations, and encourage the teachers of public schools to give their pupils lessons in nature study, thereby laying the foundation for greater usefulness and in many instances a means for obtaining a livelihood in one of the most pleasing occupations ever engaged in by individuals of either sex."

After the president's address the reports of officers and committees were presented. The secretary's report recorded a large increase in membership, which numbers over 300 and represents 85 cities and towns in 28 states and in Canada. The treasurer's report also showed continued improvement. Dr. W. W. Folwell, Minneapolis, chairman of committee on "Park Census," reported that as the census law makes no provision for statistics on parks, further legislation would be necessary to secure action. This report was received and committee continued.

An important committee report was that presented by Prof. Wm. J. Beal, Lansing, Mich., for the committee on "Prizes for Designs." After ably discussing the position of the association in the question and reviewing the possible results to be obtained by a well ordered system of prize giving, and in which women's clubs and similar organizations should be urged to co-operate, the report concludes with the following recommendations:

"However carefully your committee may attempt to be specific in making schedules for prizes for plans and their execution for the improvement of home surroundings, it will often need to be modified to suit the price of lots and houses in different towns.

"We suggest first, second, third and fourth prizes for the best plans, so far as seen from the street in front and the rear from the alley of lot and house valued at \$300 to \$800. Another list of premiums for places valued at over \$800 to \$1500. Another list of premiums for places valued at over \$1,500 to \$3,000. Another list of premiums for places valued at over \$3,000.

"The judges may be selected by the persons or members of societies offering prizes.

"Another set of prizes may be offered for plans suitable for more costly residences, in which the use of vines annual or perennial is made a leading feature, but not to the exclusion of other plants.

"Another set for plans in which ferns are a conspicuous feature.

"Another set for plans in which perennial herbs are a conspicuous part.

"Another for the use of shrubbery in street planting, not excluding trees.

"We especially recommend the prizes to boys for making good vegetable gardens. These gardens may be either on private ground or on ground supplied by Improvement Associations or Corporations. No form of prize offering will be so productive of good results in the community as this. We earnestly recommend the offering of prizes or of giving in some other way encouragement for the improvement of suburban homes, also for the home surroundings of farmers where practicable. Dwellers in those latter places usually need encouragement quite as much as people living in city or village.

"As the owner who is planting for the second or third year has a very decided advantage over him who is just beginning, it may be well to divide the prizes, in each offering the larger prizes for first year's work and the smaller for work of the second or third year, or, if desired, the prizes can be made to cover the yards showing the greatest improvement during the year. In such case it would be wise to have one continuous committee throughout a series of years.

"When the facts will warrant it, and sometimes when they do not, all classes of people enjoy showing visitors about the town in which they live, pointing out the finest residences, streets, shrubs and other plants used for decoration. The poorer streets are not visited, or, if they are, apologies are made in their behalf. We hope to add to the interest already manifested in beautifying humble homes in a few of the cities of this country by making it quite universal.

"In connection with schools and parks, we cannot too strongly impress on the minds of those in authority, the importance of botanic gardens, even though small, in which many of the leading natives and exotics shall each be represented by a good specimen accurately labeled. These will afford opportunity for any citizen in the neighborhood, rich or poor, if so inclined, to compare and take notes of his favorites for certain purposes at all seasons of the year. We refer with satisfaction to gardens of this kind at Harvard University; St. Louis, Mo.; Buffalo, N. Y.; and Bronx Park in New York City; and there are others of less pretension springing up in many portions of our country.

"Any society or club can aid much in the direction of outdoor art by purchasing for the use of its members a small library of suitable books bearing on these and kindred topics; if not able, or not inclined to purchase, they may often induce the officers of libraries already established to purchase and loan books of this character."

Commendatory remarks were made by several members on the above report. Mr. E. J. Parker, Quincy, Ill., spoke of the successful efforts of some of the colleges in this direction. It is a difficult thing to instruct the working classes, and it must be done gradually through members of the associa-



THE SHAKESPEARE MONUMENT.
Wm. Ordway Partridge, Sc.

SCENES IN LINCOLN PARK, CHICAGO.

tion. In regard to the public schools the public should insist upon parking the grounds and keeping them open the year round. They should be accessible at all times and the planting kept in good shape. Mr. S. A. Foster, Des Moines, Ia., stated that the Board of Charities in connection with the Improvement Association had taken up the work of educating the people in the crowded districts with excellent results. There should be co-operation between the women's clubs in the matter of prize giving for the benefit of city improvement.

Dr. Folwell suggested that the object of organization was to set the individual to work, he warmly

Park system, given by the South Park Commissioners. The Field Museum afforded an instructive introduction to the further pleasures of the day, its valuable collections attracting much attention. It was freely suggested that Atwood's beautiful building should be reconstructed in more permanent materials. The drive through the park system in Tally-Ho coaches, gave ample opportunity to appreciate its excellent landscape attractions, and the details of the great improvements under way. Stops were made at the new boat house and landing, a structure of commodious proportions and design and at the Refectory, where tables were already



GRACELAND CEMETERY, CHICAGO.—EFFECT OF SHRUBBERY AGAINST A TOMB.

eulogized the women of Minneapolis for the splendid results of their activity.

Prof. Macbride, Iowa City, Ia., recounted an incident of prize giving where 100 competitors entered their names in a town where the prizes only aggregated \$10. The results were astonishing and the scheme an eminent success.

The report was received and placed on file.

The committee on "Park Accounts" reported no formal report to make, and asked more time, which was granted.

In the afternoon the members of the association assembled at the Field Columbian Museum, Jackson Park, preparatory to a drive through the South

spread and decorated and where a really enjoyable lunch was served. At its close Mr. Donnersberger, president of Park Board, in welcoming the association related the difficulties which had to be overcome before the park system was begun and the opposition it met with, and gave some points on its present condition. Mr. Loring in replying corroborated Mr. Donnersberger's statements referring to his own experience while resident in Chicago in its early days. The drive to the hotel through the fine boulevards was keenly enjoyed.

Evening Session.

The evening session was entirely occupied by a lecture copiously illustrated with lantern slides

given jointly by Mr. J. H. Patterson and Mr. E. L. Shuey, Dayton, O. Mr. Shuey explained the progress of the improvement of factories and factory homes so far as it had been developed in certain places in England and America, showing a large number of views of Port Sunlight, near Liverpool, England, Dayton, O., and sundry other localities. Mr. Patterson followed specially devoting himself to Dayton, and expressing his decided opinion that

the obnoxious defacement of many prominent localities, parks and elsewhere, by the advertising bill board, which was emphasized in a running comment by Prof. Geo. Kriehn, who is taking a prominent part in the campaign in favor of Municipal Art. Nothing could more emphatically call attention to the abomination of the bill board nuisance in our cities than such an illustrated comment, and this served to introduce the elaborate and compre-



ROSE HILL CEMETERY, CHICAGO.—VIEW OF WEST LAKE.

such improvements and aids given to the working classes by employers amply repaid both the capital invested and the labor involved. The lecture was largely attended and in reply to many questions from the audience, a large amount of instructive suggestion was brought out.

Wednesday, June 6, Morning Session.

The session opened at 10 A.M. by the reading of a paper by the secretary, prepared by Mrs. Cyrus H. McCormick of Chicago, on "Landscape Gardens," extracts from which will be given in an early issue.

This was followed by a stereopticon display of

hensive report of the committee on "Advertising Bill Boards" which was read by Mr. John C. Olmsted. The report admitted that the evil to be repressed is "merely the unreasonable extension and abuse of a perfectly proper practice incident to modern business methods," and is confined to a discussion of a means of relief. An easily corrected abuse is the indiscriminate painting and placarding of advertisements chiefly upon rocks, trees, fences, etc., without regard to property rights, in which the law gives ample protection. There appears to be some confusion regarding the question of such rights in connection with public highways, practice

varying in different states. The recent law passed in Massachusetts at the instance of the Trustees of Public Reservations, and of which a copy is appended to the report covers the question for that state. The report fully discusses this phase of the matter. The great difficulty to be met is that in which the owner of property gives his consent to the advertising, and from which generally a small income is derived. And to give expression to and develop public sentiment against such offensive displays lies at the bottom of any improvement in the present condition of things. The report ably considers the many sides of this problem and is full of suggestive reasoning, and bears with strong emphasis on the abominable features in connection with billboards about parks and parkways. In relation to parks the report recommends:

"That the American Park and Out-door Art Association in conjunction with some municipal organization such as the Art Association of Chicago, endeavor to secure the adoption by a Park Commission, acting under proper legislative authority, of carefully drawn regulations governing in a clearly reasonable and moderate manner the display of advertising signs upon property fronting on the parks and open spaces under its control. The regulations and the form of the authority for passing them should be carefully examined by counsel before they are submitted for passage so that a clear and favorable test case might be presented under them to the courts, on the simple question whether the use of private property can under any circumstances be lawfully limited solely on account of the appearance presented to the public. That point once clearly established by the courts, the question of the precise limits of reasonable control can then be worked out not only as regards advertisements but as regards many other matters vitally affecting the beauty of our daily surroundings."

The report proceeds to give in considerable detail an account of the efforts of the "English Society for Checking the Abuses of Public Advertising" which has made considerable progress, though slow, and concludes with the following:

"To enter into any more detailed discussion of methods would render this report altogether too burdensome and we will therefore conclude with the following general recommendations.

"Through its secretary this association should undertake to enter into communication with other societies and with individuals interested in checking the abuses of public advertising; it should acquire and distribute to its members, to cognate societies and to press, facts and arguments bearing upon the subject; and it should facilitate the co-operation of those interested in the amenities of outdoor life in this as in other directions. Notwithstanding the fact that it will be a serious burden to undertake this work, and notwithstanding the fact that the public spirit of the secretary is already imposed upon by the association we make our recommendation in this form, because we believe it more businesslike, more likely to accomplish good results, and less wasteful of energy that all of the correspondence concerning the closely connected subjects with which the association has to deal should be done from one office and under one direction. This means that the association must provide the secretary with competent paid assistance to take as much of the burden from his hands as may be. Before passing a vote, therefore, the association should deliberately consider the financial burden involved, for if it is worth while to take any organized action it must be done with system, continuity and thoroughness, qualities which are not to be attained without the expenditure of valuable time and money. As a guide to the association in reaching a decision we may state that the expenses of the English society during those years of which we have accounts, with a very small allowance for clerical assistance, averaged \$558.68 per annum. (For details see appendix.)

"Whether the association in its present condition would be justified in taking up such a burden without securing in advance

a larger financial support than it now has, is a question in the minds of your committee; but we are agreed that to take the subject up in a half-hearted and unsystematic manner would be to a great extent a waste of time and energy and we are inclined to believe that an active and systematic campaign against the abuses of public advertising would bring to the association sufficient financial support to meet the additional expense."

Mr. E. C. Van Leyen of Detroit described how the park authorities of that city had shut out a saloon and some obnoxious billboards by planting a screen, which in due course had most effectually fulfilled its purpose.

Mrs. Herman J. Hall, vice-president of the Chicago Art Association strongly advised co-operation with the women's clubs of the country, and referred to the questions before the Milwaukee convention now in session.

Mr. E. J. Parker moved the adoption of the report and that it be printed as a separate pamphlet and used for missionary purposes. He spoke of his experiences in Quincy, Ill., and said there can be no expression of municipal art where bill boards exist. Citizens have the right of enjoying the landscape free from objectionable advertising signs.

The report drew forth a number of suggestions on the subject.

The morning session closed with the reading of a paper on "Trees in Landscape," by Mr. W. M. R. French, director of the Art Institute. This paper which is given in another column was illustrated by free hand sketches in colored crayons, executed in the presence of the audience, a method of illustrating his subject, in which Mr. French has long been a master.

The afternoon was taken up by a drive through the West Side park system provided by the West Park Commissioners. The trip was somewhat marred by a thunder shower, but was nevertheless very enjoyable, the west park system affording somewhat of a change in park work from that of the south side. Mr. J. W. Suddard, president of the board of commissioners accompanied the party. An enjoyable lunch added to the pleasant excursion.

The banquet tendered to the association by the local committee took place in the evening in the banquet hall of the Auditorium hotel, a room whose costly artistic decorations and beautiful proportions very appropriately accorded and in part illustrated the mission of the association. The affair was recherche' in every way, marked by simplicity and elegance throughout the appointments and details. Nothing whatever occurred to mar the occasion in the slightest degree, except perhaps to the chairman of the committee of arrangements, when he found that his after dinner speakers had imbibed too freely of the prevalent Chicago air and had struck. However, a number of impromptu speeches were made, those participating

being: S. M. Millard, toastmaster, J. H. Patterson, Sidney A. Foster, E. J. Cornish, Albert Kelsey, A. D. Philpot, Prof. Geo. Kriehn and Mrs. Herman J. Hall. Some seventy-five guests were present.

Thursday, June 7, Morning Session.

The meeting opened at 10:30 A. M. and in the temporary absence of the president through indisposition, Mr. Sidney A. Foster was called to the chair. A very practical paper and one full of suggestion to the landscape architect was that presented by Mr. J. Frank Foster, superintendent of the South Park System of Chicago on "Park Roads." Mr. Foster prefaced his paper by alluding to the appointment and composition of the Board of South Park Commissioners, who are elected by the Circuit Judges. The board consists of five men, one of whom is appointed to office each year; thus the board is continuous and the effect of the system has been most satisfactory to the people. Large credit is due to the judges for the excellency of their appointees. Mr. Foster's paper will be presented in full in our next issue. Mr. Foster was followed by Mr. S. M. Millard of Chicago, whose paper dealt with "Art in Landscape." Mr. Millard presented his theme in a masterly way and offered many excellent suggestions in the course of his remarks. Owing to the stress of business to be accomplished before adjournment the paper by Mr. William Ordway Partridge, sculptor, on "the Proper Setting of Statuary in Public Places," was read by title only.

The oratorical success of the convention was undoubtedly the address of the Rev. J. A. Rondthaler of Chicago, upon "the Influence of Public Parks upon the Morality of the Community," extracts from which will be given in another issue. It attracted close attention and pointedly suggested how close our lives lie to the bosom of nature.

The balance of the morning session was given up to the transaction of business, and the reports of business committees were received and their recommendations adopted.

A petition was presented from the women members asking that a women's auxiliary might be formed, with a view to affiliating with other women's clubs in the national federation, and in this way gain the influence of that body. The petition was accepted and referred to the council.

An invitation was presented by the City of Milwaukee to hold the next convention in that city. It was conveyed by letters from the mayor, Mr. David S. Rose, the Park Commissioners and the Citizen's Business League, and in person by Messrs. Wm. Weber, August Rebhan and W. A. Starke. The invitation was unanimously accepted. A num-

ber of resolutions were passed which are given herewith.

A communication was presented asking for a change in the constitution to the end that park officials throughout the country by the payment of increased dues might secure better facilities for the conduct and discussions of matters purely connected with park affairs.

An animated discussion followed the presentation of the communication, and many suggestions to encourage the consistent growth of the association were evolved, at the same time in certain directions a decided disposition to deprive the council of the association of its regulative functions was manifested.

The following officers as recommended by the council were unanimously elected:

President, L. E. Holden, Cleveland, O.; Vice-presidents: John C. Olmsted, Brookline, Mass., E. J. Parker, Quincy, Ill.; Secretary, Warren H. Manning, Boston, Mass.

Dr. Folwell moved resolutions of thanks to the Local Committee, Chicago Architectural Club, Commissioners of the three Park Systems, Trustees of the Drainage Canal, Bassett & Washburn, Chicago Carnation Co., and all who had so bountifully contributed to the success of the convention. Unanimously adopted.

Resolutions and Petitions.

CHICAGO, June 7, 1900.

The undersigned members of the American Park and Outdoor Art Association request this association to authorize them to form a Woman's Auxiliary in order that it may co-operate with and secure the aid of the general federation of women's clubs in promoting the objects for which this American Park and Outdoor Art Association was formed: (Mrs. C. M.) Florence Barton Loring, Minneapolis, Minn.; (Mrs.) Warren H. Manning, Brookline, Mass.; (Mrs.) Frances Copley Seavey, Brighton, Ill.; (Mrs.) Lewis Johnson, New Orleans, La.; (Miss) R. L. Richmond, Grand Rapids, Mich.; (Mrs.) J. I. Olmsted, Brookline, Mass.; (Mrs.) A. E. McCrea, Chicago, Ill.; (Miss) Edith A. Canning, Warren, Mass.

* * *

Resolution read by Mr. Edw. C. Van Leyen, Park Commissioner of Detroit, Mich. Referred to the council for action.

WHEREAS, The American Park and Outdoor Art Association was organized for the advancement of the parks and of outdoor art and,

WHEREAS, Many of the Park Commissions are paying the expenses of their commissioners and executive heads to attend this convention for the purpose of gaining valuable information relative to park work and,

WHEREAS, The subjects treated upon and information given at this and the past two annual meetings, have been very instructive, but mostly foreign to park work, and

WHEREAS, This association is in need of funds, and that the burden should be largely met by the Park Commissions therefore, be it

Resolved, That the Constitution and By-laws be so amended as to direct that a majority of the Council shall consist of Park Representatives and that Park Commissions be members instead of individuals at annual dues of fifteen (\$15) Dollars permitting one or more delegates from such commission and that all other members of the association pay dues the same as provided by By-laws now.

* * *

Resolutions to the Secretary of the United States Treasury, regarding advertising signs on government buildings.

WHEREAS, The American Park and Outdoor Art Asso-

ciation has undertaken to discourage the defacement of Public streets and grounds by offensive "bill boards" advertising. Therefore be it, *Resolved*, That the Secretary of the Treasury of the United States be and he is hereby requested to have Paragraphs 2, 3, 4 and 5 of Section 13 of "Instructions to Superintendents of Public Buildings" amended so that all advertising and signs other than necessary legal notices be prohibited upon all fences and inclosures upon or around government grounds or buildings. Adopted.

* * *

In connection with a letter from Dr. C. P. Ambler, Secretary and Treasurer, Appalachian National Park Association, asking the American Park and Out-door Art Association to endorse their action for the establishment of a Southern National Park somewhere in the Southern Appalachian Mountains, the following resolution was carried.

Resolved, That this association endorses all well considered movements for the acquirement by the nation of state mountain or forest reservations that will be for the use and benefit of the people.

* * *

Resolution offered by E. L. Shuey of Dayton, O. Adopted.

Resolved, That the Council be requested, when preparing the program for the next meeting, to arrange in addition to the general topics a series of sectional conferences for the discussion of special subjects of interest.

That this be done with a view to offering opportunity for the discussion of practical subjects of interest to the varied classes of members.

The members of the association were the guests of the Lincoln Park Commissioners in the afternoon. Some 30 carriages preceded by mounted park police passed over the finest drives of the north side district of Chicago, traversed Lincoln Park so as to observe its best points and halted at the conservatory where flowers and favors were presented to the guests. Mr. F. H. Gansbergen, president of the board, and other officials did the honors of the occasion. Reentering the carriages the drive was continued and Graceland and Rose Hill cemeteries were visited the excursion finally terminating at the P. S. Peterson nurseries, where a delightful al fresco lunch was served and a very gratifying hour or more spent on the grounds with the hospitable entertainers.

The return was made at will, many of the guests however desiring to attend the joint session of the association with that of the Architectural League of America at the Art Institute. At this meeting which was presided over by Mr. W. M. R. French, who gave an entertaining opening address, the first paper disposed of was that of Mrs. Edwin D. Meade, of the Twentieth Century Club, Boston, on "Municipal Improvement," which was read by Prof. James William Patterson of the Art Institute. The paper was illustrated by the stereopticon, and many incongruous conditions of city art and embellishment, with special references to the bill board nuisance, were shown. Extracts from the paper are given elsewhere.

Another paper of similar import, and which completed the evening's programme was read by Mr. Albert Kelsey, president of the Architectural League of America, on "Municipal Development." While Mrs. Meade condemned high buildings Mr.

Kelsey considered that they represented a wonderful achievement of architecture and deserved due credit as being desirable as municipal buildings. The paper was copiously illustrated with lantern slides, by which many examples of foreign development were shown as well as American, and with a number of suggestive pictures showing how the diverse influences of art and commerce might be arranged so as to present no detrimental features.

This meeting closed the regular program of the convention.

On Friday June 8, a number of members and friends took advantage of the opportunity provided by the local committee and enjoyed a trip through the Drainage canal to Lockport, where the great engineering works controlling the present outflow of the canal into the DesPlaines River, was inspected with intense interest. Here the party separated, the majority returning by train to Chicago, while a few were entertained by Mr. O. C. Simonds in a delightful drive through Mr. Higginbothams park at Joliet now in course of development, a fitting climax to a series of entertainments of a highly interesting and gratifying nature.

* * *

Among the members and delegates present were:

F. W. Salway, R. H. Warder, Cincinnati, O.; Thomas B. Meehan, Germantown, Philadelphia; Prof. Wm. W. Folwell, Wyman Elliot, J. A. Ridgeway, Harry W. Jones, *Charles M. Loring, president, Minneapolis, Minn.; *John C. Olmsted, Brookline, Mass.; *Warren H. Manning, Secretary, Boston, Mass.; Miss Edith A. Canning, Asst. Secretary, Warren, Mass.; O. C. Simonds, Treasurer, Michael Barker, Willis N. Rudd, W. A. Peterson, R. J. Haight, Geo. Kriehn, W. M. R. French, J. C. Vaughan, A. D. Philpot, John W. Weston, George Beaumont, James Jensen, Curtis T. Fenn, Cassius C. Roberts, Edward G. Uihlein, Louis J. Sullivan, Mrs. A. E. McCrea, *George B. Byron, A. C. Schrader, J. Frank Foster, J. H. Van Vlissingen, S. M. Millard, Mrs. Herman J. Hall, Mrs. Frances Copley Seavey, Edwin A. Kanst, W. P. J. Kiser, W. Suddard, George E. Mason, Olof Benson, Chicago, Ill.; Prof. Thos. H. Macbride, Iowa City, Ia.; Sidney A. Foster, Des Moines, Ia.; *Lewis Johnson, E. J. Baker, New Orleans, La.; W. J. Stevens, Carthage, Mo.; E. J. Cornish, E. J. Ellison, Wm. R. Adams, Omaha, Neb.; M. P. Hurlbut, E. C. Van Leyen, R. J. Coryell, Detroit, Mich.; John H. Patterson, E. L. Shuey, W. A. Sinclair, Dayton, O.; G. A. Parker, Hartford, Conn.; *Dr. J. V. N. Standish, Galesburg, Ill.; Edward J. Parker, Quincy, Ill.; Joseph D. Fitts, Providence, R. I.; Prof. L. R. Taft, H. P. Hedrick, Lansing, Mich.; Lyman R. Love, Kalamazoo, Mich.; Miss Rebecca L. Richmond, Grand Rapids, Mich.; C. J. Maloy, Rochester, N. Y.; Nelson Bogue, Batavia, N. Y.; Wm. Scott, Buffalo, N. Y.; Prof. Wallace Wood, New York City; Cyrus Peck, Newark, N. J.; Miss D. E. Dew, Springfield, O.; Wm. Weber, August Rebhan, W. A. Starke, Milwaukee, Wis.

*Accompanied by wife.

* * *

In one of the corridors of the Art Institute quite an extensive display of photographs were arranged for exhibition. The collection included about every phase of landscape art, and was particularly instructive in that good practice and bad practice were arrayed in such manner that each was accentuated, so that even to the casual observer there was no mistaking the good for the bad. The exhibit was rich in views from abroad, where formal gardening is so frequently to be seen.

WESTERN BOULEVARD TREES.

What a true friend of the family is a stately majestic elm, as it gracefully rears its regal head near the old homestead; and what a decided influence for good is exerted upon succeeding generations which come within the shade of its pendulous branches. The inherent beauty of every landscape is largely derived from the trees which enter into its make-up.

Trees are also very important factors in softening or accentuating the handiwork of the architect. Nothing is so restful to the eye or such a balm to the tired nerves as nature's own mantle of green. These gigantic air filters make the climate healthier, equalize the temperature, and by their beneficent effect bring heaven and earth into more perfect harmony.

Formerly, the tree planter went out to some neighboring forest and selected a sapling of the desired variety and of a size he could handle. After digging, it was found to have only three or four main roots devoid of fibers.



Carolina Poplar.

One should collect seed from a good thrifty specimen of the particular variety and habit desired, then sow in rich soil and transplant every third or fourth year, giving each time just enough space to form a straight trunk and a well shaped crown.

This frequent transplanting forms a great mass of fibrous roots which are the mainstay of all trees destined to be moved, later on in life. The annual trimming is done with reference to obtaining a stocky trunk and a well developed crown, sufficiently high so as not to interfere with carriages or street lighting. The young tree, now some three or four inches in diameter, can be graduated from the "baumschule" as the Germans call it. When extra heavy, large sized trees are required they may take a post-graduate course into heavy soil, in order to obtain a transportable ball of earth.

Upon entering business life in the city the young tree is confronted by many trials and adverse surroundings. The soot and smoke stop up its lungs; tall buildings shut out the air and sunlight; ashes and other refuse are expected to nourish the roots and the much

The reduction of the base of supplies to nearly a stump necessitated an equally heroic treatment of the trunk and branches. Should the tree survive this trying ordeal it is hardly to be expected that such material would ever produce a symmetrical effect. The training of a boulevard tree must begin in its infancy.

needed rain speedily finds its way into the sewer. Is it a wonder that city trees do not always prove a permanent success? Nevertheless, the nursery grown tree is better equipped for these difficulties than his brother from the forest.

Fall and winter are the seasons when the trees are most dormant and can be best moved.

A modern fad is the irregular treatment setting some trees against the curb and others as close as possible to the sidewalk and at various intervals omitting them altogether. Plant one variety only, in a line, and at least thirty-five feet apart. A straight avenue is plainly the work of man, so why not have the trees conform to it.

What can be grander than a vista through an overarching boulevard of stately trees. I use the term boulevard, as the French do, and not for a narrow street regularly swept and sprinkled by a Park Board.

It is not safe for us in the west to blindly follow all the recommendations of the eastern specialists. The Brooklyn Tree Planting Society gives first choice to the pistillate form of the Ailanthus for an avenue tree and in Paris the same preference is shown. With us it has not proved a success as it often winter-kills. In the severe season of a year ago, ninety-five per cent. of all the Tulip trees perished.

Oaks grow slowly and are so riddled by borers that they must be discarded. The various members of the Birch family are all very beautiful, but after removing the lower branches, as is necessary on a driveway, their narrow pointed tops have an unnatural appearance. The American Sycamore thrives better here than its more aristocratic relative from Asia, but both are erratic and unreliable. The Horse Chestnut does not take kindly to our climate



American Elm.



Norway Maple.

as all old trees will be found to be rotten at the core. For a flowering street-tree the Western Catalpa is an excellent substitute, quite tropical in its suggestion, and is a vigorous grower. The so-called "Carolina Poplar"



Peterson's Bronze Ash.

is a seedless form of this numerous family and is the popular tree of the day. With an erect habit and rapid growth, it combines a dignified disregard for soot and smoke and like the Catalpa thrives in clay or sand. The Thornless Honey Locust has a light feathery foliage and is esteemed by many. Our Teutonic friends favor it, for its resemblance to their beloved Acacia. The irregular and low-branching habit of the Box Elder makes it more suitable for screen work than line planting. The Silver Maple is of quick growth and if the top is properly trained, is more shapely than the slow growing and more rigid Sugar Maple but both have a host of admirers. If the Elm is the "King of the Forest" then the Norway Maple is its "Queen." It is free from all attacks of insects, leaves out early, gives a grateful shade, and is the last to drop its golden tinted foliage.

The Experimental Stations have found the Hackberry, in appearance much resembling the Elm, to best withstand dry parching winds, and long seasons of drought. For formal planting the Linden and Rock or Cork-barked Elm are very much in vogue.

In selecting an ironclad variety to withstand all adverse circumstances the White Ash easily takes the lead. The soil may be light or heavy, be flooded in the spring or badly cracked in summer, yet, with no attention whatever the Ash will grow right on. The "Bronze Ash," botanically known as *Fraxinus Americana Petersonii*, is a local form embodying the good points of the Ash just mentioned with a dark green foliage, holding late, and with fine autumnal



Hackberry.

colors. The English Field Elm is of much slower growth than the American and has a smoother bark. It does not transplant as readily and owing to a tendency to become sour-hearted, is not used in the west except as a lawn tree. Several varieties of the Scotch Elm are beginning to find favor as street trees; but the noblest and grandest of them all is the American Elm, the ideal boulevard tree.

Some people imagine that a goodly sized Elm cannot be transplanted with any degree of success. In substantiating the claims made, I can cite the result of 540 Elm trees, five to six inches in diameter, which we planted on Ridge Avenue in Rogers Park, three years ago, of which not a single tree died. The ancients held the Elm in venerable esteem. Virgil termed it a prophetic tree and possibly beneath its leafy canopy, with the breezes playing through the boughs overhead, penned these lines:

"Full in the midst, a spreading elm displayed
His aged arms, and cast a mighty shade;
Each trembling leaf with some bright vision teems
And leaves impregnated with airy dreams."

The above paper was read at a meeting in Chicago of the Western Society of Engineers, by Wm. A. Peterson, the manager of Peterson's Nursery.

The paper was illustrated with slides made from photographs of the varieties mentioned. The statements made are based on an experience of forty-five years in Chicago.

THE FLEISCHMANN MAUSOLEUM, SPRING GROVE CEMETERY, CINCINNATI, O.

It is seldom, even in the experience of the large cemeteries, that the opportunity offers to locate a structure of any kind so favorably as that of the Fleischmann mausoleum in Spring Grove cemetery, Cincinnati, O., and the illustration needs no text to attest the statement.

In design the mausoleum is a reproduction of the Parthenon at Athens, and is constructed of Barre granite. It is surrounded by 26 Doric columns 12 ft. high and 18 in. in diameter and was constructed by the Harrison Granite Co., New York City.

The tomb is located on a lot, about 10,000 square feet in area, which has afforded Mr. Salway an opportunity to create a harmonious setting. It may be of interest to designate broadly the planting material to be seen on the picture. The prominent trees on the right of the building are Taxodiums, while on the left are Silver poplars and Taxodiums. In the rear are Elms, Sycamores, Mulberry, Taxodiums and Willows. The evergreens in the foreground of the building are *Abies Orientalis* and Japan and American *Arborvitæ*. The shrubbery interspersed consists of *Spiræa Aurea*, *Syringa*, *Dogwood*, *Symphoricarpa* and Japanese grasses. The lilies in the lake are the Egyptian Lotus and *Nymphaea rosea*. The whole combination presents a beautiful picture, a worthy addition to the many with which Spring Grove cemetery delights the visitor.



THE FLEISCHMANN MAUSOLEUM, SPRING GROVE CEMETERY, CINCINNATI, O.

IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

VINES FOR HOUSE GROUNDS.

In considering details of the structural planting intended as a background, setting and frame for a dwelling and its surrounding grounds, vines are an important element. To their judicious use is largely due the home-like effect that is indispensable to such a scheme.

Vines can never be less than graceful, the severest pruning can not check their natural freedom



CHINESE WISTARIA ON PORCH.

of growth, and, like the curling tendrils on the head of a little child, they escape all restraint to follow the acknowledged line of beauty.

“Creeping where no life is seen,
A rare old plant is the Ivy Green.”

and like it, the mission of the whole vine tribe is to beautify—to heal nature's wounds, to veil her temporary unsightliness, and to supply the drapery which is essential to good results in exterior as well as in interior decoration.

Plants as well as persons do best when allowed to follow their natural bent, so, when there is a bare wall or tree trunk to be clothed, choose for the

situation the vines that walk up such surfaces as readily as flies walk on a ceiling—“walking vines” they might be termed. As we deal with strictly hardy material for permanent planting, the choice for such vines is narrowed to three: First, *Ampelopsis Veitchii*, otherwise known as Japanese Ivy, and, in the east at least, as Boston or South-side Ivy; second, *Ampelopsis quinquefolia* var. *Englemannii*, the type being commonly known as Virginia creeper, and to some as Woodbine; third, *Euonymus radicans* in both the green and variegated forms. The *Euonymus* is rather slow in becoming established, requiring two or three years to start into as vigorous growth as either of the other vines will make the first season. When set at the base of a living tree of considerable size, it is a good plan to grow the *Euonymus*, and even the Japanese Ivy, in medium-sized pots for a year or two (plunging them an inch or two deeper than their own height), and, at the end of one or two years, to break the pots without disturbing the roots. All vines planted at the base of growing trees should be heavily manured every fall to offset the relentless demands of the larger plant for “more.”

There is a much wider choice of vines for shading porches and other similar situations. Any reliable nurseryman's catalogue gives a fair outline of the characteristics of many, and *PARK, CEMETERY AND LANDSCAPE GARDENING* frequently illustrates the good effects of some of the best.

In choosing such material, location and requirements must be considered for, as, in all planting, success depends in a very large measure upon putting the right thing in the right place. For instance, dense-growing vines, such as *Akebia*, Wild grape, Bitter-sweet, *Aristolochia sypho*, Moon vine, etc., are needed where deep shade is wanted; but those of lighter growth, like *Clematises* in variety, some honeysuckles, *Ipomea digitata*, etc., where only a slight screen, outline or frieze of foliage is the desideratum. Again, the character of the support furnished for the vines to run on is a factor to be considered, calling in some cases for twiners such as *Akebia*, *Wistaria*, some Honeysuckles, Cinnamon vine, etc.; in others for those that climb by tendrils as do grapes, *Clematises* (practically), *Cobæas*. Then, again, some situations demand all the sunshine in winter combined with shelter from the glare and heat of summer; others are well suited to the use of strong woody vines, which would elsewhere be objectionable on account of their weight, and only those of lighter growth or true herbaceous character would be suitable. Even annual vines have their place and purpose, being especially valuable in new planting where

they may temporarily fill vacancies that will be occupied later by permanent material, and for clothing the lower part of woody vines that tend to sparseness of foliage at the base. Another acceptable way to overcome this defect lies in the use of two varieties of hardy vines together. For example: Tubers of the Cinnamon vine planted in the same opening that is to receive a Wistaria, or and perhaps still better, a good plant of Clematis coccinea with Wistaria, which latter vine has a tendency to bare stems. The Clematis is particularly good for the correction of this defect, which becomes more noticeable as the Wistaria grows old, for it exhibits quite the contrary characteristic of slender growth while young and increasing vigorousness in later years; in fact, it sends up more and stronger shoots each season, and after its second or third year, in a well chosen situation, it can be depended on to weave a generous garland that is charmingly decorated throughout the entire summer and fall with coral bells unique in shade and in shape as well as by almost equally attractive seed vessels.

Climbers are adapted to varied uses and locations. Walls may be clothed by those that cling to any surface or by erecting a trellis, preferably of woven wire, on which almost any kind of vine will climb; they will closely cover the trunks of trees or climb industriously upward and drape the tree tops; they are pretty when grown on bare posts, which are thus transformed into pillars of green; they are invaluable for shading porches, summer houses, arbors, etc.; they will supply a cover for bare ground where grass can not be made to thrive; and they are never more beautiful than when allowed to scramble at will over tree and shrub, or clothe rough and barren banks. The foundations of wind mills and water tanks may be redeemed from their present unsightly estate by using vines; they should help to shield every outbuilding of every school house in the land; country and village churches all over the country would gain in attractiveness and probably in membership, by a general and generous use of vines; and there can hardly be love in a cottage without them, while their proper use in this direction would doubtless prevent all inclination for its escape through the window.

F. C. S.

The discussion on small parks for our crowded cities is beginning to develop another form of philanthropy, that of opening private house grounds at regular and frequent intervals to the children of the locality. Under certain conditions of regulation and control this would be a helpful neighborhood agency for good.

TREES IN COMPOSITION.*

In the production of all artistic effects the art of composition is the rare and crowning skill. In the field of pictorial art nothing is more striking than the number of artists who can paint fine individual subjects, compared with those who can put this and that together and make a real picture. The studios are full of fine studies and it always seems as though the artist was on the very point of producing a great work.

In the present instance there is little need of singing the praises of trees, which with grass, may be said to constitute the chief materials of the landscape architect's art. Yet we do not always reflect how absolutely dependent ordinary scenery is upon trees. There is a grand and singular beauty in the bare and many-colored rocks of Colorado. And the treeless prairies of the Dakotas have a beauty of their own, like the expanse of the sea. But it is what we call rural or rustic beauty that affects most of us with the greatest pleasure, and it is this beauty that we can do most to promote with our own hands.

It may be roundly assented that the beauty of a small town is wholly dependent upon its trees. Watch yourself as you declare this or that village to be a beautiful place, and you will find that you mean simply that it has many and fine trees. Its beauty may be promoted by wide and orderly streets and by neat and tasteful buildings and especially by care of trees and grass, but if the trees are really fine it can scarcely be kept from being beautiful. New Haven, Brookline, Minneapolis, Madison, have good and interesting buildings, but if the trees were removed they would have little claim to being mentioned here. The trees are at least an essential element of their beauty. Great cities try to join rustic to civic beauty by the formation of parks.

In small towns it is not necessary nor desirable that there should be elaborate parks and boulevards. A village itself may be made practically a park by the exercise of taste and public spirit among its citizens. Let it be distinctly recognized that the beauty of a village is little dependent on its buildings. Give me the control of the trees, the grass and the grounds of a village and I will defy you to spoil it with bad buildings. I would not say that its beauty cannot be impaired, but certainly with abundant and fine trees, green grass, and well-kept grounds, the buildings of a village can scarcely be so bad as materially to damage its beauty. On a single street you may be able to crowd ugly buildings close upon the sidewalks, with ill-assorted colors and untidy architecture and so make an unsightly spot, but allow me a row of fine trees upon each side and I will take the edge off even of this barbarism, and in the outlying and more open parts of the village I will more than make up for what evil remains.

On the other hand reflection will show that no beauty in the buildings themselves will compensate for the absence of these beautiful adjuncts of nature, grass and trees.

Picture to yourself a scattered village, destitute of trees, of the most beautiful architecture you can conceive, of Gothic cottages and Italian villas, fenced and paved as tastefully and elaborately as possible, with gold and precious stones, like the Holy City if you

*Paper read at the Fourth Annual Convention of the American Park and Outdoor Art Association, Chicago, by W. M. R. French, Director of the Art Institute.

please, but let trees and grass be absent, and can you conceive of its being attractive and beautiful for the abode of man. Does not your mind turn with restful relief to some village like old Hadley, with plain, unpainted houses, sleeping in the green sward under the great elm, in the arms of the Connecticut.

I remember a pleasing illustration of the possibility of effecting satisfactory and artistic arrangements of trees, even upon a large scale, which I received more than twenty years ago, when I was the business associate of the well-known landscape architect, Mr. Horace W. S. Cleveland, a man who would honor any profession, and who now, in extreme age and weakness, rests at Hinsdale, twenty miles from Chicago. I went to the South Park of Chicago, then in its infancy to amuse myself sketching in water colors. Across the great lawn, I saw an interesting mass of trees or forest, irregular in outline, retreating in bays, advancing in capes upon the lawn, broken by one or two Lombardy poplars, and I made a rude sketch of it, never suspecting that it was not an accidental effect. When I showed my sketch to Mr. Cleveland, "O yes," he said, "he arranged those trees," the basis being the fine range of old oaks that ran along a slight ridge in the park.

The most extraordinary ideas often prevail among inexperienced persons with regard to the treatment of trees and woods. A common impulse is to clean up all the underbrush and cut off all the lower limbs of trees. I once heard it distinctly laid down by a country gentleman, as a rule, that the first thing to do in a country place was to take an axe and cut off all the limbs of the trees that could be reached from the ground. Anything more ruinous to the beauty of a place it would be hard to devise, unless you should cut the trees all down.

No principle of the artistic treatment of grounds is better established than that open ground and groups of trees shou'd each be marked and decisive in their peculiar character, the open ground perfectly clear, smooth and well grassed, excepting where fine specimens of trees or shrubs are deliberately preserved, and the woods dense and closely covered with foliage down to the ground if possible—at least along the edges. In this way a pleasing alternation of sunny lawn and shady grove is secured instead of a confused medley of grass and shrubs and trees, such as we often encounter. Planting too thickly is one of the commonest mistakes.

We may roughly illustrate the difference between the skillful and unskillful management of trees in this way. Suppose we have a belt of trees with thick underbrush along the bank of a river or lake—a common thing. The chances are that the unskillful forester will clear up all the underbrush, leaving the trees with long slim stems visible and a partial and unsatisfactory view of the water under them. A more experienced improver will cut decisive openings here and there, removing both trees and undergrowth, and leave the natural growth undisturbed in other places, thus producing a series of pleasing pictures framed in by the wood.

The most uncultivated eye could scarcely fail to make the right selection when once the choice was offered it, but this is one of the commonest of errors.

With regard to the relation of trees and buildings or other artificial structures, the principles are precisely those of pictorial composition. The importance of background is apt to be overlooked. In extensive private places the commonest mistake is to try to set

the house upon the highest ground. There are utilitarian objections to this, with reference to water supply and difficulty of approach. Artistically it is usually unfortunate, because of the difficulty of providing an agreeable back ground. An artist rarely paints a building so that any great proportion of the architectural lines show hard and sharp against the sky. He always provides a background of trees or hillsides to soften the effect, and especially is this true when the attempt is to convey an impression of rural repose and homelikeness. For this reason it is almost always better artistically to set a house halfway down a hillside, upon some subordinate mound or plateau, than upon the top.

The effect of large fine trees in the neighborhood of a building is so great as to need no enforcement. Visiting New Orleans, I was struck with the dignified, scholastic air of Newcomb College, the women's department of Tulane University, built upon an old estate where the walks are arched with great live oaks, as compared with the main buildings of the university upon new ground, where the trees are yet to grow. But large trees are the product of time; we must go to them not they to us. My father, an ardent planter of trees, to whom the old town of Exeter, N. H., owes much of its beauty, told me in his later years that he had discovered how to produce large trees at once, and the way was "to set them out a long time ago." He had tried it successfully.

I wonder that housebuilders do not more often make sure of good trees. I have myself bought a tree with some land about it, and built my home under it.

In the case of public monuments, the setting is of the same importance, though here the background may be either of trees or of architectural works, according to the character of the monument. Examples—The Lincoln in Lincoln Park, the Students' fountain, Gen. Grant in Fairmount Park.

Abundant illustrations of the ideas embodied in this paper will be found in the photographs exhibited in the south corridor of the second floor.

MUNICIPAL IMPROVEMENT.*

"The three prerequisites to health, civic beauty and normal civic life are space, pure air and sunlight. With these ensured, architectural beauty, street adornments of fountains, statues, trees and flowers may easily follow. Without these prerequisites, provided by wise legislation and maintained by constant vigilance, all minor beauties of decoration are overshadowed or imperiled or destroyed. The four worst causes of modern city disfigurement are slum areas, crowded suburbs of cheap wooden construction, abnormally high buildings and discordant settings for buildings, fountains and statues.

"But the abnormally high buildings of steel construction, costing from one to three or four millions of dollars, is the greatest material obstacle to modern civic progress. It cannot be wiped out like the rotten tenement block. It has come to cast its blighting shadow for a century upon its neighbors.

"The high building *per se* is not an evil when it is well treated on all four sides and shaped like a tower, and when it is surrounded on all sides by ample space; however, such a building, so far as I know, does not

*Paper read at joint session of American Park and Outdoor Art Association and Architectural League of America, June, 1900. By Mrs. Edwin D. Meade, Boston, Mass.

exist in the world, and need not be discussed. The high building, as it exists, is an unmitigated evil to the many, while it is a convenience to the few, and to those few only so long as they can prevent their neighbors from taking advantage of the laxity of the law and following their example.

"Boston now limits its buildings to a height of 125 feet, or two and a half times the width of the street; this is much less than the limit in Chicago and New York, and yet is far higher than is permitted in any city of Europe. In Paris, and in general through Germany, Italy and Sweden, buildings are limited in height to the width of the street. In Berlin and Vienna houses must not have more than five habitable stories; Brussels, they must not exceed 69 feet in height; and, in London, the limit, with perhaps some exceptions on large open spaces, is 80 feet.

"The preservation and improvement of natural beauties as at Morningside and Central Park, New York, and especially the utilization of waterways, is a matter of prime importance. In Europe, waterways are almost always made accessible to the people, and form a chief feature in the beautification of the city. With us, the river banks have usually been given over to purely commercial interests and are covered with dirty mills and warehouses.

"The question of environment, of a suitable setting to whatever has a monumental character, is the next most vital question. In spite of the fact that in many fields we are now producing much better architecture than is the continent of Europe to-day, our people and our city fathers are singularly deficient in demanding that it shall have a proper setting. Admirable buildings are placed in narrow streets, or are sandwiched in between others of discordant form and color.

"In the dressing of shop windows, in the arrangement of flowers and in many minor matters, we have learned to avoid the hodge podge and heterogeneous, and to strive for unity and harmony. That we have not done this in our street architecture and in the setting of public buildings is due not so much to our bad taste as to our bad politics and to our inveterate prejudice in favor of unregulated individual taste. This individualism permits, as regards private buildings, any dozen men who happen to own each a 25-foot front lot in a given block to mass together a dozen buildings, each of different style and color and height and of different materials. The Paris law, which requires a certain uniformity of sky line, cornice and balconies and harmony of color in any given block, would be a boon to every American city. With reasonable laws, our finer building materials, more brilliant colors and greater beauty in city domestic architecture, would make our cities far excel in beauty any in the old world. No freak or monstrosity would be permitted, and the subordination of each unit to the whole would increase rather than diminish the beauty of each, as was evident at the World's Fair. We should simply exchange unbridled license for true freedom, and have ample scope for any genuine individuality that was worth while.

"The setting of all works of art is of about equal importance to the merit of the work of art itself. Of what value to Boston is its statue of Samuel Adams with its present background. Who cares for the statue of Lincoln freeing the slave amid its sordid surroundings? Would not even St. Gaudens' noble statue in Lincoln Park, Chicago, lose half its value were it

transferred from its perfect environment?

"In the detachment suburban house of flimsy wood exists one of the greatest obstacles to beautiful city life. Here, jig-saw trimming, grotesque gables and excrescences, and patches and stripes of various colors often make as unpleasant a conglomeration of lines and proportions as the world can show. The dangerous crowding of such buildings, as the city extends its limits, makes the detached house (only three or four feet from its neighbors) worse than a brick block in respect to danger from fire. The law should prohibit any wooden building being erected within fifty feet of another building of wood. Continuous blocks of broad, shallow brick houses built around large, open squares give all the advantages of air and light and more privacy than the wooden house squeezed in between others. It can be made architecturally beautiful and harmonious, and as is shown by many delightful modern English residences of brick for persons of moderate means, is far better than the fantastic possibilities of the average American wooden suburb.

"Among less important matters for consideration, the growing nuisance of the huge advertising bill-board deserves attention. Were it not so temporary in character and so certain to be abolished as soon as an aroused public shall demand it, it might be considered a matter of great moment, as indeed it is for the time being. The desecration of rock and cliff and forest by the advertising fiend would seem to have reached almost the limit of endurance, were it not that those who suffer consider themselves so helpless in the matter. In Massachusetts a law has been passed whose enforcement will materially modify the disfigurement of roads.

"To whom shall we look for a remedy? To the good citizen! It is not necessary that the good citizen should know anything about art. It is necessary that he should care for the needs of God's creatures, that he should respect the love of beauty and that he should have common sense. He may not know Gothic from Greek, but he must know that he does not know, and that questions of beauty must be left to experts of beauty, just as questions of public health must be left to experts in the science of health. He must know enough to vote for an honest alderman, and be willing to take an immense amount of trouble to get others to do likewise. He must be willing to set his individual whim aside, and be glad to submit to the regulations and counsels of a board of beauty.

"A board of beauty made the White City the glory and the marvel that it was. When the good citizen forces partisan politics to know its place and not intrude where it has no business to be, then such a board he must again call into requisition and let knowledge and taste give counsel and even prohibitory laws to ignorance and whim. The man, for instance, who fancies yellow brick, and wants to put a yellow brick house into the midst of a brown stone block, like a slice of sponge cake set on edge, must be taught that no man buildeth to himself, because no man liveth or dieth to himself—that we are all members one of another, and thus no man in a civilized community may mar his neighbor's little plot by doing what he pleases with his own. The good citizen will find this no tyranny but a welcome protection from his neighbor's follies. In proportion as he attains the beauty of holiness in his citizenship will he recognize the holiness of beauty in his city.

SEASONABLE SUGGESTIONS.

The male flowered *Chionanthus Virginica* has much prettier flowers than the finest bearing one, which compensates in some degree for the lack of beauty which the fruit bearing one possesses.

Cuttings of the young growth of privets put in boxes of sand in the greenhouse during summer root readily, offering a good chance for rapidly increasing the stock of this most useful hedging plant.

Bechtel's double flowering crab is a grand acquisition to the list of ornamental trees flowering in early spring. Get buds of it and place them on any apple or crab tree you have. Its flowers are large and beautiful, and they come later than other flowering apples and crabs.

Early blooming columbines will soon be ripening their seeds. If these seeds are sown at once, and the seedlings encouraged to grow, they will make nice plants for flowering next spring. A great many perennials may be treated the same way.

Evergreens may be made very bushy by pinching out the central shoot of the new growth now forming. The side shoots get all the strength then. White pines treated this way become so bushy that birds can hardly get through them.

The golden leaved privet must be watched and the green leaved shoots cut out as they appear, or the golden leaves will entirely disappear in a short time. There is a tendency to revert to the green state all the time, which must be checked by cutting it out.

Weeping trees, such as Camperdown Elm, Teas' Mulberry, Japanese Cherry, etc., are apt to make more growth on some shoots than others, making the heads unshapely. A pinching off of the ends of these growing too fast will better the shape as well as promote bushiness.

While elms are growing straighten the shoots of those to be budded by using a stake if necessary. Left to itself a young elm has a somewhat leaning top. The slippery elm, *fulva*, is the best to use for a stock for grafting or budding. It forms a stronger, straighter tree when young than any other species.

To have nice geranium plants for winter blooming strike cuttings now, and grow the plants in pots through the summer. Plants lifted from the ground in the fall do not flower well in winter.

The hint given in last month's issue to layer shrubs to increase them should be kept in mind still. June and July are the principal months for the work. There are a few obstinate sorts which won't root, but they are exceptions.

Magnolia grandiflora, the grand evergreen of

the South, is difficult to transplant from the open ground. Get small plants in pots, growing them on for a year or two before planting them. There are lots of sheltered nooks in all large parks and gardens where this noble evergreen would thrive.

Many of the finer roses can only be had to grow well when worked on the Manette stock. But this stock is apt to make shoots of its own. Watch plants you think may be budded, and if a spurious shoot appears from the base cut it off close to the base as possible.

Nurserymen have found that both *Styrax Obassia* and *Pterostyrax hispidum*, its close relation, have to be removed from the list of shrubs, where they were placed when first introduced, and placed with trees. Both bear racemes of lovely white flowers. These should be marked for fall planting.

It is rather late to speak of the matter to be of service this year, but it is a common mistake to raise the soil of flower beds above the surrounding ground. This encourages water to run off quickly, the reverse of what is desired to keep the soil nearly level with that of its surroundings and the plants will thrive much better.

When the young growth of evergreens has become somewhat hard, which in these parts is about the close of June, they may be safely removed and transplanted from one part of the grounds to another. Keep a ball of earth about the roots, and after planting flood them with water for a day or two. This solidifies the soil about the roots and places water where it is badly needed at that time.

Purchased trees usually have their names attached by wired labels. As the tree grows these wires need loosening, or serious damage may be done. At the same time see that the writing is legible, as the correct name of a tree interests every one.

One of the best of almost white roses for cemetery planting is Clothilde Soupert. It is a perpetual bloomer and is quite hardy from New York City southward, and possibly it is so north of New York. It is superior to Caroline Marniesse, an old favorite for the purpose. If cut back a little after each crop of flowers is over it blooms the better for it.

Fuchsias are excellent outdoor plants in summer, planted on the eastern side of a house or in a similar situation where but little sun will reach them. They will bloom continuously in such a situation until cold nights come.

The Mountain Ash is unusually attractive when its bunches of scarlet fruit are displayed from late summer to well into winter. Borers delight to find a retreat in the stem of this tree, and they must be

watched for and destroyed, just as is done in the case of quince bushes. Because of the borer but few of this ornamental tree are met with.

Wistarias, especially those of some size, transplant badly, yet rarely die outright. If they do not push well after due waiting prune them in very close. It is not rare for them to remain a whole season without pushing and then to grow in good earnest the spring following.

When trees of like kind are planted on each side of a path the young shoots of one may be bent to meet those of the other and tied together. A living arch of much beauty may be formed in this way. If desired the shoots may be inarched, thus permanently uniting them. A row of privet on each side of a path treated in this way forms in time a beautiful arbor. June and July are the months in which the work should be done.

The budding of trees is in order in July and August. Many of our most useful ornamental trees would be hard to obtain were it not for the budder's art. The time to bud is while the sap is still active, but is commencing to decline. When in its freshest flow the buds do not unite well.

The double flowering cherries, apples and peaches may all be increased rapidly by budding them on common seedling stock.

Joseph Mechan.

GARDEN PLANTS—THEIR GEOGRAPHY, LIV. PERSONALES.

THE LEUCOPHYDLUM, TECOMA AND ACANTHUS ALLIANCE.

Catalpa has 6 species in North America, the West Indies, China and Japan. The native species is well known and is wild from the middle Delaware valley southward to the gulf, but rarely west of the Mississippi. It varies considerably both in habit, time of flowering and the color of its flowers and foliage. Some flowers are nearly pure white, but generally more or less spotted with purple and yellow. There are dwarf growing, yellowish and purplish leaved kinds. I don't take much stock in the distinction given to the so-called *C. cordifolia*, it seems to be merely a geographical variety of *C. bignonioides*, said to be hardier and so on, but both forms stand in sheltered places even north of the lower lakes. The hardiest species however are the Japanese kinds, *C. Kaempferi* with yellowish flowers and large shrublike growth, and the scarcer *C. Bungli* which is said to be a fine tree in Japan.

Tabebuia is a genus of trees and shrubs in 60 species scattered over the American tropics and subtropics from near the United States borders in Mexico southward to Brazil. Several so-called Tecomas and Bignonias have been transferred to this

genus. The Mexican *T. æsculifolia* has spotted orange flowers, and a form called Palemeri has light mauve flowers spotted with yellow in corymbs at the ends of the bare branches in spring. Other West Indian species have pinkish, purple or white flowers. Some of these may succeed at the extreme south.

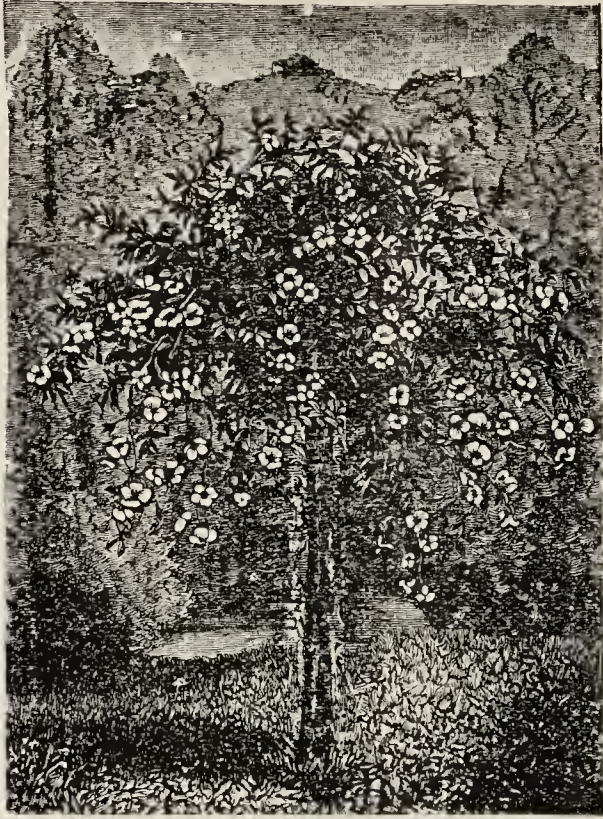
Tecoma has 25 species mostly in the sub-tropical and warm temperate parts of the world. The campsidiums are now included under this genus. The hardiest are the native *T. radicans* and vars.,



Catalpa bignonioides and var. *nana*. From *Gardening* in part.

and the Chinese *T. grandiflora* and its Japanese varieties, with flowers in a few shades of orange red. These were grafted on *Catalpa* stocks by Trumpy several years ago forming standards something like the engraving. *T. staus* with yellow flowers in paniculate racemes, is more of a shrub and more tender being a native of the Mexican border. *T. capensis* is also more shrubby with trailing or scandent young growths and racemes of deep orange red flowers. It will not bear frost. *T. Smithii* is an Australian garden hybrid. These are grown in southern California and so to some extent are *T. Ricasoliana* with pinkish lilac darker veined flowers, and *T. jasminoides* with purple throated or pure

white flowers. Several others from Australia and the Andean regions of South America are



Tecoma grandiflora.

worthy of trial where the oranges don't get frozen.

Stereospermum is a genus of large trees in 10 species from the East Indies and other parts of the tropics of Asia and Africa. They have fine foliage and fragrant flowers but are only useful for "our colonies."

Incarvillea is a genus of hardy perennials in several forms, from northern China and Central Asia. The flowers are in shades of color from rosy red to purple and white.

Torretia lappacea is a monotypic perennial climber with herbaceous stems and purple flowers.



Incarvillea Delavagi.

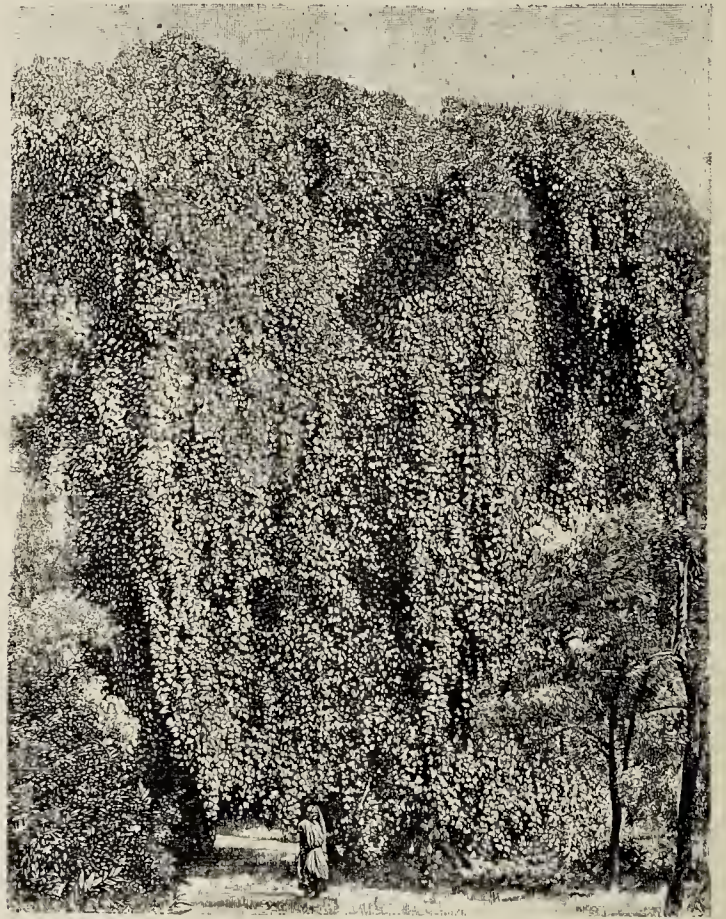
It may be treated as an annual if sown early. It is widely diffused along the upper Andean region from Mexico to Peru.

Eccremocarpus is in 3 species from western South America. The Chilean *E. scaber* has

orange scarlet flowers, bipinnate leaves, climbing herbaceous stems, and is often treated as an annual.

Jacaranda is a fine genus of tropical American trees and shrubs with elegant foliage and blueish, lilac, yellowish or white flowers. There are about 30 species. *J. mimosaeifolia* and some others ought to be useful in sub-tropical work for their annual growth of finely divided foliage, or even as flowering trees at the extreme south.

Thunbergia, however, is a splendid genus of shrubs and climbers in about 45 species. They are mostly perennial with a few variable kinds capable of annual treatment, chiefly *T. alata*. They are



Thunbergia grandiflora festooning Trees. India.—*Gardener's Chronicle.*

found in the sub-tropical and tropical parts of Asia and Africa. Both *Meyenia* and *Hexacentris* are included under the genus. *T. grandiflora* will make a tremendous growth if turned out as a summer climber at the south, but I have not had it flower at that season. It is quite hardy at Santa Barbara, Cal. *T. Mysorensis*, *T. fragrans*, *T. erecta* in var., and for the warmest and most frostless places *T. Vogeliana*, *T. chrysops* and the superb trailing *T. Hawtayneana* (which, by the bye, isn't "scarlet" flowered) are all worth a trial.

James MacPherson.

The Rose Garden on Wooded Island, Jackson Park, Chicago, has been a great attraction this season.

PARK NOTES.

The proposed commission to look into the inartistic abuses in Central Park, New York City, is creating anxiety in many quarters, as it is expected that an examination will be made into all the improvements, landscape and monumental, which have been made in the city parks in the last ten years.

* * *

A park commission has recently been organized at Dayton, O., under special Act of Legislature. The city has no large parks, but several small ones and some 15 miles of levees, all of which will be under the care of the commission. Heretofore the Board of City Affairs has had charge of this work.

* * *

The Civic Federation of Chicago is working with zeal to frame a scheme of legislation to present to the legislature of Illinois next winter, looking to the consolidation of park interests. There are now three systems, two of which, the west and north side systems, have, with their large interests, become so much the playthings of politics.

* * *

Speaking of the Grant tomb and its location on the Riverside drive in New York City, a writer in a New York paper says: "There is no such place from which to watch the full moon rising in the east as the porch of the Grant tomb. The rays streaming from column to column invest the memorial temple with a grandeur and melancholy that seem more consonant with the old world than with the new. There is something worth the journey to be seen in the tomb when the moon at the full is rising.

* * *

The Spencer County Council, Indiana, has voted an appropriation of \$800 to buy the tract of land surrounding the grave of Nancy Hanks Lincoln, at Lincoln City, in that county. The property to be bought is a beautiful natural park of sixteen acres. The grave is near the summit of a large hill, almost in the centre of a wood, and at present is marked only by a granite headstone enclosed within an iron fence. The park will be under the direct care and management of Nancy Hanks Lincoln Memorial Association.

* * *

As evidence of the growth of the idea that through the children a large measure of home improvement may be encouraged, a committee of the Oranges and Montclair, N. J., distributed many thousands of chrysanthemums and other plants last month among the public school children of those towns. With the gifts were also distributed neat pamphlets containing instructions in the care of the plants, and some primary hints on improving the city door yards. The plants were the gifts of a number of the leading florists of the locality.

* * *

The Appalachian Mountain Club of Massachusetts has petitioned Congress in support of the National Appalachian Park of the South. The petition closes with these words: "We believe the movement is inaugurated at a most opportune time, being well aware of the increased difficulty that will attend the securing of suitable land for this purpose at a later date, when land values increase and timber and land interests combine against such a movement; that we are deeply interested in this movement, which, we believe, if carried out, will result in untold health and recreation to future generations."

According to the latest report of the park commissioners of Haverhill, Mass., the acquisition of small park areas and the annual appropriations granted by the city council do not march in step. That is to say, that while the park area increases the annual appropriation remains stationary. This is the complaint from many quarters of the country and must be due to a lack of appreciation on the part of the city fathers of the many sided value of public parks. The condition of the park question is such now, that there is no excuse for niggardly economy in their maintenance. They have been proved of immense advantage wherever established, and a money saver in many ways to municipal corporations.

* * *

Among the prominent improvements carried out by the Northfield Improvement Association of Northfield, Minn., is that connected with "Sanitary Improvements and River Banks," in which some \$500 were expended, 75 per cent. of which was provided by private donations. The report of Prof. Magnus on the subject showed a large amount of useful work accomplished, including building and repairing of retaining wall, constructing shore driveway, cleaning out and widening river, as well as as actual work on sewers and culverts. Prof. Magnus stated that an encouraging feature in the undertaking was the interest taken by the mill owners. The fact that such work can be carried out by improvement associations in small cities, and with the successful results obtained here, should certainly encourage public spirited citizens everywhere to engage in such efforts.

* * *

A remarkable interest in roadside tree preservation has been observed in certain localities in Massachusetts this year, and more or less throughout the state. The last legislature enacted a law creating the office of tree-warden in every town, and this has given an impetus to the work undoubtedly. The law became operative at the town elections this past spring and it was noted that the citizens recognized the importance of the work and elected good men. It is an important office and the trees under the Warden's care will very soon attest his capacity. In the region of Methuen, Mass., Mr. E. F. Searles, who is himself a deputy warden, has planted out about his many properties some 3,000 trees this season, for the most part along the highways, and presuming other property owners are proportionately broadminded, the highways of Massachusetts will have an added charm.

* * *

The 25th annual report of the board of commissioners of the Boston Parks is full of interesting matter relating to the development of the magnificent park system of that city. Moreover the commissioners present their views on the general subject of parks, which afford abundant food for thought and suggestions in other localities. They say: "The commission believes that the greatest enjoyment by the greatest number of persons will be obtained by retaining, as far as it is practicable to do so, a natural and rural character to our parks especially in the larger parks like Leverett, Jamaica and Franklin. Such parks are valuable in proportion as they are capable of bringing the country into the city, and in furnishing to the crowded dwellers of the tenement districts an opportunity, unobtainable for them in any other way, to enjoy real rural and sylvan sights. To accomplish this all evidence of the surrounding city must be shut out as far as practicable from the inside of the park, and it cannot be too often repeated that parks are for the benefit of the many that use them, and not especially for the benefit of the comparatively few who live on their borders and desire to look into them. The commission believes that the rural character of the parks can only be obtained by protecting their boundaries with continuous masses of foliage, and that its first duty is to protect all such border plantations and encourage their growth in every practical way."

CEMETERY NOTES.

A large tract of land has been purchased in Montgomery county, Maryland, by a syndicate for cemetery purposes. It is stated that \$75,000 has already been expended in this land purchase.

* * *

The cemetery trustees of Mount Hope Cemetery, Boston, in a communication to the mayor of the city, have asked for an appropriation of \$60,748 for needed improvements in that burial ground.

* * *

Springdale Cemetery, Peoria, Ill., is to be improved by the erection of fine entrance buildings and gate. The structures will be built of boulder stones, and will have high pitched roofs covered with red tile in the Norman style. The cost will be some \$20,000.

* * *

Improvements amounting to some \$25,000 have been made about the Garfield tomb at Lake View Cemetery, Cleveland, O. The lower story of the structure has been finished in Italian marble and the floors in marble mosaic. A crown of electric lights has been placed over the head of the monument in the main rotunda. The casket of the president is now in view of visitors to the tomb.

* * *

Considerable work is being carried out in St. Agnes' Cemetery, Albany, N. Y., which now comprises some 120 acres, and a connecting link has been made between the old and the newly acquired property, "Fernwood." St. Agnes was consecrated May 19, 1867, and has been managed and improved in a manner that has made it one of the noted Catholic cemeteries of the country.

* * *

The annual report of Mt. Albion Cemetery, Albion, N. Y. shows total receipts of \$9,127.85, and disbursements, \$8,040.40. The general fund amounts to \$16,350.86, and the deposit fund to \$12,698.83. This cemetery was dedicated in 1843. Up to 1862 the cemetery was controlled by the trustees of the village, but in that year the village charter was amended to provide for the appointment of three commissioners. It now has an area of 70 acres.

* * *

Great improvements have been under way at Evergreen Cemetery, Jacksonville, Fla., and the modern idea of the cemetery is apparently taking hold. Under semi-tropical conditions there should be great possibilities for landscape decoration. The roads have been improved with crushed oyster shell covering, and have been bordered with trees of different kinds—Magnolia avenue with magnolias, Live Oak avenue with live oaks, etc. The latter is nearly a mile in length. The triangular plats, left at the crossings of avenues, are reserved for decorative planting.

* * *

The Oak Hill Cemetery Association of Lebanon, Ind., which has recently secured a private cemetery property for improvement and development, has the co-operation of the Federation of Clubs of that city, the ladies being represented in the Board of Directors. Work on the grounds has been prosecuted with vigor, much planting has been done, and superintendent's lodge and other buildings erected, and funds are being raised by the clubs for the erection of an entrance gateway. The grounds are supplied with city water, which has been piped three-quarters of a mile. Co-operation under such conditions in cemetery work is a success.

A cemetery bill, passed by the New York legislature and presumably of considerable importance and benefit to rural cemetery associations, has been signed by Governor Roosevelt. The bill provides that whenever owners of lots in rural cemeteries refuse to pay their taxes or assessments for a period of five years, they shall not be allowed to use any portion of the lot for burial purposes while the taxes remain unpaid. Many lots in rural cemeteries are owned by non-residents from whom it is difficult to obtain funds for the maintenance of the burying ground.

* * *

A monument of particular interest was recently dedicated in Mt. Auburn Cemetery, Cambridge, Mass. It was erected by ministers and friends of the Universalist denomination to the memory of the late Dr. and Mrs. Thomas J. Sawyer. Dr. Sawyer was one of the best known Universalist divines in the country, and was the first head of Tuft's College Divinity School. He was professor emeritus of that school until his death. The monument was designed by D. H. Burnham, the Chicago architect, and is in the form of a Celtic cross cut from Knoxville marble. It bears the following inscriptions: "And I, if I be lifted up from earth, will draw all men unto me." "St. John, 12-32. Albert J. Sawyer, S. P. T., D. D., 1804-1899. Carolina M. Fisher, 1812-1894."

* * *

To record gifts of public spirited citizens designed to improve our cemeteries is to stimulate beneficiary impulses, and it is gratifying to give the following details of a proposed mortuary chapel to be erected in the Pittsfield cemetery, Pittsfield, Mass., by Mrs. Edwin Clapp, of that city. It is to be constructed of blue stone after designs by Mr. J. Phillip Ruinn, architect, of Boston, and will cost some \$7,000. The chapel will be 45 ft. by 25 ft., and will have a wide porte-cochere giving a square tower on lines of old English architecture. Room is also provided for the clergy, lavatory and store-room, and there will also be a cellar. The tower will be 34 ft. in height; the interior will be finished in cypress and windows will be cathedral glass. It will be roofed with red slate, with copper gutters and ridges. It will be furnished complete for use, and will be an enduring memorial of the donor.

* * *

The annual meeting of the lot holders of Magnolia Cemetery, Charleston, South Carolina, was held on May 9th. Chairman Geo. W. Williams reported that since the organization of the cemetery half a century ago 3,000 lots had been sold, yielding \$187,000, and the number of burials was now 11,000. By an agreement with the stockholders the trustees have received 20 per cent of the gross sales of all lots to make a permanent fund, the interest from said fund to be used for the improvement of the grounds, roads, lakes and the like. That fund now amounts to \$38,649.57. The perpetual care feature is a matter in which every lot owner in Magnolia is interested, and this fund amounts to \$31,354.30. Speaking of neglected lots in the course of his report the president said: "There are now 3,000 lot owners interested in the future improvement of the cemetery. I am pleased to mention the attention that many persons are giving to the improvement of their lots. I regret, however, to report several hundred private lots in Magnolia which are totally neglected; some contain expensive monuments, which are allowed to be overgrown with bushes, briars and weeds, filling the lots with their tangled growth, thus marring the beauty of the cemetery. These abandoned lots have given the committee on grounds much concern. Doubtless numerous families have removed from Charleston, leaving no one to care for their lots. Many seem to feel that their duty ends "when they bury the dead out of their sight." Neglected graves are melancholy sights."

SELECTED NOTES AND EXTRACTS.

The Elm Leaf Beetle.

In reference to the elm leaf beetle would say that so far we have escaped its ravages. I don't know of any damage done by this voracious insect in the Mississippi Valley, and as far as I know it is still at work east of the Alleghany's.

Chicago. *Jas. Jensen.*

* * *

The beetle produces three or four broods in a season, and is so serious a pest that the planting of elms has been practically abandoned in several districts of the middle Atlantic States. The insect is somewhat like a small striped cucumber beetle and the larva is a slender brownish "worm." Entomologists say the insects pupate at the surface of the ground and that they may be destroyed during that stage in large numbers by watering all around the base of the trees with boiling or at any rate very hot water.

Spraying with various arsenites has also often been tried, some of the large parks using a steam outfit for the purpose.

At the north and west the pest seems less troublesome, but in parts of New Jersey and Pennsylvania, etc., elms look as though fire had scorched out all the soft tissues of the leaves and left nothing but their brown skeletons behind. In such condition elms are a positive disfigurement to the landscape, and yet they seem to live on, because the insects work in some seasons much less actively than in others.

It is to be hoped that the elm beetle will continue local, for it would be a distinct loss if many of the fine street avenues in the lake regions and elsewhere should be attacked.

Newark, N. J. *James MacPherson.*

* * *

Tree Paeony. (*Paeony Moutan.*)

Of the many good plants we have had from China none is of more importance than the Moutan or Tree Paeony. The old kind with double pink flowers has long been established in English gardens, and sometimes attains a large size, when as a single bush in some sheltered corner of the lawn, it is a beautiful and important object. But of late years our gardens have been greatly enriched by a quantity of new kinds, and the range of tints from pure white through flesh and salmon-rose to deepest claret color in one range, and from the faintest blush of cold pink through the amaranth to strongest magenta-purple in another, affords a wide choice in the way of coloring. Tree paeonies enjoy a sheltered place in strong soil.—*The Garden, London.*

Rhododendrons.

According to *American Gardening* there need be no fear about the hardiness or the capabilities of hybrid rhododendrons in West Chester County, N. Y., if those at Briar cliff Manor may be taken for a fair sample and guide. This season they have flowered superbly and are now making tremendous growths for another season. One point clearly brought out is this, that where pine trees are used as wind breaks not a leaf is scorched, so that the bushes are perfect, but where the clumps have been planted in front of deciduous trees a slight loss of foliage is noticeable. The lesson, then, is, use spruce or other fir trees to protect your rhododendron clumps. Mr. W. W. Law is delighted with his success and has already given an order for 2,000 more from England.

* * *

Summer Treatment of San Jose Scale.

In treating on this subject Bulletin No. 72 of the Ohio Agricultural Experiment Station has the following: Summer treatment for the San Jose scale should begin as early as June 15, and be continued until September 15 at least, with intervals of not more than ten days between sprayings. This will destroy a very large percentage of the young and thus prevent its spreading. Two different mixtures can be used, viz: (1) Whale oil soap, used at the rate of one-fourth pound to one gallon of water. This mixture will not injure the foliage of tree fruits; (2) a mechanical mixture of kerosene and water, in the proportion of one gallon of kerosene to ten of water, or what is called a 10 per cent. solution. It can be used with safety on all tree fruits except the peach. For winter treatment, which means while the leaves are off, a stronger solution of whale oil soap and water can be used—two pounds of the former to one gallon of the latter. Kerosene from 20 to 100 per cent. has been used with widely different results. The why has not been determined as yet. Consensus of opinion is that it should be used on a sunshiny day—the higher the temperature the better. The whale oil soap solutions can be used with any of the better class of sprayers. The kerosene mixture requires a specially constructed one, with a device for the mechanical mixing of the kerosene and water, of which there are a number on the market. In the destruction of trees, shrubs, vines, etc., infested with the San Jose scale, great care should be taken that stumps and sprouts are grubbed out thoroughly and burned with the trunk

and branches—otherwise your work will be in vain and the infection but temporarily checked, not destroyed.

* * *

Cactus Plants.

In the vegetable world no plants are of more unique growth or possess greater fascination for the cultivator than those of the cactus family; and the plants of no other order have so wide a range in form and size, varying from the Giant Cereus, which towers a gaunt and weird column ninety feet in height and two feet in diameter, to the pretty little *Mamillaria micromersis*, three-fourths of an inch in height and half an inch through. The flowers of many of the species are the most gorgeous, others the most delicate and beautiful of all plants. There is no end to the wonders exhibited by the members of this remarkable order. The cactus family is composed of a number of distinct divisions.

In the genus *Cereus* there are nearly two hundred distinct species in cultivation; they are natives of the temperate regions of North and South America, and all are of columnar or creeping growth. For size the *Cereus giganteus* surpasses all others, as it does, also, in the production of articles of commercial value. *C. grandiflorus*, known under the common name of Night-blooming *Cereus* is conceded by lovers of flowers, whether expert or amateur, to be the most beautiful of all flowers; it measures from twelve to fourteen inches in diameter; the outside petals vary from white to redish brown; the inner ones are of a most beautiful waxy white; the stamens, which are most wonderful in arrangement, are more than a thousand.—From *Vick's Magazine for June.*

* * *

Long Spray Flowering Shrubs for Cutting.

There are many shrubs and herbaceous plants that will furnish flowers suitable for cut-flower purposes; but those which will furnish long sprays of flowers, suitable for large decorations, are not plentiful. Among spring and early summer flowers the following are most suitable:—Flowering Peach and Almonds, *Forsythia*, *Halesia*, *Nevvusia*, *Spiraea prunifolia*, Japanese Snowball, and *Weigela*. The following bloom in mid-summer and fall. *Desmodium*, *Boltonia*, *Helianthus Maximiliani* and *Rudbeckia* "Golden Glow." The flowers of the last named are not exactly produced in sprays; but the long stems, well furnished with flowers on shorter stems, fill the requirements. A difficulty with most of these flowers is that they will not last long unless in water, and except, possibly, in the case of the *Helianthus*, which is well-adapted in every way. The weigelas have particularly long stems of flowers, and always look well.—*Meehan's Monthly for June.*

Park and Cemetery and Landscape Gardening.

ESTABLISHED 1890.

An Illustrated Monthly Journal.

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Correspondence solicited on subjects pertinent to the columns of the journal. Officials of Parks and Cemeteries are requested to send copies of their reports.

Photographs and descriptive sketches of interesting features in parks, cemeteries, home grounds, streets, etc., are solicited from our readers.

Association of American Cemetery Superintendents.

WM. STONE, "Pine Grove,"
Lynn, Mass., President.
GEORGE M. PAINTER, "West Laurel Hill,"
Philadelphia, Vice-President.
H. WILSON ROSS, "Newton,"
Newton Centre, Mass., Secretary and
Treasurer.

The Fourteenth Annual Convention will be held at Cleveland, O., September 11, 12 and 13.

The American Park and Out-Door Art Association.

L. E. HOLDEN, Cleveland, O., President.
WARREN H. MANNING, Tremont Building,
Boston, Mass., Secretary.
O. C. SIMONDS, Chicago, Treasurer.

The Fifth Annual Convention of the Association will be held at Milwaukee, Wis., June, 1901.

The American Society of Landscape Architects.

JOHN CHARLES OLMSTED, Brookline,
Mass., President.
SAMUEL PARSONS, JR., St. James Bldg.,
New York, Vice-president.
CHAS. N. LOWRIE, 156 Fifth ave., New
York, Treasurer.
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York, Secretary.

Personal.

In the recent death of Mr. Joseph McCarthy, Swan Point cemetery, Providence, R. I., has lost a faithful friend. For some 25 years he had occupied the position of assistant superintendent, and performed his duties with a constancy and ability worthy of prominent record. He was born in Boston and at the time of

his death was 41 years of age. He leaves a wife and four children, to whom the directors of the cemetery gave pointed evidence of the esteem in which they had held the deceased.

Mr. James Y. Craig, superintendent of Forest Lawn Cemetery, Omaha, Neb., has been appointed by the mayor a member of the board of park commissioners of that city, his term to extend to May 1905. This is an appointment that should commend itself, and is suggestive to the officials of other cities.

It is sincerely to be regretted that the city councils of Pittsburg, Pa., has deposed Mr. E. M. Bigelow, for nineteen years director of public work of that city, and under whose able direction the parks of Pittsburg have been so splendidly developed. His ability and resources deserved better recognition than has been accorded him by the agents of the political system which appears to be rampant in the smoky city.

Mr. John G. Barker, formerly superintendent of Forest Hills cemetery, Boston, and lately in private practice in landscape gardening, at South Bend, Ind., and elsewhere, has accepted an appointment in Philadelphia to take charge of Graceland cemetery, now in course of development.

Mr. Geo. H. Hazzard, St. Paul, Minn., Park Commissioner for the Interstate Park at the Dalles of the St. Croix, is to be highly congratulated on his untiring efforts to promote the development of that beautiful tract. Decoration Day was made quite an event in the park, a flag raising ceremony being the feature about which centred an attractive interest.

In connection with the receipt of an invitation to visit the Pæonies in bloom at the nurseries of P. S. Peterson & Son, Chicago, we have to thank the firm for the gift of a magnificent bunch of these flowers. For size, variety and coloring the bouquet was unique.

The American Forestry Association is to hold its principal summer meeting in connection with the American Association for the Advancement of Service in Columbia University, New York City. It is rather expected that Hon. James Wilson, secretary of Agriculture, will preside at certain sessions.

At the summer meeting of the Missouri State Horticultural Society, held at Chillicothe, Mo., June 5-8, among a number of papers and subjects of particular value to fruit growers, the following were of general interest: Some Valuable Shrubs, H. S. Wayman, Princeton, Mo.; Horticulture, by Dr. J. W. Green, Chillicothe, Mo.; Some Forestry Questions, Prof. Herman Van Schreuk, St. Louis, Mo.; Beautifying the Home, Mrs. Dr. Barney, Chillicothe, Mo.; Individual Trees—Their Importance, D. A. Robnett, Columbia, G. T. Tippin, Springfield, Mo.

Books, Reports, Etc., Received.

Annual report of Woodlawn cemetery, New York, for year 1899. With rules and regulations.

Sixty-third annual report of the board of managers of the Monument cemetery of Philadelphia.

From Reservoir Park, Toronto, Canada, a fine photograph of a specimen of *Betula alba laciniata pendula*.

Woodlawn cemetery, New York, annual report to the lot owners for the year 1899, with rules, regulations, etc.

City of Boston, Department of Parks. Twenty-fifth annual report of the Board of Commissioners for the year ending January 11, 1900. Beautifully illustrated with half tones.

Descriptive illustrated pamphlet of Forest Hill cemetery, Scranton, Pa., with rules, regulations, etc.

Historical and descriptive pamphlet of Fairview cemetery, New Albany, Ind. Copiously illustrated with half tones.

Green River cemetery, Greenfield, Mass. Revised list of prices for annual and perpetual care, and an appeal to lot owners to cultivate and display more practical interest in the cemetery with the object of better care and improvement.

Texas Agricultural Experiment Station, Brazos Co., Texas. Investigation and Improvement of American Grapes at the Munson Experiment Grounds near Denison, Texas. From 1876 to 1890. By T. V. Munson, M. S.

Annual report of the Park Commissioners of the city of Haverhill, Mass., for the year ending December 31, 1899.

THE FLORISTS' MANUAL. By William Scott. A Reference Book for Commercial Florists. 1899. Illustrated. Price \$5.00. Florists Publishing Company, Chicago. This book of over 230 quarto pages is as its title suggests a work for the commercial florists in particular, but at the same time contains a fund of useful information to those having largely to do with plant propagation and use. It is copiously yet intelligently illustrated which adds immeasurably to the value of the text, which considered in relation to the author's broad experience in commercial plant growing stamps the book at once as a reliable addition to the plant lovers' library. A perusal of the work will instantly reveal its practical nature, and it is well recognized that the majority of florists will be benefited by a broader knowledge of the plants and material in which they work, and Mr. Scott's book will in its style and make up afford a fund of valuable information.

MODERN HOUSE PLANS FOR EVERYBODY. For village and country residences, costing from \$250 to \$8,000, including full descriptions and estimates in detail of materials, labor, cost and many practical suggestions. By S. B. Reed, architect. Illustrated, 12mo, pp 243. The Orange Judd company. Price, postpaid, \$1.00.

Most everybody takes an interest in house plans, and whether the thought is for the present or for the future, a wide interest centers about the suggestion of a new home. The work described above has been very warmly received since its first edition, and it contains a great number of designs and styles of houses, comprising many variations in arrangement and details. The standard features of home building are prominently characterized in the book and it has been kept up to date in details as to cost of labor and materials.

Trade Literature, Etc.

To Ellwanger & Barry, Rochester, N. Y., our thanks are due for a personal cloth bound copy of their general catalogue of Fruit and Ornamental Trees, Shrubs, Roses, Paeonies, Hardy Border Plants, etc.

The catalogue of greenhouses recently issued by the Lord & Burnham Co., Horticultural Architects and Builders, New York City, is a most attractive production. It is principally a collection of fine half tone engravings of a number of the conservatories and greenhouses, public and private, constructed by the firm and most instructively portrays the variety of design and adaptability to situation and uses which competent designers and builders can provide in such structures. There is just sufficient letter press to explain the object of the firm in issuing the catalogue, to suggest their facilities for such work, and to describe the illustrations presented, and the work closes with a number of cross sections of greenhouse buildings adapted to certain requirements.

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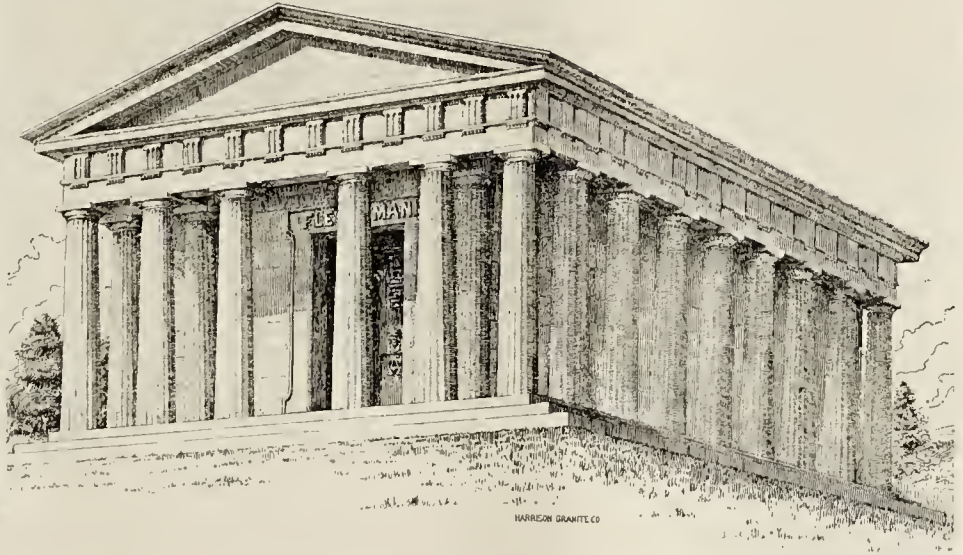
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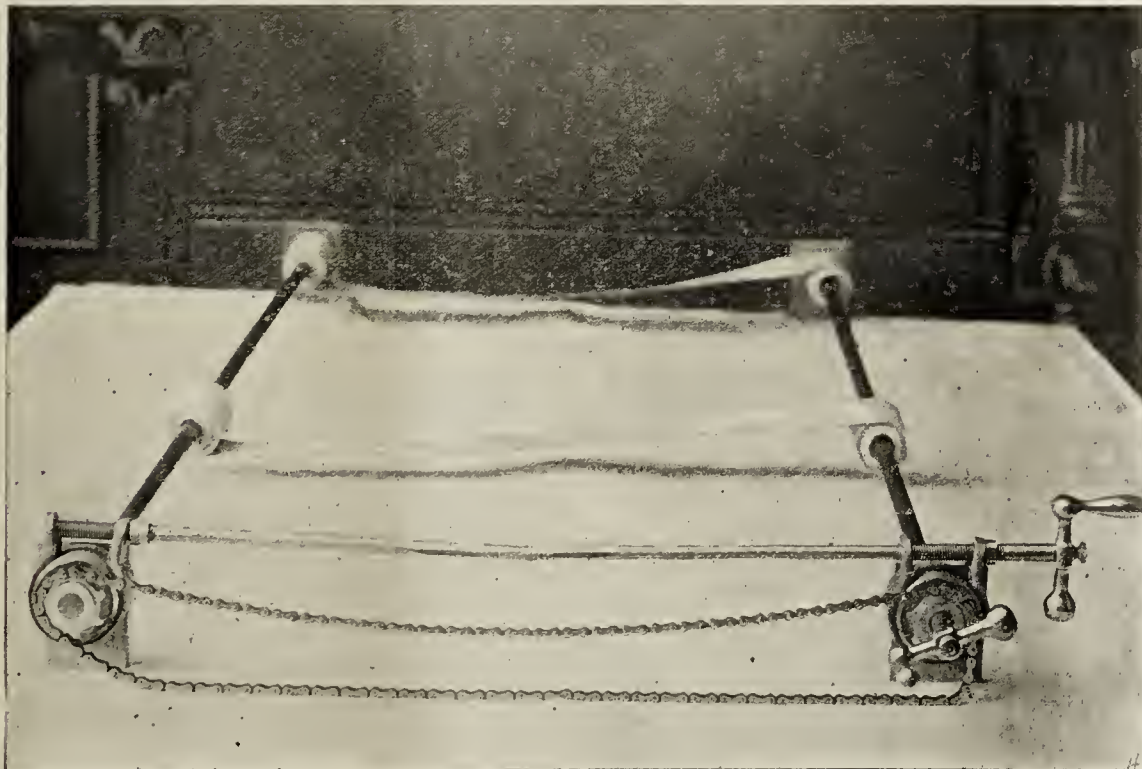
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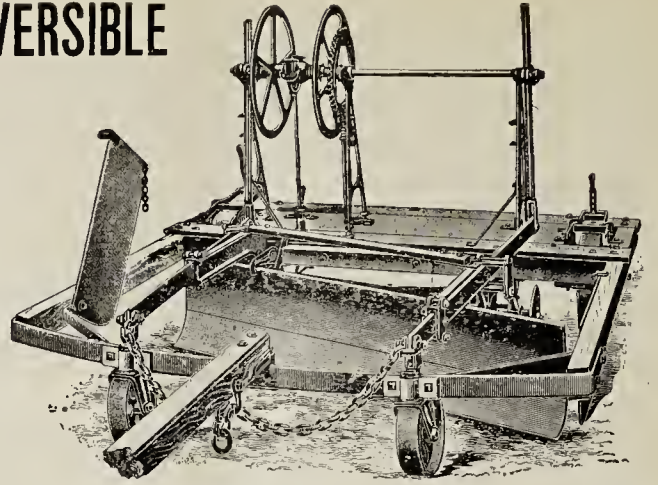
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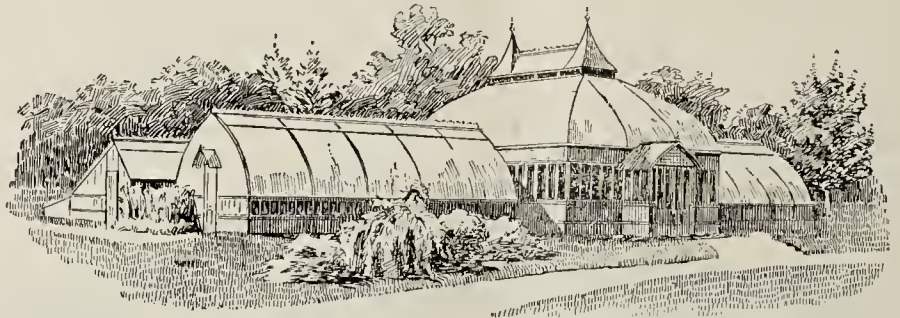
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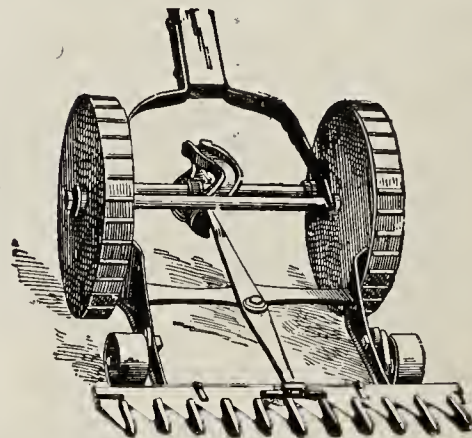
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VOL. X.

Chicago, July, 1900.

NO. 5

CONTENTS.

EDITORIAL — Tree Wardens in Massachusetts — The Appalachian National Park—The Bill-Board Nuisance—Children's Play Grounds and Gardens—Improve the Cemetery.....	101-102
*Azalea Mollis and Ghent Varieties.....	103
Rhododendrons.....	103
*Sargent's Weeping Hemlock.....	104
Construction and Destruction.....	104
*The Parks of St. Paul, Minn.....	106
Park Roads.....	109
Utilization of Waste Lands in Towns.....	111
*Memorial Day at Muskegon, Mich.—Liming the Soil—Correspondence ..	112
*Improvement Associations.....	114
*Administration Building, Oak Hill Cemetery, Evansville, Ind.....	115
Seasonable Suggestions.....	116
Notes, Chiefly Historical, on London Burial Places.....	117
Worcester Meeting of the New England Park Superintendents.....	118
*Garden Plants—Their Geography, LV.....	119
Park Notes.....	120
Cemetery Notes.....	121
Selected Notes and Extracts.....	122
Reviews of Books, Reports, etc.....	123

*Illustrated.

TREE WARDENS IN MASSACHUSETTS.

In 1899 the state of Massachusetts enacted a law providing for the annual election of a tree warden in every town of the state, with the power to appoint deputies where expedient, and at the elections this past spring with the exception of a few places such officers were elected. The duties of the tree warden according to this law are: the care and control of all public shade trees of the town except such as may be under the jurisdiction of park commissioners and these he may care for if requested by said officials; the expenditure of all funds provided for the setting out and maintenance of such trees; the prescribing of regulations and the agreement of suitable fines and forfeitures to be approved by the selectmen; the enforcement of all provisions of law for the preservation of such trees. The law also permits annual appropriations for the work, and prescribes procedure to be adopted in the cutting or removal of public shade trees or those in residential districts. It also provides for the extermination of insect pests, decrees punishments for the defacement and injury of trees either from personal wantonness or carelessness, and against injury and destruction by animals not duly controlled. This law should suggest to all interested in the tree question, that it is a vastly important one and is

being recognized as such wherever the subject is appreciated, and appreciation can be brought about by education.

THE APPALACHIAN NATIONAL PARK.

The Appalachian National Park Bill for the purpose of appointing a committee to investigate the forest conditions of the Appalachian Mountains in western North Carolina, was passed by both houses of Congress, and became a law on July 1st. The bill carries with it an appropriation of \$5,000 and the committee will be appointed by the president, with instructions to make the investigation this summer and report to congress at its next session. This is the initial success in the effort to establish the Appalachian National Park, which means the preservation for the people of one of the most beautiful sections of the country. Its location and characteristics have gained for it an enthusiastic recommendation from all quarters, and the progress thus far is a matter of sincere congratulation to all those whose energy has contributed to the result. It is a well considered project against which there has apparently been no dissentient voice, and the fact that it is the only bill of the kind that was passed by both houses at the last session of congress attests the character of the project and the righteousness of its claim for public consideration. The action of congress should encourage the friends and promoters of this southern park to continue strenuously in the good work until the end.

THE BILL BOARD NUISANCE.

The efforts of the Municipal Art League of Chicago to control the "Bill Board" nuisance has at last borne fruit. An ordinance has been passed by the Chicago City Council looking to the regulation of this objectionable feature of commercial activity in the city thoroughfares. Some of its features are: Bill boards shall not contain more than 100 square feet of area, and shall not exceed ten feet in height. They must be of incombustible material and stand at least three feet from the ground. They must not be set within 25 feet of the street line. A strong provision is that requiring the consent of the owners of three quarters of the frontage on each side of the block before bill boards can be erected on the boulevards. Violators of the ordinance must pay an annual rental of 50 cents per foot to the city. It would have been a good thing to be able to abolish such disfigurements

altogether, but it would appear that the provisions of the ordinance are practically prohibitive, and it will be at least a praiseworthy start in the direction of preventing future encroachments of this character on the field of municipal improvement.

*CHILDREN'S
PLAYGROUNDS
AND GARDENS.*

One of the most striking features in the movement for out-door improvement is that the children of to-day appear to be the chief motive. Wherever we note signs of activity in the community looking to the increase of park areas, the planting about the homes, or other work in connection with the betterment of living conditions, we find great consideration given to the part the children are to play or the benefits which will accrue to them. This is natural and logical. The incentive of every forward movement may be traced to the children, but credit has not always been given to them for the subtle force they exercise in the promotion of good works. This recognition in the last year of the century impresses one with the oft expressed idea that the next century will be the humanitarian one. Practical philanthropy to-day is largely exercised in behalf of the young, and it is working in many channels. The thought of providing better surroundings about the homes and more breathing spots in the crowded districts of our cities, has suggested to some owners of larger homegrounds to the appropriateness of opening their gardens to the children of the neighborhood under certain conditions; while others have been devoting themselves to improving certain of their vacant lots for the purpose of supplying the neighborhood children with attractive playgrounds. There would seem to be very large opportunities for good in the latter course, and with less prospect of disagreeable results occasionally. There would be additional reason for the clearing up of vacant places in the city streets, and by utilizing the pent up forces of child nature—enthusiasm, adaptability, devotion and gratitude, such lots might be made playgrounds and schoolgrounds at the same time; children are natural garden-lovers and under wise leadership have demonstrated their ability in this direction.

* * *

Apropos to the above a movement has been started in Detroit, Mich., by Mr. Edward C. Van Leyen, a park commissioner of that city, to transform the grounds surrounding the public schools into children's public playgrounds, and in connection therewith the beautifying of the school grounds. This is a direct result of a suggestion made in a discussion at the convention of the American Park and Out-door Art Association in Chicago, and is one well worthy of consideration everywhere.

School-gardens are also becoming valuable agents in training children, although as yet the work is in its infancy. The last issue of the Transactions of the Massachusetts Horticultural Society, Part II, gives some very interesting reports on the school gardens in and around Boston, and quite clearly establishes the wisdom of the addition of such opportunities for child development in a public school education. Its after effect in connection with home and municipal improvement as the years roll by may be readily appropriated.

*IMPROVE THE
CEMETERY.*

Perpetual care as a means of conserving the beauties and maintaining the status of our present day cemeteries, is an important feature of cemetery management, if not the most important, looking to the future. It is emphasized and endorsed as such by the attention now being given to the older burial grounds in many sections of the country. Wherever a community has risen to the plane of regarding external conditions as an indication of moral advancement, the cemetery as well as other public places immediately become objects of attention, and it is a well recognized fact among enlightened people that it is the quality of this care which betokens the moral progress of the caretakers, or community. In taking up the improvement of the older burying grounds, there are other phases of the question that present themselves. There is a renewal of reverence for those gone, in itself a valuable agency in education; there is the historical question, the preservation of whatever remains in the way of monumental effort, which together with other existing records, make historical connection with the past in a material way; and there is the idea, a valuable one, that of creating a beauty spot of broad educational and refined recreative influences. It is true the community may have outgrown its rural cemetery; there may be nothing therein warranting extraordinary expense to preserve; the "short and simple annals of the poor" may be all the records legible, and the expansion of the village or hamlet may decree extinction; these are matters requiring conservative and wise consideration, but the general principle remains that to keep the cemetery, wherever it may be, as far as possible a burial park, accords with the present growing sentiment. This should be the aim of every improvement association. A cemetery committee should be appointed whose duty should be not only to interest the lot owners and others in the cemetery to secure what help was possible, financial or otherwise, but to actually take in hand the work of improvement, and as "example is better than precept," commence operations at the first opportunity.

AZALEA MOLLIS AND GHENT VARIETIES.

Azalea mollis and its close allies the so-called Ghent varieties—the latter products of the garden and raised from American and Japan varieties—are rarely seen in parks and gardens. One reason for this is of course their tenderness which at present precludes their adaptability to the northern parts of the Middle States. It is to be hoped, however that varieties of more robust character may in time be produced, as they are most certainly a grand acquisition in the garden.

are clumps of *Phlox divaricata*. Beds of the shrubby forms of *Azalea*, together with *Rhododendrons* were also used, but neither of these can compare in showiness with the standard varieties of *Azalea mollis* and the Ghent varieties.

James Fensen.

RHODODENDRONS.

Originally the *Rhododendrons* were separated in a botanical sense from *Azalea* by the former having many and inserted and the latter few and exerted stamens. But with the comparatively



A PLANTING OF AZALEA MOLLIS AND GHENT VARIETIES.

The only way to procure a bed of these early flowering plants is to remove them every fall to a frost-proof cellar, where the temperature is kept a little above the freezing point; but even then if not carefully handled their life will be of short duration.

One of the things necessary for their welfare is a cool, half shady, situation in the garden and plenty of water. Care should also be taken to well soak the balls in water when planted out in the spring, as well as when removed to the cellar in the fall.

In the illustration shown, only standard varieties were used; they were planted in a bed of ferns and they made a grand display for fully four weeks, and I do not know of anything that repaid a small outlay better. The white flowers in the foreground

recent introduction of Japanese sorts with gradations between the two this no longer separates them. Some botanists separate them by the following characters: For *Rhododendrons*, evergreen foliage and clammy-glandular stems; *Azaleas* deciduous foliage.

There are eight species of *Rhododendrons* endemic to the North American continent. In the eastern parts of the United States three species are common.

R. Lapponicum, the Lapland Rose Bay, is a low, often prostrate shrub, seldom growing over one foot in height. Its crimson flowers expand in June, July and August. From the higher altitudes of the New England mountains it ranges northward to Labrador and Greenland and westward to Quebec and the northern part of New York.

R. maximum, the Great Laurel, is a tall shrub sometimes attaining the proportions of a tree. Its natural habitat is from Nova Scotia to Georgia ascending the mountains continually higher as it extends southward. The color of its flowers is a creamy white or light rose. It blooms in June and July.

R. Catawbiense, the Carolina Rhododendron or Mountain Rose Bay, is a shrub usually five to ten feet but occasionally 20 feet in height. Its flowers are a rose-purple and expand in May and June. From the mountains of Virginia and West Virginia its habitat extends southward through North Carolina and Tennessee to Georgia, occurring most abundant in the Roan mountains of North Carolina, where its profusion and gorgeous flowers are a feature that has given these mountains national renown.

Aside from the lower growing western species the only tall growing Rhododendron in America, in addition to *R. Catawbiense*, is *R. maximum*. The individual flowers of the former are broader, wider, markedly more abundantly produced, and the individual trusses are materially larger and more conspicuous.

Hybrid Rhododendrons are frequently grafted on *R. Catawbiense*, but for stocks the *R. ponticum* is more generally utilized.

Rhododendron ponticum, coming originally from Pontius, Asia Minor, is not as hardy as *R. Catawbiense*. On this account it is of common occurrence to find that otherwise hardy hybrid varieties, if not on their own roots or on *Catawbiense*, will die during the first winter after planting.

Rhododendron ponticum is reliably hardy as far north as Philadelphia, and with protection will warrant planting at New York.

R. Catawbiense is quite hardy at Boston.

In plantations where vegetation (exclusively native) is not required *R. Catawbiense* is in most respects preferable to *R. maximum*. Especially is this preference applicable to the north eastern states of America. The comparative cheapness and hitherto the availability of the Great Laurel probably explains its general use to the exclusion of the Catawba Rhododendrons.

Hardy broad-leaved evergreen shrubs, especially those bearing strikingly conspicuous flowers, are not as abundant as could be desired. For this reason the Carolina Rhododendron will always be in demand because it is a dwarf and more compact than the Great Laurel.

The successful utilization of Rhododendrons is dependent on care in planting and maintenance. Firm planting is essential. If they are to be planted in specially prepared soil containing peat,

the peat should be sweetened by exposure to the air, but never by the use of lime. After planting the soil should be mulched with straw, hay or similar material, to a depth of at least six inches. Water should be given whenever the soil is moderately dry. After flowering all the flower stems should be broken off just above the terminal leaves. Seed bearing is exceedingly devitalizing to Rhododendrons.

Emil Mische.

SARGENT'S WEEPING HEMLOCK.

(*Abies Canadensis Sargentii pendula*.)

The illustration gives an excellent representation of Sargent's Weeping Hemlock, and was taken from a specimen tree in Riverside cemetery, Asheville, N. C.

The parent tree was found growing wild in the Fishkill Mountains by Mr. Henry W. Sargent of Fishkill on the Hudson, N. Y., and was propagated and introduced by him.

Although in its early life it shows its weeping habit, yet its height is easily regulated by giving the leader, or central shoot, a support until it reaches the desired height.

As soon as the support is removed its upright growth ceases and the leader disappears. The growth is outward and is dense and graceful, and as a specimen tree it has scarcely a rival among our native evergreens.

We are indebted to Mr. W. S. Cornell, superintendent of Riverside cemetery, Asheville, N. C., for the photograph and particulars of this handsome specimen tree.

CONSTRUCTION AND DESTRUCTION.

Naturalistic Gardening which has by far the best title to the term "Landscape," is peculiar among arts as being one of modification, not construction. The possibilities of any given piece of work are rigorously limited by its area, the funds available, and very largely by existing conditions both outside and in. Cuttings and fillings cannot be made for themselves alone; they must be adapted to levels that already exist. Roads and walks can only be made as the grades will let them. Planting is limited by conditions of space, soil, climate, exposure and cost, and so on. And he is the best landscape gardener who can adapt the most æsthetic scheme to the needs of utility and existing conditions, instead of adapting existing conditions to his scheme, and who can do it at the least expense. So that he will seek the opportunities that nature has given him, and guard them jealously. He will remember that a tree which can be destroyed in half an hour with an axe will take a hundred years to replace, and a rock that can be rent in a moment by dynamite can be restored never; thus he will consider

anxiously, not what he can remove, but what he can preserve. Such things as grades and roads and masonry he will regard more lightly, for these can be made and remade as long as money holds out; but an ancestral tree, or a huge boulder can only be renewed by centuries of years, or another glacial epoch. Thus the true outdoor artist is a constructor, not a destroyer.

But many of the operations done under the name of landscape gardening have more destruction than construction in them. Suppose a piece of ground

is devastation the only thing worth paying for. In the operations of dynamite and steam shovels, antique oaks have perished, topsoil has been buried, and the ten-thousand-year work of nature has been obliterated, and covered up and smoothed down in ten months. Maybe the primeval forest is replaced by a smooth and smug lawn besprinkled with golden retinosporas and purple plums. Maybe the case is not so bad as this, and the grades and planting are arranged with a sense of the value of lines and the massing of foliage, and a due use of green and



ABIES CANADENSIS SARGENTII PENDULA. (SARGENT'S WEEPING HEMLOCK.)

is to be treated. A scheme is evolved on paper that has the merit of a sweeping simplicity thus requiring little thought after the original conception, and little care in construction. The designer can visit it once a week or once a month, feeling fairly sure that nothing will go very wrong in his absence. Meantime, the work of alteration goes on. The blasting, filling, cutting and hauling proceed steadily and relentlessly. Old trees are destroyed, landmarks effaced, rocks shattered, and presently the owner coming and seeing his piece of the face of the earth so changed, is almost consoled for the length of the bill to be paid. He can at any rate see that he has got something for his money.

But it is not change alone that is valuable, nor

healthy vegetation. Perhaps some fine specimen trees have been spared. But with all this, has not the work of reconstruction been too sweeping? Has any serious attempt been made to adapt the new grades and lines and planting to the old features, to get something of the spirit of the surrounding scenery into the work, by harmony if possible, by contrast if needful? If these things have not been done, the changes may be sudden and striking, the resulting effect may be good, and the owner satisfied; but the outdoor artist has not been justified of his art; for the silent demand of nature to have the scheme that she laid down for his guidance a million years ago understood, and respected, and developed, has no response. *H. A. Coparn.*

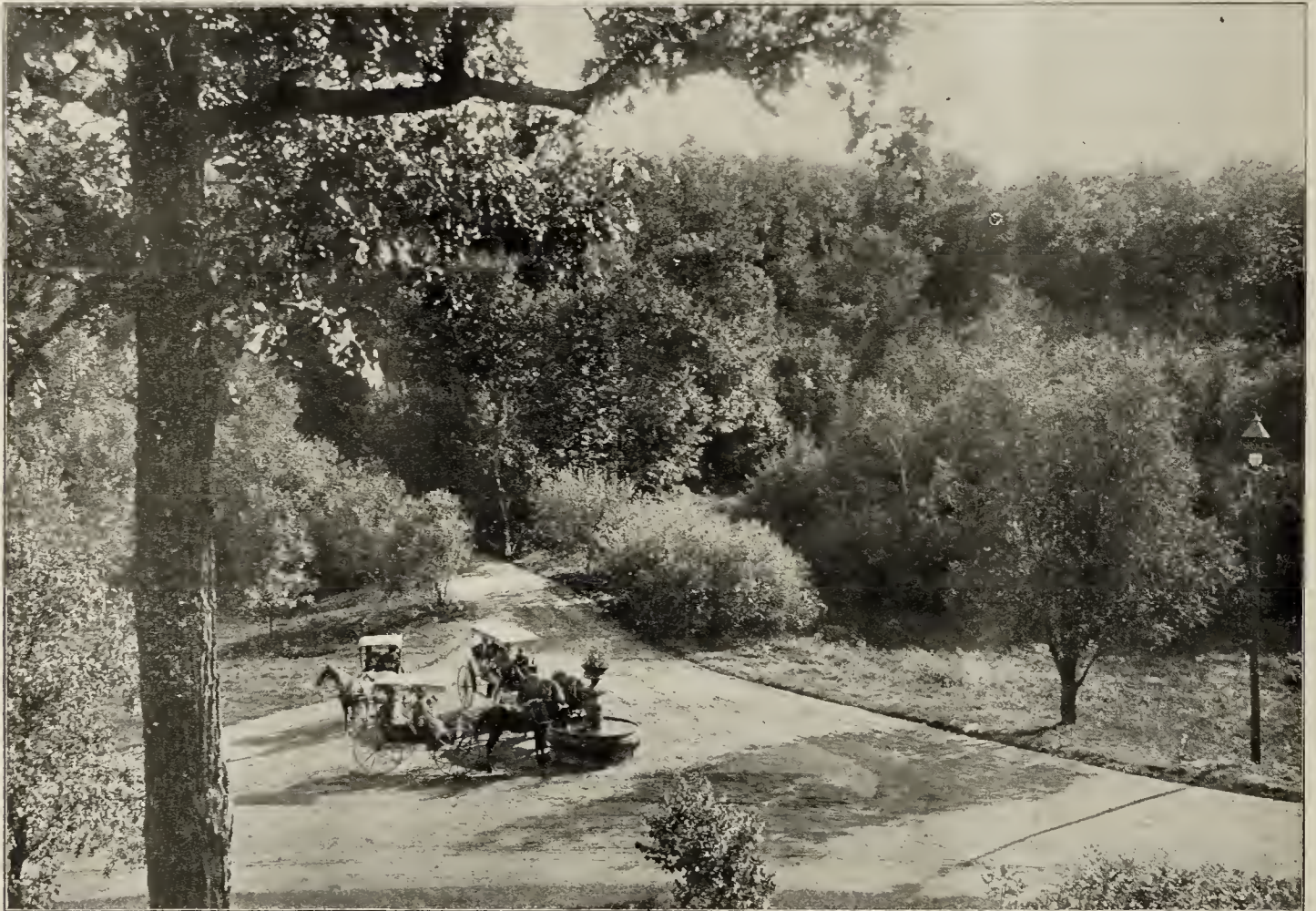
PARK AND CEMETERY.

THE PARKS OF ST. PAUL, MINN.

Few cities are more picturesquely situated than St. Paul, Minn., with the "Father of Waters" a leading feature of its scenery, and a diversified landscape for its setting. Under such general ruling conditions it is obvious that a park system for such a place, should be broad and comprehensive, and developed in harmony with the wide suggestiveness of its environment. The progressive and enlightened spirit that has characterized the development of so many of the cities of the great north-west has been a dominant feature in the growth of

From 1873 to 1891 the City Council had charge of the parks and the Park Commissioners from 1887. The total receipts from 1873 to March 1, 1900, were \$784,835.97, and the total expenditures, including land purchases during the same period, \$774,895.60. The average expenditure for the first twenty-five years has been \$28,498.22, and by the Board of Commissioners for eight years from 1891 to 1898, both inclusive, has been \$49,042.66.

Como park is the show park of St. Paul, and is indeed a beautiful park. Varied in scenery and development, while replete with the accessories in



COZY LAKE AVENUE, COMO PARK, ST. PAUL, MINN.

St. Paul, and the friendly rivalry between the twin cities has stimulated the acquisition of all the municipal privileges that a refined and enlightened community demand.

The total area of improved and unimproved park lands including lakes is 1,160 acres, of which 452 acres are under cultivation. The principal parks and their acreage are as follows: Como park, 490 acres; Phalen park, 585 acres; Indian Mound park, 17 acres. Neighborhood parks, in number some 23, range in extent from a fraction to nearly 10 acres. There are also a number of intersection triangles and terraces, which altogether give St. Paul 46 parks and 3 parkways.

buildings and conveniences for public recreation and pleasure, it is a very popular outing place, and it has frequently shown its comparative inadequacy to meet the popularity its many attractions have created. It is the intention of the commissioners to provide every requisite of park development that the trend of the times suggest. The floral display has been a feature of this park, and this has always been more or less profuse.

It is excused on the ground that it meets a popular taste, and while the landscape artist would condemn it for its extravagance, it is certain that it pleases a goodly percentage of the people. In such a case it is necessary in park management to

compromise the question on artistic lines, however.

An important park, when arrangements are made for improvement, will be Phalen park. The park and boulevards will contain an area of nearly 200 acres of land surface and will enclose a stretch of water of nearly four miles in length and embracing some 326 acres in area. It is proposed so to treat the water area as to provide for all forms of boating and aquatic recreation. The land section comprises some beautiful sylvan scenery, which in the course of improvement will develop into a charming park. There is considerable native forest and in combina-

system complete, and to accord with its grand location a linkwork of boulevards and parkways is essential and to this end the commissioners are bending their energies and much has been accomplished. The possibilities in this direction in St. Paul are exceedingly promising, for its undulating surface offers boundless capacity for beautiful effects, and the final completion of the system with boulevard and parkway adjuncts would give to St. Paul parks and recreative facilities unsurpassed anywhere in the world. There is in the aggregate, a large area of land in the hands of the commissioners yet unim-



ELECTRIC CAR STATION ENTRANCE TO COMO PARK, ST. PAUL, MINN.

tion with its splendid water features it will have distinctive characteristics as a forest and water park, and will be a needed complement to Como park with its floral and such like attractions.

Indian Mound park, though small in area commands a prospect of such magnificent extent, variety and beauty, and embraces so many picturesque features within its own limits and in its immediate vicinity, that it has an attractiveness particularly its own. It is invested in peculiar interest to many from being the seat of curious tumular antiquities from which it derives its name.

The work of improvement in a park system such as St. Paul is acquiring never ends. To make the

proved calling for both energy and outlay, to which the people must liberally contribute to attain the desired ends.

In the matter of street trees and their care, St. Paul has only recently solved the problem, although in certain districts property owners have provided themselves, through the city authorities, with shade and street trees. It has to be said, however, that there were difficulties in the way of the Park Board taking upon itself this work until legislation was secured. The time is coming, however, when the park departments of our cities will have charge of the city's trees, or that special officers will be elected or appointed by

legislation to take charge of this important detail of city progress. A very great success has attended the work of Mr. Fred. Nussbaumer, the superintendent, in his park nursery and horticultural efforts in the parks. Como Park has a very comprehensive irrigation system, rendered necessary by the lay of the land and other local conditions, and this has enabled the officials to maintain the growth and appearance of all the trees and planting material in splendid condition in spite of weather or other disadvantages. And further the losses from transplanting or in planting trees and shrubs in Como Park have been actually insignificant. This remark also applies to operations of



THE SCHIFFMAN FOUNTAIN, COMO PARK, ST. PAUL, MINN.

this kind throughout the system; the methods adopted and care in the work has reduced this loss to a minimum.

A very interesting feature of the park reports of St. Paul is the list of trees, shrubs and plants given, both of those planted out over the grounds and those contained in the nursery. Both the botanical and common names are appended, which gives to this part of the reports an educational significance, which will be more and more appreciated as nature study becomes general in our schools—a matter of growing importance.

According to a late report in hand, that issued in 1899, there had been planted in the parks a total of 31,260 trees, and it is interesting to note the varieties which, by reason of the numbers planted, predominate: *Ulmus Americana*, elm, 5,513; *Salix Vitellina Britzensis*, Red Bark Willows, 3,970; *Acer Dasycarpum*, White Maple, 3,500; *Salix Viminalis*, Golden Willow, 3,055; *Populus Argentia*, Silver Leaved Poplar, 2,924; *Acer Ne-*

gundo, Boxelder, 2,750; *Fraxinus Alba*, White Ash, 1,800; *Fraxinus nigra*, Black Ash, 1,500; *Salix Vitellina Cærula*, Greenbark Willow, 1,400; *Salix Aurea*, Fine Leaved Willow, 800; *Populus* in variety, Poplars, 700; *Salix Caprera*, Goat Willow, 500; *Catalpa Speciosa*, Indian Bean Tree, 400; *Marus Moretti*, Russian Mulberry, 400; *Tilia Americana*, Linden or Basswood, 353; *Betula Laxiniata*, Cut Leaf Birch, 350; *Pyrus Aucuparia*, Mountain Ash, 306; *Salix Purpurea*, (pendula *Napoleonis*), Red Willow, 300; *Sorbus Nana*, Dwarf Mountain Ash, 250; *Aesculus Hippocastanum*, Horse Chestnut, 200; *Betula Alba*, White Birch, 200; *Pinus Ponderosa*, Bull Pine, 200; *Salix Fragilis*, Native Willow, 200; *Tilia European*, Linden or Basswood, 186; *Zanthoxylum Americana*, Prickly Ash, 180; *Acer Saccharinum*, Sugar Maple, 163; *Betula Lenta*, Black or Cherry Birch, 163; *Celtis Occidentalis*, Hackberry, 150; *Gleditschia Triacanthos*, Honey Locust, 150; *Pinus Resinosa*, Scotch Pine, 100; *Pinus Strobus*, White Pine, 100; *Salix Nigra*, Black Willow, 100. In lesser numbers many other valuable and interesting trees are represented, together with large quantities of the smaller flowering and ornamental trees and larger bushes. Some 4,000 evergreens are also distributed in Como Park and the city squares and triangles. It will be inferred from the above that the nursery department of the St. Paul park system is an important adjunct of the management and it is intended to maintain it to a capacity of about 25,000 trees and shrubs. In the greenhouses there is an annual demand for bedding and other plants of between 150,000 and 200,000 plants, necessitating quite an establishment. There is a growing necessity for a conservatory in which to house specimen valuable plants, and to afford an added pleasure in park recreation. An extensive park without a conservatory now-a-days is behind the times. In it may be held periodical flower shows, which have become in many places, and are rapidly becoming in others, features of park work, highly educational and gratifying to the community.

The illustrations, for the use of which we are indebted to the park authorities, represent features in Como Park—in the one case some floral display and the electric car station entrance, and in the other a beautiful landscape effect at the junction of avenues. Each is suggestive of the development of this park. The Schiffman fountain was the gift of Dr. Rudolph Schiffman, a former member of the park board, and occupies a conspicuous position in the garden of Como Park. It is a suggestion to liberal minded and public spirited citizens to follow such an example, thus to add to the appropriate artistic details of improvement.

PARK ROADS.*

Park roads are, regrettable necessities. The necessity in many cases is too greatly over estimated. The landscape designer is too apt to permit usage to control him in determining the location, width and number of his drives. The road is the despair of the park designer. He takes his territory with all its possibilities for adornment, creates in his mind the beautiful picture of nature's coloring which his art inspires and when he comes to formulating it on paper his tradition keeps saying, drives, drives. He tries them here, there and everywhere only to find that wherever he places them they would be better elsewhere. He sees a beautiful slope rising in graceful undulations from his little lake to the margin of the park; but a road must go through it somewhere. He tries it at the foot of the slope along the water. The introduction of the rushing feverish life of a park driveway there completely destroys the restful effect he loves; half way up the slope it is absolutely impossible, at the top it might do if he could hide it with plantation but to do this would so contract his area that what would otherwise be a strong complete picture becomes a trivial affair, feeble and unsatisfactory, with the road the principal object. Nevertheless, the road has to be somewhere he thinks and there it goes as the least objectionable place. Sometimes it is the excusable vanity of the designer that causes him to provide too many roads. He wishes everyone who comes to the park to see all its beauties whether they come a wheel, a foot, a horse or in a road vehicle, so he must have roads, wheelways, equestrian drives and walks to lead to each place of vantage with the result that the design seems a maze of ways with the park feature as an incident. The reverse should be the case. Often the authorities controlling at the time make the greatest of all mistakes in deciding that the park shall be made a public circus with all sorts of side shows. Roads must be built to the bear pits to the merry-go-rounds to the race tracks, to the aviaries, to the monuments and to many other places which are desirable things perhaps most anywhere outside a park. Result, roads and roads.

There is another influence which often works perniciously upon the designer. He is often called upon for plans for a cemetery. There numerous roads are demanded and the apparent necessity for them not only excuses their presence but justifies them. When called upon for a plan for a park the influence of his last cemetery plan is perhaps still with him and he proceeds to lay out a beautiful system of roads and green ovals, but he has failed utterly to make a park. The uses made of the two places are so entirely different that what is fit for the one is not at all suited to the other, though both in their way may be artistically beautiful.

The crown of artistic success is placed upon a design for a park just as surely as it is upon a design for a building when simple fitness for the uses to which it is to be put is beautifully apparent. The more grass, shrubbery and trees in a park, the more beautiful. Roads

should only be used to make this beauty accessible. The more roads, the less of nature's loveliness, therefore, every unnecessary yard of driveway is a great scar on that beautiful admixture of the blue of the sky and the yellow of the sun light resulting in the luxurious green carpet with which nature has surfaced the earth, and which unlike any artificial carpet, is just as good as new after each spring house cleaning. In providing for roads in a park we are apt to neglect the example given us by the great Master. His work is satisfying as that of none other. A beautiful little story of its great charm, which I heard lately, I must repeat to you: An old Scotch Highlander was accustomed every morning early to step around to one corner of his lowly thatched cottage, from where the close by loch and its guardian hills were all in view, and stand there bare-headed for a few moments before entering upon his work of the day. A gentleman found him there one morning with bowed head in the attitude of devotion and asked him why he stood thus; if he was saying his prayers? The old Scotchman said that every morning for thirty years he had stood on that spot for a few moments with his bonnet off worshiping the beautiful world. The design for the great park, the short record of the creation of which is found in the first chapter of Genesis, shows no roads. There the kindergarten child may make his great pyramids in the sand pits; the biological student may lie on his back in the shrubby plantations studying the habits of the birds and the young dominie can go into the sequestered solitudes and learn of the God of Nature without fear of a runaway horse, the bursting of a pneumatic tire or the blowing of a tally-ho horn. Let us keep as close to our best example as possible.

The most beautiful parts of any park are away from the roads, and any one who truly loves the beauties of nature goes afoot when he really wishes to enjoy them. Make fewer roads, teach the people where the beautiful is and let them learn that the little effort of walking through a well designed and well managed park is more fully repaid in true and pure enjoyment than any equal effort in any other direction.

But park roads are deplorably necessary. The engineer's evil eye has a sinister influence upon them. He demands regular curves or tangents, otherwise they are unscientifically designed. The landscape architect fearful of the engineer's criticisms, calls upon his mathematical knowledge, and the result is satisfactory on paper regardless of the more than likely, stiffness and painful regularity when applied to the ground.

Montgomery Schuyler in an article in a recent number of the Century Magazine on art in bridges, broadly insinuates that the blood corpuscles which flow through the engineer's brain are lacking in certain projections, or jagged edges, requisite to the production of the divine aflatus of art. Now, though I am something of an engineer I am forced by my own experience to agree with Mr. Schuyler and nowhere is the want of artistic inspiration in his soul more apparent than in the purely utilitarian expression given to most park roads. The boulevard is a road first and has incidentally some of the

*A paper read at the Annual Convention of the American Park and Out-door Art Association at Chicago, June, 1900. By J. Frank Foster, C. E.

PARK AND CEMETERY.

beauties of a park to soften the hard lines, but right lines and regularity are part of the evidences of fitness for its uses, and, therefore, the formal lines and planting may be artistic. The roads in a park are the incidents. Regular curves and widths and surfaces are in such startling contrast with nature's abhorrence of regular lines that the effect can never be satisfactory. There are, of course, many reasons, and good ones, perhaps, not to be overcome for the creation of a park road such as we generally see it in our parks, but every lover of nature and of parks, too, longs for the narrow road of unequal widths and irregular margin, the grass running out into it in its modest effort to cover an unseemly nakedness of Mother Earth; but I fear we can never have it and it is largely because the majority of people place formal regularity above the beautiful. Let me tell you of an experience in an effort in this direction. A bridle path runs about through the plantation surrounding a large meadow in a certain park, not a thousand miles from the site of the World's Fair, breaking through shrubbery here, winding under the trees there and occasionally swinging out into the sward of the meadow. The sharply defined regular edges were painful to the person in charge. It seemed to him that it would be much more beautiful if it were like a path worn at random through the woods in the country, so the grass was allowed to grow and it soon became just what he wanted, an irregular path and to him at least, appropriate and beautiful. The second spring, however, that small but mightily influential class the equestrians, commenced to inquire why their road was neglected, while the edges of the walks and other drives were nicely trimmed and straightened, theirs was like a cow path. The bridle path was just as good as it ever had been except that the grass edges were irregular. The equestrians were simply jealous of other classes and afraid that they were not getting all that belonged to them, and made so much talk about it that the neglectful superintendent was compelled to edge up the path to the lines of regular curves and a uniform width, and it is now pronounced all right, and he has been complimented for what is to him tiresome and formal artificiality, in the midst of nature's lovely abandon.

Thank fortune, there are some places where regularity in roads is so evidently out of place that all understand, and it can be avoided. Who would want to see the perfect driveway with its concrete curbs and stiff formal lines destroying the natural carelessness of Wisahickon at Philadelphia? The loveliest park roads anywhere are the old country roads that existed before the territory became a park and have been maintained in their original haphazard condition since. I recall one such in the Boston Park system, I think near Jamaica Pond, which will always be a delightful remembrance to me.

A bridge is sometimes a necessary part of a road. It is, however, often introduced when not at all necessary. To lead from point to point in the shortest possible distance is a good qualification in a city thoroughfare, but by no means an essential in a park road. To avoid the construction of a bridge a very considerable detour is

justifiable. There are few places, where bridges are thrown across the ravines, that would not be much more beautiful without them. They are desirable squatters. Keep them off the premises whenever it is possible to do so. Only erect them when the necessity is strongly apparent. I know of bridges built where a ford through the little brook, with stepping stones for the pedestrians, would be much more desirable. Where there is no escape let the bridge be simple but durable and strong, of stone if practicable. Above all do not let it be an opportunity improved by some engineer or architect to erect a monument to himself, perhaps an ugly mixture of mediæval towers and modern steel cantilevers. The small so-called rustic bridge is an abomination hardly worth notice.

It is with considerable hesitation that I enter upon the description of the technicalities of the construction and maintenance of park roads before an association only a small portion of whose members are particularly interested in such details. It seems to be expected of me however, but I will endeavor to make it as brief as possible.

The construction of park roads is like the construction of all other things largely a matter of local conditions. There are however, some principles common to all conditions which must be made factors in the work or the results will not be at all satisfactory. The character of the earth upon which road material is to be laid largely controls the method of construction and the materials to be used. Sand, of course, is the best, but it should be properly underdrained or in wet springs there is likely to be much water accumulated in places that as the frost breaks the bond of the road surfacing, the road will become wavy and the wheels will break through if much used. This is only likely to happen when sand is supported and surrounded with earth impervious to water. Clay is the worst material, but is by no means to be feared if properly drained and the road surfacing is not thin. The underdraining of clay is not necessary. If provision be made for at once carrying off the water which reaches the surface of the clay under the road material the disturbance of the road by frost will be as little as on foundations of other material. The thickness of the road material depends entirely upon the traffic to which the road is to be subjected. The lightest of all roads in parks, some little turn outs to hitching places or the like might be five inches in thickness if resting on confined sand and constructed of sound stone or good gravel. This thickness should never be less than seven inches on clay. The road material in the ordinary park road should not be less than nine inches in thickness after rolling. Not because that much material is required to hold up the traffic, but because the surface will probably be worn down at least two or three inches before it is resurfaced. At its thinnest it should be capable of holding up heavy sprinkling wagons and coaches or any vehicles which may come upon it.

A well built nine-inch road of good material is amply heavy for ordinary park uses. For boulevard roads the material should be somewhat thicker. If properly

cared for in any boulevard twelve inches is ample. In some of the outer boulevards nine inches will be sufficient. The question might be asked why if a nine inch road will hold up a traffic in the parks when frequently very heavy vehicles pass over it, is it necessary to have a heavier road in a boulevard? It is the matter of wear again. Take Michigan avenue for instance in the busiest part, where 13,000 vehicles have frequently passed over the road in 24 hours and the traffic is always very heavy even in wet weather. The wear is, of course great. Suppose the road to have gone two years without surfacing; nearly three inches is worn off the surface. Suppose the following winter to be a severe one on roads, that is a wet one, then if the road was nine inches thick to start with there would be perhaps, only five or six inches of material remaining with its bond broken, utterly incapable of holding up the traffic. With a twelve inch road there would still be eight or nine inches of material, which would be sufficient. The kind of material to use? There are several things to consider in determining this. Principally it must be durable and of two grades. The upper three inches should be material that will best resist abrasion, which means a hard, tough uniform granite or trap rock. The under six or nine inches as required may be any hard stone that will preserve its integrity when subjected to frost. The upper three inches should be stone broken into pieces closely approximating one and one-quarter inches in their largest dimensions as nearly cubical as possible, the under layer into two and one-half inch pieces. The granite or trap rock as was said should be used for the upper three inches. For the much used boulevard drives this is almost imperative, but for the outer boulevards and the park roads a softer and less expensive material may be economically and satisfactorily substituted, limestone or good bank gravel. For the roads in a park color of surface is a consideration. The glaring white surface of a limestone road is very painful during the bright days and at all times its great contrast with the surrounding dark greens is anything but pleasant or desirable. The sienna of the bank gravel is much better but the gravel road is more difficult to keep clean and is much more liable to be muddy after the summer shower or if as frequently happens in any park but yours, the sprinkling is too heavy. The determination of this matter must be largely affected by the local conditions in each case as to the cost and materials found at hand. To darken the surface of limestone roads a dressing of crushed granite or trap rock, say one-half an inch thick, has been applied but it is expensive because of the frequent renewal necessary to keep the color at all even. If it is thought necessary to darken the surface it would be economy in the end to make the upper three inches of the road of the more expensive material to begin with.

The result will certainly be more satisfactory as to maintenance; for, of course, the harder material does not wear as rapidly, therefore does not have to be cleaned as often and is not as dusty in dry weather nor as muddy in wet weather.

(To be continued.)

UTILIZATION OF WASTE LANDS IN TOWNS.

Villages spring up and develop into towns and often into cities in some most uninviting localities; as the town grows the physical imperfections become more apparent and more and more abused until they become quite objectionable.

Finally it may be decided that at a considerable cost, the hand of man must overcome the features nature has left to his abuse.

Under such laws as the state may provide let an action be commenced to condemn all lands necessary to work out such a scheme as will afford control of portions of the grounds subject to contamination or objectionable encroachment.

Wisdom will suggest that the advice and direction of a competent landscape engineer should be secured to at least outline such improvements as the circumstances warrant. But where even such an expenditure is out of the question a village improvement association can arrange to gradually extend such a system of planting as will hide from view all barns and outbuildings, and eventually bring the grounds into such condition as will convey the impression that one is alone with nature, where all else is excluded.

If the valley should be broad enough, let winding roads and paths be marked out therein and improved from time to time as circumstances will permit. If a running stream, or even a periodical water flow finds its way along the grounds, let such channel be provided as will keep itself clean and free from stagnant water. Where high banks occur let them be sloped down until by the aid of trees, shrubbery and rocks they will retain a sodded slope.

If running water can be provided, pools and lagoons will suggest themselves at favored localities which may be stocked with fish and possibly may with little expense be made to provide boating for small crafts, to the delight of the children. Aquatic vegetation and flowers may also be encouraged. Again these ponds will provide suitable skating places in winter.

One of the most common and serious obstacles to be met in these valleys is the springy and boggy ground. But these can in a large measure be overcome by cutting off the upland water by a few string of tile laid parallel to the hill for a short distance and then leading obliquely off through proper channels to the main outlet in such valley. An observation and study of these conditions will suggest how best to meet and deal with them.

Next in importance will be a judicious planting system in which forest trees, including a fair allowance of evergreens and flowering shrubs should be employed. Climbing vines may be employed where opportunity for their growth is present.

Finally to assure the success of the whole regular attention to mowing and pruning must be followed, and rules for keeping the grounds clean rigidly enforced.

F. Knight.

MEMORIAL DAY AT MUSKEGON, MICH.

UNVEILING THE STATUES OF LINCOLN, GRANT, SHERMAN
AND FARRAGUT.

Philanthropy finds many forms of expression, but not the least beneficial of these, by reason of its far-reaching effects, is the gift of statuary of noted men to stand in public places as example and suggestion for the present as well as for future generations. Happily we appear to be in the midst of an era of such public-spirited generosity, and from all points of the compass there comes information relating that this or that monument has been either erected or presented by some citizen of broad-minded intelligence and liberality. But of all the cities that have been more than ordinarily endowed in such manner, Muskegon, Mich., must occupy a leading place; for it would be difficult to point to a town where public benefits had been so liberally bestowed, of so varied a character, and all of the highest consequence, as this Michigan city has received at the hands of Mr. Charles H. Hackley. Mr. Hackley in a long residence and business activity in the place had amassed a large fortune, and it has been his habit for some years past of periodically presenting to his fellow citizens some valuable public mark of his regard for his fellow men. Thus Muskegon has a park area, a soldiers' and sailors' monument, a public library, a high school building, a manual training school, and now four monuments of great men of the Civil War period, besides other features, all gifts of Mr. Hackley, whose unostentatious bestowal and wise selection has marked him as one of the broadest philanthropists of his state, if not of the country.

On the opposite page are given illustrations of his latest gift, viz: bronze statues of Lincoln, Grant, Sherman and Farragut, men whose lives and historical connections with the greatest crisis of the country, will point an example and moral to every citizen for all time. The location of these monuments on Hackley square or park, in a measure, completes an inspiring benefaction.

The method of the donor in providing these last gifts was very simple. On March 22, 1898, the then mayor of Muskegon received a letter in a plain envelope, asking permission to erect in Hackley park statues of Lincoln, Grant, Sherman and Farragut, and promising, should the permission be granted, to commit the execution of his design to a committee, which he named, with authority to expend \$20,000 in carrying it into effect.

The contract for the monuments was placed with the Harrison Granite Co. of New York City, who are to be congratulated on the successful execution of so important an undertaking. They commissioned Mr. Chas. H. Niehaus to make the statues

of Lincoln and Farragut, and Mr. J. Massey Rhind those of Grant and Sherman. The pedestals were designed by Mr. W. L. Cottrell, architect for the company. They are artistically proportioned, cut from Barre granite and are embellished only with wreaths, containing the name, date of birth and death of the man surmounting them. The bronze figures are life-size. The Abraham Lincoln stands at the southeast corner of the square facing south, and the others at opposite corners. All four statues are represented in characteristic attitudes, such as are well known to the majority of the present generation.

The monuments were unveiled on Memorial Day, and it goes without saying that the day was one of the most marked in the annals of Muskegon.

LIMING THE SOIL.

The best, as well as the cheapest, form to apply lime to the land is in powdered phosphate of lime, procured in the low grade powdered phosphates at a lower price than for lime, with the additional value of the phosphoric acid, as much in quantity as is contained in the commercial fertilizers termed superphosphates, and very much more than is contained in wood ashes. Powdered phosphate of lime moistened with a little water yields to water a considerable quantity of soluble phosphate of lime, and the solubility rapidly increases by the addition of organic matter. Hence wherever earthy phosphates of lime exist with organic matter, water will invariably dissolve a portion, progressively with the decomposition of the organic matter by fermentation. This fact is of the greatest importance to agriculture.

Boston.

Andrew H. Ward.

CORRESPONDENCE.

CHICAGO, JUNE, 1900.

Editor Park and Cemetery.

In a recent number of PARK AND CEMETERY Mr. H. A. Caparn says "Let those who have graveyards or single graves to plant get their attention off the short list of artificial bedding plants and look with cleared eyes on the lengthy array of perennials, annuals and green flowering bushes in and out of nursery men's catalogues.

Given a grave space one and one-half by four feet, with others on each side which must not be encroached upon nor overshadowed, will Mr. Caparn say how he will plant it with perennials, annuals and bushes? Can Mr. C. select from the whole list of hardy subjects and annuals one single plant which will give so much satisfaction to the planter of the above described grave and be, from all points of view so unobjectionable, as a single plant of a white or delicate pink geranium?

W. M. Rudd.



STATUES OF LINCOLN, GRANT, SHERMAN AND FARRAGUT, PRESENTED TO MUSKEGON, MICH., DECORATION DAY, 1900,]
BY MR. CHARLES H. HACKLEY.

IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

HERBACEOUS PERENNIALS IN RELATION TO HOME GROUNDS.

Herbaceous perennials are indispensable in the development of suitable schemes of planting for either small or large grounds. Wisely chosen, they furnish a running accompaniment for flowering trees, shrubs or vines, filling out weak places in the summer harmony of color, adding grace notes that acceptably enrich without destroying the unity of the composition, and sometimes nearly, if not quite, carrying the full burden of the melody



GERMAN IRIS.

and taking their places as integral parts of the theme.

I have always appreciated to the full the beauty of Irises, but have this year been especially impressed by their usefulness. They come when the continuity of the hardy flower theme is weakened by a falling off in early flowering shrubs and strike a strong, well sustained note with their richly or delicately colored blossoms, which excel all others in classic form and interest. By all means, room for the Rainbow Goddess! *Iris pumila* comes early and is always pretty, but to be fully appreciated it must be seen in its white and an unusual delicate true blue (no purple or violet about it) forms. The German Irises seem to fill a long felt want, supply-

ing color and interest in the interval between spring flowering shrubs and roses, while still later come the lovely Japanese Irises. Irises are admirable for use in colonies and clumps along the face of shrubbery plantations, and are attractive even when out of flower for the foliage is good in itself and never becomes unsightly, besides furnishing a desirable accent by reason of its distinct character.

Pæonies are equally necessary, being even more showy in the blooming season, which overlaps that of Irises, while their handsome dark foliage is clean and well preserved until frost and makes an excellent background for later blooming plants of low growth. Nothing can be more effective than a well placed mass of carefully chosen pæonies, but great care must be taken that no scarlet flower shall clash with the rich crimson varieties. An Oriental Poppy in line with crimson pæonies is enough to literally set the teeth on edge.

Other perennials that may be classed as essential are Columbines, especially *A. coccinea* and *A. chrysantha*; some of the spiræas bearing heads of feathery bloom in cream or rose color; *Achillea* var. the Pearl; *Gypsophilla paniculata*; Oriental Poppies, which are wonderfully effective in both leaf and flower; *Delphinium*s, which agreeably introduce desirable shades of blue—a color all too scarce among flowers; *Hibiscus*, which are particularly useful on account of coming into bloom in late summer; *Phloxes* in variety, and they are as necessary as Irises; *Anemones*; *Tritomas*; *Asters*; *Pyrethrum uliginosum*; *Funkias*; *Eulalias* and many others that may be chosen to meet special requirements.

The use of Herbaceous perennials need not be limited to the face of shrubbery plantations for they are exceedingly attractive in a border by themselves, either with a wall or vine covered fence as a background. In such locations they should form a bed of irregular width, advancing and receding in good lines against the lawn; tall growing plants being surrounded by those of lower habit so that the characteristics of all may be fully developed and seen. Such a border should be presentable at all times and never be without the interest of plants in good bloom.

F. C. S.

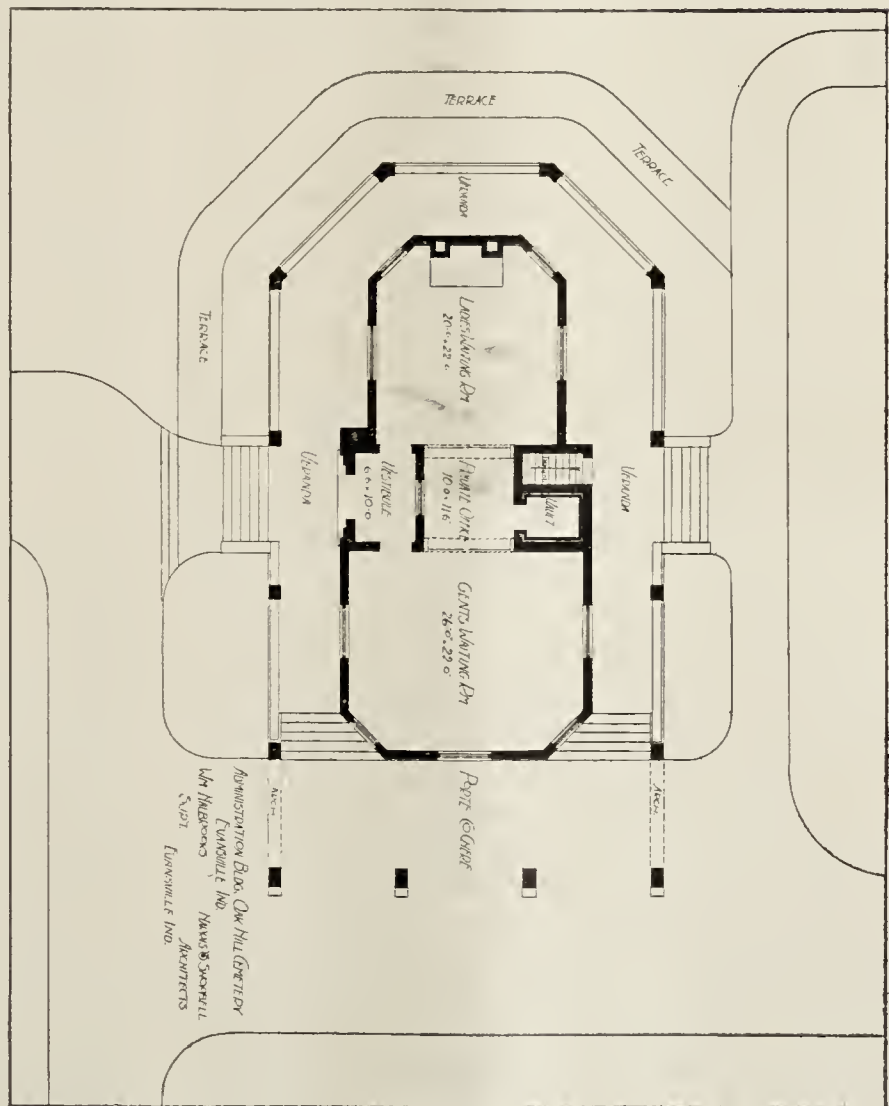
Some writer has recently said that if there is a melancholy and depressing sight on earth for the thousands who are compelled to pass the summer in their homes in the city it is that which the majority of them behold day after day from their back windows. Here and there a yard has been converted into a grass plot with shrubs and vines and flowers around its borders, and in some cases a single bit of such leaven has been seen to progressively leaven a whole block.—*Ex.*



ADMINISTRATION BUILDING, OAK HILL CEMETERY, EVANSVILLE, IND.

ADMINISTRATION BUILDING, OAK HILL CEMETERY, EVANSVILLE, IND.

The illustrations herewith give perspective view and general plan of the new administration building recently completed at Oak Hill Cemetery, Evansville, Ind. It was built from designs by Messrs. Harris & Shopbell, architects, and the general dimensions are given on the plan. The exterior is constructed of Bedford limestone with roof of light Spanish tile. The interior walls are of Columbus, O., pressed brick, unglazed, with red oak floor and ceiling. There is also a fire proof vault for records, etc. Furniture has been added to harmonize with finish. A ten-foot basement extends under the entire building, in which the heating furnace is located, together with waiting rooms for ladies and gentlemen and a private office for the superintendent. The cost of the building, exclusive of terrace work, was \$11,000. The building seen to the left rear was the old office and residence building which has since been removed. It stood close to the main entrance to the cemetery, and did not add to the dignity of the surroundings. Its site has been planted and a small lake has been created near by. We are indebted to Mr. Wm. Halbrooks, superintendent, for photographs and particulars.



PLAN.

SEASONABLE SUGGESTIONS.

Out-door chrysanthemums should not be topped as those in pots may be or it throws the flowering so late that freezing weather may catch them. As a mass of flowers is what is looked for in them and not flowers of large size, it is as well to let them run at will.

Make preparations to plant pæonies this fall instead of next spring, if you desire flowers next season. Spring set plants rarely bloom for a year.

Give Japanese iris a bog, almost a swamp and magnificent blooms will result. Like the wild iris of our swamps, versicolor, they are evidently at home in such locations in many places. Sedums are in demand for coming graves, because of their thick, low growth. For July flowering, these three are good for the purpose: Acre, yellow; speciosum, rose violet; album white. These can be planted at almost any season when the ground will permit.

Yuccas are in great demand for lawn planting. The first to flower is *augustifolia*, next *filamentosa* and quite late in the season *gloriosa* and variety *recurva*. These plants are propagated by cutting up pieces of roots and setting them a few inches underground. *Hydrangea Thunbergii*, as nursery plants have it, is a fairly hardy sort. The heads of flowers have the neutral flowers and rosy violet ray ones, a pretty contrast. It can be propagated by soft wood cuttings indoors or by outside layering. Large plants of it are most beautiful in July and August.

The Orange yellow *asclepias, tuberosa*, makes a splendid appearance when set out where it can grow at will and form a large clump. It flowers in July. The flowers are unusually pretty for a native plant, which leads many to imagine it an exotic. Pieces of root set in spring grow readily, as do seeds sown at that time. The croton is now much used for out-door planting in summer. These plants delight in sun and heat. The great variety now in cultivation affords the chance for beautiful grouping.

The beauty of a coleus bed is its regularity of outline. This regularity is obtained by constant nipping in of shoots desiring to outstrip others. If not done often a bed presents a stubby appearance when it is done which spoils its beauty.

Borers of all kinds seem on the increase. Norway maple, birches, oaks and other trees are now being attacked by them. Should sap be seen oozing from the trunk of any tree, examine it at once, as borers are sure to be there. If not gotten out they remain in a long time, killing large patches of bark and disfiguring and injuring the trees.

Spiræa Bumalda and its offspring, *A. Waterer*, will bloom more or less throughout the season if old heads are cut away. The kinds can be increased

by making cuttings of soft wood during summer, rooting them in greenhouses. The common bind weed of Europe, a *convulvulus*, is quite a pest in some grounds. As its roots are very tenacious of life it needs hoeing off the whole summer through, to kill it, the same is true of poison ivy. But if persistently cut away, that no leaves are perfected, death will come to both in the end.

At this season of the year the ripe berries of Tartarian honeysuckles are quite attractive. There are both yellow and red berried sorts, and this is the season to note which they are, that they may be properly placed for effect in the planting season. Some of the newer ones, such as *bella albida* and *Morrowi* are good, but they cannot displace the old sorts altogether.

Retinisporas, *arbor-vitæ* and similar evergreens with small roots may be safely planted throughout August if a small ball of earth be retained and an unstinted supply of water given them for a few days after. Everygreens are quickly damaged if allowed to become dry before re-planting them.

The Rivers purple beech is rarely as bushy as desired when young. The summer is a good time to prune in some of the stragling branches, looking towards bushiness. The copper beech is not always as good a color as the River's being seedlings, but they are always far more bushy and of prettier outline when young.

These hot days will start the fall or crab grass on lawns. After many trials to rid lawns of it the best seems to be to encourage the desired kinds and clovers by feeding the lawn well in spring so as to have a thick sod in which the fall grass cannot make much headway. After mowing use a rake, to bring to the surface prostrate stems and then remove it.

This is the time to spray trees for San Jose scale, as the young are now active. Kerosene emulsion, whale oil soap or some similar substance will settle them. Many ornamental trees of *Pyrus* and other rosaceous plants are subject to the attack of this scale.

To have a satisfactory heap of potting soil for fall, prepare it now. Get thick sod from a pasture and start a heap. Over each layer of sod place a layer of manure. Build a square heap, convenient to where it will be required. By fall it will be nicely rolled, and when dug out as required will be well mixed.

Violets planted in the open ground, intended for winter flowering in frames, will need cultivating and perhaps watering, to have good strong plants for lifting in October. The same of carnations. These should be topped as they grow, or they run up to flowers before they are lifted, which is not desired.

Joseph Mechan.

NOTES, CHIEFLY HISTORICAL, ON LONDON BURIAL PLACES. III.

At the opening of the nineteenth century there existed in the numerous burial places of London a state of affairs that was revolting in the extreme. The "City of London" was at that time much smaller in area than at present, its area having since been extended by the "Metropolitan Local Management Act" of 1849. The increase in its population has likewise been enormous during the latter half of the nineteenth century. The "city" in the earlier years comprised an irregular area of about a mile and a half length from east to west, and three-quarters of a mile north and south upon the bank of the Thames. The term "city" is still applied to that portion of the present area in contradistinction to other portions. In the expansion subsequent to the middle of the century the city took in suburban towns, each supplied with its burial place or places, all of them in practically the same condition as those already within the city; that is, crowded to overflowing. The records showed that more than two millions of burials had taken place within the "city" during the century ending in 1837, and it was asserted that the unrecorded burials surreptitiously made in violation of law during that time were very numerous. In the expansion of the city various pest fields and plague pits were brought within the bounds of the metropolis of the Anglo-Saxon world. In one of these 50,000 bodies were buried in the fourteenth century. In the plague of 1665 one hundred thousand persons are estimated to have died and found burial in the neighborhood of their homes. More than eleven hundred bodies were thrown into a plague pit in Aldgate churchyard; and there are other indications of the solid foundation for the assertion heretofore made in these papers that London was and is one large burial place.

* * *

The subject of burial in cities had long since occupied the attention of political and social economists and law makers elsewhere. Paris had, as early as 1765, closed all the graveyards within her borders and established cemeteries beyond the suburbs. In 1776 the benefits which Paris had derived from this action were so far recognized that a government decree was made by which graveyards were prohibited in all the cities and towns of France and interments in churches and chapels were declared illegal. In 1782-3, in order to check a pestilence then raging, more than six million bodies were removed from urban churchyards in France to places remote from human habitations. In 1790 the law closing old burial grounds in the cities was extended in its operations to the French villages.

Other European countries took similar action, and legislation upon the subject in the interests of public health was not wanting on this side of the water.

* * *

But London was "conservative" and slow. In 1842 evidence was adduced which "exhibited the singular instance of the most wealthy, moral and civilized community in the world, tolerating a practice and an abuse which had been corrected for years by nearly all other civilized nations in every part of the globe." These words, used in a report of a royal commission upon the question of the health of towns and the sanitary condition of the laboring classes, originated in a select committee charged with the task of formulating "some legislative enactments to remedy the evils arising from the interment of bodies within the precincts of large towns or of places densely populated. The "tolerated practice" to which they referred was intra-mural burial. The "abuse" they mentioned was the almost inconceivable state of affairs that had been revealed in the course of the commission's investigations.

* * *

The apparent apathy of the Anglo-Saxon metropolis upon a subject of such vital importance was in the face of many warnings. Bishop Latimer, in a sermon preached in 1552, showed himself in advance of the early part of the nineteenth century when he said: "The citizens of Nain had their burying places without the city, which, no doubt, is a laudable thing; and I do marvel that London, being so great a city, hath not a burial place without; for, no doubt, it is an unwholesome thing to bury within the city, especially at such a time when there be great sicknesses and many die together. I think verily that many a man taketh his death in St. Paul's churchyard, and this I speak of experience; for I myself, when I have been there on some mornings to hear the sermons, have felt an ill-savoured, unwholesome savour, that I was the worse for a great while after; and I think no less—but it is the occasion of great sickness and disease." After the great fire, Sir Christopher Wren wished to see suburban cemeteries established and burials in churches and churchyards discontinued, partly because he considered the constant raising of the level of a churchyard rendered the church damp and more liable to premature decay. But Wren's plans for rebuilding the city were set aside, and the voice of warning from the clergy and physicians throughout the centuries was unheeded and the practice of intra-urban burial not only continued but increased as the years went on.

L. Viajero.

NEW ENGLAND ASSOCIATION OF PARK SUPERINTENDENTS.

The third annual meeting of this Association by invitation of the Worcester (Mass.) Park commissioners was held in that city, July 11th and 12th, 1900.

It began with a social gathering and banquet at the Bay State House, followed by the reading of papers. Mr. James Draper, secretary of the Worcester commissioners, gave an interesting account of the open areas of Worcester, telling of the old common in 1684, and how in its varying usefulness and many vicissitudes it has now been reduced to only eight acres, a most charming bit of greenery in the midst of the busiest part of a very busy city. He told of the many gifts and public services of its citizens which had made the present parks possible. He related how the distributed system of parks was begun and has grown until now there are eleven parks from eight to 110 acres each, every locality having a park near it.

The president's address by John A. Pettigrew was masterful and thought-provoking and became the topic of frequent discussions the following day. Superintendent Fitts' (of Providence) paper on American Parks and Out-Door Art Associations gave an account of his attendance at the last meeting at Chicago and will undoubtedly lead to a larger membership in New England. It was hoped that Mr. John C. Olmsted would present a paper on how to study a landscape, but much to the regret of those present he was unable to be in Worcester at that time, so G. A. Parker of Hartford read a paper called "Fragments," to fill in the time allotted to Mr. Olmsted.

At the business meeting seven new members were elected:

H. B. Clewley, Landscape Architect, 1048 Tremont Building, Boston, Mass.; Gustave X. Amrlyn, Supt. of Parks, New Haven, Conn.; H. G. Clark, Engineer Keney Park, Hartford, Conn.; Chas. S. Anthony, Pres. Park Board, Taunton, Mass.; Robert Elder, Supt. Beaver Brook Reserv'n, Waverly, Mass.; T. W. Cook, Supt. of Parks, New Bedford, Mass.; Frank L. Fish, Park Com'r, Taunton, Mass.

During last winter, at the instigation of Mr. Pettigrew, a bulletin has been circulated among the members. The following extract from its heading explains its purpose:

"This bulletin is intended as a medium for the interchange of ideas; the recording of results of experiment, practice, experience or observation; for questions and answers, or for any other matter that may be proper for consideration or discussion by the members of this Association.

Will each member avoid delay in the circulation of the Bulletin, by promptly considering its contents, adding a contribution if possible, then forwarding it to the next member named below on the list, noting, in the columns prepared for the purpose, the date of receipt and remailing?

To give each member the benefit of a complete round of the Bulletin, will the last named member on the list please return to the next member named above, in reverse order?

Notify the secretary, by postal card, of the date of remailing of the Bulletin, and its number."

This Bulletin went the round of membership and returned with twenty-five pages of questions, answers and remarks, chuck full of good things. It was voted to send a Bulletin out each month.

Election of officers resulted as follows:

President—John A. Pettigrew, Boston, Mass.
 Vice-Presidents—Joseph D. Fitts, Providence, R. I.; John A. Holmes, Cambridge, Mass.; Chas. E. Keith, Bridgeport, Conn.; W. H. Richardson, Concord, N. H.
 Treasurer—John A. Hemmingway, Worcester, Mass.
 Secretary—G. A. Parker, Hartford, Conn.

Thursday the association was the guest of the park commissioners, a most royal host. All the parks except one were visited, a special trolley car being at the disposal of the party, a delightful and satisfactory way of conveyance as it kept the party together, open for discussion and explanation, no dust, a refreshing breeze and rapid transit, an ideal method of marshalling a party in summer. A shore dinner at Lake Quinsigamond, the great pearl of all the lakes of Massachusetts. Here his honor, the mayor, Rufus S. Dodge, Jr., gave an address of welcome, responded to for the association by its president, Mr. Pettigrew. Other addresses were made by Mr. Curtis, President of the Park Board, and Mr. O. B. Hadwin, whose long life has been a constant devotion to public interest and horticultural work and who for 40 years has been giving much time and energy to the beautifying of Worcester and who, except one, has served more years as a park commissioner than any other man in New England. It was a treat to listen to words of wisdom from lips of his.

Messrs. Parker and Keith also spoke for the association.

A most successful day, every moment filled, everything moved with the precision of clock work, thanks to Mr. Draper, who has the gift of a general.

Worcester has a green spot in our memory; she claims to be the heart of the old Bay State, but we feel she is the heart of all New England and gladly respond to her heart beats.

Among others the following were present:

John A. Pettigrew, Pres., Supt. of Parks, Boston, Mass.; G. A. Parker, Sec'y, Supt. Keney Park, Hartford, Conn.; J. H. Hemmingway, Treas., Supt. of Parks, Worcester, Mass.; Theodore Wirth, Supt. of Parks, Hartford, Conn.; Joseph D. Fitts, Supt. of Parks, Providence, R. I.; Henry Frost, Supt. of Parks, Haverhill, Mass.; Dudley Porter, Chairman Park Board, Haverhill, Mass.; Nathaniel Morton, Pres. Park Board, Plymouth, Mass.; Herbert A. Hastings, Supt. of Parks, Springfield, Mass.; Henry C. Fuller, Supt. of Parks, New London, Conn.; Chas. E. Keith, Supt. of Parks, Bridgeport, Conn.; H. B. Clewley, Landscape Architect, Boston, Mass.; Robert Elder, Supt. Beaver Brook Reserv'n, Waverly, Mass.; C. S. Anthony, Pres. Park Board, Taunton, Mass.; W. H. Richardson, Supt. of Parks, Concord, N. H.; T. W. Cook, Supt. of Parks, New Bedford, Mass.; J. B. Shea, Ass't Supt. of Parks, Boston, Mass.; W. J. Stewart, American Florist, Boston, Mass.; W. B. Whittier, So. Framingham, Mass.; J. W. Phelps, Hartford, Conn.; Frank L. Fish, Park Commissioner, Taunton, Mass.

Worcester Park Board—Edwin B. Curtis, Pres.; James Draper, Sec'y; O. B. Hadwin, Wm. Hart, Benj. W. Childs, Rufus Dodge, Jr., Mayor.

GARDEN PLANTS—THEIR GEOGRAPHY, LV.
PERSONALES.

THE LEUCOPHYDLUM, TECOMA AND ACANTHUS
ALLIANCE.

Crescentia is a genus of low trees and shrubs in a dozen or more tropical American species. *C. Cujete*, the "Calabash Tree," grows in extreme South Florida. It is one of the best host trees known for *Cattleyas* and other *Epidendreae*.

Several small tribes, such as *Martyneae*, *Pedaliæ* and *Sesameæ*, contain but few plants of merit for the garden.

Ruellia, including *Dipteracanthus* and some other obsolete genera as sections, has 150 species of perennial, sub-shrubby or shrubby plants, natives for the most part of North and South America, and of tropical and South Africa. Seven species with varieties are found in the United States.

Eranthemum has 17 species in India and the Malay Archipelago. Far more names are given in dictionaries, however. The plant known as *E. pulchellum* forms a fine blue flowered shrub in South Florida.

Whitfieldia has 2 South African species.

Strobilanthes includes *Goldfussia* and has 180 species of largely mountain shrubs



STROBILANTHES DYERIANUS.

or sub-shrubs, natives of India, Malaisia and Eastern Asia with an outlyer in Africa. *S. anisophyllus* becomes a fine spring flowering shrub in South Florida, and no doubt *S. glomeratus*, *S. flaccidifolius* and even *S. Dyerianus* would be useful in such climates.

Acanthus has 15 species natives of Mediterranean regions and of sub tropical Asia and Australia. *A. mollis* is hardy in some parts of the middle and Eastern states, while in California several species ought to be quite at home as regards temperature.

Asystasia includes *MacKaya* and has 25 species in India, Malaisia, and in tropical and South Africa. *A. bella* from Natal has lilac, striped flowers, and becomes a beautiful free flowering shrub in Southern California. *A. Coromandeliana*

is an evergreen climber with smaller flowers. *A. scandens* is a tropical African climber.

Jacobinia is in 30 species and now includes several plants once known as *Cyrtanthera*, *Libonia* and *Sericographis*. They are found from Mexico southward to Bolivia, and are often pretty shrubs with brilliantly shaded orange, yellow and scarlet flowers. The hybrid form figured is a well known greenhouse plant, and both it and others of the genus ought to do well in the orange belt.



ACANTHUS MOLLIS.



JACOBINIA PENRHOSIENSIS.

The same remark would undoubtedly apply to many others of the sub-tropical *justiceæ*.

James MacPherson.

If one is born to love Nature * * * as all true artists do, or if he ever learns the beneficent lesson, the quiet scenes will impress him, the most familiar will be ever new. The shadow of a blackberry vine, as it trails over a gray rock, will give him as delightful an emotion as the sight of a great mountain; and custom will not state his pleasure, for it will be as infinitely varied, as perpetually renewed, as the leaves on the trees, the blades of grass in the fields, the tints in the sunset skies.

Mrs. Schuyler Van Rensselaer.

PARK NOTES.

The appropriation for the improvement of League Island Park, Philadelphia, for this year is \$75,000.

* * *

Rhineland, Wis., recently voted to set aside \$10,000 for a public park. This is a step in the right direction.

* * *

The city fathers of La Salle, Ill., have appropriated \$1000 for the improvement of the city park, which is to be expended by the ladies, who will form an improvement association and undertake more extensive operations.

* * *

Waukegan, Ill., citizens are considering the organization of a park district to obtain the benefits of the new state law. A petition is being circulated asking County Judge Jones to call a special election to vote on the question.

* * *

The Jersey City, N. J., Board of Finance has appropriated \$35,000 to purchase land in the Italian colony, known as "Little Italy," for a park site. The city owns most of the land needed. The Board will also appropriate \$65,000 for a site for a park in the Lafayette section.

* * *

Mayor Jones of Toledo, O., assisted at the formal opening of the first children's playground in Buffalo, N. Y., recently. The playground is the result of efforts made by the Liberal club of that city, before which Mr. Jones delivered an address. He also made a donation for the playground, which is modeled after his own Golden Rule park in Toledo.

* * *

If the report of an investigating committee on the destruction of trees and the natural adornment about the Soldiers' Home at Milford, Neb., by the commandant of the Home be true, that official should be condemned to mount guard over his destruction for the balance of his days. The absence of common, ordinary sense in such a case proves the individual totally unfit for the office.

* * *

The West Park Commissioners, of Chicago, have finally decided to accept the gift of the Gunther collection of war relics, pictures, historical papers, etc. This collection will be remembered by all visitors to Chicago at the World's Fair time. A building will be erected as a museum in which to display the collection, for which designs have been prepared, and it will cost in the neighborhood of \$150,000.

* * *

By a discussion in the Park Board of Detroit, Mich., in relation to park wagons for the use of the public, attention has been called to the availability of electric vehicles. The argument that there would be no expenses attached when not in use is an attractive one, and the park authorities in other places who maintain horse vehicles for the accommodation of the public, may yet have their prejudice against motor-cycles transformed in favor of such means of passenger service in the parks.

* * *

Some Boston experts who have been examining the parks of Cleveland, O., have severely criticised certain features of improvement. Much of the natural beauty in certain parts has been spoiled in the attempts to improve them. The custom of planting flowers, shrubbery or trees in places where it is necessary to water and look after them, in order to keep them alive, was condemned. The use of pine trees in soil and climate not adapted to their requirements was criticized. Such criticisms

are probably well founded and are suggestive as to "what not to do."

* * *

The parks, public squares and avenues of New Orleans, La., are administered by separate commissions, nearly every avenue and square having its special board of commissioners. Excepting the commissioners for Audubon and City parks, these commissions are appointed by the mayor and confirmed by the city council, and all appointments are honorary. Including private parks and public resorts, the city has 847 acres of park area, divided as follows: Private parks, 209 acres; residence parks, 75 acres; public resorts, 11 acres; public parks, 499 acres; public squares and places, 53.25 acres. Besides these the avenues embrace some 41 acres. Of the public parks, Audubon comprises 280 acres; New Orleans City Park, 216 acres; Metairie Park, 3 acres.

* * *

The Essex County, N. J., park system, which has frequently been noticed in these columns, was officially inspected by the park commission and its guests last month. The system is a most comprehensive one and was provided for by act of legislature, and upon which a large sum has been expended under judicious management and on expert plans. The parks included in this system are: Branch Brook Park, Eagle Rock Reservation, Llewellyn, Orange and West Side parks, Weequahic reservation, East Side and Watsessing parks. These include every description of park scenery and development, and some of the sections are unequalled for romantic and inspiring landscape views. When the system is connected by parkways, as it must eventually be, Essex county will possess one of the finest park developments in the world.

* * *

The model lawn competition inaugurated in Kansas City by the *Kansas City Times* in April last by the offer of a prize of \$250 for the prettiest lawn of 25 feet and over, the prize to be awarded on July 4, marks, as Congressman Cowherd said when awarding the premiums, a new era in the history of the improvement of Kansas City. A large number of prizes were also offered by other interests and the result was an enthusiastic effort on the part of the people to improve. There was an immense gathering in the "Paseo" on the occasion of announcing the winners, and the general consensus of opinion is that the judges, who were women from other states and localities, thoroughly disinterested, had been wise in their awards. The effort of the *Times*, which has unquestionably been crowned with success, suggests similar movements in other cities. In Kansas City the young people were eminently successful and the lessons inculcated will be of lasting benefit.

* * *

What one man with sturdy enthusiasm can do to create and improve his surroundings is very emphatically demonstrated by Bluff City, Kansas. James Glover, who is now mayor, banker, postmaster, etc., of the town, settled on its site in 1886. He laid out the town on the bare prairie and has watched it grow. He has worked steadily to improve and beautify the place and there is now a park of seven acres with 2,000 trees in it adjoining the public school and the children use it as a playground. Mr. Glover has had enthusiastic helpers in Timothy O'Connell and C. O. Johnson. They had uphill work, but never faltered, and although the town has but 65 voters, and some 200 residents, every house has its lawn mower, and the place is a beauty spot. It is situated in the midst of some 50,000 acres of wheat, and at the regular band concerts in the park the farmers from all round drive in to enjoy themselves. Bluff City is a practical example of what one or two leading spirits can do in a community to bring about ideal results, and it does not take many years to do it either.

CEMETERY NOTES.

The eleventh annual meeting of the Glenwood Cemetery, Sherbrooke, Prov. Quebec, Canada, was held on June 12. The perpetual maintenance fund has now passed the \$5,000 mark, and continued effort is being made to include all the old lots in the cemetery under this provision. The assets of the corporation amount to \$14,111.35.

* * *

The lady stenographer of Mr. Samuel J. Knight, secretary of the Kensico Cemetery Company, New York City, has been arrested and placed under bonds, for selling to a friend stock of the Kensico and other cemeteries, the signatures to which she had forged. She had obtained in some way or the other blank stock certificates and had filled them in and sold them to her lady friend, involving that person in an outlay of a large sum. As the time for dividends came round the interest was paid for a time and a failure to continue the interest led to investigation. The woman is of good and well-to-do family connections and her crime is unaccountable.

* * *

A new cemetery is in course of development at Los Angeles, Calif., called Hollywood Cemetery, comprising some 100 acres of land situated about eight miles from the city. The improvements are being completed from plans by Earnshaw & Punshon of Cincinnati, O. The tract is beautifully situated and commands magnificent scenery. It will be developed and conducted on the lawn plan after the latest modern practice, and the permanent structures will be model buildings. The officials of the association taking time by the forelock have issued a beautifully gotten up manual, giving particulars present and prospective of the new cemetery, with carefully and intelligently illustrated views from other modern cemeteries designed to educate prospective lot-owners on the advantages of modern methods of conducting a cemetery. The manual also contains rules and regulations and details of perpetual care. This is an excellent way to advertise a new cemetery, instructive and educational at the same time.

* * *

Morningside Cemetery, Brattleboro, Vt., one of the more recent new cemeteries, is rapidly progressing in its development. It contains one hundred acres situated only about ten minutes walk from the business center of the town, and is naturally beautifully endowed. The receiving vault and chapel completed in the spring is 24 feet by 31 feet on the outside and is constructed of Dummerston granite with interior finish of Vermont marble. It contains 42 catacombs. Ten miles of avenues, 24 feet wide, have been completed and a large amount of drainage work carried out. The lawn system is to be strictly observed, with perpetual care. Among a number of lots sold were four whose area amounted to 5,470 square feet, a very satisfactory beginning in a cemetery in which the work of improvement has but begun. Prices for lots range from \$2 down to 45 cents per square foot, and in single grave sections a lot 5 ft. by 10 feet costs \$25. Granite posts, 6 in. square and 2½ ft. long are used for corner posts. The grounds were laid out and platted by Mr. G. D. Baltimore, Assistant City Engineer of Troy, and Mr. E. Estabrook is now in charge as superintendent.

* * *

The annual meeting of the Allegheny Cemetery, Pittsburg, Pa., was held June 26. According to the report of the president

the company owns 270 acres of ground, which has cost \$290,861.55. The total cost of land and improvements to date has been as follows: Cost of grounds, \$290,861.55; permanent improvements, \$278,925.63; labor, \$729,971.15; expenses, \$374,483.45; materials, \$48,468.22, making a total of \$1,722,720. During the 55 years the company's receipts have been: Lots sold, \$1,382,341.34; interments, \$330,959.95; foundations, \$60,108; plants, \$63,747.45; receiving vaults, \$8,117; interest on investments, \$515,803.62; total, \$2,361,077.36. During the past year the sales of lots have amounted to \$16,869.10, one of the largest in the history of the cemetery. The total amount of investments and cash now on hand is \$577,072.67, an increase in the year of \$44,293.59. During the same period the amount received from interest and investments was \$24,269.81. The expenses of all kinds amounted to \$42,344.43. During the same time the cemetery received from its different sources, \$19,736.98, which leaves a net outlay of \$22,607.45. The report of the superintendent showed that 108 lots were sold for \$49,208; 119 new names were added to the list of lot holders, making the total number 5,479. The estimated value of memorials, head marks, tombs, monuments, etc., is \$72,888. There were 1,007 interments in the grounds, bringing the total to 42,445. Out of a total of some 100 iron fences remaining around burial lots 10 have been removed.

* * *

Under the auspices of the Ruth Wyllis Chapter, D. A. R., and through the generosity of the Misses Stokes of New York and Mr. Goodwin of Hartford, a fine wrought iron fence, gateway and memorial tablets are to be erected on the Gold street line of the ancient burying ground of Hartford, Conn. The cost will be approximately \$10,000. The work is to be executed from designs by Messrs. McKim, Mead & White, architects, of New York, and a tablet setting forth the work that has been done by the Chapter has been designed by J. Massey Rhind, sculptor. The full length of the fence on the Gold street side will be 336 feet and of this 200 feet will abut the burying ground proper. Midway of the burying ground front will be an ornamental gateway, recessed with quadrant segments. This gateway will be the gift of the Misses Stokes in memory of their ancestor, John Haynes, the first colonial governor of Connecticut, and will be known as the "Haynes Gate." The fence will be known as the "Goodwin Fence." Upon each of the gates there will be an ornamental circle inclosing the letters "J. H.", and on the pillars at either side of the gateway will be tablets of bronze commemorating the services of John Haynes. On the west tablet the inscription will be as follows: "1594—1646. In memory of John Haynes, First Governor of the Colony of Connecticut, this gateway is given to the City of Hartford, by his descendants, 1900." The inscription on the east tablet will set forth some of the services of Governor Haynes, as follows: "John Haynes, one of the three distinguished men who created the first written Constitution known to the world, upon which was founded the Constitution of the United States of America." The gateway will be 18 feet wide, the gates having an opening of 6 feet. The fence will surmount a brick wall with a coping of Indiana limestone, buff in color, and owing to the grade will be in several sections of graduated height, the uniform height of each section, from the wall, being 8 feet and 6 inches. There will be five supporting pillars of Colonial pattern, made of red brick with pediment and capital of buff limestone and each of the five pillars will be surmounted by a Colonial urn patterned after the urn upon the monument to Roger Newberry in the old cemetery at Windsor, which is one of the finest examples of that type of decoration in any known burying ground of Colonial times. The pillars will be 16 feet high and the iron sustaining posts for the lengths of the fence will be 10 feet high.

SELECTED NOTES AND EXTRACTS.

The New York Bird Law.

The law designed to protect bird life recently enacted by the New York legislature and duly approved by Gov. Roosevelt in the light of present statistics is timely. It provides that: "Wild birds other than the English Sparrow, Crow, Hawk, Crane, Raven, Crow-blackbird, common Blackbird, Kingfisher, and birds for which there is open season (game birds,) shall not be taken or possessed at any time, dead or alive, except under the authority of a certificate issued under this act. No part of the plumage, skin or body of any bird protected by this section shall be sold or had in possession for sale. A person who violates any provision of this article is guilty of a misdemeanor, and is liable to a penalty of twenty-five dollars for each bird, or part of a bird taken or possessed." The act also imposes a fine of twenty-five dollars for robbing a nest of any of the birds protected. Certificates may be issued by the American Museum of Natural History, New York City, but they can only be obtained under exceptional conditions and for purely scientific purposes. Let other states follow this example.

* * *

Thinning Ornamental Trees.

One of the difficulties landscape gardeners experience in laying out grounds for their patrons is in the planting arrangements. They have in mind the picture of the future when the trees and shrubs have grown. But the owner desires to enjoy the living present, and the grand results in the artist's brain have to be, in a measure, realized in some respects at once, or there is not full satisfaction. To effect this, trees and shrubs have to be planted thickly,—the artist explaining that the common things must be cut away from time to time as the trees grow. But this thinning rarely occurs. In a few years there is a mass of vegetation, pretty as a mass, but with the natural beauty of the individual tree wholly lost.

In our public parks and pleasure grounds, particularly, is the want of judicious thinning painfully evident, as a rule. The great public has been taught that to cut away a tree is a mortal sin never to be forgiven, and there are few managers courageous enough to brave this exaggerated condition of public opinion. It is the same with our street and boulevard trees. They have to set closely to meet the demand for speedy shade. They soon meet, and unable to spread horizontally, struggle upwardly, until the

"tree-butcher" becomes a public blessing in beheading them with hatchet and saw.

In almost all newly planted places, an intelligent landscape gardener should be called in to advise with after a period of about ten years,—and a second inspection should be arranged for after another similar period. The "joy for ever" that we read so much about would be an actuality whenever the beautiful trees and shrubs were looked upon.—*Meehans' Monthly for July.*

* * *

Sloping Banks in Garden Grounds.

No feature is more frequent in gardens, whether large or small, than a change of level necessitating a flight of steps. The nature of the steps, whether of wrought stone with balustrade, as in the more important cases, of brick or rougher stone in those of lesser caliber, need not now be discussed; they must follow the style and treatment of the garden and near buildings.

The change of level, if not retained by a wall, usually has for its fate the steep turf bank, unbeautiful, awkward to mow, and in all ways a very "bad second" to the better way of treating it as a slope planted with suitable bushy growths. Such a bank is shown covered with *Cotoneaster*, a most suitable dwarf shrub, but only one among the many that can be used in like manner. Such a bank planted with *Savin* (*Juniperus Sabina*), an evergreen of deep, low-toned color, that accords with the most dignified of masonry, would always, winter or summer, clothe it well and be pleasant to see. The late Dutch *Honeysuckle*, though not evergreen, is also a capital thing, for its masses of growth, interlacing in a kind of orderly tangle, are by no means unsightly in winter. For banks of large size there is *Pyrus Japonica*, the free growing *Roses*, and the double *Brambles*. For hottest exposures there are the *Cistineæ* (*Cistus* and *Helianthemum*), while some of these and other sun-loving plants, such as *Phlomis*, *Rosemary* and *Lavender*, can be used in mixtures. A beautiful combination is of the common *Berberis* (*B. aquifolium*) and *Forsythia suspensa*, the yellow bloom of the free-arching *Forsythia* coming while the *Berberis* is showing its own yellow bloom, and still holds its leaves of winter red-bronze coloring. *Ivy* and *St. John's Wort* are obvious plants for such uses, but their monotony makes them less desirable than the more interesting treatment with shrubs of low or spreading growth. *Scotch Briars* are also excellent for this kind of planting, while if the bank oc-

curs in a shady spot or has a cool exposure, it will be a good place for the hardy ferns.—*The Garden*, London.

* * *

Evergreens in Cities.

The common box bush is a favorite evergreen to plant near dwellings in cities, as it thrives where but few evergreens will, not being over particular whether it be placed in the sun or in a shady place. Its hardiness, compactness of growth and deep green foliage are its recommendations. Then there are now so many varieties of it from the common box edging of our gardens to the tall tree box, that as many as a dozen sorts could be named. Added to its desirability is the fact of its hardiness. Its chief enemy is the red spider, a little insect which preys on the under surface of the leaves, sucking out the juices; but where there is hose and hydrant, as there usually is in cities, the red spider can be quickly dispersed by frequent drenchings of water. The spider loves dry places, hence to make it uncomfortable by splashing water among the leaves makes the plants less alluring to it. In addition to box bushes, the *Japanese Euonymus* is a most desirable evergreen for city yards, and best of all it delights in shade. In such a position it winters better than when the sun strikes it. In fact, when in the sun in winter it will sometimes lose its tops, a something which does not occur when it is in the shade. There is the common green leaved one, a variegated silver leaved and a golden leaved variety; and when these are in a group they make a handsome display. Another evergreen which flourishes fairly well in city gardens is the *Rhododendron*. Given light sandy soil and no lack of moisture, it will thrive. It likes some shade, and this the house or a neighbor's house usually gives it. Besides the foliage of evergreen character there are the handsome flowers. Our wild one is a light pink, almost white, but hybridisers have so improved them that there are now dozens of sorts of almost all colors. It is a very desirable evergreen indeed for a city garden or any other place of limited space.—*Joseph Meehan* in *The Practical Farmer*.

* * *

Paspalum Dilitatum.

In speaking of a grass for binding loose and sandy soils, *Indian Gardening and Planting* of Calcutta says *Paspalum Dilitatum*, to which it before drew attention, is a grass for this purpose. "It is also an excellent fodder grass and is a native of Ceylon. Those inclined to experiment with it can get seeds from the *Agric-Horticultural Society of India*, Calcutta. The grass is largely used in Australia for covering sandy situations and for farm stock."



ESTABLISHED 1890.

OBJECT to advance Art-out-of-Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

CONTRIBUTIONS: Subscribers and others will materially assist in disseminating information of peculiar interest to those engaged in landscape gardening, tree planting, park and cemetery development, etc., by sending early information of events that may come under their observation.

DISCUSSIONS of subjects pertinent to these columns by persons practically acquainted with them, are especially desired.

ANNUAL REPORTS of Parks, Cemeteries, Horticultural, Local Improvement and similar societies are solicited.

PHOTOGRAPHS or sketches of specimen trees, new or little known trees and shrubs, landscape effects, entrances, buildings, etc., are solicited.

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ASSOCIATION OF AMERICAN CEMETERY Superintendents: President, Wm. Stone, Pine Grove, Lynn, Mass.; Vice-President, George M. Painter, West Laurel Hill, Philadelphia; Secretary and Treasurer, H. Wilson Ross, Newton Centre, Mass.

The Fourteenth Annual Convention will be held at Cleveland, O., September 11, 12 and 13.

THE AMERICAN PARK AND OUT-DOOR ART Association: President, L. E. Holden, Cleveland, O.; Secretary, Warren H. Manning, Tremont Building, Boston, Mass.; Treasurer, O. C. Simonds, Chicago.

The Fifth Annual Convention of the Association will be held at Milwaukee, Wis., June, 1901.

Personal.

A striking piece of landscape art is that now being carried out on the estate of H. N. Higginbotham, near Joliet, Ill., by O. C. Simonds of Chicago. A feature of particular interest is the long drive into this "Forest of Arden" as it is entitled; this is a wild woodland thoroughfare created by the landscape gardener. The road on either side is planted with local materials, which is very diversified in character, and is so arranged as to shut out the view on either side except at frequent intervals where a beautiful vista or a landscape picture is offered. The planting throughout this private park is of considerable magnitude, and with the free hand given Mr. Simonds, it promises to be one of the finest examples of varied landscape art in the country.

Swain Nelson & Co. of Chicago are improving the grounds at a number of important stations on the Chicago & Northwestern R. R.

Dwight Cleveland has been reappointed superintendent of Greenlawn cemetery, Baldwinville, Mass.

At the council meeting, Lawrence, Kas., held in May last, Mr. R. S. McFarland was re-appointed sexton of Oak Hill cemetery for the 17th year of his incumbency of the office.

Mr. E. R. Roberts, superintendent of parks, Tacoma, Wash., is visiting the principal eastern cities for the purpose of looking over their parks, etc.

The death is announced of the Hon. Auros F. Breed, President of the Board of Commissioners of Pine Grove Cemetery, Lynn, Mass., and a leading citizen of Lynn. Mr. Breed had been president of the commission for 20 years, and was a progressive and helpful man.

Henry G. Dill has been appointed superintendent of Hillside cemetery, Middletown, N. Y., vice Walter A. Reeder, resigned.

The Missouri Valley Horticultural Society held its June meeting in Forest Hill cemetery, Kansas City, Mo. It was an open air meeting and Mr. Sid. J. Hare, superintendent, arranged affairs to obtain all the good possible from the occasion. Among the papers read were: "Flowers," by Mrs. C. V. Holsinger, and "Birds, Useful and Destructive," by Prof. D. E. Lantz, besides others. An inspection of the fine collection of trees and shrubs formed a prominent feature of the entertainment.

The Cemetery Superintendents Convention at Cleveland, O.

NEWARK, N. J., July 3, 1900.

Editor Park and Cemetery.

DEAR SIR:—It has been my custom for many years to send out letters to the members of the Association of American Cemetery Superintendents, but as this involves much time I have decided that instead of sending out such letters for the year 1900, I hereby request our members to write to Mr. R. J. Haight and inform him whether they will be present at our 14th annual convention, to be held at Cleveland, O., on September 11, 12 and 13, 1900. By complying with this request they will give much needed information. Cleveland is a beautiful city and we are sure their visit there will be a very delightful one, and under the guardianship of our esteemed brother, J. C. Dix, they will be well cared for. We hope to have the pleasure of meeting superintendents of other cemeteries adjacent to Cleveland who will join our association. We hope also to have them with us at our meetings feeling certain they will be much interested in our proceedings, and will gain valuable information. Health permitting it is my intention to be present.

Yours fraternally,

Chas. Nichols.

* * *

I think we will have a good convention and a large attendance. When we say our cemeteries are good enough and there is no more we can do, and no more for us to learn, we commence then to go backward.

William Stone.

* * *

Members are again urged to lose no time in advising Mr. Geo. M. Painter, superintendent, West Laurel Hill, Philadelphia, as to their intention of attending

the convention. Mr. Painter is keenly alive to the interests of the members in the matter of low railroad rates, but can do little until assured of a sufficient number of passengers to obtain the concession from the Railroad Association. Should any member see a possible chance of attending he should so advise Mr. Painter, and moreover ladies and friends all count in the question of reduced rates.

* * *

The executive committee is well along with the programme and expect to complete it in a few days. Besides the regular business, the reports incident thereto, and a series of excursions, the following papers are included, and others promised:

"What do we Gain by Attending the Annual Convention."

"Practical Management of Cemeteries."

"We Will Keep the Graves Green."

"Perpetual Care."

"Proper Treatment of Cemetery Woodland."

"Artificial Stone Corners."

"The Rise, Progress and Present Condition of the A. A. C. S."

"Cemeteries—Past and Present. (Stereopticon)"

"Use of Shrubs in Cemeteries."

"Cleveland Cemeteries."

"Park Idea in Cemeteries."

"Sunday Funerals and Funeral Car."

"Shall we Encourage the Putting up of Monuments or Discourage Same?"

"Influence of our Surroundings."

"Funeral Reform."

"Qualifications a Cemetery Superintendent should Possess."

"Some Landscape Ideas seen in other Cemeteries."

"Tree Planting."

"Forestry."

"Cemetery Management and the Importance of Correct Cemetery Records as a Contribution to History."

"Decoration Day.—How Abused and how to Remedy the Abuses."

Books, Reports, Etc., Received.

THE GARDEN'S STORY, OR PLEASURES AND TRIALS OF AN AMATEUR GARDENER. By George H. Ellwanger, author of "The Story of my House." Fifth edition. New York. D. Appleton & Company.

No one with any appreciation of the delights to be discovered and experienced in a garden could fail to be gratified and delighted with the dainty story of a garden of Mr. Ellwanger. It is written in a spicy manner, if we may use the term, that is that while imparting a large amount of information, the pleasure of reading is enhanced by an attractive style which is also impressive. It also carries with it an authority which is realized without the knowledge of the author's long connection with horticulture. One of its chief charms is its descriptive force, which deprives the necessary botanical Latin of much of the harshness which so often diverts the general reader from interesting garden lore. From spring until autumn the author carries us along through all the varied wealth of nature's garden beneficence, instructively and attractively and when we close the volume we wish it were spring again. It is not a text book, but might well serve as one, for it offers an abundance of educational material for prospective home gardeners.

Books, Reports, Etc., Received.

RECOLLECTIONS OF A LIFE-TIME. By General Roeliff Brinkerhoff. The Robert Clarke Company, Cincinnati, O. Svo. 462 pages. Cloth extra, \$2 postpaid.

To those at all acquainted with the remarkable events of the past 50 years and the principal actors in the drama, will remember how intimately connected with much of that history has been the author of this volume of recollections. It is such works as these that serve to establish and corroborate historical records, and to maintain a co-relationship between bare facts. General Brinkerhoff was on intimate terms with many of the foremost characters of the Civil war, and maintained himself in close touch with the politics of the stirring times succeeding that eventful period of our history. The book is interestingly written and keeps the reader absorbed to the end. General Brinkerhoff has been an active and useful citizen. In the work of education, as a soldier, lawyer, editor or statesman, he has upheld the dignity of every situation he controlled, and finally turning his active and energetic nature to Public Charities, his name is familiar in the great work of regulating and improving our correctional establishments. The Recollection of a Lifetime can well be recommended not alone for its text but for the influence it exerts towards the pursuit of earnest living.

Transactions of the Massachusetts Horticultural society for the year 1899. Part II. In this part are included the report of the Committee on Gardens and the report of the Committee on School Gardens and Children's Herbariums.

Ohio State University Bulletins. No. 27. The Non-Indigenous Flora of Ohio. By W. A. and Mrs. Kellerman. No. 28. First annual supplement to the Fourth State Catalogue of Ohio plants. By W. A. Kellerman, Ph. D.

Marcus & Amherst Cemetery Annual, Marcus, Ia., May 1900. This little annual is always an interesting periodical, and is a method of advising and keeping in touch with lot owners, that any small well managed cemetery might readily adopt. The association is progressive and has now started a perpetual care fund, which considering that the total receipts last year were only \$426, attests the energy of the managers and equally so, the condition of the community supporting their views.

We have received from the Hon. W. E. Martin, Secretary for Agriculture, Melbourne, Australia, the catalogue of plants under cultivation in the Melbourne Botanic gardens, alphabetically arranged. It is the work of W. R. Guilfoyle, F. L. S., C. M. R. B. S., Director. The book contains some 200 pages, with plates and maps, and includes a large assortment of plants.

Year Book, Audubon Park, New Orleans. Illustrated with numerous half tone plates. The Audubon Park Year Book issued by the commissioners of that park, is at once a record of progress in the development of this fine public property and of the enthusiasm and devotion of its commissioners to their work. It forms a complete record of annual progress; gives a large amount of general information on park improvement, from outside sources, a list of its plants and

botanical acquisitions, and forms an instructive agency for the creation of strong sentiment in the minds of the people for its improving park properties. Such literature is invaluable.

U. S. Department of Agriculture. Division of Forestry. Practical Tree Planting in Operation. By J. W. Toumey. Illustrated.

Thirteenth annual report of the State Board of Health of the State of Ohio, for the year ending Oct. 31, 1898.

Social Service. Series B. Abstracts of State Laws. Legal safeguards for the protection of the citizens of the states of Oregon and New Jersey.

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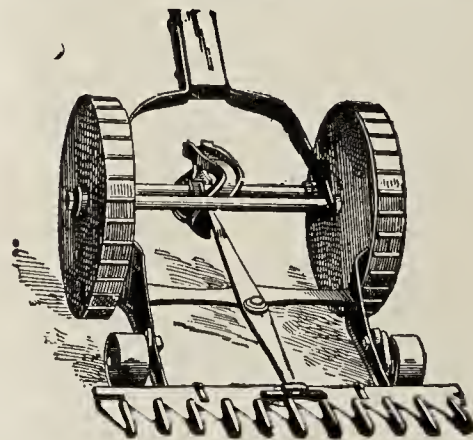
IRON GRAVE AND LOT MARKERS. PATENT APPLIED FOR.



The annexed picture represents a new idea of a Grave or Burial Lot Marker, which we are introducing to the Superintendents of the Cemeteries throughout the country, to be used by them for recording the graves or burial lots under their charge.

This Marker is made of cast iron, nicely galvanized to prevent rusting. The shank is 17 inches long, the top 6 1/2 inches long and 4 1/2 inches wide. Each Marker bears a number and can have a different number upon it, or as many can be made having the same number as there are tiers or sections in your cemetery. This Marker is driven into the ground, having its top flush, to allow a lawn mower to cut the grass completely. Our new Marker is very easily put into the ground and is easily found. The barb on the end of the shank prevents the frost from pushing the Marker up. This is a great improvement over the old fashioned stone, slate or wooden post marker, which are more generally used, and which, by sticking up out of the ground, detract greatly from the beauty of your cemetery. We believe you will find this cheaper and better adapted for cemetery use than any now in the market. Should you be interested in this, we should be glad to quote you prices for a quantity. **SARGENT & CO., New Haven, Conn.**

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Trade Literature, Etc.

Harlan P. Kelsey, Boston, Mass.—Price list of Ginseng roots and seed. Also pamphlet carefully describing the plant and giving methods of cultivation and other information. By Harlan P. Kelsey. Price, 10 cents.

Dreer's Midsummer Catalogue, 1900. Henry A. Dreer, Philadelphia, Pa.

Catalogue of Pot-Grown Strawberries for Summer Planting. Ellwanger & Barry, Rochester, N. Y.

PORTLAND, MAINE, June 23, 1900. Folding Casket Lowering Device Works, Ovid, Mich.

DEAR SIR:

We have used three of your devices a great many times since we have had them, and they do the work for which they are intended perfectly. We are very much pleased with them. Respectfully, EDWIN A. GRAY, Sec'y and Treas. Board Trustees Evergreen Cemetery.

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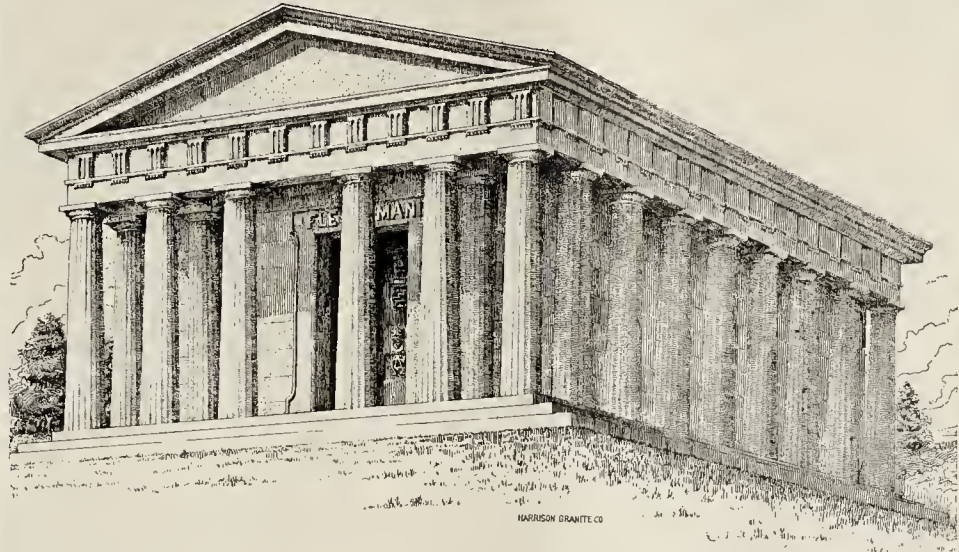
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READ THIS.

Monmouth, Ill., May 31, 1900. Folding Casket Lowering Device Works, Ovid, Mich.

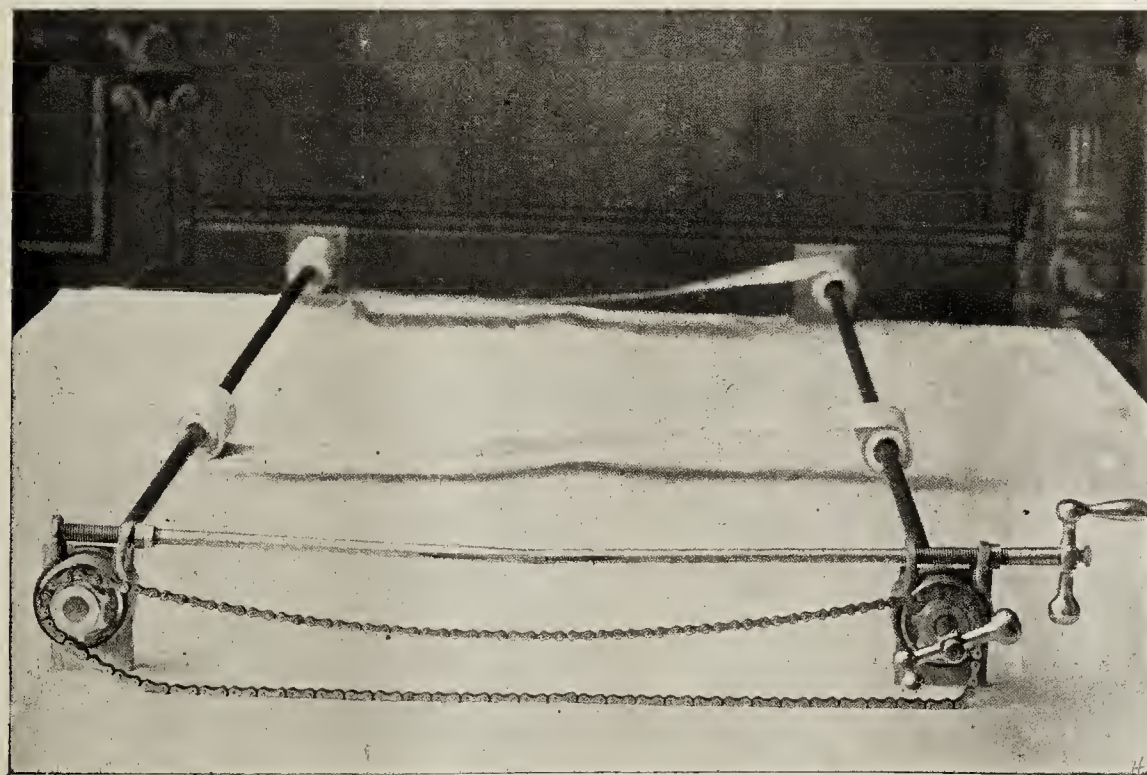
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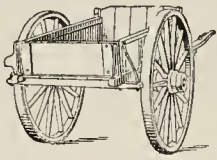
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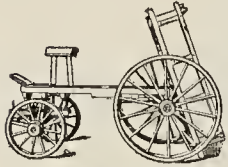
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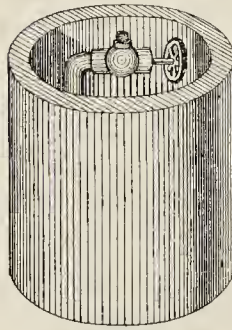
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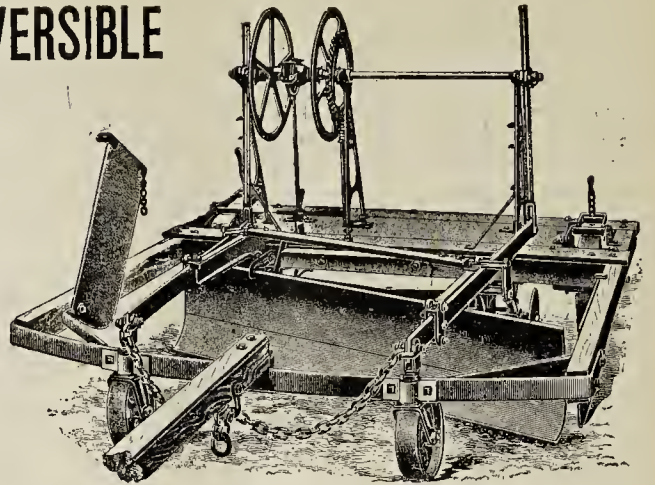
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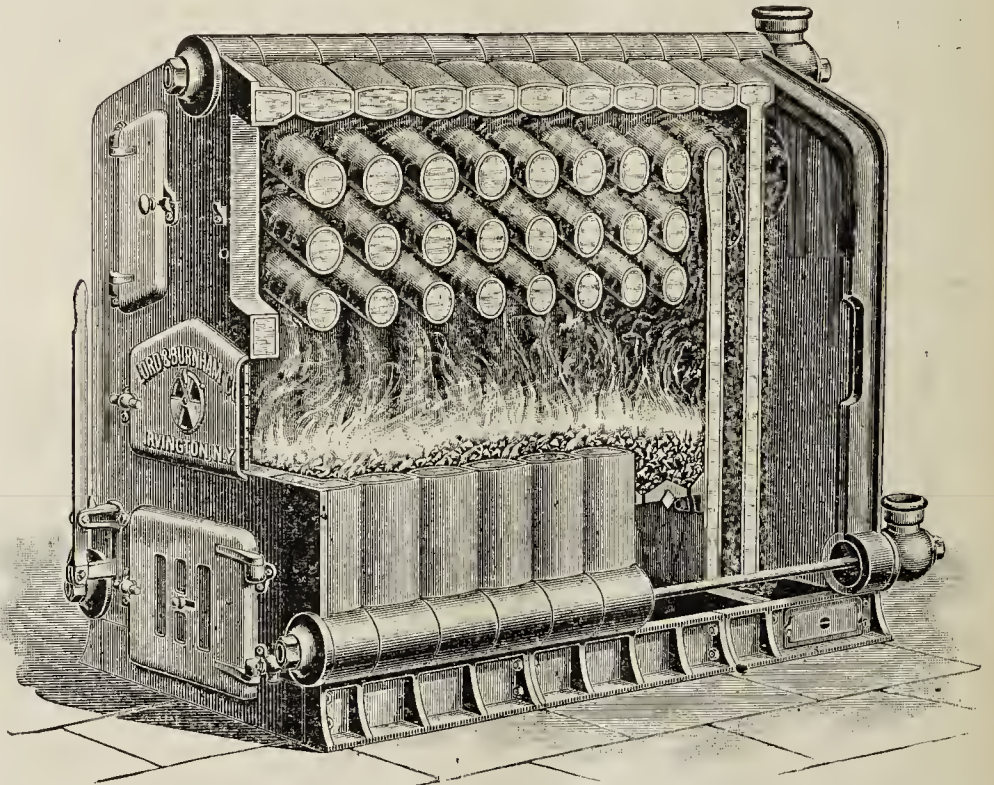


This cut shows the blade set diagonally for drifting earth and the fender thrown up to allow the earth to escape.

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PARK AND CEMETERY

and Landscape Gardening.

VOL. X. Chicago, August, 1900. NO. 6

CONTENTS.

EDITORIAL—Annual Convention of Association of American Cemetery Superintendents—A Duty of Improvement Associations—School Gardens—An Association of Village Officials—Free Baths—Small Parks in Chicago—Politics in the Parks.....	125-126
Two Valuable Trees.....	127
Propagating Euonymus Radicans.....	127
*Point Defiance Park, Tacoma, Wash.....	128
Park Roads.....	130
*Greenlawn Cemetery, Syracuse, N. Y.....	131
*Improvement Associations.....	134
*Daffodils and Jonquils.....	135
Hydrangea Quercifolia.....	136
Seasonable Suggestions.....	137
*Receiving Vault, Paxtang Cemetery, Paxtang, Pa.....	138
Program of the Fourteenth Annual Convention of the Association of American Cemetery Superintendents.....	139
The Work of Our Association.....	140
Landscape Gardens.....	141
*Garden Plants—Their Geography, LVI.....	142
Park Notes.....	144
Cemetery Notes.....	145
Correspondence.....	146
Selected Notes and Extracts.....	147
Reviews of Books, Reports, etc.....	148

*Illustrated.

ANNUAL CONVENTION OF A. A. C. S.

The annual convention of the Association of American Cemetery Superintendents which will be held in Cleveland, O., September 11-13, should rival in interest any previous meetings. The progress made in cemetery management and improvement under the modern or lawn plan, the interest now rapidly becoming universal in bettering the conditions of the cemetery, and the higher intelligence demanded for the work make the question of the cemetery of greater public importance and consequently gives to the convention a status akin to that of other leading lines of modern progress. The location of the coming meeting is central and is moreover a point of great general interest, and this, with an attractive program should ensure a large attendance. The landscape detail connected with the

modern cemetery creates mutual interest between park and cemetery superintendents, and this fact should favor the participation of the former in this gathering. Much information of a practical character will be obtainable from the papers and discussions, available for both parks and cemeteries, and to seize this opportunity is the duty of all associated with such work. A large attendance means a broader field from which to gather fruit, beside the more pronounced attention which will be accorded by the public. A frequent suggestion which is not only worthy of reiteration, but should receive more practical attention is the duty of cemetery corporations to send their superintendents to this convention. It is a duty from the fact that not only their personal interests are involved but the lot owners may righteously demand that the best knowledge available should be at their disposal through the superintendents. The attractive program and other details are given in another column.

A DUTY OF IMPROVEMENT ASSOCIATIONS.

While improvement associations are doing a great deal in the way of creating better conditions there is danger of being obliged to remodel much of the work accomplished in their aid unless wisdom is exercised in carrying it out. Especially will this be the case in connection with the planning and planting for outdoor embellishment either in the street, park or cemetery, if it be left to local committees whose membership as a rule will not be competent in such a direction. With the constantly increasing activity in outdoor work comes the necessity of competent oversight to ensure correct results. From the planting of a single tree to the designing and planting of a door yard or public square, the principles of landscape art are involved to a greater or less degree. Many people are imbued with a natural taste, a sort of art instinct, which directs their efforts oftentimes into pleasing

and acceptable channels, but the rash majority are not so happily constituted and are incapable of devising or directing work in which taste is involved. Therefore, wherever any planting is to be done for permanent effects in a public sense, the services of a landscape gardener should be called in. Permanent work should receive thorough study by expert practitioners; the cost of such a course will be amply repaid in the long run, and the results will always be gratifying. Many communities have such experts in their midst and can secure their services, but the fact remains that outdoor art requires outdoor artists to advise upon it and improvement associations should be governed by this thought.

SCHOOL GARDENS School gardens are rapidly coming forward in public interest, as a useful addition to school studies as well as an important feature in education. In Germany this has been developed to a remarkable extent and with results that have proved the wisdom of the course. In our own country the Massachusetts Horticultural Society, in collaboration with some of the public schools in Boston and its vicinity is encouraging the idea, and the children so favored not only evince much delight in their garden work, but it proves an incentive in other directions. It is well worthy of adoption as part of our public educational system generally.

AN ASSOCIATION OF VILLAGE OFFICIALS. A new organization has been formed by a number of village officers in Michigan entitled the Michigan Villages Association. Its object and purpose is the mutual benefit, instruction and improvement of the members in municipal government. At a meeting held in Detroit in July it was decided to hold the first annual meeting at Lansing in May next when the legislature will be sitting. There are over two hundred villages in the state and it is expected that a majority of them will become members. Among the matters discussed at the meeting were: Water systems and the methods of collecting revenue; and electric lighting. This is a good move but it is to be earnestly hoped that no politics, in the sense that the term nowadays denotes, will impede its usefulness. There is much that is crude and elementary in the government of our villages, and while the sentiment is so rapidly expanding in the direction of municipal improvement and reform, it is opportune that an association should be formed to absorb all the information to be obtained and to evolve therefrom the most practical and beneficial rules and procedure for the proper conduct of village public affairs.

FREE BATHS. The question of free bathing facilities in our large cities has become an important question for municipal authorities. Every summer takes the matter farther and farther from the æsthetics of civic progress and makes it a practical feature of the health department. Free baths of sufficient capacity and under proper and healthful conditions should be furnished in every city having water facilities or privileges. The city health department should be able to afford ample reasons for their establishment. The yearning and longing, witnessed in Chicago this season, evidenced by the long and patient waiting of hundreds of boys for a swim in the limited quarters provided by the great city for the purpose, is appeal enough to all city authorities in this year 1900.

SMALL PARKS IN CHICAGO. The committee on small parks for the city of Chicago has adopted a wise course in the matter of their location in calling for the suggestions of those organizations established in the crowded districts for the purpose of uplifting the poor—the university settlements, Hull house, and such. Constant contact with the governing conditions, combined with continual study to ameliorate them, educates those engaged in such work to a profound sense of the requirements of the situation and gives to their judgment a positive character the value of which must be acknowledged by the municipal officials. This co-operation will invite public confidence and should result satisfactorily to all concerned.

POLITICS IN THE PARKS. While to be deplored on first principles, it is often a good thing for the future when degrading political methods in park affairs make themselves so outrageously offensive that public sentiment rouses itself to the intent of effecting immediate and scathing reforms. This is the probable outcome of the conditions which have for a long time prevailed in the Chicago Lincoln Park Board, resulting in that beautiful park having been allowed to run down in its park characteristics and in its management until it is a public scandal. With large expenditures there is practically little accomplished, and repairs required by storms and other sources of damages are left from year to year, to the depreciation of the park, and the disrespect of tax payers. Politics, too, have cost two of the city's parks their landscape gardeners and a third is "marked" for removal. The proposed move on the part of the citizens to enact legislation that will remove this blemish and place the parks of Chicago in the hands of a competent board of commissioners above all possibility of political taint will receive the hearty co-operation of all taxpayers.

TWO BEAUTIFUL AND VALUABLE TREES.

The Nivea or Giant White Poplar must not be confounded with the common silver-leaved poplar, which has a crooked and sprawling habit of growth and sprouts so badly from the roots.

The Nivea is very hardy and a very rapid grower with fine rich foliage—green on the upper side and downy white on the other. It grows straight and soon makes an imposing tree. It will sprout if the roots are broken, but I think it will not otherwise. It is fine for parks or avenues and a noble road tree. It grows readily from cuttings and makes a surprising growth the first year.

The Boleana is a charming tree with leaves much like the Nivea. Its habit of growth is compact much like the Lombardy poplar. Unfortunately in our western states the latter has the bad habit of dying when about 15 years old. The Boleana, as far as I can learn, is a very rapid growing and healthy tree, but it is exceedingly hard to propagate. If the cuttings can be first caloused they may grow. The most common method is either to bud on the Lombardy or graft a scion on a piece of twig of the Lombardy, this piece making the root, for the one will throw out roots and the other will not. I have used this method and though exercising the greatest care, only one in five or ten will live. All will start and then one after another will fade away.

On account of the similarity of the two, I determined to graft the Boleana on the roots of the Nivea. I made grafts about like apple root grafts and was surprised at the results. Nearly every one lived. They seemed mated exactly and commenced growing with great vigor. The 10th of July some were $2\frac{1}{2}$ feet high. I am sure we will now have a much more vigorous tree than if grafted or budded on the Lombardy, which is so short lived.

C. S. Harrison.

PROPAGATING EUONYMUS RADIANS.

Euonymus radicans has for several years past been scarce in the market. This is probably due to several causes among which are: Its abundant use in plantations and the extended time necessary to grow plants from seed or from the usual method of cuttings. Seed sown as soon as ripe germinate without difficulty. Cuttings made in August or September from half ripened wood is a successful method. Cuttings made from well ripened wood during the late autumn or winter months root readily. However, it requires two, three or four years to obtain marketable plants by either of the above methods if the cuttings are made from one to three or four inches long. The most economical method

of propagating this plant appears to be as follows: From old hedge or bush plants cut branches fifteen to twenty inches long and possessing several lateral shoots. Arrange all the severed ends together and place as many of the branches upright in a tub as can be loosely accommodated. Move the tub and branches to a cool greenhouse where abundant light, moisture and air are available and exclude direct sunlight or draughts. Each day pour only as much water in the tub as will be evaporated by the succeeding day. In the course of two weeks numerous roots will have formed at the base of each branch. The branches are then to be planted in cold frames and treated as young plants. During winter protect the frames from intermittent freezing and thawing and by spring the plants will be well-rooted and saleable. A method preferable to that is to plant the rooted cuttings in a single row on the rear end of a violet or carnation bed of a greenhouse and by spring the plants will have more, larger and a compact mass of roots. In either case the plants make no stem or leaf growth from the time the cuttings are taken until the plants are sold the next spring. The loss during propagation need not be over one or two per cent.

This method of propagating is rarely employed and it is explained with the view that its employment will be profitable to others adopting it. It is possible that plants so propagated are not of equal merit to plants having been grown for one year or longer in the open ground and having had a normal rest during the winter. The latter usually make a vigorous growth after planting whereas the others usually make little or no growth the first year. However, during the second year the growth of either plant will be as vigorous as the other whether propagated by one or the other method.

Emil Mische.

Conifers are not common in the tropics. This is no great disadvantage. From a silvicultural standpoint, especially as far as the soil is concerned, there is little reason for the encouragement of conifers where quick growing broad-leaved species will grow. In certain parts of Cuba, especially Pinar del Rio and the Isle of Pines, *Pinus Cubensis* is common. It usually grows in the poorest soils. * * * No doubt there are several species of conifers which will grow well in Cuba. Their scarcity in tropical countries is probably not because they do not like the climate, but because they are overwhelmed and crowded out by broad-leaved kinds. There are, however, near relatives of the pines which thrive in the tropics and produce excellent woods such as the *Podocarpus*. *John Gifford in The Forester.*

PARK AND CEMETERY.

POINT DEFIANCE PARK, TACOMA, WASH.

Much interest is centering on the state of Washington, induced by an increasing knowledge of its natural resources as well as by the wonderful climate which offers remarkable possibilities from the agricultural and horticultural standpoints.

The success which promises in the growing of what have been hitherto known as Dutch bulbs, and other similar examples of plant life, on a commercial basis, leads to the suggestion that the state has a great future in horticultural pursuits, and in this connection it is but the turning of a thought to the question of public parks to impress one with the belief that in their development these

ernment donated it for park purposes to Tacoma reserving the right to use it for defence requirements if ever the occasion should arise.

The history of its development has been one frequently met with—lack of public interest, insufficient funds, and the persistent effort and enthusiasm of the superintendent in charge, to overcome the obstacles and to finally win recognition. This in a few words explains the conditions prevailing over Point Defiance park, which Mr. E. R. Roberts, to whom we are indebted for photographs and particulars, bids fair to control after nine years of effort.

For park purposes ideal conditions exist here;



POINT DEFIANCE PARK, TACOMA, WASH.—SUPERINTENDENT'S HOUSE.

should display conditions quite distinct in their general features.

Mention has been made occasionally of the park interests of Tacoma, as connected with its beautiful city breathing spot, Wright park, and the grounds in course of development about the university, and the illustrations herewith will introduce the reader to that splendid acquisition of the city, Point Defiance park.

This park is a tract of primeval forest of some 640 acres in extent, so close to the city of Tacoma as to be connected by a street car line, and embracing well nigh all the advantages connected with park economics that can be conceived. It covers a point of land jutting out into the sea and was owned by the government, the intention being to fortify it if necessary. Some years ago the gov-

the waters of Puget Sound bathe three sides of it, tending to moderate climatic variations as well as to afford all the delights pertaining to sea shore recreation. Its forest features, only improved the more to emphasize them, in combination with a wonderful profuseness of floral production and other details of park development, including a small zoological collection, offer opportunities of recreation, pleasure and study only to be realized under like circumstances, a fact which makes this park almost unique.

The illustrations given — the superintendent's house and surrounding grounds, the rustic bridge, and the forest path, serve to indicate prominent features.

The view of the superintendent's house suggests the floral possibilities due to the climate and soil.

It is a veritable paradise of roses, which may be grown as successfully as in Europe. In the rose-bed in the picture are General Jacqueminot, La France and Paul Neyron in bloom. Madam Plantier grows beautifully and there are 2000 plants of Madam Alfred Carriere. Marechal Niel is also a luxurious grower. One Crimson Rambler rose had 10,000 blossoms upon it. Altogether there have been 100,000 roses planted out in the last four years, and the blooming period of many of them lasts until nearly Christmas. Roses have been mentioned particularly but all kinds of flowers fairly revel in luxuriance in this favorable locality.

Such possibilities of horticulture should interest our home growers and lead them to investigate,

feet above ground level which is 230 feet long; it is constructed of cedar logs from one to six feet in diameter and fifty feet in length. It crosses a deep ravine and its height permits of a grand view of the lily pond below where Florida water lilies grow all the year round. There are ten miles of paths and seven miles of drives in this beautiful domain.

Much attention is given by the officials of Tacoma by way of encouraging the love of and culture of trees and flowers and an immense amount of material has been given to the working people with which to embellish their homes. The nurseries at Point Defiance park are kept in a condition to supply such needs and liberality in this direction is a marked feature of the attitude of the authori-



POINT DEFIANCE PARK, TACOMA, WASH.—RUSTIC BRIDGE.

which would be amply repaid. Educational as well as commercial interests are involved.

The picture of the forest path suggests a word on the great trees, several of which may be seen. Mr. Roberts maintains a court of honor among his big trees. There is a giant fir which has succumbed to circumstances and lies on the ground; this is partially covered with growing vines. It is 200 feet long and is retained for the aspect it helps to create. There are Douglas firs 200 to 300 feet high and Cedars 150 to 200 feet with a diameter of 5 to 6 feet three feet above ground. No trees are destroyed and no clearing is done that is not thoroughly considered or that would destroy natural beauty, decaying or decayed material of course excepted.

There is a rustic bridge in the park standing 75

ties toward the citizens. This is a suggestion to other park managements where the spirit seems manifest to regard the park products as largely for the benefit of the official cliques.

Enthusiasm always marks Arbor day in Tacoma, and the planting and care of the school grounds is growing to be an important feature of municipal improvement. The exercises are particularly and practically appropriate, and are under the guidance of those adapted to the work. Mr. Roberts is an enthusiast in plant culture and imparts it to those with whom he comes in contact; he is always helpful in the cause close to him, and he will be glad to send a collection of coniferous trees to any park or cemetery that would like to experiment with them.

Altogether Tacoma possesses some 800 acres of

park properties, and the foregoing will lead to the assumption that Nature has wonderfully blessed



POINT DEFIANCE PARK, TACOMA, WASH.—PATH THROUGH THE FOREST.

her in one of the most beneficent avenues of comfort and pleasure for her citizens.

PARK ROADS*

(Concluded.)

The materials to be used having been determined the only other question is form. The crown of a road should approximate as nearly as may be two per cent of the entire width. The center, for appearances, should run longitudinally on a regular grade, not rise and fall with the gutter as it frequently does on level roads. The grade at the gutters should fall not less than one inch in twenty five feet. Gutters of harder materials than macadam are not required where the grade is less than two per cent. The most satisfactory gutter as to maintenance is made of paving bricks, though a flat cobble stone gutter, where there is no curb, is much more pleasing in appearance for a park road. Catch-basins should be not to exceed 200 feet apart. In narrow drives and broad drives of sharp grades, they

should be placed at shorter intervals. The foregoing details are largely engineering questions which will be rightly determined if the building of a road is placed in the hands of an engineer who will profit by the experience of others where his own has been meager.

What is the proper width of a park road? The point of view taken by the person deciding the question, of course, will govern. Should he consider the road only as a carriage way and give every accommodation possible to the driving public regardless of appearance he will make a broad road fifty or perhaps sixty feet in width. Even with that width there will be times when it will seem too narrow. On the other hand should he seek to subordinate the road feature as much as possible he will seldom find it necessary to make a road in the midst of a park over thirty-five feet in width. The boulevard drives, and some of the large carriage promenades in a park may be made much wider than this without harm, for in such cases the roadway is the principal feature. But the winding drives of a park are undesirable intruders into the picture. Keep them as insignificant as possible.

The maintenance of roads is but a very simple matter, but like all other tasks the way to do it is to do it. But just there is where most corporations or commissioners fail. It is difficult for many to understand that the work of maintenance should commence on a road the very day it is completed, the result being that more frequently than not the road is left until its condition demands repair; then will it be continuously unsatisfactory, no matter how much care is given it until it is resurfaced. The first necessity in the maintenance of a road is proper sprinkling. It should be always damp enough to prevent dust but never wet enough for mud. It is as essential for the preservation of a road as it is for the comfort of those who use it. I know of no more difficult thing to do in the maintenance of parks than to obtain satisfactory work in sprinkling the drives. It is so much a matter of judgment on the part of the drivers of sprinkling wagons that they should be not only much more intelligent than the ordinary laborer, but should also have considerable experience, and above all be men who are willing to do whatever work is necessary to bring about the desired result. Without these qualifications in the men it is absolutely impossible to do the work at all well; and in addition to this the sprinkling wagons must be properly made and the pans or whatever device is used for throwing the water adjusted so that the driver can regulate the discharge just as he wishes for any condition. To these requisites must be added eternal vigilance on the part of the person responsible for the manner in which the work is done.

Next in importance is the keeping of the roads clean; There are many ways of accomplishing this. The regular use of the sweeper is probably best, though it really matters little so it is accomplished in such a way as not to disturb the integrity of the material. The patching of a road as it wears into small depressions can be quite efficiently done with limestone or gravel, and with some trap rocks and soft granite, but with hard

*A paper read at the Annual Convention of the American Park and Out-Door Art Association at Chicago, June, 1900. By J. Frank Foster, C. E.

stone it is very difficult to accomplish much that is satisfactory in that way. But patching when most successfully done cannot preserve a road; it only keeps the surface smooth as it wears out. Sooner or later resurfacing has to be done; usually it is demanded when the center of the road has worn down about three inches.

It should then be done at any rate. It is probably needless to say that the resurfacing is simply loosening up the surface, adding the necessary new material to bring to grade and rolling until thoroughly compact. Many drives that are little used are apt to be found with the bond broken in the spring when the frost goes out of the ground. These should be gone over with a steam roller with perhaps a little packing material added. It is surprising how cheaply this can be done and how greatly the drives will be improved by it. Most outlying park and boulevard roads will be so greatly improved by this rolling in the spring that its cost is more than repaid in the resulting excellence of the roads during the remainder of the summer.

Again I say the maintenance of park roads is a simple matter. Its success or failure depends simply on doing or not doing it. But it costs something.

What I have said refers entirely to the gravel or macadam roads. Hard roads such as brick, stone blocks, asphalt and perhaps wood cannot be considered as park roads: for a park road if anything is a pleasure road. Driving over a hard road is very little pleasure if one has a fine horse and cares anything for it. The introduction of the automobile may however change this. When the horse is the exception on the drives then the hard monolithic surface will be the pleasure drive par excellence. That time has not arrived. Pleasure seekers still abandon the hard road for the dirt road. Therefore, for the present at least hard roads are not park roads. Rejoice that it is so else you would be bored with another most tedious quarter of an hour listening to the merits and otherwise of concretes, asphalts, bricks and wooden blocks creosoted and otherwise treated.

The park road to be at all satisfactory must have three qualifications. It must be in good repair; it must be clean; it must be properly sprinkled. These conditions are to be attained only by constant attention, efficient management with the expenditure of money. In many things in the world the expression: "That is good enough" may indicate a satisfactory condition, but in park roads and park work generally, if that is to limit the effort the result will be mediocrity. A road is clean or dirty. It is well sprinkled or it is muddy or dusty. The lawns are green or they are dried out. The trees are pruned and thrifty or they are full of dead wood and dying. Things either are or they are not. A park is the municipal luxury of a community. A luxury to continue as such in the estimation of those who enjoy it must continue to be to them perfection of its kind. A luxury is expensive, usually an extravagance. Perhaps parks are extravagances, but as long as the people consider them luxuries they will as freely expend their money for the maintenance of the parks as they do for other luxuries if they feel that a dollar expended buys a

dollar's worth of material or labor. But just the moment that there is a falling off in efficient care and exquisite beauty just then will the people commence to question the wisdom of the park tax and shortly the revenue will be reduced to a point where satisfactory maintenance cannot be had. Excellent maintenance should be the first consideration of all park commissioners. Unless the majority of the people of a community think their parks are just a little better than any parks in the world, that park system is on slippery ground. To create that impression it only needs proper maintenance and there is no place where the want of it is more quickly noticable than on the roads. Do not let the luxuriant vegetation with which nature adorns either side of it be marred with the ugly unkempt road.

As was first said, the park roads are regrettable necessities. Do not multiply the necessities for them by introducing extraneous attractions into the park.

Simplicity is always beautiful, and above all things the simplicity of nature. Let your park be a piece of country, your roads only ways to reach its beauties, mostly roads through thick woods closely planted upon both sides, hidden. There are open roads enough in the approaching boulevards. There let the peacocks of fashion who drive only to be seen disport themselves. Make the roads in the parks the quiet peaceful ways of the lovers of nature, and those who travel them will find themselves approaching near and nearer to the truest pleasure of life—the full appreciation and enjoyment of the wonderful beauty which nature has so lavishly strewn all about us.

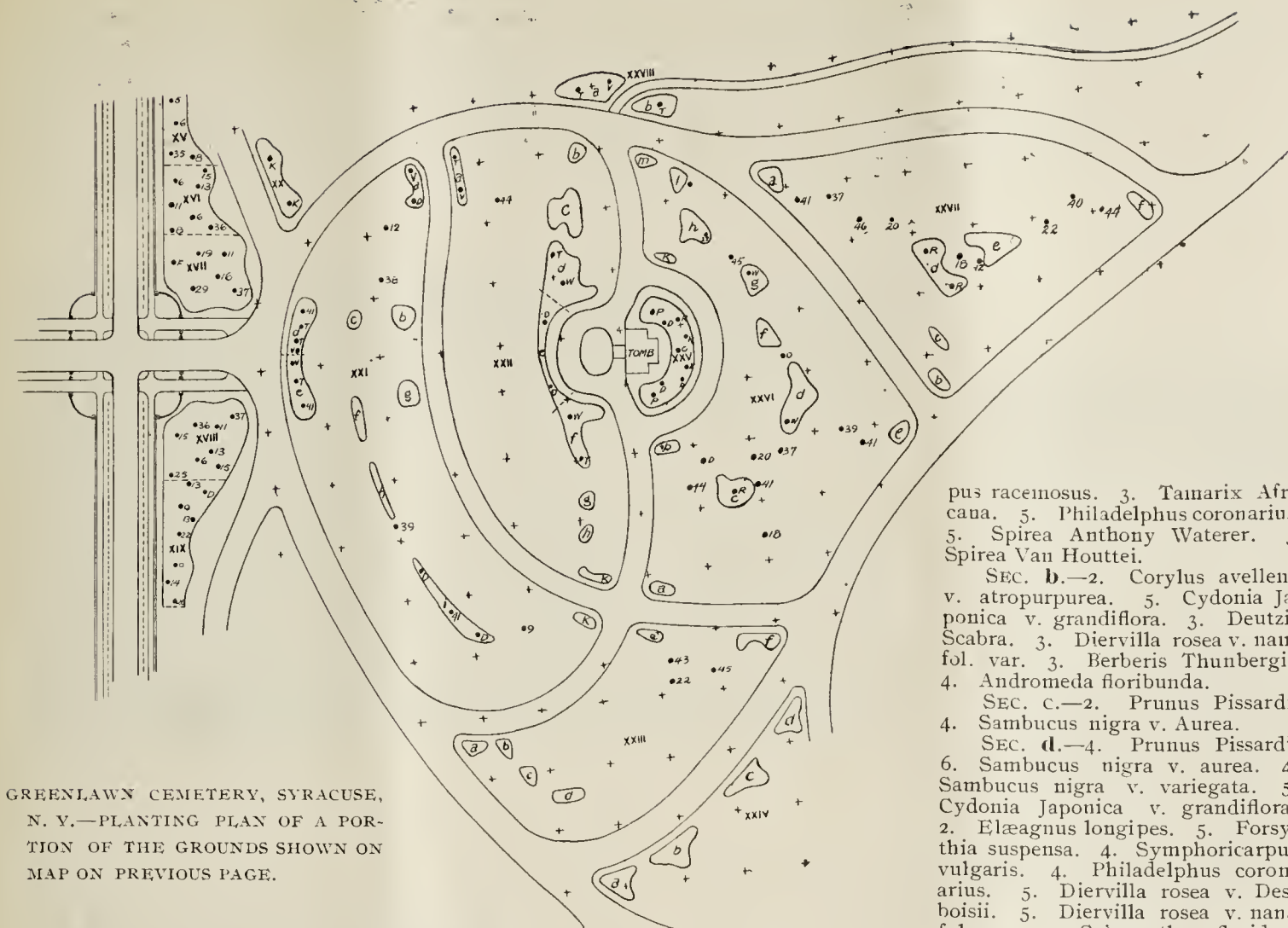
GREENLAWN CEMETERY, SYRACUSE, N. Y.

On the next page is given a plan of Greenlawn cemetery, Syracuse, N. Y., one of the recent examples of cemetery practice. It is the work of Mr. Edward D. Bolton, landscape architect, New York city, and is designed to conform to modern ideas of cemetery development.

The total area owned by the corporation is about 200 acres, but the area, as shown on the plan and lying south of the highway, is only 130 acres. It is located on the line of the New York Central railroad, about nine miles west of Syracuse. The topography of the tract is very undulating and the drives are located so as to secure the easiest possible grades with an economical amount of excavation or embankment. The figures along the drives are suggestions for grades and show very closely the general contour of the land.

Considerable work has been done in the way of grading for lawns and most of the ground is in fine condition for that purpose.

The railroad station built some months since, was built by the cemetery corporation for its own private use. It is planned for the usual purposes of a railroad station and is also provided with a large room where services may be held when de-



GREENLAWN CEMETERY, SYRACUSE, N. Y.—PLANTING PLAN OF A PORTION OF THE GROUNDS SHOWN ON MAP ON PREVIOUS PAGE.

sired. The offices of the cemetery are in the second story.

The construction of the public tomb is progressing rapidly.

The approaches from the railroad station to the highway are completed and a large amount of work has been done on the drives. In this connection it is proposed to complete about one and a half miles of drives this season and one or two of the lakes. A large amount of planting has been accomplished about the grounds, which will give a finished and attractive appearance to the cemetery. With the exception of a very small tract of woodland, the land was originally bare of trees, so that much work of this character was necessary to secure desired results.

Planting Plan.

In connection with the above plan the following details of the material employed in part will be of interest:

NOTE: Location of tree and kind represented is marked on plan thus ●22. Figures preceding name of shrub indicate the number of that variety to be placed in group. The largest growing shrubs are to be placed about the center of the groups the smaller shrubs are to be arranged about the outer portions.

GROUP XXI.

38. *Acer dasycarpum* v. *tripartitum*. 39. *Acer platanoides* v. *Reitenbachii*. 41. *Betula alba* v. *pendula laciniata*. 9. *Catalpa bignonioides* v. *speciosa*. 12. *Cladrastris tinctoria*. T. *Retinospora plumosa* v. *Aurea*. V. *Retinospora plumosa* v. *Argentea*. D. *Pinus Mugho*.

SEC. a.—5. *Rhodotyptus Kerrioides*. 3. *Symphoricar-*

pus racemosus. 3. *Tamarix Africana*. 5. *Philadelphus coronarius*. 5. *Spirea Anthony Waterer*. 5. *Spirea Van Houttei*.

SEC. b.—2. *Corylus avellana* v. *atropurpurea*. 5. *Cydonia Japonica* v. *grandiflora*. 3. *Deutzia Scabra*. 3. *Diervilla rosea* v. *nana fol. var.* 3. *Berberis Thunbergii*. 4. *Andromeda floribunda*.

SEC. c.—2. *Prunus Pissardi*. 4. *Sambucus nigra* v. *Aurea*.

SEC. d.—4. *Prunus Pissardi*. 6. *Sambucus nigra* v. *aurea*. 4. *Sambucus nigra* v. *variegata*. 5. *Cydonia Japonica* v. *grandiflora*. 2. *Elæagnus longipes*. 5. *Forsythia suspensa*. 4. *Symphoricarpus vulgaris*. 4. *Philadelphus coronarius*. 5. *Diervilla rosea* v. *Desboisii*. 5. *Diervilla rosea* v. *nana fol. var.* 4. *Calycanthus floridus*.

SEC. e.—4. *Philadelphus foliis aureis*. 4. *Philadelphus grandiflora*. 5. *Deutzia crenata* P. of Rochester. 5. *Diervilla candida*. 2. *Elæagnus longipes*. 3. *Symphoricarpus racemosus*. 3. *Syringa Persica* v. *alba*. 5. *Tamarix Africana*. 5. *Diervilla rosea* v. *nana fol. var.* 4. *Spirea prunifolia* v. *fl. pl.*

SEC. f.—5. *Hypericum aureum*. 5. *Cydonia Japonica* v. *grandiflora*. 6. *Deutzia crenata* fl. pl.

SEC. g.—*Berberis Thunbergii*. 5. *Diervilla rosea amabilis*. 5. *Deutzia gracilis*. 5. *Spirea Thunbergii*.

SEC. h.—3. *Rhus cotinus*. 3. *Symphoricarpus vulgaris*. 6. *Deutzia Crenata* v. P. of Rochester.

SEC. i.—7. *Calycanthus floridus*. 5. *Cornus mascula variegata*. 5. *Azalea Mollis*. 3. *Elæagnus longipes*. *Hibiscus Syriacus* v. *rubra* pl. 3. *Hibiscus Syriacus* v. *totus albus*. 5. *Philadelphus foliis aureis*. 3. *Philadelphus coronarius*. 5. *Sambucus nigra* v. *aurea*. 5. *Spirea Van Houttei*. 5. *Spirea Billardi*.

SEC. k.—5. *Diervilla candida*. 5. *Diervilla rosea* v. *Desboisii*. 5. *Diervilla rosea* v. *nana fol. var.*

GROUP XXII.

44. *Fagus sylvatica* v. *incisa*. T. *Retinospora plumosa* v. *aurea*. V. *Retinospora plumosa* v. *argentea*. W. *Taxus baccata* v. *glauca*. D. *Pinus Mugho*.

SEC. a.—3. *Kerria Japonica*. 3. *Symphoricarpus vulgaris*. 5. *Diervilla rosea* v. *nana fol. var.* 5. *Spirea Reevesii* v. *robusta*. 5. *Spirea callosa* v. *alba*.

SEC. b.—5. *Azalea Mollis*. 6. *Andromeda floribunda*.

SEC. c.—5. *Syringa Persica* v. *alba*. 5. *Elæagnus longipes*. 5. *Forsythia suspensa*. 3. *Corylus avellana* v. *atropurpurea*. 5. *Berberis Thunbergii*. 3. *Clethra Alnifolia*. 5. *Cornus mascula variegata*. 5. *Deutzia crenata* v. *fl. pl.* 5. *Deutzia scabra*. 4. *Ribes Aureum*. 2. *Rhus cotinus*. 5. *Tamarix Africana*.

SEC. d.—10. *Berberis Thunbergii*. 6. *Elæagnus longipes*. 2. *Hibiscus syriacus* v. *rubra pleno*. 2. *Hibiscus syriacus* v. *totus albus*. *Hypericum aureum*. 5. *Lonicera Tartarica*. 5. *Lonicera Tartarica* v. *grandiflora*. 5. *Philadelphus coronarius*. 3. *Rhus Cotinus*. 5. *Sambucus nigra* v. *variegata*. 5. *Symphoricarpus racemosus*.

IMPROVEMENT ASSOCIATIONS.

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ANNUALS AND BULBS FOR HOME GROUNDS.

Both hardy bulbs and hardy annuals hold important places among the materials for planting home grounds.



SHIRLEY POPPIES.

against them. It is given to few persons or things to be perfect. Besides, among them are some of the sweetest flowers that blow, as, for instance, the Hyacinth.

As for Lilies, they amplify the glories of summer, acceptably filling certain blanks among herbaceous plants of another character.

There are so many kinds of Lilies that thrive with slight care that no one should be content with the two or three sorts ordinarily grown. Have them all, from the dainty little coral blooms of *Lilium tenuifolium* or Siberian lily, to the immense bells of *Lilium auratum*, the great golden banded lily of Japan, whose rich perfume is spilled as generously as is that of the tropical water lily, *Victoria regia*.

If bulbous plants supply the first flowers of spring, annuals furnish them in unstinted measure just at the time when those of shrubs and herbaceous plants are scarce. While shrubs and perennials are doing their best to attract all atten-

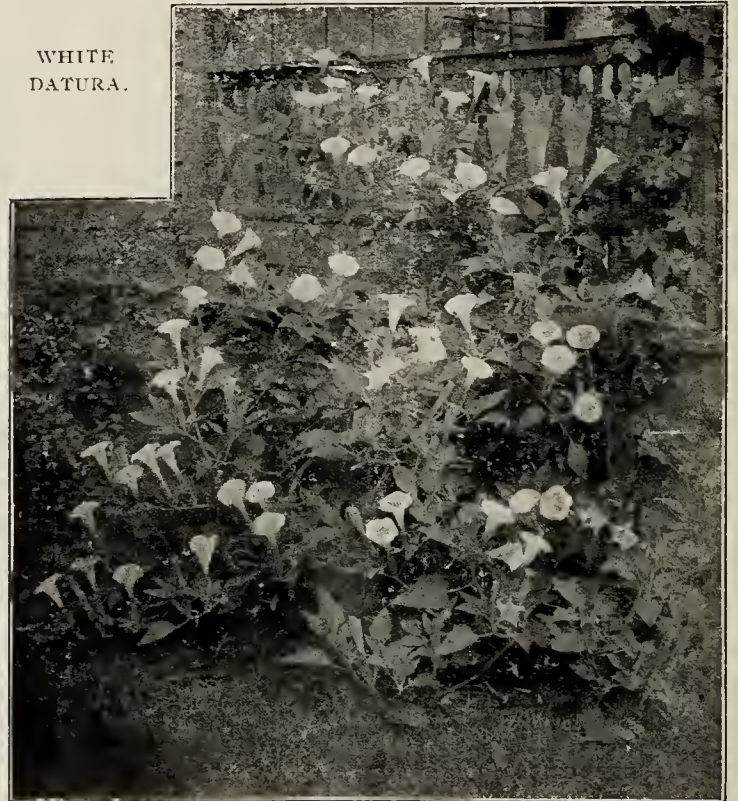
tion to themselves, the little seedlings are busily growing and patiently biding their time, knowing that he laughs best who laughs last, and that they are going to make a good showing on the home stretch. Indeed by proper management, there will be a goodly array on view by the time the half mile post is reached.

No garden should be without Nasturtiums, not only for cutting, but as garden ornaments. Rightly placed and grown, they are extremely effective and equally reliable. Poppies too, are good as a feature of the planting, but should be so placed that something else can be grown among them to spread and fill their places when they are pulled out by the roots after flowering, as they always should be. It is a good plan to grow fall-sown and spring-sown Poppies together for this gives a long season of Poppies and they are all out of the way in time to be replaced by Asters. Or tall Nasturtiums may be grown among them to fill their vacant places in late summer and fall.

Such coarse annuals as the *Datura* must be introduced with caution for, while effective in masses at some distance from the house, the foliage is usually weedy in appearance and in the case of the *Datura* itself, is malodorous, though the flowers are deliciously scented.

Who, after making its acquaintance, would be

WHITE
DATURA.



without the Moon flower, *Ipomea Noctiflora*? Its heavy foliage forms rather shapeless, clumsy masses that are unsuited to small porches or light trellises; but in some location where its fragrant, pure white

trumpets may be enjoyed as twilight brings them out, they are delightful. The same is true of the starry flowers of another nocturnal bloomer, *Nicotiana affinis* or Ornamental Tobacco; but it is well adapted for use near the house as well as in other parts of the grounds.

It is neither possible nor necessary to mention



CANDIDUM LILIES.

all of the good things that may be advantageously used in the home grounds, and in calling attention to the various classes of flowering plants to be considered for this purpose, the few mentioned have been alluded to as features of the landscape rather than as material for supplying cut-flowers. For, while all fading flowers should be cut from every plant, the main supply for cutting, where many are required, should be grown apart from the plants used in making the pleasant picture of home and comfort that every dwelling with its grounds may and should present.

F. C. S.

DAFFODILS AND JONQUILS.

For park planting these are the gayest of all bulbs, excepting the tulips of dazzling colors. The advantage they have over tulips is that they are more hardy. Tulips and hyacinths when imported



DAFFODIL.

from Holland are at a maximum, and when grown and bloomed degenerate the second season, by reason of the fully matured bulb having performed its mission and commenced the work of reproducing its kind. The large bulb loses its vitality to great extent and the young bulbs or offsets multiply around the base.

Time will develop these offshoots into fine blooming bulbs, but two or three years will be required. An annual importation and planting of Holland tulips and hyacinths is necessary to keep up a display of these bulbous flowers at their superb best. Not so with the *Narcissus* type. The class is divided into many sections, but arbitrarily four will answer all descriptions. The kinds under discussion here are yellow. The white narcissi, in variety, are not excelled in the floral world for free and hardy blooming, characterized also by fragrance and beauty.

Daffodils are marked by their large, prominent trumpets of a deeper gold color than the perianth, which is spreading, thin and silky in texture and from a clear primrose to creamy yellow. The trumpets are waved and fluted around the edges, and of velvety texture. Daffodils bloom second early to crocus, Roman hyacinths and some white narcissi, but March will encompass first and second early bulb blooming. Time was that daffodils were called "Easter lilies" in England. Invariably a component of English flower gardens,



JONQUIL.

the daffodils bloom, naturally, there just at Easter-tide. Chaucer, Shakspeare and Wordsworth pay tribute to the daffodil, as one of the most pleasing of early spring flowers.

"Beside the lake, beneath the trees,
Fluttering and dancing in the breeze."

Daffodils and jonquils in England are lavishly planted, bordering walks and drives through the parks. Similar disposition of the bulbs is also the

popular method of planting in our own cities, wherever the nature of these iron-clad bulbs is fully understood.

From hundreds to thousands is the way to plant. From 35 to 50 and 75 cents per doz., discount on large purchases is the rate at which the finest and healthiest of these bulbs are sold. They will all be sure to bloom, as a rule, but should some fail to bloom the first spring, wait until the next and flowers will be produced. This is asserted from the known fact that the daffodil bulb will never fail to bloom except from want of full-grown size or maturity. Winding in and out of drive-ways, in sunny spots, on straight, curved or circular borders, in flickering sunshine and shade, or athwart the green sward, or bedded in fancy forms, this primrose yellow and gleaming gold of daffodils will be the very incarnation of spring, beautiful, ever welcome spring time.

Jonquils are deeper yellow than daffodils. The bloom is all yellow, cup and saucer shaped. The perianth is broad and spreading and the cup in the center small, both cup and perianth deep chrome yellow. The foliage is more free than with the daffodil. Rush-like, abundant and as dark and rich as the bullrush by the river's brink, the foliage of the jonquil is one of its pleasing features. Jonquils are more decidedly fragrant than daffodils, although not as sweetly perfumed as hyacinths and white narcissi. Masses of the deep yellow flowers, gleaming in the sunshine before the leaves have put forth on deciduous trees and when evergreen trees are still sombre from the winter's cold, are inspiring, delighting every sense of the beautiful. Daffodils and jonquils will grow in any ordinary garden soil. Park grounds fertile enough to support velvety green grass will answer every purpose for their growth. In excavated places, trenches or prepared beds, though, good gardeners always bestow some additional fertilizers for newly planted bulbs. Fall is the time to plant these hardy bulbs. Mr. Meehan gives the reason for fall planting when he says: "The daffodil (the same may be said of the jonquil) sends out its roots throughout the winter time, no matter how hard the ground may be frozen. The young fibres have internal heat, or they would not be alive, and this heat is sufficient to thaw enough moisture to keep the bulb alive. It is this work of the roots during the winter which makes it necessary to plant the bulbs in the fall of the year. The earlier they are planted the earlier they will flower the ensuing spring."

There are varieties and varieties to be had. All of them are gay and pleasing. Jonquils number some lovely double sorts. The large white and yellow double is as handsome a flower as the spring

time has to show. And the dwarf multiflora, borne in full clusters is in single and double form, the latter quite as full, as double and as beautiful as a Polyantha rose. Once planted, daffodils and jonquils become a permanency. They naturalize themselves in the soil, and if on grass-grown grounds not disturbed they will be nourished by the top dressing given the grasses, and annually brighten the park ways with blazing yellow, flame-like and brighter than the sunshine, far beyond the quarter of a century.

G. T. Drinnan.

HYDRANGEA QUERCIFOLIA

Everybody plants hydrangea paniculata grandiflora, and indeed it is a very valuable shrub, the showiest of all shrubs that bloom in late summer. But it has a near relative that one does not very often see which is equally desirable for parks and private places and which has the advantage of being ornamental from the time its downy leaves appear early in April, until heavy frosts have stripped the bushes of foliage late in November. This shrub is hydrangea quercifolia, or the oak-leaved hydrangea. It is a noble plant when well grown and is a native of Florida, Georgia and other southern and also some western states, where it is found growing in partly shaded places. It is, however, quite hardy at the north. I have seen it eight feet in height, more like a small tree than a shrub, with a spread of branches at least fifteen feet in circumference.

The leaves are five-lobed and very large, some of them measuring ten inches across. It has a most picturesque habit of growth, the lower branches, with their huge panicles of bloom, resting upon the grass of the lawn.

The color of the foliage is a fine grayish green, and the underside of the leaves is downy. The petioles and young wood are densely covered with a rusty colored downy substance.

But its chief charm is in its flowers. It begins to bloom here the first of June, many weeks earlier than *H. p. grandiflora*, and it has large cymes of showy flowers, which are, when they first open, a delicate sea-green in color, fading every day until they become creamy white. The heads are pyramidal in outline and the sterile flowers are numerous and large. They surround the small fertile ones, which form the inside of the clusters. They remain cream colored for some time and then gradually change to pink and finally to russet red. They are very persistent, so that the plant remains in bloom for four or five months. Indeed, the flowers do not fall off until the leaves drop. One great merit of this hydrangea is its capacity to withstand drought. We have them planted on a

dry hillside under the shade of an oak. In this position they are never watered, yet they remain fresh and vigorous throughout our most trying seasons of drought.

As we have so few summer blooming shrubs it would be well if the merits of the oak-leaved hydrangea were more generally known and appreciated. A plantation of these shrubs, together with hypericums, altheas, and the late blooming spiræas would be gay and attractive from midsummer until late in autumn. This hydrangea is also exceedingly effective in sub-tropical gardening when planted with such little trees as azalias, paulowinas, ailanthuses and other plants with decorative foliage.

Had it no other merit it should be extensively planted for its beautiful fall coloring. At the first touch of frost its handsome foliage takes on fine shades of claret and crimson, and long after nearly all the trees and shrubs in its neighborhood have been stripped bare, its persistent foliage brightens the shrubberies until the last asters have shed their airy pappus and the golden rods have turned to silver.

Danske Dandridge.

SEASONABLE SUGGESTIONS.

Keep in mind the budding of your flowering apples, cherries, pears and other trees. This is the time for the work. Soon the sap will cease flowing; then it will be too late.

September is a favorite month for the transplanting of perennials. There is time between this and freezing weather for the plants to get good root hold. Pæonies should be done in the fall, not in spring.

Transplant deciduous trees if you wish to towards the close of September. Strip the foliage off, give a good watering and they will do well.

As soon as perennial phloxes have done flowering, and all other perennials, in fact, it is a good plan to cut off the decayed flowers and flower stalks. Seeds are not wanted and the strength which they would require to perfect themselves goes to the forming of shoots for next year.

Calla lilies which have been lying dormant through the summer should now be potted afresh and started growing. They may be left outdoors a month later, then taken to the greenhouse.

Chrysanthemums wanted for pot blooming should be lifted from the ground by early September, that they may take good root hold of the soil and progress towards flowering before November. Left out later they often fail to be satisfactory.

Shrubs intended for forcing should be lifted in October early, placed in pots or tubs and left out till freezing weather comes. Tubs are better than

pots. Common boxes answer very well. These are not broken by frost or in any other way and are good for a year or two's service.

Marechal Niel, the beautiful yellow Noisette rose is sometimes seen doing well out of doors here. But then the owners bend the shoots to the ground and cover them with earth in winter. Some do this with Gloire de Dijon, but in most parts of Pennsylvania it is hardy without this.

The question is often asked whether the flowers of Clematis paniculata are fragrant or not. They certainly are, but not so much so as the old flammula. But it is so much the superior of flammula in every other respect that there need be no hesitation which to plant.

The bag worm, usually so destructive to arbor vita and other trees, can be destroyed by spraying with Paris green. This worm quickly defoliates a tree. It prefers arbor vita to any other tree.

The common English ivy tied to a stout stake for a few years becomes a shrub in the same way as wistarias, trumpet vines and many other climbers do. These "tree" specimens of ivy are desirable ornaments on a lawn, making, as they do, an addition to the list of evergreen shrubs.

Should a damp cloudy time come to you try the transplanting of some of your smaller evergreens. Get a small ball with them, and after planting flood them with water.

Yucca filamentosa will be ripening its seeds soon. If these are saved and sown out of doors in the ordinary way in early spring nearly every one will grow. Besides this way of increasing them yuccas make plants readily from pieces of root.

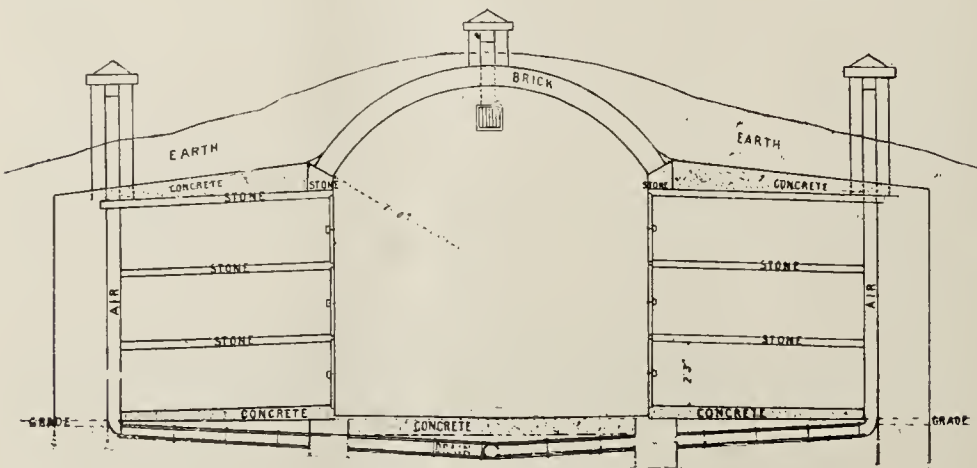
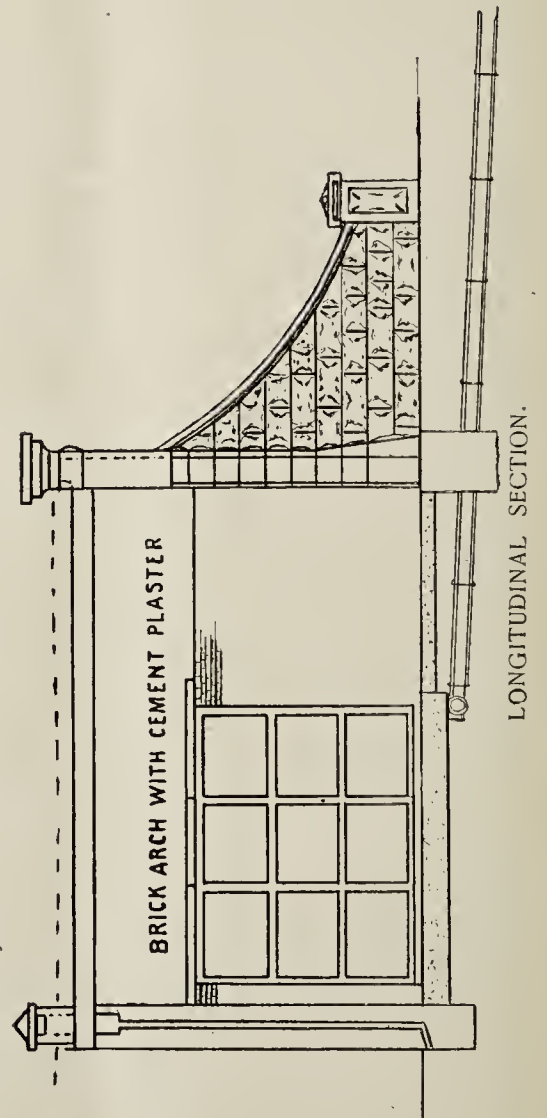
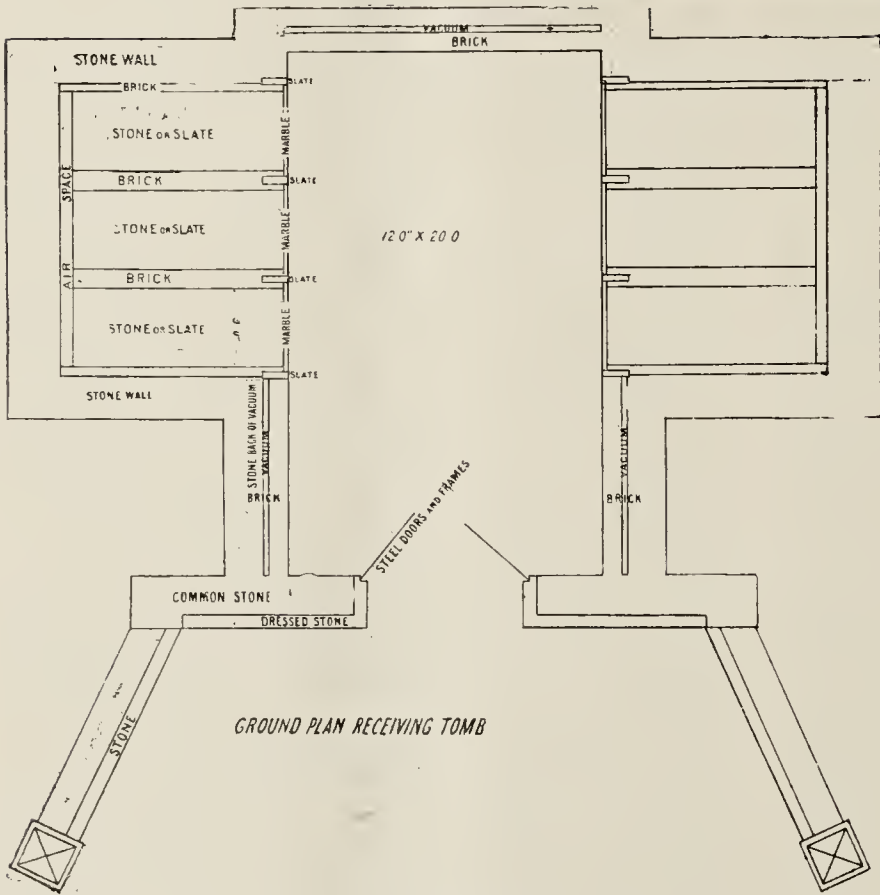
Allegheny hollyhocks differ from ordinary ones in having quilled petals. They are very pretty and valuable. Seeds sown now and the seedlings well cared for in a cold green house or in a pit in winter will make plants for blooming next season.

As is generally understood the "big tree" of California, Sequoia gigantea, is hardy enough in the Middle States, but has been killed time and again by a fungus which attacks it. Recent experiments prove that this fungus succumbs to Bordeaux mixture, as do all other forms of fungi.

Many parks adopt the plan of having a nursery, or place where small purchased plants are set to grow until wanted for permanent planting. Those anticipating forming such a stock ground would find spring the best season to plant quite small stock.

Before frosts destroy them lift a few moon-flower plants, pot and house them. These make splendid plants for setting out in spring, besides affording lots of cuttings. It's a mistaken notion that this useful vine is an annual. *Joseph Meehan.*

ELEVATION AND
DETAILS OF RECEIVING
VAULT,
PAXTANG CEMETERY,
PAXTANG, PA.



RECEIVING VAULT, PAXTANG CEMETERY,
PAXTANG, PA.

The illustrations on opposite page give details of a low cost but substantial public Receiving Vault, erected last year in the Paxtang cemetery, Paxtang, Pa., from a design by the superintendent, Mr. Bellett Lawson, Jr. The dimensions of the tomb, exclusive of the retaining wing walls are 24 feet deep by 33 feet 6 inches wide. The exterior is constructed of Cleveland Amherst stone and the interior is of the same material, with slate and marble catacombs, of which there are now 18. Provision has been made to increase this number by removing the rear wall, which was built with that object in view.

The building is most substantial throughout, and the crypt is commodious, being 12 feet by 20 feet in area.

In building the catacombs every consideration was paid to drainage and ventilation. In the rear of each catacomb is an air chamber with an opening both at the bottom and top through which a constant current of fresh air passes. The doors are wrought iron with ventilating grilles.

The total cost was about \$2,500. Black & Hunter of Harrisburg, furnished all the exterior work, and the remainder was executed by day work by the cemetery association.

ASSOCIATION OF AMERICAN CEMETERY SUPERINTENDENTS.

Programme of the Fourteenth Annual Convention of the Association of American Cemetery Superintendents, Cleveland, O., September 11th, 12th and 13th, 1900.

Headquarters will be at the Hollenden Hotel, and all meetings will be held in the hotel assembly room. The Hollenden Hotel is on Superior street, one block east of the Public Square. All street cars run to the Public Square, and several pass the front entrance of the hotel. The rates will be \$1.50 per day and up, European plan.

Tuesday, Sept. 11.

MORNING SESSION, 9.30 O'CLOCK.

Meeting called to order. Prayer by Rev. G. F. Houck. Reception of new members and roll call.

Address of welcome by the mayor, Hon. John H. Farley.

President's address, William Stone, Lynn, Mass.

Report of the secretary and treasurer, H. W. Ross, Newton Centre, Mass.

Appointment of committees.

1. Paper—"Practical Management of Cemeteries." By G. H. Scott, River Grove, Ill.

2. Paper—"Art in Modern Cemeteries." By M. P. Brazill, St. Louis, Mo.

3. Paper—"Some Landscape Ideas Seen in Cemeteries." By S. J. Hare, Kansas, City, Mo.

4. Paper—"Perpetual Care." By James Warren, Providence, R. I.

Recess for Luncheon.

Afternoon—Visit to Calvary Cemetery and Garfield Park. Take street cars at 1.30 p. m.

EVENING SESSION, 8 O'CLOCK.

5. Paper—"Proper Treatment of Cemetery Woodland." By Bellett Lawson, Sr., Wilkesbarre, Pa.

6. Paper—"Artificial Stone Corners." By W. N. Rudd, Chicago, Ill.

7. Paper—"Cemeteries, Past and Present (Stereopticon)." By J. C. Scorgie, Boston, Mass.

8. Paper—"Cleveland Cemeteries." By J. M. Curtiss, President of Riverside cemetery, Cleveland, O.

9. Paper—"Use of Shrubs in Cemeteries." By O. C. Simonds, Chicago, Ill.

Wednesday, Sept. 12.

MORNING SESSION, 9 O'CLOCK.

10. Paper—"Sunday Funerals and Funeral Car." By Rev. F. G. Houck, in charge of R. C. cemeteries, Cleveland, O.

11. Paper—"Park Idea in Cemeteries." By William Salway, Cincinnati, O.

12. Paper—"Shall We Encourage the Putting Up of Monuments, or Discourage Same?" By H. R. Hatch, President of Lake View cemetery, Cleveland, O.

13. Paper—"Influence of our Surroundings." By Mrs. E. E. Hay, Erie, Pa.

14. Paper—"Tree Planting." By E. A. Sloan, Tronton, O.

15. Paper—"Forestry." By M. Horvath, Cleveland, O.

Recess for Luncheon.

Afternoon—Visit to Lake View Cemetery, and City Parks and Parkways.

EVENING SESSION, 9 O'CLOCK.

16. Paper—"Cemetery Management and the Importance of Correct Cemetery Records as a Contribution to History." By W. H. Gladden, New Britain, Conn.

Nomination of officers.

17. Paper—"Reminiscences of Some Old Burying Grounds Abroad." By Wm. H. Barlow, Pres. Dale Cemetery Ass'n., Sing Sing, N. Y.

18. Paper—"Modern Roads in the Modern Cemetery." By W. H. Evers, Cleveland, O.

19. Paper—"Drainage of Roads and Driveways." By G. C. Nailor, Wilmington, Del.

20. Paper—"Decoration Day, How Abused and How to Remedy the Abuses." By Frank M. Floyd, Portland, Me.

21. Paper—"Rise, Progress and Present Condition of the Association of American Cemetery Superintendents." By Charles Nichols, Newark, N. J.

Thursday, Sept. 13.

MORNING SESSION, 9 O'CLOCK.

22. Paper—"What Do We Gain by Attending the Annual Convention?" By B. H. Dorman, Bridgeport, Conn.

23. Paper—"Generalities by a Novice." By R. F. Robertson, Los Gatos, Cal.

24. Paper—"A Personal Experience." By G. L. Kelley, New Albany, Ind.

25. Paper—"Funeral Reform." By George Van Atta, Newark, O.

26. Paper—"Qualifications a Cemetery Superintendent Should Possess." By C. D. Phipps, Franklin, Pa.

27. Paper—"We Will Keep the Graves Green." By T. L. Ford, Knoxville, Tenn.

Report of committees.

Election of officers.

Afternoon—Visit Riverside Cemetery and the Olney Art Gallery.

Evening—Banquet.

* * *

It is more than probable that it will be possible to obtain reduced railroad rates for members and guests attending the convention. The latest advices from Mr. Painter, who has the matter in charge, point to an attendance, in excess of the required number from outside points. Provided the arrangement is effected with the Railroad Association, this will entitle those attending to a rate of one and a third single fare for the round trip on the certificate plan. Every person taking the train for the convention, when purchasing his single fare ticket at his departure depot should remember to ask the station agent for a certificate and *not* for a receipt. The certificate will, when signed by the Railroad official at Cleveland entitle the holder to a return ticket at one third single fare. An omission to secure a certificate at point of departure will cancel the privilege.

THE WORK OF OUR ASSOCIATION*

The tendency of the times is toward concentration; capital and labor, workers in the trades and arts, professional and scientific men, all follow the drift of the prevailing inclination to meet together for the interchange and discussion of ideas and theories, or to record, for mutual advantage, the results of experience, thought, and experiment in their various lines.

The Association of New England Park Superintendents now entering its third year has been organized for a definite purpose; that of raising the standard of excellence in park work. This probably has not been sufficiently realized by us, and, beyond the memories of two or three pleasant meetings, not much of lasting importance has been done for the welfare of the Association or its object. Let us lay off this lethargy and bestir ourselves. The field is large, work lies in every hand; let it be taken up with persistence and determination. Abuses are creeping into the management of parks; let them be attacked and overthrown. We may not be able to obliterate all evils with which parks and park departments are afflicted, yet we may effect a partial regeneration; even partial success will repay when taken in connection with the opportunity our meetings give for becoming acquainted with brother craftsmen in their own fields of labor.

In particularizing the work of this Association, I would call attention to an evil which it should be the object of the Association to attack vigorously; that of the overcrowding of trees in park woodlands and plantations. This results mostly from a fear of public criticism, or rather, I may say abuse, leveled at the trained superintendent who cuts down a tree. Many people who are perfectly rational on most subjects, and who would accept without question the opinion of the doctor or engineer in matters pertaining to his special profession, are ready to criticise any attempt on the part of the forester to better the condition of growing trees. And to this abuse may be attributed, in a great measure, the lamentable lack of fine tree growth in the public parks throughout the country. This calamity, however, is not confined to the parks; every street and every square calls out for reform in respect to the care of its trees. And this reminds me that the planting and care of street trees may be a matter of legitimate interest to this Society. Progressive communities are beginning to recognize the fact that nothing adds more beauty to the streets than fine trees, and are placing them under the care of the Park Departments, or other authorized officers, for protection and development. The laws governing these transfers are varied and not, so far as one can hear, entirely satisfactory.

It would seem that a law simply giving full and indisputable authority over the trees to a competent body would be the most effective measure.

Another form of the desecration of public parks, which should be a subject for our consideration and discussion,

is improper planting. Some years ago I saw in a public square, in the centre of a smoky city, planted, in all the awful grotesqueness of an old craze, with geraniums, echeverias, alternantheras, and other plants of like character; the blackness of death covering the whole. A few days ago, I again saw this square planted in a similar way—no change, no awakening. In the same city I saw beds of fancy conifers set in the bays of a beautiful natural foliage line along one of the parkways. It seems as though the landscape gardener, in an aimless way, had seized each open space, saying, here is room for a bed, I will make one; utterly spoiling the foreground and the predominating natural features by the forced intrusion of trees and shrubs of variegated foliage, or of beds of crimson rambler roses and other plants properly belonging to the garden.

In another prominent city I found lines of shade trees newly planted along curving drives throughout a park of several hundred acres. It is to be hoped that good taste will prevail and cause the removal of these trees before they attain to any size, or the temptation to flank them with stone curbs and sidewalks may be too strong to be resisted. Another instance, and I have done: In the most beautiful park in the Empire City, I found an island planted with scarlet geraniums, where they disputed possession with a few trees and shrubs. Surely, here is a field for work and work which will repay in the elevation of our profession.

Much can be done by this Association in preserving public parks from desecration by those who have schemes for turning a penny by the introduction of various devices, ranging from observation towers or merry-go-rounds, to peanut stands. The petitioners for such concessions usually pose as philanthopists and in this guise are well calculated to deceive.

Another evil against which the weight of this Society's influence should be thrown, is that of the introduction of politics into park management. This abuse is steadily growing and is a dangerous one. Positions of importance in connection with the welfare of parks are being absorbed by men who have no fitness for the work, and whose qualifications are only valuable in ward politics. Under the politicians' creed "To the victor belong the spoils," tenure of office is insecure and offers no inducement to young men to educate themselves for park work.

Many other lines of action may suggest themselves as the work progresses; for the present, those above noted will perhaps suffice.

As a means of communication and a medium for the expression of the ideas and experiences of the members of this Association, I would suggest the circulation, monthly, of a recording bulletin, passing from member to member for contributions, or for perusal, and returning in reverse order to the Secretary. It is quite possible that many contributions could be culled from the bulletin which would be valuable from an educational point of view, and would be readily published by horticultural journals and city newspapers. The bulletin would serve to draw the members into closer fellowship and acquaintance, and help to heighten their interest in the work of the Association.

*Paper Read at The Third Annual Meeting of New England Association of Park Superintendents, Worcester, Mass., July 11th and 12th, 1900. By John A. Pettigrew, Supt. Parks, Boston, Mass.

LANDSCAPE GARDENS.*

"As the modern style owes its origin mainly to the English, so it has been developed and carried to the greatest perfection in the British Islands. The law of Primogeniture which has there so long existed, in itself, contributes greatly to the continued improvements and embellishments of those vast landed estates, that remain perpetually in the hands of the same family. Magnificent buildings, added to by each succeeding generation; wide spread parks, clothed with a thick velvet turf, which in their moist atmosphere, preserves during the greater part of the year an emerald greenness, studded with noble oaks and other forest trees which number centuries of growth and maturity; these advantages in the hands of the most intelligent and the wealthiest aristocracy in the world have indeed made almost an entire landscape garden of merry England.

"In the United States it is highly improbable that we shall ever witness such splendid examples of landscape gardening as those abroad. Here the rights of man are held to be equal, but if we have no enormous parks, and no class of men whose wealth is hereditary we have, on the other hand a large class of independent land owners, who are able to assemble around them, not only the useful and convenient, but the agreeable and beautiful in country life.

"In America, a feeling, a taste, an improvement is so contagious that it is disseminated with a celerity that is indeed wonderful to every other portion of the country.

"To attempt the smallest work in any art, without knowing either the capacities of that art, or the schools, or the modes by which it has previously been characterized, is but to be groping about in a dim twilight, without the power of knowing, even should we be successful in our efforts, the real excellence of our production.

"Of late, professors of modern landscape gardening have generally agreed upon two species of beauty of which the art is capable. These are the beautiful and the picturesque. Or to speak more definitely, the beauty characterized by simple and flowing forms. The admirer of nature will at once call to mind examples of scenery distinctly expressive of each of these kinds of beauty.

"By landscape gardening we understand not only an imitation of the general forms of beauty, but an expressive, harmonious, and refined imitation.

"Besides the beauty of form and expression we have to deal with the three principles, viz: unity, variety, and harmony. Violations of the principles of unity are often to be met with, and they indicate an absence of a correct taste in art. Looking upon a landscape we sometimes see a considerable part of the view laid out in natural forms of trees and shrubs, and perhaps in the middle of the same, a formal avenue leading directly to the house. In this example the avenue taken by itself may be a beautiful object, and yet, if taken with the natural groups of trees and shrubs the picture will not form a whole because it does not make a composite idea. For the same reason there is something unpleasing in the introduction of fruit trees among fine ornamental trees on a lawn, or in assembling together in the same bed flowering plants and culinary vegetables. In the arrangement of a large extent of surface where a

great many forms are necessarily presented to the eye at once, the principle of unity will suggest that there should be some grand or dominant feature to which the others should be subordinate. Thus, in grouping trees there should be some large and striking mass to which the others appear to belong, however, distant, instead of being all the same size.

"After unity we must carefully consider the subject of variety as a fertile source of beauty in landscape gardening. The different scenes presented to the eye should possess sufficient variety in the detail to keep alive the interest of the spectator. Harmony is the presiding principle over unity and variety, and prevents them from becoming discordant. It presupposes contrasts, but never so strong or so frequent as to produce discord.

"Two or three trees and a few shrubs, with a bit of lawn may make either an exquisite little picture or a disordered array of forms. If unity, variety and harmony rule the composition, we shall get the same pleasures from it that we do from looking upon a beautiful picture.

"There are many persons with small country places who have neither room nor time to attempt the improvement of their ground fully after either of these two schools. How shall they render their places tasteful and agreeable in the easiest manner? By attempting only the simple and natural, and the unfailing way to secure this is by employing trees and grass. A soft velvet lawn, a few forest or ornamental trees well grouped with universal pleasure,—they contain in themselves in fact, the basis of all our agreeable sensations in the most splendid examples of a landscape, and they are the most enduring sources of enjoyment in any place.

"Landscape gardening is not solely a decorative art. This idea of it is illustrated time and again by people who first built a house and then apply to a landscape artist or attempt themselves to finish it off. The house has probably been placed in a position where it will subject the owner to all sorts of inconveniences, while if he had placed his house elsewhere, he might have secured advantages now impossible to him. He has expended large sums in grubbing or burning up all that he considers underbrush, and has thus destroyed all the natural beauty of the woods, which now consists only of a collection of gaunt, naked looking trees; and now he applies to the aforesaid artist to make the place look attractive by the introduction of artificial decoration. In other words the place is to be dressed up to look pretty. The portion of those who study to arrange their grounds from the outset, fixing the position of the buildings and adapting the roads and walks so as to secure the utmost convenience with the best possible development of graceful and picturesque effect, is insignificant with those who after fixing those features beyond recall, then and then only confer with the landscape artist. Thus, inexperienced persons continually deceive themselves with the idea that no art is required in the arrangement of the grounds for the domestic use of the family residence beyond the exercise of intuitive skill and ingenuity, and nearly everyone imagines until he has tried, that he can do it to suit himself much better than another can do it for him. Many a one finds in the end that he pays dearly for his error.

"It has been the common plan to break up seemingly and purposely every possible stretch of lawn and vista by roads and paths, and no country house was supposed

*Extract from a paper to the Fourth Annual Convention of the American Park and Out-door Art Association, Chicago June, 1902. By Mrs. Cyrus H. McCormick, Lake Forest, Ill.

to be completed until the road from the main entrance circled an entire house. Roads should be regarded purely as convenient accesses to buildings. They are not ornamental things in themselves, and are more or less blemishes upon the landscape. Every effort should be made to make them as inconspicuous as possible. This can be secured by studying the curves and grades of the natural surfaces, by a careful arrangement of trees and shrubs, and by using a material for the road-bed which would be as unobtrusive as possible in color.

"Vines alone should not be depended upon to unite the house and grounds. Hardy shrubs should form the encircling garment, which should be high in some places, low in others, or here dense and massive, there light and graceful, now clinging closely to the walls, and now spreading away a little, or running along beyond the end of the house to border a path. They should follow the outlines of the house and accent these while uniting the buildings, as a whole, with its site, or should be massed in angles and intersections of roads. An overdose of shrubs should be avoided.

"It has been the custom for some time in this country to plant along the foundations of suburban houses flower beds, or strips filled with annuals and tender ornamental plants. The work is done, the effect is produced for the season only. When winter comes, nakedness returns in a worse shape than if no flowers had been planted. Flower beds in themselves are but formal things, and yet we see them in the midst of grounds which have been laid out according to naturalistic unsymmetrical lines. No place could be worse for a mass of brilliant color than in the center of a stretch of bright green, shaven turf, for it destroys all unity, repose and breadth. * * * There are cases where colored foliage or flowers can be used with good effect, on the edges of shrubbery for instance, just as a bit of bright color serves to particularize an attractive feature in a room or in a picture; but, in general, the quiet peacefulness of the lawn, with its ever varying tints of greens and the graceful outlines of trees, should never be disturbed by gorgeous and striking combinations of color.

"It has been said that the lawn is the heart of the true English garden, and what is true of England should be true of America. Study to get the widest expanse of lawns, framed in with trees and shrubs in keeping with the local landscape. Local plants are an essential foundation and exotics should be chosen with rare discretion.

"The partly open feature of a landscape is most essential if we would have beautiful grounds, for it affords an opportunity for vistas at various points, for admitting cool breezes and sunshine, for the effects of light and shadow, and, most important of all, for that degree of general repose and breadth, without which no landscape can be altogether satisfactory. It is obvious that, as a rule, the masses must in all small areas be planted along the outlying portions of the turf places, keeping the centers free, but showing open vistas skirted by margins of woody growth, which tend to give an enlarged idea of the size of the grounds so treated.

"The rapid construction of tall buildings and the massing of humanity in cities make one of the reasons why thinking men have been forced to consider the question of air holes for cities or open spaces for breathing, in the shape of parks, wheelways, promenades and boulevards, and last but not least play grounds for poor children. It is well known that nothing costs

a city like disease. City life is essentially artificial. Its greatest alleviation are parkways and parks, and one part of the higher education of the city is to teach the people how to enjoy nature—how to get into fresh air, into the parks, under the trees, on to the grass, down on their knees in worship of nature's God. There are many great hearted men of wealth who might have their names carried down with the ages if they would only give or purchase for the people of the cities where they have made their fortunes land for park purposes. Nothing is so undying as the name of a man associated with a large public park near a great city. It is borne down from generation to generation, linking the donor's name with the park which he makes the heritage of the people for all coming time."

GARDEN PLANTS—THEIR GEOGRAPHY, LVI.

LAMIALES.

THE VERBENA, MONARDA, AND AJUGA ALLIANCE.

This is a considerable and widely distributed group of 19 tribes, 224 genera, and 3858 species. Superficially the plants may best be distinguished by their more or less bilabiate flowers (with exceptions as in the anomalous *Plantagæ*) by the prevalence of square or sharp angled stems, opposite leaves, and flowers generally disposed in axillary or other whorls forming elongated spikes or capitate clusters. Many of the distinctions are founded upon the disposition of the ovules, and the character of the seeds. Blue is a prevalent color among the flowers, but the variation is considerable, while variegated foliage is a greatly appreciated characteristic of several genera. Many aromatic herbs which yield antiseptic perfumes are found in the group, and there are a few esculent tubers less well known to the United States. The trees and shrubs are chiefly tropical and subtropical, but a few are hardy in warm temperate regions. The majority of species hardy at the north are herbs, and a gardener consulting herbarium sheets would pronounce a large proportion weedy trash.

Myoporum is a genus of trees and shrubs in 20 species from the warm parts of China and Japan, Australia, New Zealand, the Pacific Islands, and Malaisia. *M. verucosum* and *M. lætum* are in California collections and are reputed to stand drought well. It is possible, too, that *M. parvifolium*, *M. montanum* and *M. crassifolium* would be useful. They have mostly white or light colored flowers followed by pretty berries.



HEBENSTRETIA, COMOSA VAR.

Hebenstretia in 20 species are South African and Abyssinian.

Globularia in 13 species are herbs or sub-shrubs largely from the Mediterranean regions. A few from central Europe and Asia Minor, such as *G. trichosantha* and *G. vulgaris* are used at the north and *G. alypum* with bright blue heads of flowers is a good winter flowering plant in California.

Lantana has 45 or more species and a number of varieties natives for the most part of tropical and sub-tropical America, three or four, including *L. camara*, reaching the Mexican border in Texas. Others are found in Asia and Africa. They have become extensively naturalized in some parts of the sub-tropics where they are used as hedges. The dwarf varieties are still quite popular as summer bedding plants.

Lippia again is largely a sub-tropical American genus of 90 species, but with species in several other warm countries. *L. citriodora* is the well known "lemon verbena" forming a large straggling shrub in Southern California and similar climates, and even in the southernmost parts of England. Two or three slender branching shrubby kinds are found in Texas and elsewhere of which *L. lycioides* is the most agreeably scented. Some of the low creeping species have been suggested and used as a substitute for grass in dry climates.

Stachytarpheta is a good sized genus of tropical American rather weedy annual or perennial herbs with reddish orange and various shades of blue, violet and purple flowers in spikes. The blue *S. Jamaicensis* is found in south Florida, and *S. mutabilis* with changeable orange flowers is grown in Southern California.

Verbena has 80 species mostly sub-tropical and tropical American. There are about 18 species mostly native to the south western states, with the pretty South American *V. venosa* adventive in Texas and hardy well northward, and the weedy European "vervain"—whose odor is said to kill microbes in less than an hour!—widely scattered. Australia has one species. The superb garden forms are healthier when raised from seed, and are quite hardy at the south, where, however, a "norther" often destroys their full flowered beauty



VERBENA X SEEDLING.

—but they soon recover. It is difficult to determine what species have contributed to these, but *V. bipinnatifida*, *V. aubletia* and *V. venosa* should be worked over again for a hardy set.

Citharexylum is a genus in 20 species of sub-tropical and tropical American trees. The "fiddle wood," *C. villosum*, is found in south Florida, where it is but little more than a shrub.

Duranta has but four or five shrubby species distributed between tropical America, the West Indies, Bolivia and Mexico. *D. Plumieri* extends northward to the Florida "Keys." It is hardy as to its roots up to Columbia, S. C., and on south walls sometimes produces its pretty blue flowers. There is also a white variety and both produce yellow or yellowish berries in localities further south.

Callicarpa is in 30 species natives of North America and the sub-tropical and tropical parts of America, Asia and Polynesia. *C. Americana* and its white fruited variety, (now offered in Southern nurseries) is found from Virginia to the West Indies, and is said to be hardy to Lake Erie—probably with protection. *C. Japonica* and *C. purpurea* are also in cultivation. These shrubs are admirable for their purple, blue and white berries in the middle states. All are better cut back in spring.

Tectona in three species are famous trees of the East Indies and Malasia. *T. grandis* is largely used by British naval architects, and is one of the most valuable woods for all purposes. It is largely cultivated and will sometime be so perhaps, in the Philippines.

Gmelina has eight species in the same countries, with *G. Leichardtii* extending south to New South Wales where it is regarded as their most valuable timber. Some of the East Indian kinds are also fine trees.

Vitex "chaste trees" are in 75 species of trees and shrubs found in tropical and temperate Asia, Southern Europe and other warm regions. *V. Agnus-Castus* at the South grows to a small tree and has spikes of blue or whitish flowers. It is sometimes seen as a sub-shrub further north, as is also *V. incisa* from China. *V. littoralis* is a large tree in New Zealand.

Oxera is a New Caledonian genus said to have 10 species in that island? *O. pulchella* is a handsome free flowering climber which has been introduced to Southern California. It has greenish or yellowish white flowers.

Holmskioldia is a genus of four species. The Himalayan *H. sanguinum* used to be in collections and flower handsomely full or orange red flowers when planted out during summer. It would probably prove hardy in the lower south.

James MacPherson.

PARK NOTES.

The board of park commissioners, Peoria, Ill., has passed the annual appropriation bill which authorizes the expenditure of \$122,336 during the ensuing year.

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The women of Lamar, Mo., are urging the creation of a city park. The Lamar Educational association has made a proposition to the ladies which promises to aid in realizing the park project.

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A special election has been held in Waukegan, Ill., to determine whether or not a park district shall be created which shall embrace the township of Waukegan. Up to time of going to press the result of the election is not known. Waukegan sadly needs parks.

* * *

A large amount of work in the way of improvement has been carried out this season in the parks of Denver, Colo. Among the prominent parks is City park, a natural tract of 320 acres, of which some 115 acres have been improved. It is especially noted for its beautiful lawns.

* * *

The business men of Las Vegas, N. M., are manifesting a commendable spirit in relation to maintaining interest in their plaza park. They have during the summer subscribed \$100 per month to furnish music and when the time expires for the regular musical entertainments the subscription will be continued to furnish an appropriate fountain as an embellishment for their park.

* * *

The executive council of Boston has advertised for bids for removing the buildings east of the state house, between Mt. Vernon, Beacon and Bowdoin streets. This would indicate that the long delayed development of the state house park is about to be inaugurated. The act to establish a state house park was passed in 1893, but actual work has been put off from time to time until this final action.

* * *

A new rule of the park board, Minneapolis, Minn., relative to petitions for the planting of trees decrees that such petitions must be presented this fall if the work is to be done next year. Under the new plan, the board is able to determine on the assessments at \$5 per forty feet for all tree planting next year, and arrange appropriations accordingly. The park board now has 40 miles of trees planted and under its care.

* * *

Starr Garden park, Philadelphia, Pa., concerning which so much has at times been written, will be when completed an ideal small city park. In size it is only one regulation city block but its location at Sixth and Lombard streets will materially help the health of that congested portion of the city. An appropriation of \$8,000 is available for its improvement. The improvement work will consist of grading, laying cement curbs and walks and erecting a pavilion and fountain. After the constructive work is completed, which embraces a sand bank and a wading pool for children, City Forester Lewis will carry out a planting scheme.

* * *

A valuable addition to the educational interests of Bakersfield, Calif., is the public library, which was accepted by the

city authorities last spring. It was the gift of Mrs. Mary E. Beale and Hon. Truxton Beale, of Washington, D. C., in memory of General E. F. Beale, for many years a resident of the place. In the remarks of Mr. Beale in presenting the building he alluded to the affection which his father had had for the town and wishing to erect a memorial to his name, he and his mother had concluded that a public library would be as enduring a monument as could be erected. In this sentiment Mr. Beale will be warmly seconded.

* * *

A park project is being inaugurated at York, Neb., in which it is proposed to introduce some new features. A native forest on a creek will be utilized and special groups or sections will be laid out in appropriate locations. There will be a Rocky mountain section on a steep hillside, containing specimens of its trees, flowers, etc., and likewise a Black Hills section. It is also intended to provide Japanese and Chinese groups. The climate is hot and dry, but a north slope has been secured. Rev. C. S. Harrison, who is chairman of the Commercial club of York, and president of the Nebraska Park and Forest association, is chairman of the above park committee, and is an enthusiast in this work in its relation to the state interests.

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In connection with a previous note on the progressive spirit manifested by certain residents in Bluff City, Kansas, the following from the mayor, Mr. James Glover, affords suggestions to others. He writes: "It has become a custom, a fad, for rich men to endow libraries. This country is well supplied with reading matter; the daily press alone is a library, and I cannot help but think that more parks, larger playgrounds about the city school buildings would be a better outlay of money than a heap of books in a gorgeous building where poor children never go and many of them who do were better out romping in the pure air. Large cities can have parks. They have the property to tax and raise funds; it requires only the disposition to do it, but villages and small towns often lack both. We have been very successful and accomplished a good deal with the means at hand, but it was love, not money that did the work. Now our people are educated up to the point where it is easier to continue than it was to begin and we look forward to greater success."

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In a speech on Farmers' day, at Exeter, N. H., Dr. John D. Quackenbos, of Columbia university, after expatiating on the natural beauties of New Hampshire, thus expressed himself on the "bill-board" nuisance: "A great civilization like ours resents expression in mulitared forests, denuded mountains, flowed like margins with their hideous girdles of dead timber, stony channels of dried streams, emptied like basins; trees and rocks disfigured with advertisements—the outward and visible signs of an inward and reprehensible apathy. Ruthless advertisers, in deliberate contempt of our feelings and our property rights in the scenery, are everywhere disfiguring the face of nature with the flaring placards of nostrum proprietors; dry goods and hardware dealers, agents for farm machinery. Huge field boards intercept the most inspiring views with disgusting portraiture in color of stage and circus brutalities; barn sides painted black, proclaim, in colossal saffron letters, the virtues of potassium iodide under the pseudonym of sarsaparilla; and every fence rail commends to the passer-by the comforts of Dutchess trousers or the sedative effects of L. M. cough drops. Time was when the scenery and the outlook needed no protection; now there exists an organized intent to destroy both—the inalienable birthright of the community, with the object of adding to the gains of a handful of traders."

CEMETERY NOTES.

The perpetual care fund of Elmwood cemetery, Sherbrooke, Canada, now amounts to over \$5,000, a fact considered very satisfactory by the officials, as promising that eventually all lot-owners will avail themselves of its advantages.

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The new addition to the grounds of the Riverview Cemetery Co., Wilmington, Del., are being laid out on plans designed by the superintendent, Mr. G. C. Nailor, and under his supervision. Perpetual care and lawn plan are the guiding principles.

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The work of removing the bodies from the old St. John cemetery, Clinton, Mass., is about completed. Already there have been over 3600 bodies taken up and transferred to the new cemetery in Lancaster, Mass.

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West Superior, Wis., which has until a recent date lacked somewhat for cemetery accommodation, has turned over a new leaf and is liable to have a surplus. Over six organizations have been laying plans for new cemeteries, four of which have purchased ground.

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The Ladies' Cemetery association of Grinnell, Ia., have purchased an additional 12 acres of land to be laid out and intend to move and enlarge their present greenhouse. They have found the greenhouse a profitable adjunct and besides propagating all their own plants they dispose of quite a number adding considerably to the income.

* * *

Commissions as deputy marshals have been issued to Sidney J. Hare, superintendent, and E. J. Walter, assistant superintendent, of Forest Hill cemetery, Kansas City, Mo. The necessity for these commissions arises from petty lawlessness of drivers and boys who carelessly injure shrubs and flowers in and about the cemetery. This is a suggestive bit of news which might be of benefit elsewhere.

* * *

St. Mary's cemetery, Kingston, Ontario, has been greatly developed and improved in the past year. The vault has been rebuilt, a large amount of planting done and new sections developed. More land has been added which has been laid out and partially improved under the direction of Mr. H. P. Smith, architect. The work will be proceeded with as rapidly as funds will permit.

* * *

The public demand for a crematorium in Mount Royal cemetery, Montreal, Canada, in connection with which there were legal complications touching the financial requirements, has resulted in the offer of Sir Wm. C. Macdonald to build the structure at his own expense. The offer has been accepted by the cemetery authorities and a committee has been appointed to carry the project through, work on which will be vigorously prosecuted.

* * *

The North Bergen, N. J., board of health seem determined to push the case concerning the improper interment of the victims of the North German Lloyd fire by the Flower Hill Cemetery company. The cemetery officials declare that the laws of the state board of health were complied with and repudiate the ordinances of the North Bergen board. In case of suit going against cemetery company the fines will amount to \$8,000.

The burial ground at Saltillo, Mexico, wherein are interred the remains of the 500 American soldiers who were killed in the battle of Buena Vista or died in hospital has been a neglected spot. Many of the bones have been forever lost—washed away by a stream that cuts through a corner of the original cemetery. The U. S. government has awarded the contract for the removal of the remains to the National cemetery at San Antonio, Texas, and the preliminary steps are now being taken to that end.

* * *

The annual meeting of the Newton, Mass., Cemetery association held in June was satisfactory. The sales of lots for the year amounted to \$10,003.50, and the receipts for perpetual care for the year reached \$14,739.50, being \$3,461.50 on 11 new lots and \$11,278 on old. There now remain some 200 lots not under perpetual care. Considerable money was spent during the year on maintenance and improvement. The cemetery was incorporated April 5, 1855, and purchases of land gave an area of between 30 and 35 acres; it now covers 118 ac. es.

* * *

Oakridge cemetery, Marshall, Mich., now contains an area of 55 acres, including 17 acres recently purchased and which has been laid out partly under perpetual care and on the lawn plan. It has connection with the city water supply giving ample water facilities. About one hundred lots in all are under perpetual care. At a recent meeting the cemetery board donated a fine plot of ground to the Grand Army Post upon which it is intended to erect a monument. The cemetery is in excellent condition financially and otherwise.

* * *

The cemetery association of Mitchell, S. Dak., in which the women are actively interested, is rapidly transforming the cemetery, and the contrast between the present and past is very marked. The lawn plan is being worked up to as fast as possible and among the latest improvements is a new artesian well for better water service. A neat cottage with porch and climbing vines, trees planted, avenues laid out, two flowing wells with water service throughout the grounds, are among the permanent results of the work of the association.

* * *

In the matter of perpetual care in small cemeteries, Mrs. Adelaide W. Wright, secretary Rocky Hill cemetery, Rocky Hill, Conn., informs us that some half a dozen years ago two ladies took into consideration the providing of a fund for such a purpose and formed an association called the Rocky Hill cemetery trust fund, with four men and two women as trustees, and a deposit of \$90 to start with. They have now \$1200 on deposit, mostly in sums of \$100 per lot. They consider it very successful, both from the perpetual care side and the influence it has had in the better care of the whole cemetery.

* * *

The Boston, Mass., *Record* gives the following: The most extraordinary development of the "Jim Crow" law appears in the Arlington National cemetery, located upon land formerly owned by Gen. R. E. Lee. In a remote portion a space has been set apart for the bodies of colored troops who die from wounds in battle or by the ravages of pestilence, and no white soldiers' bodies are permitted, under any circumstances, to be buried in the ground set aside for colored soldiers. This gives a great opportunity to the Virginians accused of discriminating against the colored citizens of the Old Dominion by making them ride in cars separate from the whites. They retort that Arlington cemetery is a justification of their prohibition of a mixing of the whites and blacks.

CORRESPONDENCE.

The Cottony Scale.—*Pulvinaria Innumerabilis*.

CHARLOTTE, VT., July 2, 1900.

Editor Park and Cemetery.

DEAR SIR:—I am just home from the west and while in Chicago and one or two other places near that city I noticed what I took to be a scale on the underside of the branches of the Silver Maples. It was abundant in Humboldt and Garfield parks and out at LaGrange I found it much more so. I found a trace of it up at Racine, though only a trace. I dare say this is well known to those who are familiar with such things, but as I never had seen it before I wondered if it was confined to that particular location. I could not find it on any other tree than the *Acer dasycarpum*. I looked for it up at Edgerton and Milton Junction, Wis., but did not see it there. I am anxious to know what it is and how far it has spread.

Yours truly, *F. H. Horsford.*

CHICAGO, ILLINOIS.

Pulvinaria innumerabilis is present everywhere in this part of the state. I have seen it from Waukegan to Elgin and all around Chicago. This scale insect is found usually on the soft maple, *acer dasycarpum*, and its varieties, and is therefrom also called the "cottony maple scale," but it is just as plentiful on some of the *Cratægus* species, especially on *C. tomentosa* and *coccinea*; it also infests the ash-leaved maple, *acer negundo*, and I have seen it on the honey locust, *gleditchia triacanthus* and *G. enermis*. This louse first settles on the leaves and later migrates to the twigs where it is easily noticed by the waxy or cottony egg mass. The proper time to fight it is at its early stage, June, and can be done by spraying with kerosene emulsion. Its natural enemy is a beetle belonging to the lady-bug section and is found at work in the egg mass quite frequently.

James Jensen.

MILWAUKEE, WIS.

The Cottony Maple scale, *pulvinaria innumerabilis*, made its appearance in Milwaukee two years ago and did considerable damage last summer, in many cases causing the death of the tree attacked. This summer it does not seem to be so bad. Its attacks as far as I have observed are confined to the soft or silver maple. Remedy, spraying with kerosene emulsion. Efforts should be made to stamp it out.

J. Currie.

KANSAS CITY, MO.

We have had no trouble this year from the maple bark louse or cottony scale but had considerable last year. Our great pest this year is the green-striped maple worm, *anisota rubicunda*. Many large maples are entirely stripped of leaves and parts of our grounds look like the fall of the year.

Sid. J. Hare.

CHICAGO, ILL.

The scale is a very large one about $\frac{1}{4}$ inch across. We find a few scattered specimens on all our silver maples. It is not abundant but is well distributed as nearly every tree has a few. A somewhat superficial search has failed to locate it on the Norways or any other tree.

W. N. Rudd.

* * *

Azaleas.

PHILADELPHIA, PA., July 27, 1900

Editor Park and Cemetery.

DEAR SIR:—It was a surprise to me to read in Mr. Jensen's notes on azaleas that the Ghent varieties "are rarely seen in parks and gardens. One reason for this is, of course, their

tenderness, which at present precludes their adaptability to the northern parts of the middle states." Isn't this a little misleading? The general impression is that Ghent azaleas are anything but tender. My own observations are that they stand 10° to 15° below zero without any injury whatever. Although there are doubtless exposed situations where they would not thrive, nursery firms in Pennsylvania have sent them to customers in all parts of the country for many years, with no complaint of their lack of hardiness.

J. M.

* * *

Planting Single Graves.

NEW YORK, July 30, 1900.

Editor Park and Cemetery.

DEAR SIR:—I think Mr. Rudd is crowding me a little unkindly when he limits my planting of perennials, annuals and bushes to "a grave space one and one-half by four feet." This is surely gardening or landscape gardening on an uncomfortably small scale, and extreme cases like this are hardly fair tests of the value of general suggestions such as I made in my article.

The true solution of the problem of planting very small cemetery lots is probably to include a number of them in one scheme of treatment. If they must be treated separately, they may be planted even with bedding plants without arranging them into stars or anchors or floorcloth patterns. As for the "white or delicate pink geranium" that is merely a matter of taste. If Mr. Rudd, after looking with cleared eyes on the annuals and perennials, prefers his geranium, I cannot dispute his right to do so. For my part, I would prefer most of the annuals and perennials that do not grow too tall and last a reasonably long time in bloom. If I am asked to name any particular one, the first that occurs to me is dwarf nasturtiums.

H. A. Caparn.

NOTES.

Plans have been filed with the commissioner of the department of buildings, Borough of Queens, Brooklyn, N. Y., for a crematory in Long Island city. The building is to be 40x49 feet with an incineration chamber 25x16 feet, and it will cost \$20,000.

* * *

Competitive plans for the aquarium building to be built by the board of park commissioners of Detroit, Mich., will be received by that body until October 15, and the jury of architects to award the prize will have until October 25 for their decision. With all this it is not expected that actual work will begin before next spring.

* * *

Mr. A. H. Allen, of Red Wing, Minn., who has given the subject of country cemeteries much attention, says in the local newspaper: "The first great need of the country cemetery is organization of citizens for the purpose of improvement. The next is the adoption of a predetermined effort to improve. The advantages accruing from these successive steps are too self-evident to need explanation. The clearing out of weeds and objectionable accumulations, of vegetable debris, the mending of roads and paths, the mowing of grass where it is worth saving and the sowing of it to lawn surface, are among the first steps to renovate the country burial ground. Then might follow the planting of shade and memorial trees, the filling in of exposed and vacant places with appropriate shrubs and the planting of vines and trailers to embellish the boundary fences. With the improvements carried so far it might be a good time to formulate and adopt rules looking to the preservation of what had been done as well as the continued care of the grounds by the lot owners and all interested."

SELECTED NOTES AND EXTRACTS.

Clothilde Soupert Rose.

The following interesting communication relating to the Clothilde Soupert rose, recently referred to in our "Seasonable Suggestions," will be read with great interest. The lady who sends them is a well-known enthusiastic horticulturist. Commendation of her treatment of the rose bed is unnecessary. Her success proves it to be just what this grand rose requires:

CROWNSPOINT, IND., July 1st, 1900.

MR. MEEHAN,

DEAR SIR:—Have just been reading your "Seasonable Suggestions" in PARK AND CEMETERY for June, where you speak of the Clothilde Soupert rose for cemetery planting and describe it as "hardy from New York southward,"—so I want to report to you that we have a small bed of Clothilde Soupert roses in our cemetery lot here, which has been a great success for the past five years. The bed is, perhaps, 4x5 feet and contains 18 plants and is placed east of the family monument, which gives a little protection from the drying west winds. We observe the fine t roses to be nearest the stone and from the first of June until November it is a sheet of bloom. The care given it is to cut the plants down in fall and cover with eight inches of manure. The finest of the manure is left for a mulch in summer and the bed kept weeded and watered and two or three plants replaced in spring—the corner ones are apt to winter kill. If the winter proves unusually severe some tar paper is added. The cemetery is some feet higher than the town and so windswept that it is difficult to keep even geraniums there growing thriftily. It is also the custom to raise the lots 6 or 8 inches. Perhaps because of the naturally heavy clay soil, and I ascribe the success of this rose bed to the added good black soil and the drainage given by the raised lot, and, I may justly say, that in spite of these inartistic raised lots our cemetery is the best kept small one that I have ever seen. Northern Indiana is not by any means a paradise for rose lovers and growers and we find this Clothilde Soupert rose the best one rose to grow, the hardiest and freest ever blooming rose.

Yours truly, B.

* * *

Fertilizers.

An interesting note on the relative money value of chemicals and horse manure is the following from *The Florists' Exchange*: In reply to your enquiry of a few days since, which reads as

follows: "Can there be furnished in 100 pounds of chemicals, at a cost not exceeding \$3, as much nitrogen, phosphoric acid and potash as is contained in one ton of horse manure? Signed, Market Gardener," we would say that a ton of good horse manure contains about 12 pounds of nitrogen, 6 pounds of phosphoric acid and 12 pounds of potash. At present market prices of chemicals, these amounts of plant food are worth about \$2.50, provided we do not take into consideration the question of availability. For \$3 we could purchase the following amount of plant food: 15 pounds of nitrogen in the form of nitrate of soda, 8 pounds of available phosphoric acid in the form of acid phosphate and 16 pounds of actual potash in the form of muriate of potash.—L. L. VanSlyke, Chemist, New York Agricultural Experiment Station.

* * *

Hardy Evergreens.

When in search of evergreens particularly hardy and yet very choice, do not overlook the Colorado Blue Spruce. This native inhabitant of the Rocky Mountains endures the very coldest temperatures, and when well established will make one of the prettiest decorative evergreens, in color and form, that can be desired. It grows just rapidly enough to avoid an unnatural compactness, yet always maintains a regular, symmetrical growth that makes it prominent among other evergreens. Seedlings yield a great variation in color, from a light green to a bright steel-blue. Grafted specimens, secured from trees of the best color, are the best to obtain. The arbor vitae is a commoner tree, though the many varieties offer ample room for choice of pretty and desirable kinds. But it is perfectly hardy and thrives almost anywhere except in shade.—*Meehan's Monthly for August*,

* * *

Flowers as Mental Healers.

The statement, credited to the head of the House of Correction in Chicago, that he is convinced that women misdemeanants may be reformed by being taught to cultivate roses, is based upon sound psychological principles, and is likely to lead to something practical and valuable. One who has observed the effect on his own mind of the cultivation of plants and flowers cannot have failed to perceive its quieting, healing, restorative nature. Excitement, agitation, anxiety diminish when attention is drawn away from one's self to any beautiful object, especially if

it be a living, growing beauty. Count de Charney's plant, "Picciola," in Sairtine's beautiful tale, growing up between the stones of the prison yard, kept from insanity and despair a mind that would otherwise have been wrecked and lost. The story is not without its suggestion of what close contact with life in its lower and simpler forms may do for a soul that is shattered and unstrung through contact with the rough world of sin and care and sorrow. Yes; set the misdemeanants cultivating roses; give the insane a taste of the joy and sanity of contact with Nature; put a plant in the window of the sick-room; let all who are broken down in body, mind or soul feel the touch of the healing, restorative forces that clothe the world with health and beauty.—*From Vick's Magazine*.

* * *

One is apt to neglect the permanent plants and trees about the place, and their special requirements are more easily ascertained now than at any other time. A shrub that has recently flowered shows the older twigs inclined to be sluggish, while there are young sprouts trying to make their way to light and form blooming branches for next season. Take a sharp knife and cut the old branches completely out. As a rule well grown branches will bloom for three years and the four years' wood should be cut out each July. Careful observation will, however, induce you to make exceptions to any rule.—*C. B. W. in The American Florist*.

* * *

Deutzia Crenata Flore Pleno.

This double-flowered form of the large growing Japanese *Deutzia crenata* is a delightful shrub, and well worthy of associating with its near relatives, the Philadelphuses, flowering as it does at much the same time as some of them. When growing freely and in the shape of large bush some six feet or so in height, few shrubs are more attractive than this. There are two double-flowered forms of this *Deutzia*—one in which the blossoms are wholly white, which is sometimes known as candidissima, and also as *Pride of Rochester*; and the second, whose blooms are tinged on the exterior with purple, which feature is decidedly pronounced in the bud state, almost disappearing when fully expanded. This, which is generally known as *extus purpurea*, is a decided break from the pure white flowers of most of its immediate allies. Beside these forms, distinguished by their floral differences, there is a distinct variegated leaved variety, grown under the names of *variegata* and *punctata*. In this the leaves are peculiar with white and green in about equal proportions.—*The Garden, London*.



ESTABLISHED 1890.

OBJECT: To advance Art-out-of-Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

CONTRIBUTIONS: Subscribers and others will materially assist in disseminating information of peculiar interest to those engaged in landscape gardening, tree planting, park and cemetery development, etc., by sending early information of events that may come under their observation.

DISCUSSIONS of subjects pertinent to these columns by persons practically acquainted with them, are especially desired.

ANNUAL REPORTS of Parks, Cemeteries, Horticultural, Local Improvement and similar societies are solicited.

PHOTOGRAPHS or sketches of specimen trees, new or little known trees and shrubs, landscape effects, entrances, buildings, etc., are solicited.

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ASSOCIATION OF AMERICAN CEMETERY
Superintendents: President, Wm. Stone, Pine Grove, Lynn, Mass.; Vice-President, George M. Painter, West Laurel Hill, Philadelphia; Secretary and Treasurer, H. Wilson Ross, Newton Centre, Mass.

The Fourteenth Annual Convention will be held at Cleveland, O., September 11, 12 and 13.

THE AMERICAN PARK AND OUT-DOOR ART
Association: President, L. E. Holden, Cleveland, O.; Secretary, Warren H. Manning, Tremont Building, Boston, Mass.; Treasurer, O. C. Simonds, Chicago.

The Fifth Annual Convention of the Association will be held at Milwaukee, Wis., June, 1901.

Personal.

The many friends and acquaintances of Mr. H. Wilson Ross, Secretary and Treasurer A. A. C. S., Newton Centre, Mass., will join with us in expressing condolence with Mr. Ross in his recent bereavement. On July 22, his only child, a boy, nearly 4 years old, departed this life. Such a break in the home circle appeals to all and calls forth profound sympathy.

John C. Olmsted, of Olmsted Bros., landscape architects of Boston, Mass., prepared the plans and will give attention to the development of the new city park of Watertown, N. Y.

The Tussock moth is busy in Detroit, Michigan, devouring the leaves of the shade trees, and Supt. Coryell of the Park Commission recommends, as the best thing that can be done, that the white blotches on the trunks and large limbs of the trees be scraped off.

PARK AND CEMETERY.

Society of American Florists.—Department of Plant Registration.

M. H. Walsh, Wood's Holl, Mass., registers new rose "Debutants," a seedling of Wichuraiana crossed with Baroness Rothschilds; flowers pink, double, fragrant, produced in profuse clusters. A climbing rose of unquestioned hardiness. The same gentleman also registers new rambler rose, "Sweetheart," a cross between "Wichuraiana" and "Bridesmaid"; flowers double, 2½ inches in diameter, borne in profuse clusters. The buds are a beautiful pink; the expanded flowers white, very fragrant and perfectly hardy. *Wm. J. Stewart, Secretary.*

Books, Reports, Etc., Received.

Cyclopedia of American Horticulture, comprising suggestions for cultivation of horticultural plants. Descriptions of the species of fruits, vegetables, flowers and ornamental plants sold in the United States and Canada, together with geographical and biographical sketches. By L. H. Bailey, Professor of Horticulture in Cornell University, assisted by Wilhelm Miller, and many expert cultivators and botanists. Illustrated with over 2000 original engravings. In four volumes, Vol. II, E-M. New York, The Macmillan Co., 66 Fifth Avenue. Price, \$5.00. Chicago, A. C. McClurg & Co.

The second volume of this work recently to hand continues the matter through its alphabetical sequence to M, and the same favorable comment expressed on the appearance of the first volume, may readily be accorded the second. It is unnecessary again to critically discuss its style, methods, or arrangement. The vast amount of matter contained in its pages and the generally excellent quality, suggests that time itself will pick the flaws and enable the editor to modify or correct as may be required any inaccuracies or blemishes that may be discovered in its practical use and application. The second volume contains some 550 pages, similar in style in all respects to the first part, except that parallel columns are adopted for indexing the specific, varietal and synonymous names of the large genera. It contains a number of lengthy articles, among which are horticulture and landscape gardening, which are treated in the manner one would be led to expect from Prof. Bailey's extended work in these branches of knowledge and practice. The undertaking of such a colossal work deserves success in all respects, and this second volume emphasizes the impression that it is one which gives promise of immense value to the horticultural interests and their progress in the United States.

THE CENTURY BOOK OF GARDENING. A Comprehensive Work for every Lover of the Garden. Edited by E. T. Cook, London: "Country Life," Covent Garden, W. C., and George Newnes, Ltd., Southampton street, Strand, W. C.

If there could exist a human being not in love with a garden a perusal of the introduction to the Century Book of Gardening would certainly convert him. In presenting the scope of the work it introduces, it carries the reader over the many

phases of gardening in a manner so attractive that a new enthusiasm springs up at the very thought of the innumerable garden delights it suggests. The object of the work is well expressed in this same introduction: "It is to help the home gardener that this book has been prepared. Here, whether his garden be large or small, it is confidently believed that he will discover what he requires. The arrangement is simple—alphabetical wherever possible—and information is given in the simplest way and in a manner that every one can understand. The whole work of the flower, fruit and vegetable garden has been considered from the very beginning, and the laying out and draining of the land, up to the gathering of the blossoms in the borders, of fruit from the orchard or hothouses, and of the kitchen products from the useful garden beyond." One could hardly think of a thing connected with gardening that has not been touched upon and in a manner commensurate with its importance, and looking over the list of contributors one can realize in large measure its reliability. Bearing in mind the extract given above and looking through its pages the impression is established that the promises of the introduction are fully carried out, and the succession of illustrations, fine in production and carefully illustrative of the subjects represented and described or discussed, give a character to the work, not the least value of which is the faith imparted of the authentic nature of the contents. The foregoing will give an idea of its scope, but added to this it must be said that it is a large and beautiful book, scarcely a page without a worthy illustration, and although an English work, and based on English garden practice, it will far more than repay any American lover of gardens to have it to hand in his garden library.

It is appropriate, also, to mention in connection with this work the weekly publication, entitled "Country Life," issued by the same firm. It aims to cover the pleasures and duties appertaining to life in the country. A series of articles on "Gardens Old and New" are of particular interest, and the journal, while covering sports, pastimes, stock, garden work and country occupations generally, is in each department illustrated profusely and right up to date in its literary and mechanical details.

Messrs Doubleday, Page & Co. New York, are the American agents for both works.

A LITTLE TALK ABOUT MICHIGAN FORESTRY.—Michigan Forestry Commission. Charles W. Garfield, President.

This pamphlet prepared by the Michigan Forestry commission, should be a forcible stimulant to Michigan intelligence in the direction of re-foresting its denuded areas and preserving, so far as is judicious, what is left of the extraordinary forest wealth of but a comparatively few years ago. It contains a wealth of argument in the way of questions, suggestions and opinions of those of authority, and sets forth the damage that has been done and the steps to be taken to remedy the situation in a way that must be convincing. Forestry reform everywhere is the crying question of the hour, and Mr. Garfield's pamphlet is a vigorous and instructive effort in a right direction.

Books, Reports, Etc., Received.

THE PICTURESQUE PARKS OF HARTFORD, with Sketch of the Smaller Pleasure Grounds of the City. The principal points of interest, their beautiful scenery, history and development. Published by the American Book Exchange, Hartford, Conn.

This book of 128 pages in pamphlet form gives a very interesting account of the parks of Hartford, their present condition, establishment and development, as well as that of many points of interest of the beautiful city. It is illustrated on every page in half tones and forms a beautiful souvenir.

A SUMMER'S WORK ABROAD in School Grounds, Home Grounds, Play Grounds, Parks and Forests, comprises Bulletin No. 62 of the Department of Agriculture, Pennsylvania.

It is the record of observations of Miss Mira Lloyd Dock, of Harrisburg, Pa., who was delegated by the State Federation of Pennsylvania Women and the Parks association of Philadelphia to represent them at the International Congress of Women held in London in 1899. It is a valuable contribution to the literature pertaining to out-door art and improvement generally, and covers a very interesting itinerary with the various matters of interest encountered and examined enroute. Miss Dock is well-known throughout the country as a public speaker and lecturer on the natural sciences, particularly as they apply to the present movement in relation to school grounds, home grounds, forests, parks, and improvement associations. The bulletin is well illustrated and contains some invaluable suggestive material for immediate application.

PHOTOGRAPHING FLOWERS AND TREES.

The subject matter of the April issue of *The Photo-Miniature*, a monthly magazine of photographic information published by Tennant & Ward, New York City, was the photographing of Flowers and Trees. This particular branch of photographic application is an attractive one though generally disappointing in its results to the average amateur, the reason for which is plainly suggested by the exquisite half tones given in connection with the text. It requires special study, some ingenuity in adapting means to an end, plenty of patience and intelligent application. The subject is admirably covered in the magazine. The little book was prepared by Mr. J. Horace McFarland of Harrisburg, Pa., well known in connection with florists illustrative matter, and the reader or photographic student will be more than repaid the 25 cents it costs to obtain it.

"Restland," Mendota City cemetery, Mendota, Ill. Rules, regulations and by-laws adopted July 1, 1899. Illustrated. A perusal of the pamphlet leads to the conclusion that these rules and regulations are well adapted to a small place and are to be commended.

Department of Agriculture, Commonwealth of Pennsylvania, Harrisburg. Bulletins: 62. A Summer's Work Abroad. By Mira Lloyd Dock. 63. A Course in Nature Study for use in the Public Schools. By Louise Miller. 64. Nature Study Reference Library for use in Public Schools. Arranged by Mira Lloyd Dock. 65. Farmer's Library List. Compiled by Mira Lloyd Dock.

Transactions of the Illinois State Horticultural Society for the year 1899. Including the proceedings of the 44th annual meeting and of the district of other societies. New series, Vol. XXXIII. L. R. Bryant, Secretary, Princeton, Ill. Besides a valuable fund of matter on fruit and orchard work, with report from the many experiment stations of the state, there are several papers and discussions on the improvement of home grounds, especially in relation to the farm. This is a subject of growing importance and bears a close relation to the success of the enterprise which centers about the home. It is therefore a subject that should be given more attention by our State Horticultural societies.

Maine Agricultural Experiment Station. Bulletin No. 62. An account of the origin and development of the station. No. 63. Feeding Stuff Inspection.—Program of Farmers' Institute.

Description and Views, Rules and Regulations, etc., of Graceland cemetery, Angora, Philadelphia. This is a new cemetery of some 90 acres, lying just adjoining the city line of Philadelphia. It is developed and conducted on the modern lawn plan, and is under the charge of Mr. John G. Barker, superintendent.

First annual report of the Nebraska Park and Forest association. Meeting held in Lincoln, Nebraska, January 10, 1900.

First annual report of the Superintendent of Commons, of the city of Lowell, Mass., for the year ending Dec. 31, 1899. Beautifully illustrated and giving a condensed description of all the parks of Lowell.

The Tulip Craze.

About the middle of the seventeenth century the tulip became known in Ger-

many, and a scientist named Gessner gives the first description of this flower. First only the yellow variety was known, and then other colors were produced by crossing. The Dutch, particularly the citizens of Haarlem, produced the most wonderful varieties of this flower and obtained enormous prices for them.

It 1634 the trade in tulips assumed a peculiar turn. It degenerated into a sort of a game of chance, so that in 1673 the authorities felt called upon to interfere and to issue edicts against extravagance in tulips, as they formerly had against trains and lances. This interference would seem to be justified if one reads that in 1606 a single flower of this sort, called the Viceori, was paid for with two cargoes of wheat, four cargoes of rye, four fat oxen, eight fat hogs, 12 fat sheep, two casks of wine, four barrels of beer, two tons of butter, 1,000 pounds of cheese, a complete bed, a suit of clothes and a silver tankard.

Another bulb, the Semper Augustus, was paid for with 4,600 gold guilders and a coach with a double team of horses. In Haarlem the tulip craze reached its height in the decade from 1630 to 1640, when a price of 12,000 gold guilders (about \$9,000 American money) is recorded for a single bulb.

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IRON GRAVE AND LOT MARKERS. PATENT APPLIED FOR.



The annexed picture represents a new idea of a Grave or Burial Lot Marker, which we are introducing to the Superintendents of the Cemeteries throughout the country, to be used by them for recording the graves or burial lots under their charge.

This Marker is made of cast iron, nicely galvanized to prevent rusting. The shank is 17 inches long, the top 6½ inches long and 4½ inches wide. Each Marker bears a number and can have a different number upon it, or as many can be made having the same number as there are tiers or sections in your cemetery. This Marker is driven into the ground, having its top flush, to allow a lawn mower to cut the grass completely. Our new Marker is very easily put into the ground and is easily found. The barb on the end of the shank prevents the frost from pushing the Marker up. This is a great improvement over the old fashioned stone, slate or wooden post marker, which are more generally used, and which, by sticking up out of the ground, detract greatly from the beauty of your cemetery. We believe you will find this cheaper and better adapted for cemetery use than any now in the market. Should you be interested in this, we should be glad to quote you prices for a quantity. **SARGENT & CO., New Haven, Conn.**

NEW HAVEN, CONN., August 2, 1900.

MESSRS. SARGENT & CO., New Haven, Conn.

Gentlemen:—We have recently adopted this Grave or Burial Lot Marker in our cemetery and find them to be a very great improvement over anything we have seen. Our method of putting them into the ground is by making a hole twenty inches deep with a 1¼ inch pipe, then the marker is very easily put into its position. We very gladly recommend its use in all cemeteries as an aid for recording and marking burial lots. We have been investigating grave markers for over three years and find this one the most practical and best to be had. Very truly yours,

(Signed) EDWARD C. BEECHER, Supt. New Haven City Burial Grounds.

EPITAPHS.

The following epitaph was taken from an old tombstone at Winslow, Me.:

"Here lies the body of Richard Thomas, An Englishman by birth, A whig of '76. By occupation a cooper, Now good for worms. Like an old rumpuncheon marked, numbered and shooed, He will be raised again and finished by his creators."

He died Sept. 28, 1824, age 75. America my adopted country. My best advice to you is this: "Take care of your liberties."

At St. Marylebone, England—

QUEEN ELIZABETH

(By Laureate Skelton.)

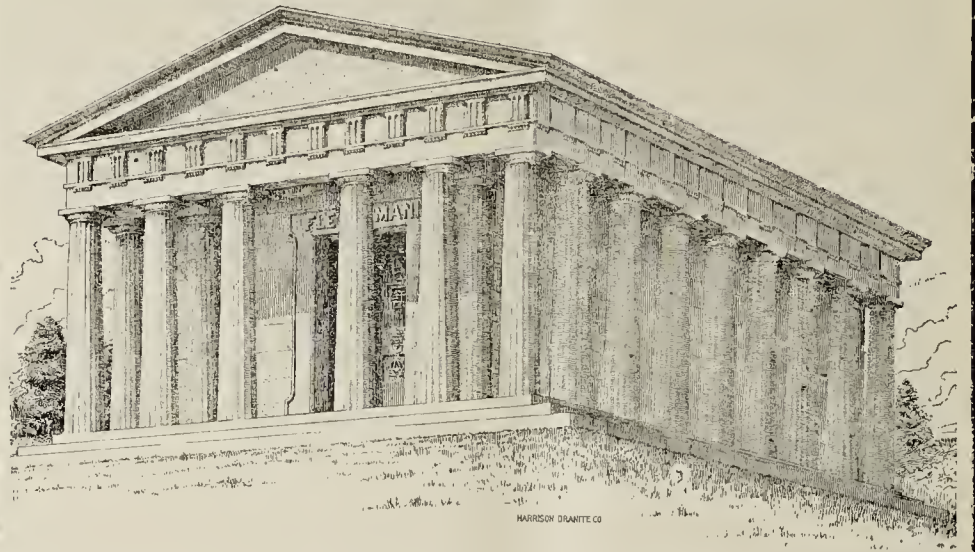
Fame blow aloud, and to the world proclaim.

There never ruled such a royal dame! The word of God was ever her delight, In it she meditated day and night. Spain's rod, Rome's ruin, Netherland's relief, Earth's joy, England's gem, world's wonder.

Nature's chief. She was and is, what can there more be said, On earth the chief, in heaven the second made.

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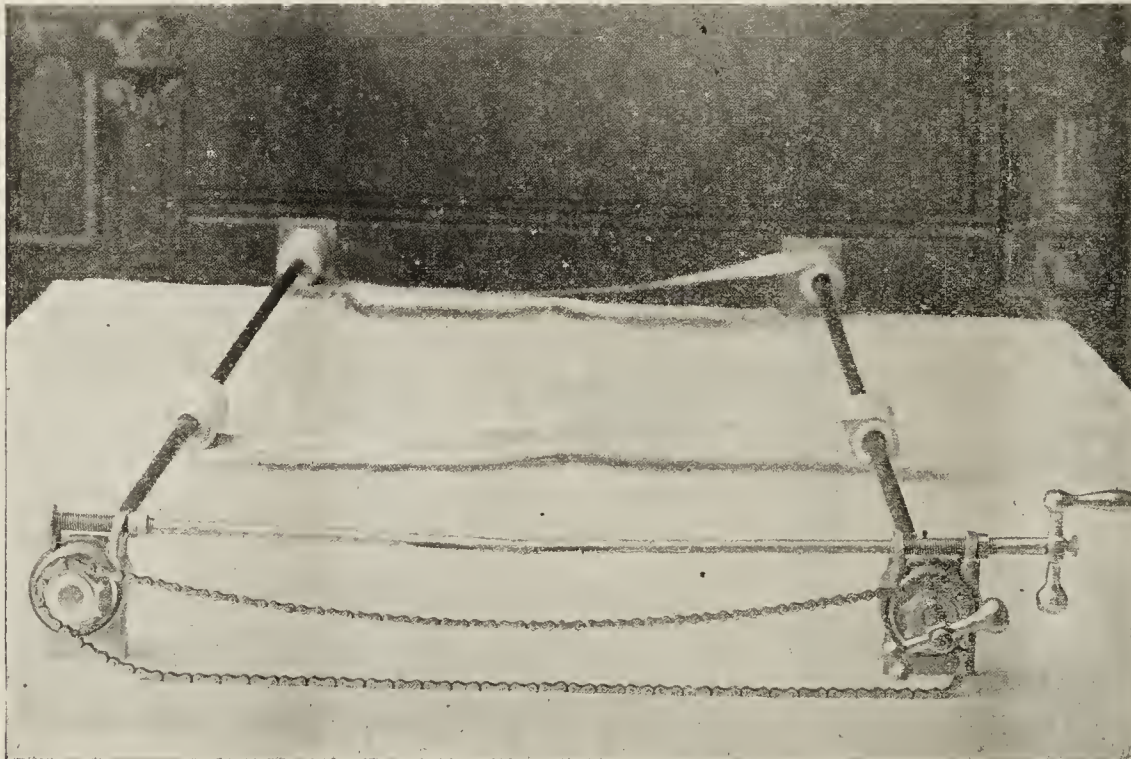
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Monmouth, Ill., May 31, 1900. Folding Casket Lowering Device Works, Ovid, Mich.

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PARK AND CEMETERY

and Landscape Gardening.

VOL. X. Chicago, September, 1900. NO. 7

CONTENTS.

EDITORIAL—The Cleveland Convention of the A. A. C. S.—Forestry in our Cemeteries—Cemetery Monuments—The Galveston Disaster—Small Parks—Municipal Art.....	149, 150
*Annual Convention of Cemetery Superintendents at Cleveland, O.....	151
*Sunday Funerals—Funeral Car.....	157
*Modern Drives for Cemeteries.....	158
The New York Convention of the Society of American Florists.....	159
*The Symmetrical and the Natural Flower Garden.....	160
Seasonable Suggestions.....	161
A Universal Flower.....	162
Improvement Associations.....	163
“Fragments”.....	164
Notes Chiefly Historical on London Burial Places.—IV....	165
*Garden Plants—Their Geography, LVII.....	167
Correspondence.....	168
Park Notes.....	169
Cemetery Notes.....	170
Selected Notes and Extracts.....	171
Reviews of Books, Reports, etc.....	172
<i>*Illustrated.</i>	

THE CLEVELAND CONVENTION OF THE A. A. C. S. That the influence of the Association of American Cemetery Superintendents, through its annual gatherings and the published reports of its discussions, has been far reaching in extent and beneficent in character is made more apparent with each recurring convention. With the passing of the years, the seed that has been sown has resulted in a gradual change in both our city and country cemeteries. The gloomy aspect of the old time burying ground, with its evidences of neglect on every hand has been changed and offers more cheerful and inspiring surroundings. The public has responded to the suggestion that a cemetery should be considered as a whole and not as an aggregation of individual holdings, which has resulted in the passing of unsightly and unnecessary inclosures of every description, has induced a more careful consideration of the character and size of memorials, a disposition to lower the time honored grave mound to less conspicuous proportions, and a willingness to dispense with other features no longer considered as essential in a modern cemetery. From the very nature of things such reforms particularly where the unwritten law of custom has been so firmly established, must be gradual, but

the “leaven” introduced by the Association of American Cemetery Superintendents is at “work” dispelling superstitions, unsanitary and inartistic ideas and giving place to a desire for better things in “God’s acre beautiful.”

FORESTRY IN OUR CEMETERIES.

In a paper read before the recent convention of the Association of American Cemetery Superintendents, Mr. M. Horvath suggested the appropriateness and desirability of practicing a little aesthetic forestry in our cemeteries, and the suggestion is a good one. There are, however, many points of a practical nature, practical in so far as the art requirements go, that must be considered both in the question of establishment and care of any tracts of ornamental forest land that may be set apart in the cemetery. The introduction of such an innovation, which, by the way, is suggested by the very trend of the higher thought of today, involves the exercise of both taste, judgment, and moreover, knowledge. The former faculties are more or less distributed among us and the latter in these days can be acquired by patience and industry, seeing the wealth of literature we have on almost all subjects. The tract of natural forest in the cemetery would be one of the most attractive features possible of acquirement in God’s acre. It would undoubtedly impart a more profound sense of the obligations of thought and act in regard to our burial places, and in a practical way would invite a larger share of public attention to the cemetery, thereby ensuring more active sympathy in its improvement and perpetual preservation.

* * *

Another matter of somewhat startling significance was also presented in the form of a paper on “Cemetery Monuments,” by Mr. H. R. Hatch, president of the Lake View cemetery, Cleveland, in which the practice of erecting monuments was deprecated except in cases of persons whose public life suggested lessons proper to be emphasized by monumental effort. Attention was also called to the old established practices of burial, etc., which do not conform to present ideas, and therefore are stumbling-blocks in the way of creating the best conditions throughout our cemeteries. Anyone

giving thought to the monumental question as it relates to the natural features involved in the new order of cemetery improvement, will readily come to the conclusion that too much stonework whether in monuments or otherwise is opposed to the spirit of landscape art. So to prosecute a campaign of education on the subject of monuments, with a view of teaching how in their multiplicity they are comparatively valueless, and, so far as the sentiment is concerned which moved their erection, how short-lived it is, would appear to be a proper course to pursue. It will take much time to create reaction on the lines suggested in the paper, but the landscape cemetery will never attain its highest perfection until the monument accentuates and does not overwhelm the outlook, nor until the monument is erected to teach great lessons, and is to this end designed on such lines of high art, that nature and art shall be made to combine their beauties to the uplifting of the observer. Then the desire to perpetuate the cemetery will be an inheritance of increasing import as the generations succeed to the trust.

THE GALVESTON DISASTER.

The shocking and terrible disaster which has overtaken the city of Galveston has touched the chords of sympathy throughout the world, but horrible and devastating as it has been, it is evident that in the undercurrent of thought there has lurked a premonition of some such calamity. It is certain that had it been possible for scientific knowledge to have been applied to the building of Galveston, the houses, which have proved to have been built upon sand, in name as well as in fact, would have been constructed more substantially in their lower stories. In the matter of rebuilding the city with its important business accessories, the question of more substantial construction is the controlling one in the minds of those discussing the situation. Had the foundation stories of the buildings been adapted to the peculiar conditions of the site, whatever the hurricane may have done in the way of destruction, it is more than probable that that due to the encroachment of the sea would have been trifling in comparison.

SMALL PARKS. The necessity of more breathing spaces in our larger cities, and the difficulty of obtaining appropriate sites at reasonable outlay, has developed many suggestions to overcome this snag in the course of their establishment. The obstacles encountered in the older cities should serve as a most powerful incentive to our growing towns to secure or set apart while it is yet time, suitable areas in appropriate situations to meet the demand for small parks when the proper time comes. In

Chicago the authorities are having quite a serious time in finding such sites and it is possible they may have to resort to expedients to serve temporary purposes. In this connection it might be said that had the grounds surrounding the public schools been improved and cared for in the past as should have been the case, conditions would have been present in the city, which by proper regulations could have readily served to a limited extent such temporary needs. The difficulty in the choice of sites, a serious part of the problem, bids fair to be solved satisfactorily, the committee on small parks having requested the co-operation of the heads of the several "settlements" and other workers in the crowded districts. Such co-operation promises excellent results and with little opportunity for quibbling. A number of property owners have also offered the use of vacant property for a specified time under conditions, almost free of cost to the city, and it may readily be concluded that in one way or the other the now well understood necessity of small parks and play spots for the overcharged districts will be met in one or the other avenues opening up for immediate results.

MUNICIPAL ART.

The efforts of the sculptors and architects to give to the people some examples of municipal art for special occasions, have recently been seen in New York, Philadelphia and Chicago. The Dewey Arch in New York, a splendid suggestion as to the power of American art, opened the series, which recently culminated in the Court of Honor, in Chicago, erected in greeting of the Grand Army of the Republic at its encampment. The architects succeeded in producing two arches, which were markedly chaste in design and effectively harmonious in proportion and detail, and they were accentuated by groups of sculpture, whose motives appealed both to the public and to the veterans of the civil war. As with the Dewey arch in New York, a strong sentiment prevails to perpetuate the arches in more durable material at some prominent locality of the city, and the idea is an excellent one; but the experience in the New York project does not augur well for the erection of such costly decorative work at present. Art is young in this country, and there is so much to be done to create a public interest in it. Until that time comes there must be many available and highly laudatory schemes exploited and postponed. The time is coming, however, and that rapidly when our cities will not only be noted for refinement in architecture and the homes, but in the larger features of municipal decoration. Art is making rapid headway on our public buildings, it will soon become more familiar on our streets.

ANNUAL CONVENTION OF CEMETERY SUPERINTENDENTS.

The Fourteenth Annual Convention of the Association of American Cemetery Superintendents held at Cleveland, O., September 11, 12 and 13, 1900, was a thoroughly enjoyable occasion, to



CHAPEL AND RECEIVING VAULT, LAKE VIEW CEMETERY, CLEVELAND, O.

which fair weather, a large attendance, papers of a high order and diversified entertainment were contributory factors. For the first time in the history of the organization the attendance was of sufficient numbers to justify the railroads in granting the reduced rates, a privilege that will have a tendency to increase the attendance at future conventions and greatly extend the usefulness of this most commendable organization.

President William Stone of Lynn, Mass., and Secretary H. Wilson Ross, Newton Center, Mass., officiated in their respective capacities at the sessions which were held in the finely appointed Assembly rooms at the Hollenden hotel. In the absence of Mayor Farley his representative Mr. M. P. Excell extended a cordial welcome to the city.

President Stone's annual address was as follows:

PRESIDENT'S ADDRESS.

Ladies and Gentlemen of the Association of American Cemetery Superintendents:

Fourteen years ago this association was organized. Annually since then we have met in various cities from the Atlantic coast to the western city of Omaha.

We meet today in the city of Cleveland, having the same object in view that inspired us to organize, the beautifying of the most sacred of spots, our cemeteries. Every superintendent that has attended our previous meetings, I will venture to say, has been benefited in the highest degree.

Every subject pertaining to cemeteries has been discussed. While in some instances a different opinion has existed, the one great feature conducive to the welfare of any organization has predominated, "harmony."

Since first we met many new cemeteries in various parts of our country have been incorporated, and this association has been the means of giving them much good advice.

Two subjects of the greatest importance has been uppermost in our minds, the perpetual care system and the lawn

system. Today the perpetual care system is generally adopted in all our cemeteries, and it is safe to say, that had this organization not existed, the old way of care would have continued for years to come in many cemeteries. The lawn plan as years go by is more noticeable in all our cemeteries. Fences around lots are gradually disappearing, and when stone curbing and high corner posts are no more, much will be done to enhance the beauty of our grounds.

I find in Downing's Rural Essays, under date of July, 1849, the following, in referring to our three leading cemeteries of that day, Mt. Auburn, Greenwood and Laurel Hill: "Few things are perfect, and beautiful and interesting as our cemeteries now are, more beautiful and interesting than anything of the same kind abroad, we cannot pass by one feature in all, marked by the most violent taste. We mean the hideous ironmongery which they all more or less display. Why if the separate lots must be inclosed with iron railings, the railings should not be of simple and unobstructive pattern we are wholly unable to conceive. As we now see them by far the greater part are so ugly as to be positive blots on the beauty of the scene. Fantastic conceits and gimcracks in iron might be pardonable as adornments of the balustrades of a circus or a Temple of Comus, but how reasonable beings can tolerate them as inclosures to the quiet grave of a family, and in such scenes of sylvan beauty is mountain high above our comprehension." This was the opinion of that celebrated landscape artist who was far in advance of the times.

Uncouth inscriptions on monuments and headstones are no more. Raised mounds over graves mar the beauty in many cemeteries, and no doubt will disappear with other objectionable features.

At previous conventions we have discussed the matter of Sunday burials. I am still of the opinion that too much work is done in many of the cemeteries on that day, and there is room for reform in this direction. I think above all places Sunday should be observed in a cemetery. Some of the superintendents say they are obliged to sell lots because there are rival cemeteries, and if they refuse to sell, the party will go to another cemetery. An understanding between the management of the cemeteries could no doubt be brought about and a reform made in this direction. If the office is kept open for business it invites business. If offices were kept open in our municipal buildings, Sunday would be a busy day; and then we say we are obliged to bury because people want it done. In



OFFICE BUILDING, LAKE VIEW CEMETERY, CLEVELAND, O.

my own case since stopping Sunday burials, it has lessened Sunday funerals, because parties that wanted an immediate burial have the funeral Saturday or Monday. Bodies are kept for several days in order to have a Sunday burial where burials are made on that day.

In the matter of Sunday funerals it seems to be a subject

for the clergy and the undertakers to discuss. It is a busy day for the clergy otherwise, and it seems as if a united action on their part would do much towards lessening Sunday funerals.

I am aware that we are many miles apart, and that people and customs are different. What could be done in an eastern city perhaps could not be done in a western or southern city and vice versa. We can, however, study reforms in our own section and bring them about if we can. Sunday is observed in the cemetery over which I have charge, and I wish it could be observed in all.

I should feel remiss in my duty if I said nothing about flowers. I consider them as much identified with a cemetery as the ground itself. They speak in a sermon, though silent is far reaching, reaching to the inmost recesses of the heart. We carry them to the sick room and welcome hands receive them, and the lesson is friendship; we place them upon the silent casket and the living are comforted, and the lesson is sympathy; loving hands carry them to the cemetery and place them upon the grave, and the lesson is love and devotion.

There is a sermon in the trees and shrubs, the grass and the mighty rocks, but the sermon of flowers softens our very nature. They seem to bring us more in touch with the departed and they rob the cemetery of much gloom.

In my own experience I am satisfied that a public garden, so called, connected with a cemetery, where a great variety of plants are cultivated, together with aquatics is very beneficial and is much appreciated if the number of visitors is a criterion. To visit the garden on the way to or from the grave has a tendency to make the visit to the cemetery more pleasant.

In studying to improve and beautify our grounds we must not overlook ourselves. Don't get careless. Our positions are of the greatest responsibility. Our lot owners place confidence in us and we should give them in return courtesy, kindness and patience. We are to meet those bowed down with sorrow, and they are in no state of mind to be met with abruptness.

A matter of great importance to us now is to increase our membership. There are many superintendents who have never attended our conventions, and perhaps the management of their cemeteries have not had the matter brought to their notice. Agents of business houses go to distant cities and abroad in the interest of the business they represent, and they return with broader and more comprehensive views of their business, and the same rule will apply to cemeteries; any man that takes an interest in the position which he occupies cannot but help being benefited by attending our conventions.

There is a future for this association. Our cemeteries will ever be held sacred, made sacred by the dust of loved ones, and the interest in the cemetery as loved ones pass away will increase. While we know that the soul has gone to the God who gave it, the ground that holds the dust will ever be held in reverence.

The annual report of the secretary and treasurer showed the association to be in a prosperous condition financially and numerically. At least twenty names were added to the roll at this meeting of new or reinstated members, making the membership approximately 180.

"Practical Management of Cemeteries" by George H. Scott, "Elmwood," River Forest, Ill., was the subject of the first paper. It emphasized the importance of employing practical managers for conducting the affairs of a cemetery; suggested the qualifications a successful superintendent must possess to meet and overcome the difficulties with

which he has to contend and showed the position to be anything but a sinecure and one that demanded a high order of intelligence, a determination of purpose, the tact of a diplomat and the patience of a Job.

Matthew P. Brazill, "Cavalry," St. Louis, Mo., treated the subject of "Art in the Modern Cemetery" in an interesting manner. He cited "Oakwoods" and "Graceland" Chicago, "Spring Grove," Cincinnati, and "Swan Point," Providence, R. I., as notable examples of the landscape gardeners art in beautifying nature. In referring to the beautiful boulder wall that surrounds "Swan Point" he said "here Nature in its most primitive form is made to subserve art, and produce a natural architecture, a pleasing substitute for the mechanical architecture that defaces the entrance of some of our cemeteries." Mr. Brazill deplored the work of the stone cutter as being too often meaningless in construction and destructive of landscape art. He agreed with the growing sentiment in favor of trees as appropriate memorials, "being beautiful specimens of God's wonderful works in nature and much more ornamental than the pagan designs that now disfigure our cemeteries."

"Some Landscape Ideas Gained in Cemeteries" was an interesting and suggestive paper by Sid. J. Hare, "Forest Hill," Kansas City, Mo. "Rocks and Graves" are conspicuous features of most cemetery landscapes but it is the disposition we make of them that adds to or detracts from our grounds. Mr. Hare emphasized the importance of landscape effects, not only to counteract the monotony of the ever present monuments but to give to the cemetery such restful features as will divert the thoughts of sad hearted visitors.

"Generalities" by a novice, was the title of a well written paper by R. F. Robertson, Los Gatos, Calif., who treated a variety of cemetery subjects in such a way as to show conclusively that he was no longer a novice in such matters.

The afternoon was devoted to visiting Calvary cemetery and other points of interest. Special electric cars, including an electric funeral car, being provided to transport the visitors. The route afforded an opportunity of seeing the Standard Oil Works and extensive Rolling Mills and Furnaces for which Cleveland is famous. Light refreshments were served on the lawn at the residence of the sexton of "Calvary," after which the cemetery was visited. Under the management of Rev. Chancellor G. F. Houck assisted by Supt. C. D. Carroll, a tract of some 160 acres of farm land about five miles from the city, is being gradually transformed into a cemetery which it is the intention to conduct on the lawn plan. The original plan was prepared

by Mr. Frank Eurich about six years ago, since which time nearly 40 acres have been improved. A waiting room at the entrance, a stone receiving



OFFICE BUILDING, RIVERSIDE CEMETERY, CLEVELAND, O.

vault, a number of good roads and other substantial improvements have been made. The undulating surface of the grounds affords an opportunity for pleasing effects in planting and which in time, will give to Cleveland a Catholic cemetery that will compare favorably with any in this country. Sunday funerals are prohibited at Calvary and in fact throughout Northern Ohio. This subject and that of the funeral car is treated in a paper by Rev. Houck which will be found elsewhere in this issue. On the return trip the grounds and spacious buildings of the Cleveland State Hospital were visited.

At the evening session the papers read were: "We will keep the Graves Green," by T. L. Ford, Knoxville, Tenn.; "Forestry in Cemeteries," by M. Horvath, the accomplished forester of the Cleveland City Parks.

In the course of his paper Mr. Horvath said: I would consider it highly desirable for every large park system or cemetery to provide some portion, where æsthetic forestry can be practised. This would add variety to the ground and make it very interesting.

Forestry in cemeteries is not a common thing, yet there are quite a few woodlawn, woodland and forest hill cemeteries, and these names suggest readily that in the cemeteries a piece of woodland, whether of natural or artificial creation is quite desirable.

If we undertake to plant a pleasure forest in connection with the cemetery, the first thing we have to do is to make a broad survey of nature's plans, follow them carefully, combining the various units, and making a complete composition. Simplicity is the plan of nature. She is doing her operations with no object in view, not even the object to please. Although nature is a great artist in her way, yet there is a good portion of the work that nature left undone, and she has to depend on man's helping hand to assist her in completing the work.

A talk entitled "Neglect and Care" illustrated with stereoptican, by J. C. Scorgie, "Mt. Auburn," Boston, Mass. Mr. Scorgie's interesting talk was on the subject of perpetual care and the method of arriving at the cost of caring for certain lots. The pictures thrown upon the screen served the double purpose of illustrating the monuments of notable

people buried in Mt. Auburn and of demonstrating the character of the lots and their accessories in certain sections in that famous cemetery. This object lesson was thoroughly appreciated. "Moving pictures" of grewsome scenes when grave yards yawn closed the evening session.

The morning session of the second day found a much larger number of members in attendance. The session was devoted to papers treating a diversity of subjects as will be seen by their titles as follows: "Tree Planting," by E. A. Sloan, "Woodland," Ironton, O.; "Proper Treatment of Cemetery Woodland," by Bellet Lawson, Sr., "River-view," Wilkes Barre, Pa.; "Use of Shrubs in Cemeteries," by O. C. Simonds, "Graceland," Chicago; "Sunday Funerals and Funeral Cars," by Rev. G. F. Houck, manager "Calvary," Cleveland, O.; "Shall we Encourage the Putting up of Monuments or Discourage Same?" by H. R. Hatch, president "Lake View Cemetery," Cleveland, O.; "Influence of our Surroundings," by Mrs. E. E. Hay, Erie, Pa. Among other things she said:

A cemetery superintendent can do much towards making the surroundings inviting and pleasant if he or she is so disposed. True we have to contend with the many tastes with which we come in contact, and endeavor to give enough variety to satisfy all without making a display that will pall upon any. In order to do this we must receive our impetus and influence from the God given "sense of the beautiful within us." We must so mix the beautiful with the useful that the former will only enhance the latter and by its very inconspicuousness yield a gentle influence.

A talk on Artificial Stone Corner Posts was given by W. N. Rudd, "Mt. Greenwood," Chicago. Mr. Rudd exhibited portions of concrete posts, such as are in use at his cemetery and explained the method of making.

The discussion of Sunday Funerals following



RECEIVING TOMB, CALVARY CEMETERY, CLEVELAND, O.

Father Houck's excellent paper showed that the practice was becoming less common and the association again placed itself on record by adopting a

resolution endorsing the sentiments expressed in the paper. It was voted to have five thousand copies of the paper printed in pamphlet form for gratuitous distribution as an educational tract.

In the course of his paper on monuments Mr. Hatch said:

"Discouraging the use of monuments is the one thing we ought to do, if we would secure the most pleasing and artistic effect of our cemetery grounds. * * * I would do away with all monuments except those of public persons, or those who have made munificent gifts to town or city. *

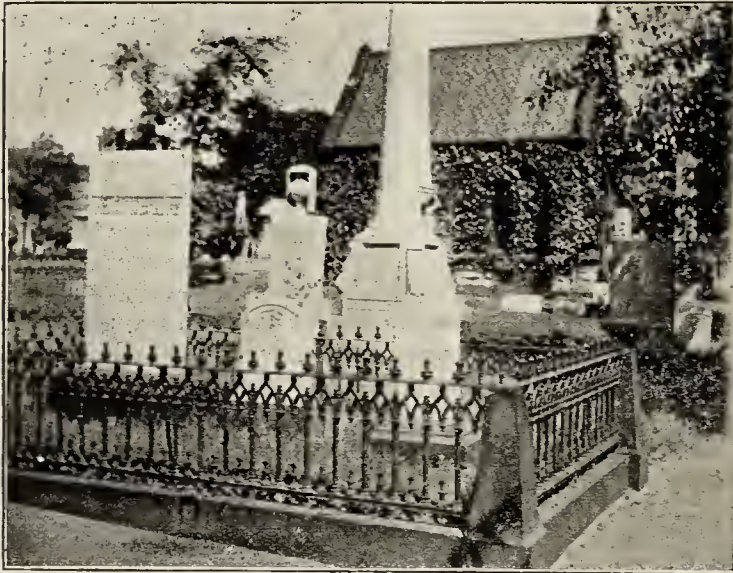
* * * Visitors to the cemetery should not be attracted by its monuments but rather by the beautiful landscape lifting the thoughts upwards to that which is immortal."

The paper provoked considerable discussion. Inconspicuous markers level with the ground or but slightly raised were strongly advocated, the judicious use of trees as memorials was recommended,

\$200,000. By courtesy of the monument trustees the visitors were allowed free admittance to the monument. It stands upon the highest knoll in the cemetery, 200 feet above the level of the lake and from its tower affords a magnificent view of Lake Erie, the City of Cleveland and surrounding country. Of the 300 acres in Lake View but little more than one-third have as yet been improved, there are now about 34 acres in lots and twice as many more in drives, lakes, etc.

A majority of the land is wooded, Beech, Elm and Maples predominating. Financial reverses have retarded the development of Lake View, but under the present efficient management there is every prospect of ultimate success.

The original plans by the lamented Adolph Strauch will be gradually worked out. Two praise-



A VIEW IN AN OLD CLEVELAND CEMETERY.

The above are a pair of contrasting views, several of which were distributed by Mr. H. R. Hatch, to illustrate his paper.



VIEW IN LAKE VIEW CEMETERY, CLEVELAND.

but this was regarded, by some as a too radical departure from the traditional cemetery.

The carriage drive in the afternoon gave the visitors an opportunity of seeing some of Cleveland's beautiful residence streets, parks and connecting parkways. The park system comprises 1,326 acres, traversed by 28 miles of roads and 32 miles of walks, abounding in natural beauties of woodland and meadow, lakeside cliffs and shaded valleys. Cleveland has been fortunate in being the recipient of much of its park lands from public spirited citizens, after whom the parks have been named, notably Gordon, Wade, Rockefeller and Ambler parks. Lake View cemetery, very appropriately named from its commanding view of the waters of Lake Erie, was reached late in the afternoon. The objective point in these beautifully undulating grounds was the monument to the martyred Garfield erected by public subscription at a cost of

worthy examples of useful memorials are to be seen here in the office building donated by Mr. H. R. Hatch, president of Lake View Cemetery Association, built at a cost of \$6,000 and the Receiving Vault and Chapel donated by Mr. J. H. Wade, one of the cemetery trustees, and designed as a memorial to his grandfather. This substantial structure of Barre granite, with an elaborate interior of marble and the most artistic glass mosaics was built at an outlay of \$140,000. A memorial window designed and made by Tiffany for this vault is now on exhibition at the Paris Exposition. The vault has a capacity for 98 caskets and when completed will be one of the finest memorials of the kind in America. Another notable memorial is that of the Rockefeller family. This is a massive shaft of Barre granite, an illustration of which appeared on these pages some time ago. The monument rises from a base 14 feet square, to a height

of 65 ft. 8 in., the shaft alone being 52 feet long and 5 feet square at butt. The burial lot contains 17,000 square feet comprising the entire width of a section and the entire end of a high knoll. The guests were treated to refreshing "grape juice" at the Garfield monument and after strolling over the well kept grounds they returned to the carriage ride back to the hotel.

At the evening session the following papers were read: "Tree Planting," by E. A. Sloan, "Woodland," Ironton, O.; "Cemetery Management and Correct Cemetery Records," by W. H. Gladden, "Fairview," New Britain, Conn.; says Mr. Gladden:

Again it may be said very truthfully that among the various professions that engage the minds of men, perhaps none require a greater variety of qualifications than the business of a cemetery superintendent, in order that he may be fully equipped for the very delicate and important duties resting upon him.

Then followed "Reminiscences of Some old Burying Grounds Abroad," by Wm. H. Barlow, president, Dale Cemetery Association, Sing Sing, N. Y.; "Modern Roads for Modern Cemetery," by W. H. Evers, County Surveyor, Cleveland, O.; "Mechanics of Water Relating to Drainage of Roads and Driveways," by G. C. Nailor, "Riverview," Wilmington, Del.; "Decoration Day, how abused and how to remedy the abuses," by Frank M. Floyd, "Evergreen," Portland, Me.; "Rise, Progress and Present Condition of the Association of our Cemetery Superintendents," by Chas. Nichols, "Fairmount," Newark, N. J. Mr. Evers paper is published in part in this issue.

At the morning session Rev. E. E. Baker expressed regret that a local paper should have referred disparagingly to the visitors in an attempt to be humorous. He commended the work of the organization and of all co-operative movements, that "work together for the mutual advancement of the home, the city and the nation. We need to magnify our work and honor and respect it, and in so doing we respect ourselves and will be respected by the community in which we live." B. H. Dorman, "Mountain Grove," Bridgeport, Conn., read a paper on "What we Gain by Attending the Annual Conventions;" G. L. Kelly, "Fairview," New Albany, Ind., related, "A Personal Experience;" George Van Atta, "Cedar Hill," Newark, O., treated the subject of "Funeral Reform," and C. D. Phipps, Franklin, Pa., read a paper in which he outlined the "Qualifications a Cemetery Superintendent Should Possess." The papers were well received, but limited time prevented any discussion.

Appropriate resolutions of respect were adopted on the death of the following late members: John

F. Boerckel, Peoria, Ill.; Burritt Chaffee, Syracuse, N. Y., and John Wilson, Marion, O.

The election of officers resulted as follows:

President, George M. Painter, "West Laurel Hill," Philadelphia, Pa.; Vice-president, Frank Eurich, "Woodward Lawn," Detroit, Mich.; Secretary and Treasurer, H. Wilson Ross, "Newton," Newton Center, Mass.

Pittsburg was selected for the next meeting and the following gentlemen appointed as the Executive Committee, David Woods, "Homewood," Pittsburg, Pa.; Wm. Harris, "Uniondale," Allegheny, Pa.; James M. Devlin, "Calvary," Pittsburg, Pa.; Thomas Wightman, "Homewood," Pittsburg, Pa.

The outing for the afternoon gave the visitors an opportunity of a drive through another portion of the business and residence sections of Ohio's metropolis, past Reservoir Park, Monroe cemetery and other points of interest with "Riverside," as the objective point. At the dedicatory exercises of this cemetery held Nov. 11, 1876, a Centennial Memorial Service was celebrated in which Governor Hayes who was then president elect of the United States, participated and planted the first of a number of memorial trees, which are still objects of interest on these beautiful grounds. Riverside designed by E. O. Schwaegerle now of Seattle, Oregon, contains 104 acres, divided into three sections or plateaus overlooking the valley of the Cuyahoga. These plateaus are connected by iron truss bridges of artistic design, spanning broad and picturesque valleys; the longest of these bridges is 310 feet. The tree-arched drives in the wooded ravines, with occasional vistas of the surrounding landscape as the road winds up and down the sloping sides elicited admiring comment from the visitors. Here were sylvan beauties such as are rarely found in any cemetery. The irregular edges of the plateaus with their natural background of foliage on trees growing on the steep sides of the ravines, form bays of varying forms and shades that make ideal burial lots and give another bit of individuality to this favored spot of choice natural characteristics.

The chapel and receiving tomb with capacities for 120 bodies, is an artistic stone structure of gothic architecture; another substantial improvement is the stone office building with its reception and retiring rooms for the accommodation of lot owners. The building is modern in its appointments and represents an investment of \$20,000. Refreshing beverages were served on the piazza. After listening to vocal and instrumental music at the home of Mr. and Mrs. Dix, the carriage ride was continued to the Olney Art Gallery where the visitors greatly enjoyed the privilege of viewing one of the most

valuable private collections of paintings and curios in this country. The building itself is an architectural gem and one of the most pleasing effects was produced during the brief but enjoyable visit, as the last rays of the low descending sun were cast through the stained glass windows that form one of the decorative features of the beautiful gallery.

Last but not least came the banquet in the spacious banquet hall of the Hollenden, where the closing hours of the fourteenth annual convention were passed in a manner long to be remembered. Covers were laid for 125 and nearly all were taken, the tables were beautifully decorated, the menu was tempting, the music so good as to call forth frequent applause and the toasts, arranged by toastmaster J. M. Curtiss, president of Riverside cemetery, brought out some very happy remarks from the



ELECTRIC FUNERAL CAR, CLEVELAND, O.

clergy, local representative of parks and cemeteries and visiting guests.

Resolutions were adopted expressing the gratitude of the convention for the hospitable manner in which it had been entertained and to the executive committee Messrs. Frederick Green, J. C. Dix and C. D. Carroll for their very successful efforts in behalf of the association.

* * *

Among those in attendance at the convention were:

E. C. Abdill, "Spring Hill," Danville, Ill.; G. C. Anderson, "Graceland," Sidney, O.; W. H. Barlow, "Dale," Sing Sing, N. Y.; R. D. Boice, "Oakwood," Genesee, Ill.; John M. Boxell, "Oakland," St. Paul, Minn.; *M. P. Brazill, "Calvary," St. Louis, Mo.; Henry Bresser, "Calvary," Toledo, O.; *Chas. D. Carroll, "Calvary," Cleveland, O.; *E. G. Carter, "Oakwoods," Chicago, Ill.; *H. A. Church, "Oakdale," Urbana, O.; *J. C. Cline, "Woodland," Dayton, O.; J. Y. Craig, "Forest Lawn," Omaha, Neb.; Geo. W. Creesy and son, "Harmony Grove," Salem, Mass.; *J. C. Dix, "Riverside," Cleveland, O.; *B. H. Dorman, "Mountain Grove," Bridgeport, Conn.; W. H. Druckemiller, "Pomfret Manor," Sunbury, Pa.; Theo. Elssesser,

"Westminster," Philadelphia, Pa.; *Frank Eurich, "Woodward Lawn," Detroit, Mich.; John H. Fawell, "Wyuka," Lincoln, Neb.; George Gilmore, "Union," Ulrichsville, O.; Perry Goodwin, "Lake View," Jamestown, N. Y.; P. J. Graves, "Bloomington," Bloomington, Ill.; *Frederick Green, "Lakeview," Cleveland, O.; *Sid. J. Hare, "Forest Hill," Kansas City, Mo.; Mrs. E. E. Hay, Erie, Pa.; A. W. Hobart, "Lake-wood," Minneapolis, Minn.; *Bellett Lawson, Jr., "Paxtang," Harrisburg, Pa.; W. L. Lockwood, "Sleepy Hollow," Tarrytown, N. Y.; G. L. Kelly, "Riverview," New Albany, Ind.; *Bellett Lawson, Sr., "Riverview," Wilkesbarre, Pa.; *J. F. Mabin, "Oak Hill," Owosso, Mich.; L. L. Mason, "Lake View," Jamestown, N. Y.; J. L. Mellor, Hackensack, N. J.; J. H. Morton, "City Cemeteries," Boston, Mass.; Geo. M. Painter, "West Laurel Hill," Philadelphia, Pa.; *S. C. Penrose, "Wilmington and Brandywine," Wilmington, Del.; *C. W. Ross, Newtonville, Mass.; *A. H. Sargent, "Glendale," Akron, O.; *J. C. Scorgie, "Mt. Auburn," Boston, Mass.; F. A. Sherman, "Evergreen," New Haven, Conn.; *J. J. Stephens, "Green Lawn," Columbus, O.; Wm. Stone, "Pine Grove," Lynn, Mass.; *Geo. Van Atta, "Cedar Hill," Newark, O.; Thos. Wightman, president, "Homewood," Pittsburg, Pa.; David Woods, "Homewood," Pittsburg, Pa.; G. C. Nailor, "River View," Wilmington, Del.; Chas. Nichols, "Fairmount," Newark, N. J.; C. D. Phipps, "Franklin," Franklin, Pa.; John Reid, "Mt. Elliot and Mt. Olivet," Detroit, Mich.; A. Reinhardt, "Rosedale," Orange, N. J.; *H. Wilson Ross, Newtonville, Mass.; W. O. Roy, "Mt. Royal," Montreal, Can.; S. W. Rubee, "Riverside," Marshalltown, Ia.; W. N. Rudd, "Mt. Greenwood," Chicago, Ill.; *Geo. H. Scott, "Elmwood," River Grove, Ill.; *O. C. Simonds, "Graceland," Chicago, Ill.; E. A. Sloan, "Woodland," Ironton, O.; F. J. Van Horne, Marion, O.; T. H. Wright, "Highland," Covington, Ky.; H. H. Noble, president, "Cypress Lawn," San Francisco, Calif.; J. H. Shepard, "Riverside," Rochester, N. Y.; Clyde Leesly, "Graceland," Chicago, Ill.; Samuel Requa, president, "Sleepy Hollow," Tarrytown, N. Y.; C. W. Modie, Bloomfield, O.; Stanley W. Hyer, Kansas City, Mo.; James A. Devlin, "Calvary and St. Paul," Pittsburg, Pa.; John Appleby, "Chestnut Grove," Ashtabula, O.; Peter L. Conklin, president, "New York," Hackensack, N. J.; J. R. Florence, "Forest," Circleville, O.; M. Jensen, "Westwood," Oberlin, O.; A. E. Silcott, secretary, Washington C. H., O.; Geo. Gossard, superintendent, Washington C. H., O.; H. L. Pitcher, president, "Rose Hill," Chicago, Ill.; James Emslie, "Maple Grove," Ravenna, O.; A. B. McGrew, "Woodland," Des Moines, Ia.; Ed. L. Kirnes, "Forest," Toledo, O.; Wm. Rank, "West Lawn," Canton, O.; Wm. F. Jewson, "Glenwood," Mankato, Minn.; John F. Miller, "Dodge," Mattoon, Ill.; J. W. Keller, "Mt. Hope," Rochester, N. Y.; Rev. G. F. Houck, J. M. Curtis, H. R. Hatch, Cleveland, O.; R. J. Coryell, Detroit, Mich.; R. J. Haight, PARK AND CEMETERY, Chicago.

*Accompanied by ladies.

Convention Notes.

The attendance of ladies was larger than at any former convention. Why not organize a Ladies' Auxilliary?

Riding in an electric funeral car was a novel experience for many of the guests.

Pittsburg and Allegheny in 1901.

Eight charter members were present, including the first president and the first secretary.

The Bomgardner Burial Device was on exhibition at the convention hall.

Stereopticon lectures should henceforth be a feature of each convention. Mr. Scorgie's views of Mt. Auburn were interesting object lessons.

A recent fire that destroyed the barns at "Spring Grove," caused the absence of Mr. Salway, one of the charter members who seldom misses a meeting.

Messrs. Dix, Green and Carroll composing the local executive committee filled their trusts with credit to themselves and with pleasure to their guests.

Suggestions for future executive committees: Fewer papers, more well directed discussion and more object lessons will insure more practical results. An exhibition of photographs, drawings, plans, etc., properly arranged would be instructive and interesting.

The banquet on second night of meeting and final adjournment at close of morning session on third day would insure the greatest amount of pleasure to the greatest number.

A trite question for the "Question Box," would be: "What reforms have you introduced as a result of membership in the Association?" It has been observed that reformers do not always reform.

THE SUNDAY FUNERAL.—FUNERAL CAR.*

Mr. President and Members of the American Association of Cemetery Superintendents:

It is well known that for years past the "Sunday Funeral" has been discussed in public print, and in many of your conventions, and that it has been opposed also for years by the clergy, funeral directors and cemetery officials. The result of this steady discussion and opposition is, that the "Sunday Funeral" is gradually becoming more and more unpopular, whilst it is now prohibited by many cemetery managements throughout the country.

Among all funeral reforms suggested, and found necessary for the enforcement of cemetery decorum, none is more needed than that in connection with Sunday Funerals. Reform in this respect will stop at nothing short of their discontinuance, exceptions being allowed only in favor of burials that for sanitary reasons cannot possibly be postponed.

Having had an experience of over twenty-two years in cemetery management, covering all its details, I may be warranted in saying that I do not know of a single valid reason in favor of the Sunday Funeral. On the contrary, I know, as you gentlemen also know, there are very many and strong reasons against it, to some and only to the more important of which I desire to call your attention.

1. The Sunday Funeral disturbs the sacred quiet of the Lord's day. It is often largely attended by bands of music, societies and crowds drawn by curiosity to the house of mourning, to the church or to the cemetery. It is also quite as often accompanied by an evident desire for display or notoriety on the part of the supposed or real mourners.

2. If the funeral services are held in a church, the Sunday Funeral often interferes with the regular church services, to the great annoyance of the clergy and parishioners, who also have rights which are entitled to respect.

3. Cemeteries are more frequently visited on Sundays than at any other time. The visitors are not always attracted, to the City of the Dead by any special regard for the memory of those there interred, but rather by a morbid curiosity, "to see funerals." The Sunday Funeral is to such people what the magnet is to the bar of iron; it attracts. And the thoughtless crowd thus attracted, in its jostling, and in its desire to see what is going on, pays no regard to the decorum due the sad occasion; it tramples under heedless feet the adjoining sodded graves or lots, and in a few minutes destroys beautiful and

costly flower-beds that may require many days and dollars to replace.

4. The Sunday Funeral is at variance with the Decalogue. The law, "Remember, keep holy the Sabbath Day," is as binding to-day as when first promulgated. Cemetery employes, funeral directors and all other persons directly or indirectly connected with interments, have as good a right, and as sacred a duty as others, to observe the divinely enjoined day of rest. Charity and absolute necessity alone absolve from this sacred obligation.

To the above reasons against the Sunday Funeral others might be added, but their presentation would not add more force to the now very commonly accepted verdict: "Abolish the Sunday Funeral!"

The question is simply this: How can the Sunday Funeral be abolished? A certain modern statesman, speaking on one feature of the many sided financial question, once said: "The way to resume is to resume." I would paraphrase his words by saying: The way to abolish the Sunday Funeral is, to abolish it. No doubt it will be difficult in many places to do so. Yet, with firmness and persistency, at least on the part of those in charge of private cemeteries, the Sunday Funeral would soon be of the past; for public opinion would thus be gradually educated to approve such action, and would eventually sustain like action on the part of those in charge of municipal cemeteries.

To prove that my suggestion is possible I will state that for many years the question of abolishing the Sunday Funeral, because of its many attendant abuses, was seriously discussed by those in charge of the Catholic cemeteries in the larger cities within the limits of the Diocese of Cleveland. Steadily the feeling grew that the Sunday Funeral should be abolished. Finally the Rt. Rev. Dr. Horstmann, Bishop of said Diocese, published the following prohibition on December 23, 1897:

"To the Rev. Rectors and Pastors in the Diocese of Cleveland: From and after January 1, 1898, Sunday funerals will be prohibited in the diocese of Cleveland, except in case of extreme necessity, to which fact the priest issuing the burial permit will certify by letter to the sexton, or superintendent of the cemetery in which interment is to be made. If by reason of death from contagious disease it is necessary to permit an interment on Sunday, only a hearse, or wagon, and not more than three carriages, or other vehicles, will be allowed to enter the cemetery.

The reverend rectors and pastors, as also those having immediate charge of Catholic cemeteries, will be governed by the above regulation in regard to burial permits and funerals.

By order of the Rt. Rev. Bishop,
G. F. Houck, Chancellor."

Since January 1, 1898, there have been no Sunday funerals within the Diocese of Cleveland, and all concerned are quite pleased with the result. What has been thus successfully accomplished, others in charge of private cemeteries can do, even though there may be some friction and dissatisfaction when such action is first taken. In time those in charge of the public cemeteries will of necessity follow the good example. Let us hope this much needed reform may soon be universally adopted.

The Funeral Car.

Ever since the electric system of propelling street cars was adopted, it was my earnest endeavor to induce the two companies owning the street railway system in Cleveland, and within reach of every cemetery, with one exception, to equip a Funeral Car for the use of the public. Many and seemingly insurmountable obstacles were in the way to have this desirable object materialize, chief of which was the great expense of building supposedly necessary switches on which to place the car whilst waiting for the funeral party, either at the house of mourning, or at the church where the funeral services were to take place. Finally, after much discussion the two companies

*A paper read at the Cleveland Convention of the Association of American Cemetery Superintendents, September, 1900, by Rev. George F. Houck, Manager Catholic Cemeteries, Cleveland, O.

agreed that the solution of this principal difficulty could be feasibly met, either by placing the proposed car on branch tracks, shifting it out of the way when the regular cars had to pass such tracks, or by having the Funeral Car at the nearest car barn, within telephonic reach. It was found that between the two railway systems twenty-one such stations, or shifting places, could be provided, and thus cover and accommodate the entire City of Cleveland. When this conclusion was reached Mr. Henry A. Everett, President of the Cleveland Electric Railway, and J. B. Hanna, Secretary and Treasurer of the Cleveland City Railway, agreed to build and place in public service the desired Funeral Car. I gave them in outline the design, but my highest expectations were far more than realized, as the gentlemen named spared no expense in fitting up the Funeral Car, so that it resulted in a veritable "palace on wheels." Those of you who saw it yesterday will bear me out in this statement. The Funeral Car was placed in service last autumn and soon grew in public favor, in spite of the opposition manifested openly and secretly on the part of some who felt that their business interests were jeopardized by this new departure from the old time system of "funerals with carriages." That this opposition is based on selfish motives goes without saying. It will necessarily and eventually be brushed aside by the people as they become accustomed to this innovation, which is an outcome of our "electric age." The more progressive and better class of funeral directors encourage its use; others must follow, as the Funeral Car is here to stay. The people, seeing that its use is a great convenience as well as a great saving, without making the funeral a whit less respectable, will demand it. The Electric Funeral Car will eventually do away with the meaningless and costly funeral cortege, composed of a long string of carriages, often filled with sham-mourners. It is in line with Funeral Reform, which all of us connected with cemeteries so ardently desire to see effected and to which we give our best thoughts and efforts.

MODERN DRIVES FOR CEMETERIES.*

The general public has been very slow to realize the importance of thorough road construction, but all economists who have given the road question its needed consideration, concede, that although the cost of properly surfacing earth roads is in comparison to the cost of some showier or more conspicuous improvements heavier, yet good roads afford more pleasure, more profit, and ultimate benefits to the material and moral welfare of a community, than even the much demanded telephone or railway systems.

Our roads are the common highways of the people, absolutely necessary to our business relations, and to our very civilization, and should be so constructed as to be passable in all seasons of the year, with the least possible waste of labor under heavy and constant travel, and so as to give a cleanly and wholesome appearance to surrounding property.

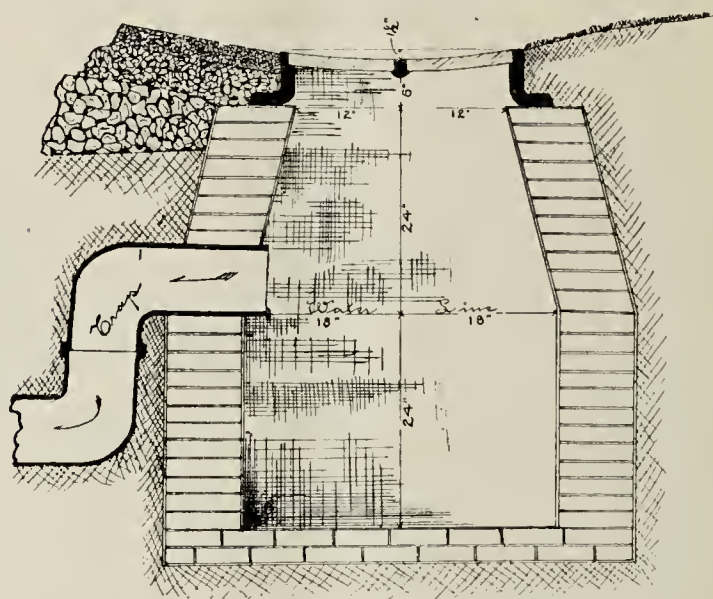
As the public has been slow to understand the benefits of good road construction, so has the former cemetery superintendent not appreciated properly built drives in his grounds, but with the development of the modern park cemeteries, whose landscape effects draw countless admiring visitors at all seasons of the year, it soon became evident to the foresighted superintendent, that the most disagreeable and the most marring feature of his grounds were his earth driveways. If the soil in his grounds was sandy, his roadway proved to be very soft and dusty in the summer and rough in the winter. If the roads were of clay soil he may have prided himself on his fine drives

a few months in the year, and then found his roads almost impassable during certain winter months.

To the progressive superintendent about to take up the improvement of his cemetery drives, the most important questions are, what is the best form of construction adapted to the conditions prevailing in my cemetery, and at what cost can this work be done to assure permanent results at a minimum cost of maintenance? Without discussing the separate advantages of the various well known pavements, let us proceed on the well established hypothesis that a Macadam or Telford macadam road is the best form of construction adapted to park or cemetery work. The essentials of thorough macadam construction mentioned in their order of importance are, good drainage, a solid foundation and a clean, hard, wearing surface.

Drainage.—This most important necessity in road work is too often entirely neglected to the detriment and rapid disinte-

Catch Basin



Plan for Cover



SECTION AND PLAN DESIGNED FOR CEMETERY WORK.

gration of the improvement, leading the average inexperienced official to erroneously condemn, either the character of the workmanship, or the selection of material used or the plan of construction adopted.

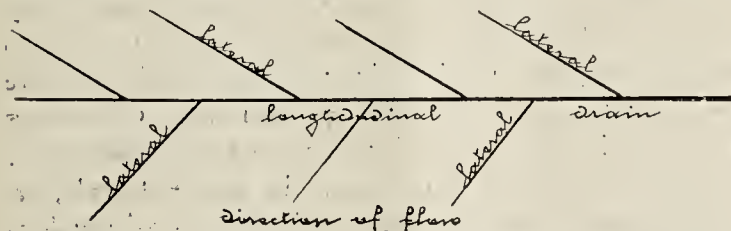
Drains must be laid for two purposes, equally essential to the permanency of the improvement; first to rapidly and thoroughly drain the surface, and second, to keep the subgrades and subsoil dry at all seasons of the year. Surface drainage has long been recognized as of prime importance, yet the problems of the various details in constructing a perfect system at a minimum expense, are such, as to require years of active experience, and the theoretical training of an engineer, to solve intelligently. The various sizes of pipe required (and the cost of the work is materially affected by even a small increase in size of pipe) are dependent upon the extent of area drained, the gradient and alignment of the sewer and the rapidity with which the surface water reaches the catchbasins. This is purely

A Paper read at the Cleveland Convention of the Association of American Cemetery Superintendents, September, 1900. By W. H. Evers, County Surveyor, Cleveland, O.

a mathematical proposition and can be determined by any sewer engineer. In good sewer construction much depends upon the style and character of catchbasins, which must be built so as to rapidly receive all surface water with its suspended filth, and second to empty through properly built traps into the main sewers, preventing overflows on the surface and holding back as deposit all filth finding its way through the cover. The following plan has been much used in our city cemeteries at a cost including rim, cover and trap complete, of about \$15.00.

Specifications for this catchbasin include removable cast iron top, double elbow for a trap, shale brick laid in Louisville cement with both inside and outside plastered completely, with Portland cement mortar, composed of two parts of sand to one part of cement.

Subsoil drainage in macadam construction appears to the average man an extravagant and useless proposition, and is therefore too often entirely neglected. In sandy soil, unless the substrata have veins of quicksand, or are traversed by springs, there is no necessity for laying drains, but in clay soil underdrainage is an absolutely essential part in road building. To prevent settlements in the subgrades where quicksand or springs are encountered the following plan commends itself as affording permanent and thorough results. Either lay pipe longitudinally, wrapping the open joints with hay or straw, in a bed of cinders, slag, coarse gravel or broken stone, covering all sides of the pipe with at least six inches of the porous material, or when the quantity of quicksand and water is unusually great, add to the above a system of laterals, laid as above specified, according to the following plan:



We have often observed that rain water will rest for days in the wheel ruts on streets of clay soil, which is almost impervious to water. Knowing that water is the greatest absorbent and disintegrator in nature, it must appeal to us as a most dangerous neglect to allow water to percolate through our macadam roadways, and lay upon the subgrades, especially during the winter months, when the expanding qualities of freezing water will break even marble or cast iron.

(To be Continued.)

THE NEW YORK CONVENTION OF THE SOCIETY OF AMERICAN FLORISTS.

The sixteenth annual convention of the Society of American Florists and Ornamental Horticulturists, held in the Grand Central Palace, New York City, August 21-24, was a success throughout. The proceedings were conducted with a vigor and enthusiasm that reflects credit upon all concerned, and especially the New York Florists' Club, the practical hosts of the occasion. The meeting far eclipsed any preceding convention both in point of numbers and interest. The whole country was represented, and there were several delegates from the far distant states to participate in the meeting. Not a complaint or criticism was voiced, the arrangements for the entertainment were about per-

fect, and from first to last the convention was an eminent success, crowned by the fact that a large amount of business was transacted by those present in connection with the trade exhibit. Both the trade and horticultural exhibits were valuable, the quality of the material shown and its completeness being quite remarkable. The private gardeners of the vicinity are to be congratulated and thanked for the prominent part they took in making the horticultural exhibit such a success.

Eloquent addresses of welcome and response were made at the opening of the proceedings by acting Mayor of New York, Randolph B. Guggenheimer, and Edgar Sanders of Chicago. The address of the president of the society, Mr. Edmund M. Wood, of Natick, Mass., ably covered a broad field and was particular in advocating the principle of co-operation.

In the report of the secretary, Mr. Wm. J. Stewart, the system of plant registration conducted by the society is pronounced a success. The full number of members is recorded as 553, including 26 life members, a net gain of 119 over the previous year.

Besides the business attendant upon so important a convention, the following papers were read: "Floral Decorations," illustrated by stereopticon, by Robert Kift, Philadelphia, Pa.; "What I Think About Greenhouse Construction," by J. D. Carmody, Evansville, Ind.; "American Floriculture, Retrospective and Prospective," by Prof. B. T. Galloway, Chief Div. Veg. Physiology and Pathology, U. S. Department of Agriculture, Washington; "The New York Botanical Garden," with stereopticon views, by Dr. N. L. Britton, Director; and "The Improvement of the Carnation," by Wm. Weber, Oakland, Md.

The proceedings were interspersed by trips to interesting localities, and an excursion to Glen Island, where a dinner was served. On the evening of the opening day a reception was given by the president.

As a result of the election for officers, Patrick O'Mara, of New York, was elected the next president and William F. Kasting, of Buffalo, vice-president; Secretary Stewart and Treasurer Beatty were retained in office. After a spirited contest Buffalo was selected for the convention of 1901.

The association is expanding in its relation to the many directions it is possible for such an organization to extend, and promises to solve many problems in the florist's work, which only study and investigation by competent committees can effectually unravel. While Chicago is a city that would offer a generous invitation and entertainment, no doubt for next year Buffalo was well chosen.

THE SYMMETRICAL AND THE NATURAL FLOWER GARDEN.

I question if better examples of the symmetrical or ornamental flower garden and the English or natural garden can be found anywhere in our public parks as those shown in the accompanying two illustrations taken in Lincoln Park, Chicago.

Located on both sides of the main driveway visitors to the park can never miss them, and lovers of the beautiful in landscape art have ample opportunity to compare the merits or demerits of either style. They are both fair examples of man's handicraft.

The flower garden or grand parterre is quite old, and came into existence in the early days of Lincoln Park; whereas the perennial or English garden, only dates back to the time when Mr. J. A. Pettigrew was the superintendent.

Symmetrical or ornamental gardening never, or perhaps with few exceptions, fully understood or correctly designed in this country, has lost much of its prestige and it is well.

Such an array of design! Fit for the showman, or ready-made to decorate the breast of some warrior or secret society official. Truly, it is to be hoped that the man with the sheep shears has vanished for the good of garden art.

But was it always the park gardener that was to blame? Unscrupulous park commissioners with more knowledge of ward politics than park work, often forced the unfortunate park gardener to carry out their ideas of how to embellish the public grounds under their care. But can we call this

ornamental gardening, these fantastic conceptions of gardening art? And was it the true and skilled gardeners, those men who received their first lessons in the grand profession from masters of the art that conceived these ideas of "freak gardening?" I think not.

Besides being inartistic and ungartenlike, this style of gardening is expensive and swallows up large amounts of money that otherwise would help to keep the lawn and plantations in better order. In the hands of the artist symmetrical gardening need not altogether be banished from our parks, and there certainly are situations in connection with our park buildings and monuments inviting or rather demanding this style of gardening.

The English herbaceous perennial or natural garden, by whatever name it may be called, is the very opposite of the garden of symmetrical design, fitting and in place everywhere. It is inexpensive, as all the plants used are either perennials or annuals. It is at home along the house wall, will hide the unsightly fence and beautify the walk border. It enlivens the woodland border and gives charm and color to the margin of the pond or rivulet. It is interesting in individuality and produces an endless array of flowers from early spring till late fall, beginning with the snowdrop and closing when winter's cold has blackened the last gentian and shriveled up the lovely Christmas rose. It is the garden for the poor and rich alike.

There have been extremes in symmetrical gardening and there are extremes in natural gardening. If the gardener knows his limits in these two



THE FORMAL GARDEN IN LINCOLN PARK, CHICAGO, WITH STATUE OF SCHILLER IN THE DISTANCE.



THE OLD-FASHIONED GARDEN IN LINCOLN PARK, CHICAGO, WITH STATUE OF SHAKESPEARE IN THE DISTANCE.

directions he is wise. The field is large enough to develop his cravings for more knowledge without trying to imitate the art of the sculptor or cabinet maker, or nature itself in producing the wild jungle sooner or later to become an uncontrollable wilderness full of dead and decaying vegetation, the course of nature's own teachings—"the survival of the fittest"—and a breeding spot for insect pests of all descriptions.

Let him remember, "We are a product of civilization, let our gardens be the same if gardens they be." Extremes on both sides are the products of the undeveloped mind. *James Fensen.*

SEASONABLE SUGGESTIONS.

There is no better time than this to transplant evergreen euonymus, box, yew, retinosporas and similar evergreens. Pour in enough water about them to make the soil like mush, and failures will be rare.

Deutzia Lemonei, having as one of its parents *D. gracilis* proves as good or better for forcing than *gracilis* is. It has for its parents *gracilis* and *parviflora*. Florists say that when forced the flowers are more lasting than those of *gracilis*.

A sowing of pansy seed made in early October will give excellent plants for spring blooming. If required for indoor flowering in early spring they should be in frames in winter just free from freezing.

Silver maples grow late and their bark will often lift in early September sufficiently to enable them to be budded with Wier's cut-leaved. This is the approved method of increasing this popular variety, though seedlings come fairly true to type.

Europeans rush for our trees of beautiful col-

ored foliage in fall. On the other hand, for variety sake, our people appreciate some trees which keep their leaves green almost to the last. In this they will meet with their requirements in almost all European trees, such as ash, oak, elm, Norway maple, etc.

Horse chestnut seeds keep in sound condition but a short time. They must be sown shortly after they fall, and the bed covered with a few inches of leaves afterwards to keep them from severe freezing.

Lift up a variety of early blooming shrubs and pot or box them for winter blooming. Set them in a sheltered place out doors until freezing weather comes, then place them in a cool shed till wanted to grow, when a warmer place must be found for them. Young shrubs with a good supply of shoots are best.

Do not think of transplanting magnolias or tulip poplar in autumn. They will not grow, unless in cases where pot grown. The disturbance of their roots seems fatal to them.

Willows and larch are better set in the fall, as they push into leaf the first thing in spring, often before one is ready for them, and if this occurs they rarely live. Planted when entirely dormant spring or fall they rarely fail.

Cuttings of geraniums may be made to give plants for next season. After inserting them in boxes or pots of sand do not water them for a week, and then but slightly. This treatment does not hurt them, and prevents their rotting, something sure to follow watering.

Large trees or others deemed difficult to transplant may be root pruned to advantage now. Dig a trench around them, cutting off the larger roots a

few feet from the trunk. Numerous small roots will form which will make the trees comparatively safe to remove in a year's time.

Cuttings of Tea's Weeping Mulberry made from hard wood in fall and planted and covered with leaves for winter, root readily. Plants so raised form a prostrate shrub of singular appearance, running over the ground like a creeper.

The female paper mulberry appears to have been unknown in this country until a quite recent period. It bears round balls of fleshy, deep pink flowers, in August, making a tree of singular beauty. No one will make a mistake in planting it.

In the herbaceous garden *Platycodon* (*Camp-anula*) *grandiflora* is one of the most attractive plants of the season. It exists in both blue and white sorts. As the plants grow eighteen inches high and the numerous flowers are two inches in diameter, it makes a great display.

Florists do not care to make coleus cuttings in the fall, but prefer to lift a few plants from beds relying on these to furnish enough cuttings towards spring.

Roses for winter blooming are selected from plants raised in spring. They are usually planted in shallow beds of about four to six inches in depth. Such plants, given a temperature of about 60 degrees in winter, grow and flower freely.

Joseph Meehan.

A UNIVERSAL FLOWER.

The genius and patience of the florist have evolved a new world of beauty.

The dozen or so of native varieties of pæonies have been crossed and recrossed, so that we have marvels of beauty with delicious fragrance. Such amazing results would not seem possible a few years ago. There are now about 2000 sorts catalogued and many are yet to be added to the list.

The wonder of it is that this flower is everywhere successful—from the Atlantic to the Pacific, from the sunny south to Manitoba, we hear only praise for it. The old-fashioned pæony of our mothers, with tubers like sweet potatoes, is not always hardy, but the newer kinds are. Prof. Green, of the University of Minnesota, writes me that they do remarkably well with him, only it pays to mulch with coarse manure in winter. Dr. Saunders, superintendent of the experiment stations of Canada, speaks in high praise of their beauty and hardiness.

Last winter on a mild day I cut up a lot of roots for spring planting, leaving the rubbish on the ground to freeze and thaw all the winter. I was surprised in the spring to find a dozen buds, so

small as to be overlooked, leafing out and starting roots. No other flower could do this. In color they range from deep purple to snowy white, which in Madam Schroder culminates in a large ball so puffy and ethereal it seems as if it would float away.

In England, France and Germany florists have long been experimenting and they have given us splendid results; and in our own land great advance has been made. Years ago, Mr. Richardson, near Boston, succeeded in producing very strong plants with gorgeous bloom.

Miss Sarah Pleas, of Dunreith, Ind., has spent years in raising new varieties, one of which she sold for \$100 last spring, and since then she has sold several hundred dollars' worth. I have in my care some 80 kinds yet to be developed, and among them some of wondrous beauty. Dainty is the only really variegated one I ever saw. It is semi-double, petals satin pink, striped with silvery white and from its heart of gold there is a variegated petal rising from the stamens.

Little Maiden is pink, edged with white, with a tremulous heart of gold and odor of the heliotrope.

Mr. H. A. Curry, of Crescent, Iowa, has been hard at work for thirty years creating new sorts. He has developed about 70 kinds of rare merit, among them some singular freaks. Clara is a flower of rare beauty with stamens growing out of the ends of the petals. One is a regular "double-decker," a symmetrical flesh-colored flower, perfect in itself, and in its lap sits another just like it. Grover Cleveland is a flower of glowing crimson, full orbbed as the man whose name it bears. Princess Ellen is of splendid beauty.

The wonder is that more are not planted. They are a success everywhere, while millions of dollars are annually lost on flowers which fail. With care they double every year and one plant in ten years makes a thousand. One wealthy man last fall bought Mr. Thurston's whole stock of two acres for \$7,000 to adorn his fine grounds at Peoria, Ill. He could not have used his money to greater advantage than to plant a wilderness of loveliness. They should have a place in every flower garden and in every park and cemetery.

C. S. Harrison.

Large additions to the planting of Schenley Park, Pittsburgh, are to be inaugurated and contracts for some 8,000 trees are reported, at time of writing, as about to be let. After Schenley is advanced attention will be given to Highland Park.

IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

"But weeds, alas, how sad it seems
To pass them coldly by."—Old Song.

Yet, it cannot be denied that we do so—not only "coldly," but mediumly, warmly, wetly, dryly and worst of all, dustily.

In all sorts of weather, at all times of the year, either alive and green, brown and sere, or as ghostly skeletons, weeds, like the poor, we have always with us. Those who "pass them by" on city sidewalks go forward laden with moisture, or dust, or rank odors, or hay fever germs, or clinging burrs, according to the variety of season, weather or weed. In some instances they actually impede physical progress, and they are at all times an indication of impeded municipal progress. They are detrimental to health and not infrequently are also detrimental to morals—as witness the startling cropping up of a spooning couple sitting less than two yards from the sidewalk in the gathering twilight, and surrounded by a dense growth of shrub-like weeds that covered an entire city block, the adjoining street, and crowding upon the walk left but a winding footpath through the entangling labyrinth. A more fitting loitering ground for rough characters than for the decent serving maids of the community and their more than doubtful "young men."

But, thanks largely to Improvement Club work, there are those who no longer pass the weeds "coldly by." On the contrary, they are given careful attention, and by checking their career before the season of seed time and harvest, a gradual control is being obtained that means their eventual extermination within restricted limits. One of the tenets of faith of numerous efficient Improvement organizations is shown by the yearly onslaught on such undesirable vegetation. Only last month the gentlemen of the distinctly alive Improvement Club, of Morgan Park, Ill., sallied forth on one of the hottest days of the hot "spell" to do battle with these enemies of civilization, thereby sadly blistering their unaccustomed hands and rousing the renewed admiration of the club ladies who forthwith rewarded their effort and example with applause and with refreshments *à fresco*, all of which was richly deserved.

The city of St. Louis has an ordinance imposing a fine of \$100.00 on property owners for each and every lot where the weeds are not cut, and that the

law may be successfully invoked to the same end in small places, through village officials, is proven by the experience of the Improvement Society of San Mateo, Cal., as recounted in *California Municipalities*. "The Society decided that 'while it is questionable whether we can compel a lot owner to remove weeds from his sidewalk, nevertheless such cleaning of the sidewalks by the lot owners is a very convenient way to accomplish a great public good.' They then proceeded to get an ordinance passed, but wisely endeavored to get around the most objectionable features of the procedure by having the demand for such an ordinance come from the people themselves through the Improvement club. By this means the ordinance was passed and beside it, printed on the back of the street superintendent's notice, is printed a copy of the following resolution: 'Resolved by the San Mateo Improvement Club: That the action of the board of trustees in adopting Ordinance No. 63, of the city of San Mateo, be approved; that weeds on sidewalks are a public nuisance, and the enforcement of said ordinance will be a public benefit; and that on behalf of the people of San Mateo we urge all property owners to obey same.' The effect of this method of procedure has been eminently satisfactory. Men who would have growled at the board of trustees for arbitrarily exercising their authority, willingly yielded to public sentiment. Laws with such public opinion back of them do not need technical correctness in order to ensure the enforcement of their provisions." *F. C. S.*

* * *

The principal clauses of the San Mateo ordinance above referred to provide, That it shall be unlawful for the owner, lessee or anyone in possession of real property in San Mateo to permit weeds or other obnoxious growths to grow or remain on the sidewalk in front of such property. It is made the duty of such persons to remove and destroy such weeds on their sidewalks. It provides for the issuing of permits to maintain a lawn or such portion of sidewalk as the board of trustees shall specify, and the same must be kept green and closely cut. The board has power to deny application for permit or to revoke same. It is the duty of superintendent of streets to make complaints in recorder's court of the city against any person violating any section of the ordinance, after giving ten days' notice to comply. Violators shall be deemed guilty of misdemeanor and upon conviction shall be subject to a fine not exceeding \$100 or imprisonment for 30 days in county jail, or both.

Autumn.

"Autumn is the barber of the year who shears the bushes, hedges and trees—the ragged prodigal who consumes all and leaves himself nothing; and this bald-pated Autumn is seen going up and down orchards and groves, fields, parks and pastures, shaking off fruit and beating leaves from the trees."—Quotation in George H. Ellwanger's "The Garden's Story."

"FRAGMENTS."*

We go to the park for recreation and whatever influences us while there may be considered a part of it. A park should be measured not by its number of acres, not by its boundaries, but by its features and power to influence.

If one walks on Seaside Park in Bridgeport it is the waters beyond him with the passing vessels and the dim shore of Long Island in the far distance that influences him more than the long narrow strip of land, however well it may be kept. As one stands on Castle Craig in Hubbard Park and sees the steamers passing in the sound, then turns to see Mt. Tom and Holyoke in the north, while in the east is the broad Connecticut valley bounded by the Bolton Hills with the Hills of Berkshire in the west, and overhead is the sky, ever changing yet ever beautiful, and below him the city of Meriden, one is filled with the grandeur of the scene, and, is not all this as much a part of Hubbard Park as Merrimen's and Crystal Lakes which nestle at the foot of the precipice, within its boundaries?

A landscape picture is a feature which may produce an inspiration or cause an influence. It may be a whole city filled with houses and streets, if overlooked and seen en masse, or a hillside covered for miles with tree growth, or a valley with its many farms, or it may be a little seat in a nooky place, a spring under a tree, a bit of walk by the brookside or a vista amongst the trees.

There are persons whose very presence is a benediction, who seem a personification of the 23d Psalm, so there are landscapes equally as restful, pleasing and helpful.

To the listener it is not necessary to know how to spell or even to know the letters, in order to understand the story told, or to appreciate its meaning, but he who writes must know these and more, and we, who as park superintendents, are interpreters and writers of nature's secret that others may read more clearly, must know the alphabet.

The spelling out of a landscape by the means of this alphabet will produce many surprises for we begin by finding the most striking, the most picturesque as being of the greatest interest, but we end by learning that the most common things may be the most beautiful. After we have learned these letters we will know that a bed of scarlet geraniums in the middle of a lawn has no more meaning than a drop of red ink on the page of a letter, both are blots.

ALPHABET.

As the landscape painter has mastered the beautiful in nature more thoroughly than others it is well to follow his alphabet, for he is obliged to analyze his landscape. A photograph may be taken without analysis, but a painting never. It has pleased me to rearrange his alphabet into six groups, viz: Lines, surfaces, color, composition, life and music; each deserving a chapter to itself, so that here only the barest outline can be given.

Lines.—The first thing to be desired in the study of lines in landscape is to upset and revise all previous suppositions and definitions of what a line is. We must see nature as she appears en masse and not what we know she is in detail. This is difficult to those who have the construction of grounds. In nature straight and mathematical lines do not exist. Broken lines may appear straight, and straight lines crooked—parallel lines do meet, and the jumble, contradictions and unreasonable things which exist seem impossible to the logical engineering man. With nature all things are possible, like a woman, she will most unconcernedly contradict herself and go off in all sorts of vagaries, and yet with it all becoming more and more beautiful.

That which is usually known as lines are but masses of color against other colors, and lines are but objects so related as to give direction and appear as a line only from one point of sight.

Lines have depth and width without definite boundaries with colors varying in tone and value and altogether differs so much from what is ordinarily known as a line that one could almost say there are no such things as lines in landscape, and yet the surface beneath and the air above are full of them.

The continuous line with the smooth surface renders nature rigid, statuesque, immovable, what she never is. They center attention upon the external form, so that the internal spirit, the deeper, nobler, truer part of her lacks interpretation. Nature is but known by such qualities as color, transparencies and shadow inequalities.

In the designing of plans, and the developing of work, lines, angles and points must be used, but used as suggestions and directions, and not to decide the absolute form. They many times mislead as well as lead aright,—the eye is the final test.

Our education as to lines is a great hindrance to our receiving into our minds what our eyes tell us as to the forms, surface and texture.

Surfaces.—Surfaces are to be considered in two ways: First; The substance and form of which the surface is the outside appearance, and secondly, its texture. In substance it may be earth or rock or water; in form it may be convex, concave, incline, flat or perpendicular; it may be broken or with long sweeps, it may only include the small front yard, or extend over miles of country. It is too large a subject to be considered here tonight, but I would like to refer more fully as to texture. In passing I would say that planting ought never to conceal the form of the earth; in one sense they hide the earth, in another way they best reveal it and make its meaning more clear. The feeling should be that the ground with all its variation was there, though hidden, yet revealed by the plants, any planting that deforms or reforms the ground has in it an element of imperfectness.

Textures.—In external appearance it is by texture that landscapes are peculiarly different from all other arts; but for texture, color, light and shades and aerial perspective, every scene would be but a silhouette.

*A Paper read at the Third Annual Meeting of New England Association of Park Superintendents, Worcester, Mass., July, 1900. By G. A. Parker, Superintendent of Keney Park, Hartford, Conn.

Let us consider now only texture as determined by tree life. To begin with, it is needed to get out of the mind a tree as a tree, with branches and leaves; forget leaves as such, and see them only as mass; every tree or collection of trees always differ with each other and with themselves. At first we may see it only by outline, but look more carefully; there are light spots where the sky is seen through, there are dark spots filled with shadows as we look into the woods or trees, there is the variation of sky line, the advancing and retreating between the wood line and the meadows, the uneven trailing out of the woods into bushes and bushes into grass; these are the great texture features of the landscape. The lesser features come from the different ways trees divide themselves into branches, limbs and twigs, the arrangement of the leaves, the shape and the size of the leaf blades and their petioles. The petiole is a most important factor in the leaf motion—it may be long or short, or none at all, round or angular, vertical or horizontal, oblong, upright or drooping, and at the end of any of these leaf-stems may be a leaf-blade of any size or shape; there is not a composition possible to conceive of but somewhere a plant has it. The variation in the little unseen, unthought of leaf-stem produces great landscape effect sharing equally with its larger brother the branches, and its sister the leaf-blade, the glory of the beauty of the trees.

There are rocking trees and swaying trees; there are bending trees and trembling trees; there are drooping trees and stiff, upright trees; there are trees like the elm with feathered trunks and trees with tall, smooth trunks like the tulip, with smooth bark like the birch and rough bark like the hickory. Trees may express any or all the emotions by their leaf-blades, petioles, twigs and branches.

Music.—Who has not heard the sooting of the white pines, the higher notes of the hemlock and spruce, or the rustling of the leaves, yet has it occurred to us that each tree has its own melody, differing from all other trees, changing as it increases in age, soft and low as a baby cooing, in the spring when the young leaves start, growing stronger and fuller as the season advances, becoming quiet yet more penetrating as it gathers the autumnal tints, sounding almost harsh as the leaves become dry and lifeless, then the leafless branches like the aeolian harp seem mourning its departed glory until the frost and the ice give vigor to the tones.

Some have listened for and thought they heard the music of the spheres. If all will listen they surely may hear the music of the trees, and when is added the songs of birds, the chirping of insects, nature has provided a concert worthy of man and angels, with a program varying with every breeze, changing every hour as the sun passes over, and every day different as the season advances.

Color.—Many are the books which have been written about colors, yet in the study of the landscape the most subtle changes of color are seen. If it takes a trained ear to hear the music of the trees it will take an equally well trained eye to absorb the melody of

nature's coloring. Nature is a master workman, and all and more that painter's have said of tones, value, lights and shades, and aerial prospection is here seen in perfection. Color is the symbol of life, its absence seems like death to us. In the study of colors in nature I have been helped most by the two books of John C. VanDyke, "Art for Art's Sake," and "Nature for Nature's Sake," and to the student I would advise adding another book, "The Principles of Beauty," by Mary Anne Schimmelpenninck. These three books seem to lead one down into the foundation principle of landscape beauty.

Composition.—Composition in landscape is the proportioning, arranging and unifying the different features of a picture or more specially in park work the proportioning and arranging and harmonizing different pictures on one piece of ground. It requires judgment as to the features selected and their position in the park as a whole, of the tone and value of colors and light, and skillful uniting all the parks into a perfect whole. The power of the park should depend on some leading characteristic supported by subordinate features which must often sacrifice some of its possible beauty that the leading character may take its proper position. A double-headed park is as uncalled for as a double-headed calf.

Composition and correspondence not only are needed for designing parks but are necessary for a clear understanding of landscape beauty.

Conclusion.—In the study of a landscape with these principles as a guide, we see why the introduction of roads and structures are an offense,—they introduce a hard, continuous line, a smooth compact surface, a dead object in the midst of a living scene, and like a glass eye, they are expressionless, motionless and lifeless. It is like patching a dark velvet dress with light colored satin, for they often come into the scene as patches and tears, yet there is such a thing as a velvet dress trimmed with satin, or a silk dress trimmed with velvet, and when filled with the living woman the creation may become beautiful and artistic, so statues may become the pearl of the landscape and walks the string course which binds and defines the whole.

NOTES, CHIEFLY HISTORICAL, ON LONDON BURIAL PLACES.—IV.

(Continued from page 117.)

It was not until 1835 that a genuine agitation of the subject began. Dr. George Alfred Walker, a surgeon practicing among the poor of the Drury Lane district, decided that the prevalence of fatal typhoid fevers in his practice was due in great measure to the large number of overcrowded burial places in the neighborhood. He made a thorough personal investigation, wrote pamphlets and leaders for the public press, lectured upon the subject, and finally, actuated by purely philanthropic motives, published a book, entitled "Gatherings from Graveyards, particularly those of London, with

a concise history of the modes of interment among different nations from the earliest periods, and a detail of dangerous and fatal results produced by the unwise and revolting custom of inhuming the dead in the midst of the living."

* * *

As the result of the agitation thus started, London petitioned parliament in 1842 for an act abolishing burials within the city. A committee of inquiry was appointed which worked faithfully even if slowly and cautiously. In 1846 an act was prepared (and was passed four years later), "To make better provision for the Interment of the dead in and near the Metropolis." This act received supplements in 1851 and 1852, and was in 1853 extended in its operations to all the cities and towns of England and Wales. Under its provisions the urban burial places were closed to a large extent and new suburban cemeteries were opened. Some of these, however, were located so close to the "city" as to be soon overtaken by the expanding metropolis.

* * *

The frightful revelations made by Dr. Walker in his book and pamphlets were supposed at first to be gross exaggerations of facts. It must have seemed impossible for the Londoners to believe all that he told was being tolerated by them. Who could believe, for example, that wells sunk in the midst of graveyards generations before were still in use? Dickens, in his forcible way, called attention to one of them and depicted the occupants of a London graveyard saying, as they heard the pump at work directly over them, "Let us lie here in peace; don't suck us up and drink us!" But then Dickens was a novel writer, and those who read these words cared not to see that they were called forth by the actual drinking, every day in the year, by hundreds of people, of water filtered through overcrowded graveyards. And during a cholera scare, many years ago, a clergyman hung a placard, bearing the words "Deadmen's Broth," upon a pump in his churchyard to which his parishioners used to resort for drinking water.

* * *

The results of the parliamentary investigations fully corroborated the statements of Dr. Walker. For the purposes of these papers the gross evils exhibited in the course of the investigation may be reduced to two: the overcrowding of the burial places and the utter neglect of such as fell into disuse. In regard to the former certain "private cemeteries" were found to be the worst offenders, and one in particular furnished an example of how far the practice of overcrowding burial places

might be carried without exciting a popular revolt. It was that of a small chapel with vaults under it built as a speculation by a certain minister. The burial fees were small, which induced patronage. As many as nine or ten burials often took place on a Sunday afternoon. The space available for coffins was 59 x 29 x 6 feet, yet no less than 20,000 coffins were deposited there. To make this possible the destruction of the older ones was constantly going on, and this was accomplished in the fire places of the minister's house. The vaults were directly under the board floor of the chapel, and long after it became impossible to hold services in the chapel because of the intolerable stench arising from the vaults, the latter continued to be used for interments, and "more money was made from the dead than from the living" for the speculative minister.

* * *

In one burying ground capable of holding 1,000 graves, at least 80,000 bodies had actually been interred. The gravestones were moved about from time to time to give an appearance of emptiness to certain parts of the ground; bodies were burned behind a brick wall; coffins were destroyed and vast quantities of quick-lime were used to accomplish this end. In another private burial ground pits were dug and disinterred coffins and bodies were "chucked" (such the word used in the official reports) into them in order that the graves might be used again. Thus 1,400 were interred in that ground in one year after the ground had been already filled more than once. The grave diggers in such grounds were in constant peril of their lives. They were accustomed while at their work to hold rue or garlick in their mouths, or to fill themselves with grog. The more experienced, when they "bored" or "tapped" a coffin in the course of their digging, fled immediately to a distance and remained away until the harmful exhalations had been sufficiently dissipated for them to resume their work with some degree of safety. But with every precaution deaths often occurred. Even sheep grazing in these overfilled churchyards were known to die from the poisonous air.

L. Viajero.

* * *

In connection with the above we have received through Mr. Joseph Meehan, of Philadelphia, the following note from London: "In the playground of Christ's Hospital, (Blue Coat School), that portion called the garden is another ancient burial place, part of the suppressed monastery of the Grey Friars. In the centre still in use is a pump, the water of which, strange to say, (frequently tested) is found to be absolutely pure.

GARDEN PLANTS—THEIR GEOGRAPHY, LVII.
LAMIALES.

THE VERBENA, MONARDA AND AJUGA ALLIANCE.

(Continued.)

Clerodendron in 70 species are natives of the tropical and sub-tropical parts of the world—mostly the old world. They are trees, shrubs and climbers. *C. fætïdum* and *C. trichotomum* are hardy as to their roots in Central New Jersey or even further north, and although frozen in severe winters the latter becomes quite a little tree during a series of mild ones. Further south *C. fragrans* in variety may be grown, and in Northern Florida *C. infortunatum* sometimes attains to tree size. In Southern Florida *C. squamatum* and even the roots of *C. Balfouri* hold over, and no doubt both there and in Southern California several others from the Himalayas, Eastern Asia and Australasia would succeed.

The Caryopteridæ is a small tribe of five genera and less than a dozen species.

Caryopteris is a genus of five species from China, Mongolia, the Himalayas and Japan. Some of the Himalayan plants have been transferred to



CLERODENDRON FÆTIDUM—Gardening.

Clerodendron. *C. mastacanthus* is a good shrub, or herbaceous plant where the frost continues too long around zero. It has light blue flowers and is a very excellent bee plant. Florists sell it under the absurd name of "spirea." During the 1898-99

winter north of Philadelphia, plants under the shelter of deciduous trees sometimes escaped root killing while others were killed completely.

The *Avicennias* are the "white mangroves," a genus of maybe one true but variable species. They are curious in the growth of their roots and young shoots and form impenetrable thickets along the tropical seashores. One or two forms extend north to the Keys of Florida and the mouth of the Mississippi. The genus is peculiar enough to be tribally important.



CARYOPTERIS MASTACANTHUS.

Ocimum "basil" has 45 species of sub-shrubs, and annual herbs from the warm regions of the world.

Coleus is a genus of sub-tropical and tropical frutescent evergreens in 60 species from the Malay Islands, the East Indies, Australia, and tropical and South Africa. They are well known bedding plants prone to vary greatly in the hue and making of their foliage, but very tender and wanting in durability with temperatures below 60 degrees Fahr. *C. fruticosus*, however, has long been a favorite window plant for English cottages where but little heat is employed. It has good green foliage and thyrses of blue flowers. It is South African and although employed as a stock for grafting the tropical kinds into crazy quilt kind of plants, I don't know that it has been employed as a parent for a set of hardier hybrids. It might be worth trying. In 1860 *C. Blumei* was about the only one with pointed foliage in collections, but two or three years afterwards *C. nigricans* and *C. Verschaffeltii* made their appearance, soon followed by *C. Gibsonii*, and then in rapid succession a whole host of crossed varieties, boomed by the success of a gardener at the Royal Horticultural Gardens, Chiswick. They were immensely popular for some years. *C. thrysoideus* and some others are good blue winter blooming plants for warm climates, and *C. tuberosus* is an esculent of considerable repute in some parts of the tropics.

Lavandula "lavender" has 20 species in Mediterranean countries and the East Indies. *L. vera* is the well known odoriferous shrub sometimes

passing through the winters at New York City, but not reliably hardy north of Virginia. *L. dentata* and some others endure great drought and California ought to suit them admirably.



COLEUS + SEEDLING.

Pogostemon has 32 species scattered through the Malayan countries from India to Japan. *P. Patchouli* yields by the distillation of its young shoots and leaves a perfume which seems to be popular with American women.

Comanthosphace is a genus of Japanese shrubs in four species—some with yellow flowers.

Perilla Nankinensis with dark inky purple leaves is an annual used as a summer bedder. It naturalizes more or less in the middle states, and so does *C. ocimoides*.

Mentha "mint" has a vast number of so called species described of which maybe 30 are good. Some variegated forms are ornamental.

Origanum "marjoram" has 30 species.

Thymus "thyme" about 40 species with some ornamental flowering and variegated forms. *T. serpyllum* makes a fine sod in the North Eastern States, but discolors with the first frost.

Hyssopus "hyssop" is probably monotypic, varying in foliage and the colors of the flowers. It is quite a hardy plant used in Canada in lieu of box edging.

Micromeria is a genus of small evergreen shrubs or perennial herbs in 60 species natives of North West and South America, the Canaries, tropical Africa and the Mediterranean regions, therefore

adaptable to California and the south of England.

Calamintha is a genus of hardy perennials scattered in 40 species over the temperate regions of the northern hemisphere. *C. coccinea* is a Gulf States plant of some beauty, once known as gardoquia. The low growing *C. alpina* with blue, and others with purple, red, yellow, and white flowers may often be made useful. *Horminum Pyrenaicum* is also of the affinity.

Salvia "sage" is a large genus of 450 or more species distributed over most warm temperate and sub-tropical regions. About 30 are natives of the United States, mostly near the Mexican boundary. Several are shrubby and densely pubescent, among which the hardy South European *S. argentea* with white flowers is a useful plant. Many are well-known flowering plants which vary considerably, but there are two variegated foliaged forms of the common sage which might be oftener employed. One of these has beautiful purple leaves in tricolor shades, the other has leaves bordered with creamy yellow, and if the flowers are kept picked off they are equal to coleus in beauty and of course much hardier. *S. Sessei* is an arborescent Central American plant with good foliage and orange-scarlet flowers hardy in Southern California.

Monarda, "Bergamot" as it is called in some parts of Britain and the south and west, has nine species all North American. They are well known plants, some of them quite showy.

James MacPherson.

CORRESPONDENCE.

Azaleas.

CHICAGO, August 30, 1900.

Editor Park and Cemetery:

DEAR SIR—I can assure *J. M.* that my observations on Ghent azaleas and their adaptability for this locality is not a mere illusion, but is based upon practical experience covering a period of over ten years, and this under different situations and in prepared beds, some of them costing more than I could have bought a good building lot for.

I have also noticed their behavior in places outside of Chicago. One thing is true, though, that with good care and protection during the winter I have carried them along for five years. But, dear me, who would want such sickly looking plants in the garden as these were after the first two years? And getting worse until they finally gave up the ghost. Flowers there were none except in the first year, with a few scattering in the second, and by close observation a few could be discovered the third year. I can also assure Mr. *J. M.* that our hardy American varieties are not adapted to this locality, either, except in the hands of a crank like myself who is satisfied so long as a green leaf can be seen. *J. J.*

[With the illustration of the Azalea *Mollis* and Ghent varieties, given in the July issue, it should have been noted that the view was taken in Humboldt Park, Chicago.—ED.]

PARK NOTES.

Among a number of bids invited for park construction work in New York city by the park commissioners, the price for supplying and laying asphalt hexagonal paving tiles for an amount of 110,600 square feet including borders, in Brooklyn parks, ranged between 17 and 20 cents per square foot.

* * *

Mrs. Harry A. Richardson, of Dover, Del., has developed a part of her farm abutting on Silver Lake, above town, and founded a park for the use of the public. She has provided it with appropriate buildings and other park appurtenances, and will continue the work of beautifying the tract for the benefit of the people.

* * *

The work of planting some 20,000 trees on Schenley and Highland Parks, Pittsburg, Pa., is under way. Soft maples and hardwood trees are being planted in close proximity, the former to provide early shade. In addition to this some ten shelter sheds are to be built in Schenley and six in Highland parks. They will have wooden floors and will be provided with seats.

* * *

Wm. H. Eder, Elkton, Md., has donated 25 acres of land situated along the banks of Big Elk creek, to the south of the town, to that city for a public park. To make the gift effective and provide for its management, an act of legislature was secured for incorporation. Maryland has not been favored with many public parks in its smaller cities and the public spirit of Mr. Eder, it is hoped, will stimulate others to like gifts.

* * *

The park commissioners of Taunton, Mass., have, under recent legislation, taken over the care and control of the public trees and cemeteries, but according to their annual report just received, they are sorely straitened by lack of funds. They, however, have begun practical operations and have been instrumental in securing the passage of ordinances for the protection of the trees. A case is reported where they made good an old tree on Fremont street which has a cavity in its trunk over two feet deep. This was filled with cement which was afterwards painted, and thus repaired the tree will still have many years of usefulness.

* * *

Public baths were established this summer on Harriet island, in the Mississippi river opposite St. Paul, Minn. It is an ideal place for such a project, partially overflowed by spring freshets, but covered by a thick growth of willows with some fine elms interspersed. Apparently useless for other purposes it is just the location for a bathing establishment. The building stands on stilts above high water, and the water is pure and uncontaminated. The beach is a gradual slope and that part used exclusively for bathing is fenced in. A lunch counter is provided, restricted in its refreshment supplies. This beneficent public necessity is due to the zeal and public spirit of Dr. Ohage, the health commissioner, who has the unstinted commendation of the people.

* * *

San Jose, Calif., is among the pioneer cities in passing ordinances regulating the bill board nuisance and it has been upheld by the Superior court of the county. It is giving general satisfaction. According to *California Municipalities*, its terms are: It shall be unlawful for any person, firm or corporation to erect, build or maintain in the city of San Jose, any fence, building or other structure of or to a greater height than ten feet from the street, sidewalk or ground where the same is

erected, built, constructed or maintained, for the purpose of painting thereon any sign or advertisement for advertising purposes, or posting thereon, or affixing or attaching thereto, or thereon, any bills, signs, or other advertising matter for advertising purposes. A violation of the provisions of the ordinance involves a fine of \$100 or imprisonment for 30 days.

* * *

The fortieth annual report of the Park Commissioners of Hartford, Conn., affords some interesting reading, enhanced by maps and a number of fine half tones. The total park area of Hartford is now 1200 acres, comprising seven large park areas and ten small parks containing an aggregate of eight acres. The larger parks are: Keney park, 665 acres; South park, 200 acres; Elizabeth park, 100 acres; Pope park, 90 acres; Riverside park, 80 acres; Bushnell park, 42 acres and Capitol grounds 15 acres. From May 1, 1895, to April 30, 1900, the commissioners have expended on purchase of lands and care and control of the park system the sum of \$374,560.23. By gift of the late Charles M. Pond, the city received in 1897, \$114,602.53 to be expended for beautifying and completing Elizabeth park. Mr. Theodore Wirth gives interesting details of a large amount of improvement in progress. In Pope park some 30,000 trees and shrubs were planted. In Elizabeth park, the gift of Mr. Charles M. Pond, in memory of his wife, the improvement has consisted principally in the making of roads and paths and the necessary grading and filling. The plans for this park were prepared by Mr. Wirth. The nurseries are maintained in a healthy condition and the balance sheet explains their value in the park economy. The superintendent is strongly advocating an extension of the plant, with the addition of a conservatory for public display purposes. The total amount expended for labor for the fiscal year ending April 30, 1900, was \$64,123.73. The average number of men employed throughout the year was 119 and teams 15.

* * *

The Park and Boulevard Commission, of Detroit, Mich., has recently issued its eleventh annual report, which contains much interesting matter, finely illustrated. The general superintendent's report voices a stereotyped complaint of park commissioners generally. It says that owing to the insufficient appropriations for last year, much of the work was left undone, which caused an increased cost in putting parks in condition during the first two months of the present fiscal year. He further says: "The general aim has been to keep the entire system in a neat and tidy condition and to that end careful attention was given to resodding the worn-out places in downtown parks, and making other necessary improvements. There is still great need for improvements along this line and a lack of funds to meet the ever-increasing requirements of a rapidly growing system makes it necessary to limit such improvement and care more than what is consistent with the standard set by this well-kept city." By the courtesy of A. O. Farwell, the botanist, the report contains a valuable feature in a nearly complete flora of Detroit and the park system, of which the following is the summary of special varieties and forms: Pteridophyta, 13; monocotyledones, 232; choripetalae, 364; and gamopetalae, 252; making a total of 861. In the secretary's report the financial statement shows the following: general maintenance, \$38,525.67; general improvements, \$6,398.50; Belle Isle maintenance, \$36,737.22; Belle Isle improvements, \$23,534.13; boulevard maintenance, \$10,009.01; boulevard improvements, \$15,344.32; Palmer park maintenance, \$4,325.83; Palmer park and parkway improvements, \$7,083.07; Clark park maintenance, \$4,732.83; city parks' maintenance, \$7,663.63; city parks improvements, \$4,278.20—a total expenditure of \$159,078.99; which, with other incidentals, gives a grand total of \$160,319.70.

CEMETERY NOTES.

Among the proposed improvements in Pine Grove cemetery, Manchester, N. H., is the sodding of numbers of the small paths through the sections so as to conform to the lawn plan. Cemeteries in the smaller cities are rapidly falling into line on modern practice.

* * *

The trustees of Ravenna township have recently added 25 acres to Maple Grove cemetery, Ravenna, O., which increases its area to nearly 100 acres. Improvements will be carried out next year. The addition is on the north and includes a good residence for the superintendent.

* * *

Lakeside cemetery, Oswego, N. Y., is to undergo extensive improvements, to prepare for which the city engineer has been making a complete survey. Considerable ornamental planting is to be done and a park like appearance given to the cemetery. A direct water supply is also to be provided.

* * *

The trustees of Gray cemetery, Knoxville, Tenn., have appointed the first Saturday after the first of November of each year as "Chrysanthemum Day." They request that lot owners place chrysanthemums on the graves in both the old and new Gray cemeteries. Chrysanthemum Day is to be a citizens' Decoration Day.

* * *

The Cemetery Board of Findlay, O., have resolved upon drastic measures to compel lot owners to settle up the balances remaining against them on the cemetery books. A certain time is to be given delinquents, and if no satisfactory settlements are made, bodies buried on these lots are to be exhumed, reinterred in the potter's field and the lots resold.

* * *

Mount Carmel, a new Catholic cemetery for Chicago, was recently dedicated by Archbishop Feehan. It is located on the Illinois Central R. R., at Hillside, fifteen miles from the city. It comprises 160 acres. The cemetery is naturally wooded and a fine receiving vault has been erected. Macadamized roads have been constructed through the tract and a large and commodious waiting-room erected for the accommodation of visitors. The cost of the cemetery was \$68,000. It is to be conducted on the lawn system.

* * *

The West Davenport Cemetery Association, Davenport, Ia., adopted a novel scheme to secure a good name for its grounds. It offered a cemetery lot as a prize to the author of the accepted name, for which some 200 suggestions were received from all parts of the country. The name selected was "Fairmount," because it covers the general lay of the land and its natural conditions. The tract commands a magnificent view and many of the suggestions were based on that alone, but the name adopted is more applicable to the cemetery itself and gained the prize for its author.

* * *

To provide against the calamity of being buried alive, a Buffalo inventor has devised an electrical scheme of communication between the buried casket and the surface of the ground. In operation it is simple; a pair of contact points are attached to the under side of the coffin lid, in close proximity to the hands and chest of the body, so that the slightest movement will cause the points to touch and complete an electric circuit which starts a bell ringing on the surface. The wires run through a tube in passing from the circuit closer to the bell, and this tube allows a circulation of air and also provides a means of communication with the buried person.

Among the rules and regulations governing monuments in the public cemeteries adopted by the town of Ware, Mass., this year are the following: "If any monument or effigy, cenotaph or other structure whatever, or any inscription be placed in or upon the said lot, which shall be determined by a majority of the said commissioners for the time being, to be offensive or improper, the said commissioners or a majority of them, shall have the right, and it shall be their duty to enter upon the said lot and remove said offensive or improper object or objects. No tomb shall be constructed within the bounds of this cemetery, except by permission of the commissioners, and in such manner as they shall approve."

* * *

The Mount Royal cemetery of Pittsburg and Allegheny is the name of the new cemetery now in the first stages of improvement near Pittsburg, Pa. Negotiations for the requisition of the desired land have been noted from time to time, and it is now announced that the tract consists of some 200 acres, on the line of the Pittsburg & Western railroad, about eight miles from Pittsburg, and besides Pittsburg and Allegheny, it will be convenient for Sharpsburg, Millvale, Etna, Glenshaw, and other places. The site is beautiful with very attractive scenery and it will be improved on the latest ideas connected with the lawn plan of cemetery development, with permanent and commodious buildings. The work of development is under the charge of Mr. Edward D. Bolton, landscape architect, of New York. The offices of the company are located in Pittsburg.

* * *

The government census of the living has suggested to certain authorities of Cleveland, O., that a census of the dead would be of interest. The figures, given as accurate, make the number of dead of Cleveland 152,123, distributed through 26 cemeteries. The municipality under the direct supervision of the director of charities, maintains five of these and in them over half of Cleveland's deceased are buried. Erie street cemetery is the oldest and Woodland cemetery the largest of the city cemeteries. Erie street contains 17,969 and Woodland 40,386 bodies. Harvard Grove, Monroe and West Park cemeteries contain together 26,574, making a total of 84,924 people reposing in the burying grounds of the city. The Catholics have four cemeteries containing some 45,050 bodies. Lakeview and Riverside have had some 12,465 interments. There are ten Jewish and five other cemeteries belonging to different religious organizations.

* * *

One of the most interesting cemeteries in all America is the old Granary Burying Ground, situated in the very heart of the business centre of Boston. It is closely related to the history of our country, for it contains the remains of men and women intimately associated with the stirring events which characterize that history. The old Park street church stands at one corner and here there was once a public granary, which has given the name to the burying ground. Many of the old stones are also worthy of preservation. Here were buried Josiah and Abiah Franklin, the father and mother of Benjamin Franklin, and among the crowd of celebrities whose remains repose here are: James Otis, of Revolutionary war fame, John Hancock, Samuel Adams, Peter Faneuil, who gave old Faneuil Hall to Boston, Judge Samuel Sewall. There are graves of eight colonial, provincial and state governors in the grounds. Paul Revere lies buried here as well as Robert Trent Paine, one of the signers of the Declaration of Independence. The graves of the victims of the Boston massacre of 1770 are also to be found. Many of the graves are more than 200 years old, and the inscriptions on the stones marking them can scarcely be deciphered. There are many curious epitaphs, and altogether the old Granary burying ground should be studied on every visit to Boston.

SELECTED NOTES AND EXTRACTS.

A Word of Caution.

A writer in an exchange advises the cutting down of ornamental shrubbery around the house and replacing them with fruit trees. Don't do it. We must not give over our lives altogether to the practical and useful. Utility is all right and it is very necessary to have it in mind, but the home without the presence of things beautiful is not what it should be. The lilacs, the syringas, the flowering almonds and the rose bushes can never be fully replaced by the apple, the cherry, the plum or the pear. Grape vines are all right in their place but they can never take the place of the trumpet flower, the wisteria, the clematis or the ivy. The Giver of all Good gave us the beautiful as well as the useful and one is as valuable as the other.—*Garden and Farm.*

* * *

The Rock Garden.

In "Notes from Kew," given in *The Garden*, of London, appear the following on plants for the Rock Garden:

Gentiana asclepiadea is one of the best late summer-flowering gentians that we have. Its flowers are of an intense blue and are very freely produced. The plant grows to a height of two feet, and thrives exceedingly well in a shady position. The best method of propagation is by seed; it does not, as a rule, transplant successfully.

Anemone japonica, var. Lady Gilmour is a remarkable variety of the well-known Japanese anemone. The leaves have a most peculiar appearance, the edges being curiously curled, reminding one not a little of a parsley leaf.

Allium carinatum, a European species, is an exceedingly bright little plant. It bears light pink flowers, that are abundantly produced on long, stiff stalks, and are especially welcome at this season of the year, when the bulk of outdoor flowers are on the wane. It may be easily raised from seed.

Shortia galacifolia. This charming introduction from North Carolina is thriving remarkably well in a sunny nook of the rock garden at Kew. It delights in plenty of water, and is occasionally top-dressed with the curious compost of decayed pine needles. The leaves are at present beautifully tinted a deep bronzy red.

* * *

Winter Protection of Half Hardy Plants.

It should be well-known to advanced gardeners, by this time, that light is as

great an agent in destruction by frost as frost alone. But little practical advantage has been taken of this knowledge, except by gardening folk generally, of what the advanced gardeners know. The latter shades his greenhouse, when he finds the plants frozen,—and he plants rhododendrons and similar plants where the sun does not strike them in frosty weather, if he should have any choice in the selection of a site. In the extra cold regions of the northwest, the advanced gardener shades the trunks of his fruit trees by placing boards, fastened together like tree boxes, up against them. And thus the trees escape sunscald arising from being under the sunlight, and similar troubles. Surely orange growers in Florida might profit by this experience of their northern brethren. It would not be a very expensive thing to make an arbor of lath over an orange grove—the lath being an inch or so apart. With such a partial shade the plants would probably endure ten or twelve spasmodic degrees of frost without injury,—and the shade in summer would doubtless be all the better for the trees,—at least the trunks of the trees might be boxed, and even filled with earth if the weight could be supported. If the tops should suffer from frost, the strong trunks would sooner recover, than when the whole tree was killed to the ground.—*Meehan's Monthly for September.*

* * *

Avena Saccharifera.

This magnificent palm, known as the "Gomuti Palm" of the East Indies, is often cultivated as a source of palm sugar and useful fibre. The black fibres of the leaf stalks are adapted for cables and ropes, which are intended to resist wet for a long time. The juice is converted into toddy or sugar; the young kernels of the fruit can be made into preserve with syrup. The tree dies off as soon as it has produced its fruit, when the stem becomes hollow, and is used by the natives for spouts and troughs of great durability. The pith yields sago at the rate of 150 pounds from each tree. The above are some of the economic uses to which this palm is put. I am, however, chiefly concerned with its ornamental aspect in the garden, where it is such a striking object. It grows to about 40 feet high, but in its young state is a most ornamental pot plant. It yields seed freely, and in such abundance, that thousands of plants can be raised from the product of one tree. It

is one of the easiest palms to cultivate, needing very little care or attention once it has established itself. The seed should be sown in the rainy season.—*Quisqualis Indica*, in *Indian Gardening and Planting.*

* * *

Exochorda Grandiflora.

Exochorda grandiflora, sometimes called "pearl bush" for an easy name, is one of the most showy and satisfactory of the white early flowering shrubs of large growth, and its more extensive use should be encouraged.

It blooms just before the spireas, weigelas, etc., and is almost universally admired. The only objection is that it does not transplant as readily as desired. Many dealers and planters are shy of it for this reason and for no other. It starts growth very early in spring and its long, coarse roots are slow to become re-established after transplanting, consequently it won't endure exposure as many other shrubs do, and unless the weather is moist and conditions very favorable for growth the plants die at once or struggle along in a feeble condition for one or two years before they develop properly.

For these reasons it is particularly desirable that the plants should be frequently transplanted in the nursery. One year seedlings moved into nursery rows or beds grow very readily their second year and if these plants are transplanted every year and cut back they will make good plants that will grow readily without disappointment. Of course this kind of treatment increases the expense of raising and it cannot stand in the list of "cheap" shrubs; but it don't need to. It is a shrub well worth all it costs to raise good plants and should be recognized as and grown and sold accordingly, and planters should be cautioned to give it good care.

By good care I mean plant it in autumn or very early spring; don't allow the roots to be exposed and dried; plant in rich soil or mulch with manure; water if necessary, during the first season; large plants should be cut back when transplanted. When treated as suggested it flourishes in almost any kind of soil or situation and may be profitably introduced into many localities where it is unknown or seldom seen.—*Samuel C. Moon* in *The National Nurseryman.*

* * *

Horticulture and in crests allied thereto will be a strong feature of the Pan-American Exposition at Buffalo in 1901. The Society of American Florists will hold its annual meeting next year in Buffalo.



ESTABLISHED 1890.

OBJECT: To advance Art-out-of-Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

CONTRIBUTIONS: Subscribers and others will materially assist in disseminating information of peculiar interest to those engaged in landscape gardening, tree planting, park and cemetery development, etc., by sending early information of events that may come under their observation.

DISCUSSIONS of subjects pertinent to these columns by persons practically acquainted with them, are especially desired.

ANNUAL REPORTS of Parks, Cemeteries, Horticultural, Local Improvement and similar societies are solicited.

PHOTOGRAPHS or sketches of specimen trees, new or little known trees and shrubs, landscape effects, entrances, buildings, etc., are solicited.

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ASSOCIATION OF AMERICAN CEMETERY
Superintendents: President, Geo. M. Painter, "West Laurel Hill," Philadelphia; Vice-President, Frank Eurich, "Woodward Lawn," Detroit, Mich.; Secretary and Treasurer, H. Wilson Ross, Newton Centre, Mass.

The Fifteenth Annual Convention will be held at Pittsburg, Pa., September, 1901.

THE AMERICAN PARK AND OUT-DOOR ART
Association: President, L. E. Holden, Cleveland, O.; Secretary, Warren H. Manning, Tremont Building, Boston, Mass.; Treasurer, O. C. Simonds, Chicago.

The Fifth Annual Convention of the Association will be held at Milwaukee, Wis., June, 1901.

An interesting illustration of a valuable plant, *Rubus Dumetorum* is shown in the advertisement of Hiram T. Jones in another column. It is an English bramble, of a distinct species, and very useful for the covering of steep slopes and rough spots. It may be noted that the plant is well known in Kew and the Arnold Arboretum, Boston, and the illustration is from a plant propagated from parent plants in the latter institution.

BOOKS, REPORTS, ETC., RECEIVED.

A 1900 SUPPLEMENT TO NICHOLSON'S "DICTIONARY OF GARDENING." In two volumes. Volume I, now ready. \$5 per volume. George T. King, 145 Arlington St., Hyde Park, Mass.

Up to within a recent date Nicholson's Dictionary of Gardening stood unique in the comparative comprehensive manner

in which it treated horticulture and the details of gardening from the practical and scientific standpoints. To all intents and purposes it was an Encyclopedia, and its reputation has stood high from its first issue. But the old and valued work, as time has rolled along, with its wonderful progress, needed, to make it up to date, a supplement so as to include all the latest in discovery and research that has been added to the realm of knowledge in the later years. This has been done under the caption above and comprises 2 volumes, the first of which containing 376 pages and nearly 400 illustrations, has been delivered. The scope of the work as a whole is well explained in the preface of the first volume. It "aims at being the best and most complete work on gardening and garden plants hitherto published. * * * It is to be hoped that earnest efforts to attain accuracy, by consulting the best authorities, combined with no small amount of original research, have contributed to render the *matter* of the work not unworthy of the *form* in which it is presented to the reader. *

* * * Considerable trouble has been taken in revising the tangled synonymy of many genera, and in clearing up, as much as possible, the confusion that exists in garden literature in connection with so many plants, popular and otherwise." The supplement is produced in the same splendid manner as the work itself, both in matter and style, the ablest authorities having edited and written the text, but the illustrations mostly in half tones, which are of a very high order, show the remarkable progress made in this art, and offer an instructive contrast with the excellent wood cuts that characterize the earlier work. The work when completed will maintain its position as being a necessary part of a library of every horticulturist and lover of the plant kingdom.

Rules and Regulations for the Government of the Public cemeteries in the Town of Ware, Mass. Adopted March 26, 1900.

Annual Report of the Park Commissioners of the City of Taunton, Mass., for the year ending November 30, 1899. Illustrated with half tones.

Fortieth Annual Report of the Board of Park Commissioners of the City of Hartford, Conn., for the year ending April 30, 1900. Profusely illustrated with maps and half tones.

Act of Incorporation, By-laws, etc. Eder Public Park, Elkton, Md.

Obituary.

Louis Menand, a prominent figure in American floriculture for the past 60 years, died at his home in Menands, near Albany, N. Y., on August 15, aged 93 years. He was born in the province of Burgundy, France, in 1807 and after passing his early years among the flowers and in the capacity of gardener in various situations, he came to America in September 1837. He began work in Astoria, L. I., and remained there until 1840, when in the latter part of the year he removed to Albany, in the vicinity of which he has since resided. His career has been remarkable, to which the record of numerous successes in floriculture have con-

tributed no small part, but to which his efforts and accomplishments in an educational way lend a great charm. His plant at Menands is quite extensive, and he had accumulated a large collection of rare plants. Seven children survive him and his business is carried on by his son, Louis Menand, Jr.

* * *

Hiram Berry, for 40 years a resident of Rockland, Me., and for many years superintendent of the Achorn cemetery, died in Rockland August 14, aged 66 years.

* * *

Azel K. Billings, the veteran superintendent of Canton Corner cemetery, Canton, Mass., died at his home in Canton, Sept. 3, aged 71 years.

* * *

The death of William Saunders, superintendent of the division of experimental gardens and grounds, U. S. Dept. of Agriculture, Washington, D. C., who died at his home in that city September 11, aged 77, is a matter for universal regret. He was born in St. Andrews, Fife, Scotland in 1822, and he has done great work in the cause in which, for so long he has been well known. Intended for the ministry, for which he studied in Madras, India, where his early years were passed, he felt called upon to minister among plants rather than men, and he left his ministerial studies and apprenticed himself to a gardener. Coming to London, he made the acquaintance of Mr. Meehan of Philadelphia, and they have always since been co-workers and friends. For many years they practiced together at Philadelphia, and Fairmount and Hunting Parks were designed by Mr. Saunders. Another great work was the laying out of the estate of Johns Hopkins, Baltimore. A very extensive list of private works have also to be credited to Mr. Saunders. Washington owes him a great debt of gratitude, for its reputation as a beautiful residence city was practically made by him. Mr. Saunders was superintendent of the gardens and grounds of the Department of Agriculture, Washington, for 35 years, and he had gained the respect and veneration of his colleagues, both by his sterling and splendid character, and the vastly important and wonderful amount of work he had accomplished for horticulture and horticultural pursuits in the world. At his death Secretary Wilson called the officials in his office, and committees were appointed to appropriately recognize the loss the country had sustained and to formulate expressions of sympathy. At the time of his death Mr. Saunders had been absent from his duties only a month, and was confined to his bed but a week.

* * *

David G. Yates of David G. Yates & Co., a prominent nurseryman of Germantown, Philadelphia, and who has been represented in the columns of PARK AND CEMETERY, for many years died suddenly at Holland Springs, Me., on August 11, in his 64th year. The firm of David G. Yates was originally Miller & Yates, but Mr. Charles Miller, now landscape gardener of Fairmount Park sold his interest in the firm some years ago, and the business has since been conducted by Mr. David G. Yates, the sole owner.

PARK AND CEMETERY

and Landscape Gardening.

VOL. X. Chicago, October, 1900. NO. 8

CONTENTS.

EDITORIAL—The Springfield, O., Couvention of Improvement Associations—Cemetery Reforms—Preservation of Public Monuments—Another Improvement Agency—The Care of School Grounds—The Fall Arbor Day—Art Out-of-Doors.....	173, 174
*Monument to Gov. John S. Pillsbury, Minncapolis, Minn.....	175
*The Use of Shrubs in Cemeteries.....	176
Seasonable Suggestions.....	179
*Elæagnus.....	180
Angles and Inclined Planes in Highways.....	182
Flowering Trees for Ornamental Planting, I.....	183
*The Wall Vaults, Paco Cemetery, Manilla.....	184
Improvement Associations.....	185
Coal Cinder Walks and Paths.....	186
*Garden Plants—Their Geography, LVIII.....	187
*Modern Drives for Cemeteries.....	190
Correspondence—Hardy Azaleas—Monuments in Cemeteries.....	191
Legal.....	192
Park Notes.....	193
Cemetery Notes.....	194
Selected Notes and Extracts.....	195
Reviews of Books, Reports, etc.....	196

*Illustrated.

NATIONAL LEAGUE OF IMPROVEMENT ASSOCIATIONS A convention of Improvement Associations for the purpose of forming a national organization was held at Springfield, O., October 10 11. The number in attendance was not large as is usually the case at the opening meeting of such a project, but several prominent devotees in the cause of art out-of-doors and village and town improvement were present to set the work in motion, and considerable well directed enthusiasm distinguished the proceedings. Springfield improved the opportunity to show its hospitable side and the guests were entertained very cordially and pleasantly. The meeting resulted in the appointment of committees to continue the work and the framing and passage of a constitution and by-laws. The constitution decides the name to be "The National League of Improvement Associations," and its object "to bring into communication for acquaintance and mutual helpfulness all organizations interested in the promotion of out-door art, public beauty, town, village and neighborhood improvement." The following officers were elected: President, Jonn L. Zimmerman, Springfield, O.; 1st Vice-president, Edwin L. Shuey, Dayton, O.; 2nd Vice-president, Mrs. Conde Hamlin, St. Paul, Minn.; Recording Secretary, E. G. Routzan, Dayton, O.; Corresponding Secretary, D. J. Thomas, Springfield, O.; Treasurer, Frank Chapin Bray, Clev-

land, O.; Organizer, Miss Jessie M. Good, Springfield, O. It was decided to establish the headquarters in Springfield, O. At a mass meeting held in the City Hall on the evening of October 10, one of the principal features was an address by Prof. Zueblin of the University of Chicago.

CEMETERY REFORM.

It will doubtless have been observed in the report of the Cleveland Convention of the Association of Cemetery Superintendents that the spirit of reform in many lines of cemetery practice dominated the gathering. And yet with this spirit permeating the minds of the progressive members, as it has done since its influence was first felt, reform has been comparatively slow. This is easily explained. Perhaps in no other feature of human progress, have the methods and customs relating to the disposal of the dead been less encroached upon by current movements, and it has only been when conditions demanded change that the conservatism attaching to the cemetery or burial ground has been forced to yield. This conservatism, which on the part of lot-owners even now is the most difficult task cemetery officials have to deal with, has the unfortunate tendency of drifting into apathy, resulting in the neglect so generally encountered, especially in the smaller places. Respect and veneration for old time customs is a good foundation upon which to build reform when it is properly practiced, but when it results in neglect it is a force that must be diverted into more useful channels and this can only be done by continued educational effort.

PRESERVATION OF PUBLIC MONUMENTS.

The preservation of public monuments, which means of course such monuments as have historical or local interest worthy of the distinction of being preserved, is a matter of great importance everywhere. It was broadly emphasized in a paper read at the recent congress of architects held in Paris, wherein Herr Borstedt related that the German historical and archæological societies last year adopted joint resolutions on the subject. These resolutions provided that no fixed monument of artistic or historic interest over which the public has any claim should be interfered with for any purpose nor in any way, nor left to decay, even without the consent of the authority charged with its control. The same view was expressed in regard to movable objects having public interest

attached to them. In regard to archæological explorations, it was voted that none such should be undertaken on state or corporate property without official sanction. In reference to private holdings of interesting monuments or relics the resolutions decided that in case of peril to them the state should appropriate them as public property. It was advocated at the Paris meeting that the most effectual way to preserve monuments and works of antiquity was to labor to induce the public to take an interest in them.

ANOTHER IMPROVEMENT AGENCY. When the devotees of the Board of Trade of a city take up the question of the improvement of the town by ornamental and useful planting, who shall say that such a movement is not gathering force? Such is the case, however, in a prominent town in Texas, and the Board of Trade has invited the co-operation of the citizens to undertake the work in whatever direction it can be consistently applied. There would appear to be no reason whatever why such an established organization could not do effective work in town improvement. It might readily exercise considerable force in compelling the school authorities to improve the school-grounds, and the town authorities to clear up and improve the unseemly places, while its indirect influence would go far to create a practical sentiment looking to the improvement of home surroundings among the citizens generally. Its action would be stimulating and encouraging in many directions, while in practical directions it would have both business energy and tact to organize effective auxiliaries.

THE CARE OF SCHOOL GROUNDS, ETC. In regard to the maintenance of school grounds and the other playgrounds designed for children in Chicago, financial and other questions have arisen and are under discussion. One of the promising suggestions to fit the case has been a proposition to enlist the services of the children themselves in the work of preserving order and maintaining the grounds, under proper supervision. Why cannot this be made a practical question? By imposing a share of responsibility upon those enjoying the benefits, it is possible to secure willing help in the desired directions. Children are born gardeners, and likewise delight in exercising authority. By enlisting the help of teachers of known ability in training the young, an efficient committee in every school could be formed for the practical work of caretaking, and preserving order and maintaining the grounds. The practical experience accumulating of the work of the boys and the girls in gardens which have been established for their pleasure

and profit, amply demonstrates their ability for such work, and it is possible that in this way of volunteer help a large share of expense could be saved and the pleasure of the young in their playgrounds and schoolgrounds immensely augmented by the sense of responsibility imposed upon them.

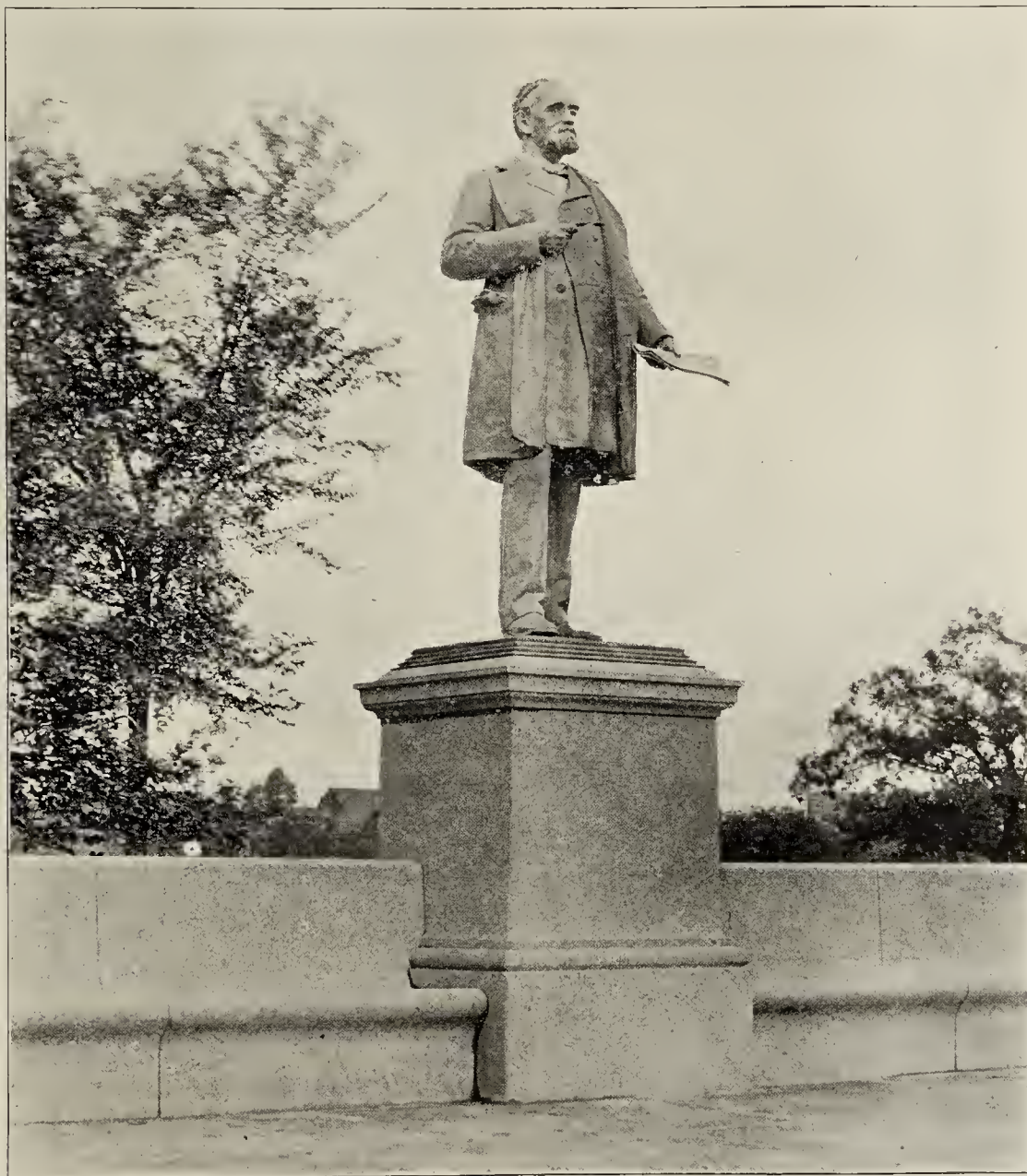
THE FALL ARBOR DAY. Arbor Day in Pennsylvania comes twice in the year due to the variations in climatic conditions in the state. The day set apart in spring does not meet prevailing conditions in an appropriate way, so that to ensure the advantages to be derived from fostering and encouraging the improvement of the home, the farm, the schoolhouse yard and the public places generally, which the ideas connected with Arbor Day tend to encourage, a fall Arbor Day has been the custom. In the proclamation issued by the governor concerning this later Arbor Day, which is set for October 19, stress is laid upon the care of the forest lands and their extension. Pennsylvania is going ahead in this direction and so is New York, and it is one of the most important questions of the day on economics for every state in the union.

ART OUT OF DOORS. The question of art-out-of-doors is one of those appealing sentiments that being understood, rapidly secures public sympathy and finally becomes a social force. The effect of external surroundings, or natural environment, has always been marked in both the mental and physical development of man, swaying him this way or that according to the nature of such surroundings; and it may be positively assumed that the general improvement of the home lot, whether it be hemmed in by city limitations or with more or less room as in the suburban or farm home, a corresponding improvement in the members of the community will result. The movement is one of those forceful agencies that occur in certain periods of civilized progress, and form connecting links to bridge over its inequalities, and so create a harmony in the general development. It had to come sooner or later in this broad country, where the marvellous material growth has for the time being overshadowed the slower yet absolutely necessary accompaniments of refined living and doing. It would be difficult to estimate the amount of inspiration a pretty dooryard imparts to the inmates of the home. Be the area ever so limited wherein is exercised the practical love of nature, and wherein is displayed an appreciation of nature's efforts at decoration, there is added to the daily life a cheery and refreshing stimulus, and the inclination is stirred to follow nature's lead in a constantly renewed activity in every day's duties.

MONUMENT TO GOV. JOHN S. PILLSBURY, MINNEAPOLIS, MINN.

With befitting ceremonies, and under a condition not generally met with in unveiling ceremonies—the presence of the living original—the bronze statue of Gov. John S. Pillsbury was unveiled in Minneapolis on Sept. 12. The illustration on this page, for the photograph of which we are indebted

trusive features to marr the effect of the whole, or invite thoughtless criticism. All the details are well arranged; the hang of the garments, their arrangement, all point to the fact that a master hand modeled the statue, and created a harmonious balance in the completed work. The portraiture is not only excellent as might have been expected, but the spirit in the expression is characteristic of



STATUE OF GOV. PILLSBURY, MINNEAPOLIS, MINN.—D. C. FRENCH, SC.

to the *St. Paul Pioneer Press*, gives an excellent view of the monument, which is located on the campus of the University of Minnesota at Minneapolis.

The statue is the work of Daniel Chester French and is a splendid production. It is somewhat over life-size and bears the impress of a work of art, and moreover lends itself to dispute the argument that a statue in modern habiliments can never be made artistic. It is unquestionably both dignified in pose and the attitude of the figure presents no ob-

trusive features to marr the effect of the whole, or invite thoughtless criticism. All the details are well arranged; the hang of the garments, their arrangement, all point to the fact that a master hand modeled the statue, and created a harmonious balance in the completed work. The portraiture is not only excellent as might have been expected, but the spirit in the expression is characteristic of

the man, and bears intimate relationship to the manuscript in the hand as containing matter to which he is giving voice. The monument as a whole is simple in design, but dignified as befitting the work. The pedestal which is of Minnesota granite, has no alluring detail to divert attention from the figure above. The work of art it supports is the prime object for study, and the simplicity of the accessories contributes to a better appreciation of the statue itself.

THE USE OF SHRUBS IN CEMETERIES.*

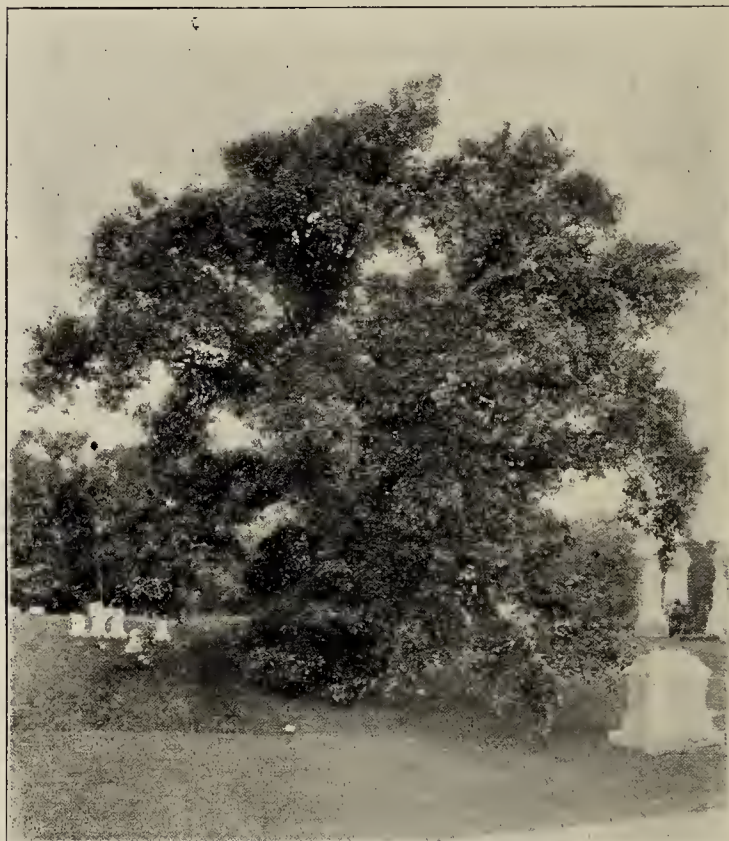
The reports of our meetings show that during recent years the subject of shrubbery has been neglected. In fact, judging from many of the cemeteries which our association has visited, one would think that the shrubs themselves were very little appreciated. Undoubtedly the removal of fences, hedges and railings, and the substitution of grass walks for those of other materials, is a movement in the right direction, but in confining the features of a cemetery to grass, tall trees, roads and monuments, is there not danger of producing an effect of baldness and monotony? We have been in some burial places where the whole area included within the boundaries could be seen at a glance. A multitude of stones would first obtrude themselves on our attention and then the bare trunks of trees would fill the view with vertical lines. Some low foliage hiding portions of the roadway and at least nine-tenths of the monuments would have made a wonderful improvement in the appearance of the grounds. We come here to learn how to make cemeteries beautiful. Nothing will help us more than an abundance of good healthy-looking



A GLIMPSE OF WILLOWMERE, GRACELAND CEMETERY, CHICAGO. BLUE BEECH (FAGUS) AND MAPLES (ACER) IN FOREGROUND.

green leaves. Foliage adds as much to the beauty of a landscape as plumage does to the beauty of a bird. To make a cemetery attractive and interest-

ing in appearance, the attention must be confined to one object at a time by shutting other objects out



A BURR OAK, NOT TRIMMED UP, GRACELAND CEMETERY, CHICAGO.

of view. By so doing, the changing of one's position brings new features into sight. In this way we are attracted from one object to another and our interest in what we are looking at is maintained. It follows, therefore, that masses of shrubbery covered with foliage reaching from the ground to points above the eye are exceedingly useful in producing the desired effect. It sometimes happens that trees with foliage coming to the ground serve the same purpose as masses of shrubs, but in too many cases the branches of the trees have been cut away. The hiding of certain objects, however, is not the most useful purpose served by shrubs. They are beautiful in themselves. What is more pleasing to the sense of sight and the sense of smell than a great mass of lilacs when in bloom? How delicate in color and fragrance are the pink and white flowers of the Tartarian honeysuckle? How graceful the curving branches of some of the spiræas when weighed down with a profusion of clusters of white flowers. But I think the beauty of the various shrubs, although surpassing one's powers of description, yields in importance to the part which they serve in making artistic compositions. They make the most pleasing boundaries of lawns, forming a background in one place, carrying a point of foliage forward in another, so as to

*A Paper read at Cleveland Convention of the Association of American Cemetery Superintendents, Cleveland, O., September, 1900. By O. C. Simonds.

give a prominent point of light in contrast with deep shade, and everywhere varying the outline so that it is as beautiful as the margin of a summer's cloud. The effect of shrubs as seen in moonlight when their color is for the most part lost, shows their fundamental value, but a strong light which brings out the variety of color helps to complete the picture.

I have spoken of masses of shrubs, but we sometimes see them dotted upon the lawn in a way to weaken the general effect. And even in masses, too great a variety is frequently used. A large

shrubs of New England and the Alleghanies! All shrubs which make the country so beautiful are certainly appropriate in a cemetery.

It is sometimes said that there is not space enough for shrubs in a cemetery, and I have even known rules to be adopted prohibiting their use, but there is room enough for anything that people like. People wish to place their dead among most beautiful surroundings, and with those who can choose, the general effect is the first consideration rather than a given amount of space. The people who spend fortunes in erecting ugly stone tombs



European Larch (*Larix Europæa*.)

A SCENE IN GRACELAND CEMETERY, CHICAGO.

group of one kind of shrub is generally very satisfactory in appearance, and if two kinds are used they should not be mixed so as to produce a spotted appearance, but each kind should predominate in its own part of the group. Only such shrubs should be planted as prove hardy in the locality in which they are used. I have read that there is no country more abundantly supplied with shrubs than the United States and none where the climate is more favorable to their growth. We certainly have enough native shrubs to make any locality as beautiful as the fairest park. I have seen prairie roses make a ravine in which they were at home more beautiful even than the "wooded island." How attractive'y the elderberries fill out the corners of a rail fence, and how beautiful are the viburnums and dogwoods, to say nothing of the evergreen

would not hesitate in securing all the space required for any tree or shrub or any combination of such beautiful objects if they could fully appreciate them. Shrubs can usually be placed along the boundaries of cemeteries, the margins of ponds and in acute angles of lots or sections without taking any space that is valuable for other purposes. Sometimes they can be placed about the trunks of trees with good effect. I know of no reason why they should not occasionally be allowed to grow directly over a grave. We might think of them as reaching out their branches to protect a spot that is sacred. They would form a place of refuge for the birds whose music would continue to bring cheerfulness each spring for a period longer than a granite monument will last.

A group of shrubs should form a complete

PARK AND CEMETERY.

ground covering, that is the foliage should meet the lawn and no attempt should be made to grow grass underneath the branches. Usually no trimming should be done after the plants are once established. It is a mistake to trim up shrubs. If they get too high or too broad, the longest branches should be cut at the ground. If this treatment produces a bush that is too straggling, perhaps the whole shrub should be cut to the ground and allowed to sprout again.

It is also a mistake to rake the leaves from

ries on little red stems, the red-branched dogwood, the witch hazel, the viburnums of different kinds, the common hazel, the elderberries, both the red and the black-berried species, the spiræas of different kinds, the chokeberry, the different sumachs, varying in size from the small aromatic to the stag-horn which is almost a tree, the prairie, swamp and meadow roses, and the New Jersey tea are examples of attractive shrubs that are found almost everywhere in the northern states. In favored localities the evergreen shrubs, including the rhodod-



WAITING ROOM AT GRACELAND CEMETERY, CHICAGO.

Thunberg's Barberry, (*Berberis Thunbergii*.) Snowberry, (*Symphoricarpos Racemosus*.) Prickly Ash, (*Zanthoxylum Americanum*) and Honeysuckles (*Lonicera*.)

underneath a group of shrubs. The fallen leaves always look better than the bare ground during late fall, winter and early spring, and in summer they are not seen. They preserve moisture and furnish plant food. They will also protect certain early spring flowers which naturally find a home near shrubs, out of reach of chilling winds, such as snowdrops, crocuses, bloodroots, erythroniums, trilliums and hepaticas.

Frequently the greater portion of the shrubs needed for boundaries and margins of ponds can be taken from the surrounding country. The pangled dogwood with its rich foliage and white ber-

endrons and laurels, make a beautiful addition to the list. But, of course, we should take advantage of the beautiful shrubs that come to us from other countries. The forsythias, covered in spring with a profusion of yellow flowers, the Japan quince following with bright red flowers, the honeysuckles, lilacs, syringas, spiræas, viburnums, roses, barberries, etc., that fill our nurseries are all delightful and should be used in abundance.

If I could make but one suggestion for beautifying our cemeteries it would be to use more of these smaller woody plants which clothe the ground so attractively and feast the eye with a profusion

of flowers, leaves and fruit, and which even in wintertime soften the outlines of a landscape and often catch and hold the snow in a delightful way. They are as important in the real pictures which we try to form as children are in the family. Let us use them with boldness, creating broad, quiet effects, and by so doing make the cemeteries more truly resting places.

SEASONABLE SUGGESTIONS.

Plant bulbs for spring flowering this month. See that the soil is good as better results follow than when it is poor. Florists who desire bulbs for cut flower purposes place a dozen or more in flat boxes, then place the boxes outdoors covered with leaves or soil, to remain until desired to bring them indoors for forcing.

The *Euonymus* scale, which attacks all euonymus, whether evergreen or deciduous, is easily destroyed by washing with kerosene emulsion or whale oil soap. Where badly infested it is often better to wholly destroy the plants by burning, starting with a new lot free from scale.

Most all *Daphnes* are sweet scented but none are more so than the creeping, evergreen one, *Cneorum*. This species likes a somewhat light soil and to be under the protection of leaves in winter. When suited, it flowers almost as freely in the fall as it does in spring.

The verbena shrub, *Caryopteris mastacanthus*, strikes readily from green cuttings. Place a plant in a pot and introduce it to a greenhouse, making cuttings from the green shoots as they grow, and a good supply will soon be on hand.

Elæagnus umbellata is the silver thorn bearing ripe fruit now. All other kinds have fruited earlier in the season. The salmon colored berries are produced in great profusion. These berries, washed of pulp and kept in slightly damp sand, germinate well when sown in spring.

The green shoots in *Ligustrum tricolor* should be cut out before the fall of the foliage makes it impossible to distinguish them. They weaken the bush in the line of maintaining the golden foliage portion.

Sedums are usually thought of for rockeries and like situations but they need not be confined to such places. In good situations in a garden they do well. Plant them in fall or spring. One of the best, if not the best for late September is *S. spectabile*. The pink flowers are in flat heads, and are produced in great abundance.

Hydrangea Hortensia will not flower if its shoots are destroyed by frost. A good way to winter them is to dig them up and bury them root

and branch in some high situation for the winter. Or dump a load of sawdust over them where they stand, removing it in spring.

Gelsemium sempervirens, the Carolina jasmine, which rambles over trees in the south, adorning them in spring with sprays of golden flowers, cannot be termed a hardy vine in the north, hence is seldom seen in flower there. But treat it as a greenhouse plant and what a splendid show it makes!

Both golden rods and asters grow readily from seeds sown either in fall or spring. Such beautiful asters as *Novæ-angliæ* and its variety, *rosea*, are readily increased in this way. In parks a handful of seeds scattered broadcast along a bank will result in a lot of plants.

Yucca gloriosa is a quite late blooming sort. It is common about the Capitol grounds, Washington, flowering there in August and September. In Philadelphia, where it is quite hardy, it blooms in October. It is an arborescent species, as is its variety, *recurva*. These and all yuccas should be planted in spring.

White oak, chestnut oak and chinquapin oak are among those the acorns of which sprout almost as soon as they fall from the tree. Gather them up and sow them thinly in a bed at once, as they soon lose their vitality if exposed to the air.

Japanese Snowball forces well, and whether for the florist or the amateur is as useful a shrub as could be named for the purpose. This and all other kinds intended for forcing should be potted or boxed at once and kept under cover in a cool place for a few months until time to start forcing, which may be about February.

There is a general complaint of the death of white birches throughout the country. Though fungus has evidently got in its work on some which have been examined, a borer does not seem exempt from blame, as several dead trees gave evidence of the presence of many of them.

Crimson Rambler rose is an eminently satisfactory one for forcing in winter. In many cities it has become much called for for Easter. Plants which have made long shoots are the ones which will flower. If plants are now in pots, so much the better, but those lifted from outside, potted and put under cover for a month or two are good for the purpose.

Carnations for winter blooming should be housed in October or before the ground freezes. Though a tolerably hardy plant and not hurt by a little freezing, they are the better for being inside to get roothold before fires are required at night.

Joseph Mechan.

ELÆAGNUS.

Considerable confusion appears to exist concerning the species of elæagnus as sold by the nurserymen of Europe and America. Each of the



ELÆAGNUS ANGUSTIFOLIA.*

species has merits equal to the sorts of shrubs usually found in nurseries.

Some are evergreen, others have ornamental fruit, a few are distinctly silvery in tone and all may be cultivated without difficulty.

The flowers are, in no instance, large, conspicuously striking or of great ornament. They are axillary and apetalous and in some species fragrant; the leaves are alternate and entire.

The deciduous sorts in common cultivation in America are: *Elæagnus angustifolia*, *E. argentea*, *E. parvifolia*, *E. umbellata*, *E. longipes* and *E. multiflora*. The evergreen species are: *Elæagnus macrophylla* and *E. pungens*.

Horticulturally the species may be classified thus:

1. *Leaves Deciduous.*

*Branchlets of the current year silvery white.

†*Elæagnus angustifolia*, L. = *E. argentea*, Moench (not Pursh.); *E. flava*, Hort.; *E. hortensis*, Bieb; *E. incana*, Lam.; *E. songorica*, Fisch.; *E. spinosa*, L.

Tall shrub or tree attaining a height of 20 feet. The branches are long, slim and frail, and toward the ends, droop, giving the tree a somewhat weeping appearance.

Leaves are oblong-lanceolate to linear lanceolate, petiolate, light green or silvery above and decidedly silvery white be-

neath, 2-3½ in. long and ½-1 in. broad; flowers produced in June, 1-3 borne on short pedicles, perianth yellow within. Fruit covered with silvery scales. Native of the Mediterranean region of Europe and Asia. Quite hardy at Boston.

††*Elæagnus parvifolia*, Royle (not Wall) = *E. Japonica*, Hort.

Shrub or small tree attaining a height of 20 feet. Branches are thick, strong and erect or spreading. Leaves are entire ovate to ovate-oval, obtuse, sometimes truncate, margins undulated, upper surface somewhat silvery, later dark green and glabrous, lower surface silvery white, 1½-2¼ in. long, 1-1 3-5 in. wide; flowers numerous, produced in June. Interior of perianth whitish; fruit globose or oval, silvery, later pinkish, ripens latter part of August. Native of the Himalayas and Japan. Not perfectly hardy at Boston.

**Branchlets of the current year covered with light brown, or toward end of summer somewhat silvery scales.

†*Elæagnus argentea*, Pursh. = *Shepherdia argentea*, Hort. (not Nutt.)



ELÆAGNUS ARGENTEA.

An erect growing stoloniferous, shrub, 10 to 12 feet high. Lateral branchlets are short and stiff, leaves ovate or oval-lanceolate or oblong-lanceolate, acute or obtuse, short petioles, 1-3½ in. long; 1-2 in. wide, dull silvery above, shiny silvery-whitish beneath. Flowers usually numerous, 1-3 in axils, fragrant, 6-8 lines long, on short pedicles produced in May-July, perianth silvery without, yellowish within. Fruit globose or ovoid covered with silver scurf, edible. Indigenous from lower

*All the illustrations in this article are half natural size.

Ontario to James Bay westward to Northwest Territory, Minnesota, S. Dakota and Utah.

This plant is frequently confused with *Lepargyrea* (*Shepherdia*) *argentea*, Nutt., which has opposite leaves, diœcious flowers and twice as many stamens as parts of the perianth, whereas in *elæagnus* the leaves are alternate, flowers polygamous and stamens equal in number to parts of the perianth. Furthermore the *Lepargyrea* attains a height of from 15 to 18 feet, extends southward into the Mississippi valley to Kansas, has its flowers in fascicles instead of singly or in twos or threes as in *Elæagnus*, and has a bright scarlet or crimson colored and sour fruit of a size about half as large as those in *Elæagnus argentea*.

††*E. umbellata*. Thunb.

A wide spreading shrub growing to 12 feet in height. Leaves ovate lanceolate to elliptic and narrowed at both ends, 1½-3 in. long, ½-1¼ in. wide, margins undulated, upper surface somewhat silvery—eventually slightly silvery and light green in color, lower surface silvery white. Flowers buff-

whitish, May-June, erect; fruit short stalked, globose or oval, covered with silvery scales when young, later scarlet, persistent



ELÆAGNUS UMBELLATA.

after leaves have fallen. The figure shows fruiting branch early in September and mature fruit in middle of October. Japan. Hardy at Boston

***Branchlets of current year dull red or chocolate color.

†*E. multiflora*, Thunb. A shrub attaining a height of 8 feet. Leaves ovate, oval or oblong-acute; upper surface sometimes thinly covered with stellate hairs, eventually green and glabrous; lower surface shiny, covered with dull and silvery scales. Flowers, 2-3, May-June. Fruit long stalked, oval to oblong, scarlet, ripens July-August. Japan. Hardy at Boston.

††*E. longipes*, A. Gray = *E. odorata edulis*, Hort.; *E. edulis*, Hort. A shrub attaining a height of six feet. Leaves broadly oval or oblong oval, acute or obtuse, when young upper surface usually covered with stellate hairs, at length dark green and gla-



ELÆAGNUS PARVIFOLIA.

brous; lower surface brownish silvery. Flowers April-May, 1-2, whitish. Fruit pendulous on long slender peduncles, $\frac{3}{4}$ in. long, $\frac{1}{2}$ in. wide. Japan. At one time cultivated for its



ELEAGNUS MULTIFLORE.

fruits which are large, scarlet, abundantly produced and somewhat tart. Fruit ripens end of June. Hardy at Boston.

II. *Leaves Persistent.*

A. Branchlets of the current year silvery white.

B. *E. macrophylla*, Thunb. A shrub attaining a height or 6 feet. Leaves ovate or broad elliptic, upper surface covered with few scales, eventually becoming dark green, lower surface silvery white. Flowers, August, silvery. Japan. Not hardy at Boston.

AA. Branches of the current year brown or chocolate colored.

B. *E. pungens*, Thunb. *E. reflexa*, Hort. A shrub attaining a height of 6 feet. Leaves oblong or oval, margins undulated, upper surface light green, lower surface silvery. Japan. Not hardy at Boston.

Emil Mische.

ANGLES AND INCLINED PLANES IN HIGHWAYS.

Probably nine out of every ten people are unconsciously impressed by the ironclad rigidity of the lines of streets and roads, both in grade and direction; probably not one in a hundred is impressed consciously, or public opinion would have made the lines less rigid and the grades less awkward. Whoever will take the trouble to observe cannot but be struck by the difference between the picturesque and restful aspect of a road that was laid out before the memory of man, and the average modern street or boulevard. The reason is, that the road followed the natural lines of the ground, and the boulevard was laid out by the engineer.

In the thick centres of population it is no doubt essential that lines should run parallel and angles meeting at a point should add up so as to be exactly equal to four right angles; that grades should rise and fall without preparation, or many feet of inestimable real estate might be lost to buildings or light wells. But, where land is less valuable, in country and suburban districts, and wherever roads and streets are laid out with any regard to aesthetic effect on which in fact, more or less of their value depends, why is the use of suave and flowing lines so generally disregarded? Why are grades always angular and angles gawky? Why cannot a road or street turn off by an easy curve instead of two restless and hostile straight lines? And if the two straight lines are indispensable, why can they not be united by a curve, if it is only in the curbstone? If the road or street must rise or fall, as every road or street must if it is long enough, why cannot its rises and falls melt into each other imperceptibly by the endless phases of the ogee curve in which Hogarth discovered his line of beauty? Why has nobody who makes highways perceived how nature has made her scenes peaceful and soothing by covering the gaunt skeleton of the earth with alluvial deposit in the whole of which there is not a straight line? Why, in short, should our streets and roads be forever gaunt in line, unyielding in grade and generally ugly in effect?

The probable answer is that straight lines and angles, either in direction or surface, are easy to calculate or lay down, while curves are difficult. The engineer being trained to reduce all indefinite lines to definite ones, reduces all his grades and changes of course to the lowest terms of his verniers and the public gets the result. Everybody knows these results, or can learn to see them by looking about him, for they are obvious wherever the surveyor has been with his transit and put down parallel lines for houses to be built along.

There is a city not very far west that boasts itself to be of the east, that has encircled itself with a boulevard for pleasure traffic. There is at least one stretch of it a mile or so long passing through broken ground on a regular incline; and the effect is near as restful and inviting as that of any railway embankment of them all. But whether this be the reason or not, or all or only part of it, surely most people will agree that the use of a moderate amount of taste and skill in defining the lines of our public ways would make them vastly more agreeable to the eye and even to traffic. If the engineer is not able to accomplish this result, he ought to call in the help of someone who can; and those who are responsible for his work ought to see that he does so.

H. A. Caparn.

FLOWERING TREES FOR ORNAMENTAL PLANTING.
—NO. I.

First in the list of flowering trees for parks and gardens comes that extensive branch of the rose family, to which we give the name of *Prunus*. Probably no other genus furnishes so many beautiful small trees, valuable for their early bloom and decorative effect. The Japanese employ no plants so extensively for pure ornament. Plums, almonds, peaches, nectarines, apricots and cherries are all included in this genus to the confusion of the amateur botanist, who does not see why the name *Prunus*, which he has been accustomed to associate with plums alone, should embrace so many other and such widely different kinds of fruit. Some botanists have tried to simplify matters by giving cherries the sub-title of *Cerasus*, and peaches that of *Amygdalus*, but the great authorities tack the generic term of *Prunus* on to them all, and we lesser lights can only follow in their tracks.

It is just as well to inform the ignorant, however, that the nurserymen's catalogues frequently drop the *Prunus* entirely, and describe cherries and peaches by their sub-title alone.

But to go back to the Japanese who are, probably, the most æsthetic people on the earth, especially in the art of landscape gardening. The *Prunus* group furnishes them with what they call their royal flower, the cherry blossom. But I believe they thus honor more than one species of the genus.

When the "Cherry" blooms they make holiday and repair to their parks and gardens to "view" the flowers, for that is what they call it. Their young men and maidens adorn themselves with garlands of blossoms and their poets hang verses in honor of the cherry on the branches of the trees.

Prunus mume is the name they give to their favorite species. I do not know whether this tree is offered for sale by any American nurseryman, but Mr. Watson, of Kew, describing it in *Garden and Forest*, said that it was distributed some years ago by Messrs. Baltel Bros., of Troyes, in France, under the name of *Prunus myrobolan flore pleno*.

The Japanese nurserymen offer named varieties of these trees with flowers varying from white to rose purple. The flowers are as large as those of the almond, semi-double and delicately fragrant. It blooms very early before the leaves appear. Mr. Watson says: "It is distinguishable by the pale green color of its twigs, the long, pointed, apricot-like form of its leaves, and its globose, slightly velvety fruits, containing oval convex stones."

Another favorite tree of the Japanese is *Prunus Pseudo-cerasus*. It was introduced into England some years ago by Mr. Anthony Waterer, of the Knap Hill nurseries, where it is called *Prunus Watereri*. It blooms in April and has beautiful large flowers in crowded clusters. The Japanese nurserymen offer about a dozen named varieties of these trees, with white, pink, greenish-white, single and double flowers. Mr. Watson speaks of a yellow-flowered variety at Kew Gardens.

The tree is the largest member of the rose family known to Japan, and, next to the apricot, is more cultivated for its flowers than any other tree. In the forests of Yezo *Prunus Pseudo-cerasus* occasionally rises to the height of 80 feet and forms a trunk three feet in diameter. "Early in the fall the foliage of this tree turns to deep scarlet and lights up the forest before the maples assume their brightest colors." I must not forget to state that the three first described in this article under the Japanese name of *Prunus Mume* is a species of apricot and it is to this tree that Mr. Sargent refers as the favorite tree of the Japanese.

There is a mystery surrounding the origin of the Myrobolan plum, *P. Myrobolana*. It has been accredited to North America, but has not yet been found wild there. Seeds without name which were sent to the Arnold arboretum by M. Leichtlin, said to have been collected in Turkestan, produced plants of this species.

Prunus Pissardii, so generally offered by dealers under the name of the Purple-leaved plum, is a variety of this species. "It is recorded," says Mr. Jack, "that it was first sent to France by M. Pissard from Persia, when he was gardener to the Shah."

As grown in our gardens this plum is a small tree about twelve feet in height, clothed early in

spring, or about the middle of April, with quantities of very pale pink flowers. These are fine in contrast to the reddish purple of the expanding leaves. It is a favorite tree with those who like odd-colored foliage.

Prunus Davidiana was introduced to France by the Abbe David twenty-six years ago. It is quite rare in America. In England it is better known, though it was not planted there until about 1892, when the Messrs. Veitch began to distribute it. Mr. Watson, of Kew, calls it a peach. There is a snowy white variety and one with pink blossoms. He says it is the most charming tree of the *Prunus* group.

In America it is hardy at least as far north as the Arnold arboretum in Massachusetts. Its great value is for its very early bloom as it comes into flower before any other of its class. The flowers are large and cover the tree before the leaves expand. It comes from Northern China.

Prunus triloba is very well known in our gardens where it forms a large shrub or small tree with double pink bloom in April, very much like that of its smaller relative the dwarf double-flowering almond, usually called by dealers *Amygdalus nana flore pleno*. The only drawback to the use of *Prunus triloba* is that it is almost impossible to get plants that are not grafted on plum stock. These grafted plants soon die. I have had a number of them but find them very short lived. Mr. Robinson speaks of it as hardy and vigorous.

It blooms before the leaves are fully expanded and when every twig is covered with its double, rose like blossoms, tinged with pink, no shrub is finer in effect. If as hardy here as in England I hope our nurserymen will give us ungrafted plants and thus do away with the greatest drawback to the use of this charming shrub.

Prunus Simonii, as it grows here at Rose Brake, is a small, erect tree, with dark green leaves and quantities of pure white blossoms, very early in April. The tree does not flourish here and the flowers are small, and there are many better varieties. The fruit is edible but not valuable. Its chief advantage is that it is one of the first of its class to blossom before the leaves appear.

The Almond tree is a fine plant for ornamental purposes and is hardy in this neighborhood. The Black Almond is called by the learned, *Prunus dasycarpa*. It has black twigs and the flowers, which are an inch across, are white, with rose-tinted stamens and reddish calyx lobes.

Some years ago I planted two Hard-shelled almond trees on the site of an old woodpile where they have grown very vigorously and give us quan-

ties of beautiful rose-tinted bloom very early in the year before vernalization begins. The almond tree has this advantage over many of the plum group that its bloom is not so evanescent as that of its cousins. Several varieties of plums bloomed at the same time as the almonds but faded long before the latter had cast a petal.

Prunus spinosa flore pleno is a double-flowering variety of the English Sloe or Black Thorn which is not a thorn at all but a "spring" plum. It grows about twelve feet in height here and has small dark green leaves, black bark, and numerous spines along the branches. When in bloom these upright branches are wreathed with small double pure white blossoms something like those of *Spiræa prunifolia*. It is a charming little tree, opening its flowers a week or ten days later than the almonds and apricots at Rose Brake.

Danske Dandridge.

(*To be Continued.*)

PACO CEMETERY, MANILLA.

The accompanying illustration will undoubtedly be of interest considering that the Phillipine question is a prominent one. It represents the wall vaults in Paco cemetery, Manilla, and the



WALL VAULTS, PACO CEMETERY, MANILLA.

crypt immediately under the man's raised arm was the one in which were deposited the remains of Major Logan, prior to their removal to this country. The photograph was taken by E. C. Hulbert, Trumpeter, Bat. L. 3rd. U. S. Artillery.

Cut Flowers for the Cemetery.

Those living at a distance from the rural cemetery, where daily care is out of the question, will find gladiolus admirable for cutting. The long spikes, cut when the lower flowers are just commencing to open, will flower continuously in water until the topmost bud has opened; and the wilted flowers close up and are not unsightly as are so many blossoms when past their prime.

B. L. P.

IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

A LITTLE OBJECT LESSON.

It is said that by precept and example even the children of South Park, a suburb of Dayton, Ohio, have become so proficient in the basic principles of

The position of the sidewalk, at the side instead of stretching its unattractive length through the middle of the lawn, results in an apparent increase in the size of the grass plot, and the leafy screen that partly shelters the walk lends a pleasant air of mystery to the interior when seen from the street and gives an agreeable sense of seclusion to those who pass in and out of the grounds.

The character of the surface of the ground, which rises more rapidly from the street line to the house than is clearly indicated in the picture, accounts for and in some degree excuses the use of terrace steps, and the group of shrubbery beside them is an excellent feature of the planting.

The massed foliage makes a protective frame and background for the dwelling, setting it apart from all surrounding plots and buildings, and increasing its home-like effect as it sits far back from the street on its own particular hill.

DEFECTS.

The defects, as shown by the photograph, are the unwarranted intrusion of three small trees on the left side of the lawn (one being on the high ground near the house) which interfere with the view of the dwelling, and one small one near the walk on the right side of the lawn between the large tree in the middle distance and the terrace steps.

IMPROVEMENTS.

The entire effect might be improved by remov-



HOME OF MR. GARBER, MADISON, IND.
An example of "Open Centre" and "Massed Sides."

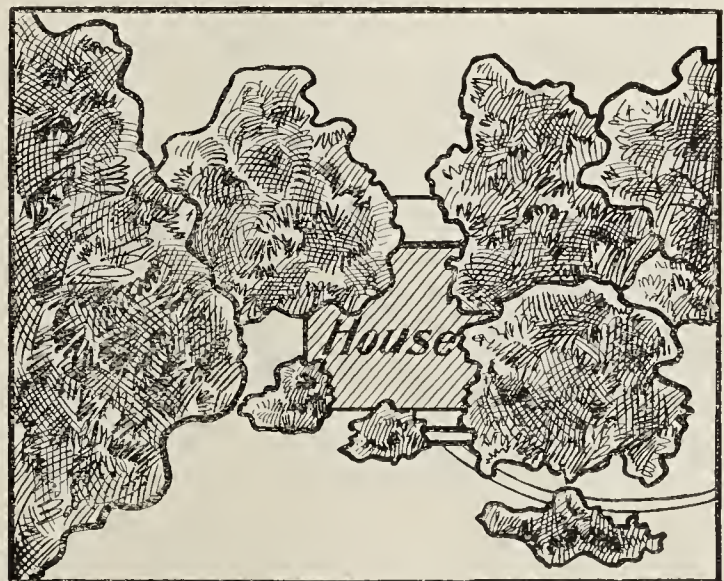
landscape gardening, that they appreciate such points as an "open centre" and "massed sides" and that they freely criticise the planting that comes under their observation.

Our illustration shows an example of the "open centre," which, while good in a large way, is in a fair way to be spoiled.

GOOD FEATURES.

The good features especially noticeable in the picture are the open lawn, the massed sides and the position of the sidewalk from the street entrance to the house.

The open expanse of sward and balanced masses of foliage give opportunity of a glimpse of the street from the windows, and offers a pleasant picture of the home from the street. The same causes produce effects of light and shade that introduce pleasing variety into the picture from either point of view.



PLAN.

ing the four trees mentioned, by setting a group of shrubbery close to the house at the corner shown in the photograph, by introducing a rather long, irregular clump of shrubbery near the sidewalk at a point to include the large tree before alluded to, and by the use of shrubbery (after the removal of small trees) on the left of the lawn in front of the large trees to bring the mass of foliage down to the grass line at one or two points.

RESULTS.

The effect of these changes would be to open up the centre even more than as shown, to work attractive detail into the frame, and to improve the picture itself by introducing the planting at the corner of the house.

It is hoped that the picture and the suggestions will together prove helpful to Improvement Society members in making their own homes object lessons for their neighbors.

* * *

The conductor of this department is now and will for some months to come be receiving highly important and interesting information from both home and foreign improvement organizations. The material is so full of valuable suggestions that items of practical value from this source will from time to time appear in these columns.

* * *

The Tioga Point Village Improvement society (incorporated) of Athens, Pa., has been the means of introducing electric lighting into the borough; has restored and takes charge of an old, neglected cemetery, that was first used in 1779; and has secured control of an ancient landmark known as the "Old Academy," which was erected in 1827, and had long been abandoned by the school officers. By the expenditure of about \$1500.00, this building with its grounds, has been saved for many years of usefulness, the society using the building as its headquarters, holding its meetings there, caring for it and also maintaining in it a local museum. The latter feature should have great educational influence on the rising generation as the locality must have much historic interest, the town having been settled in 1779.

In addition to this tangible record of the Society's usefulness, it also interests itself in existing parks and public grounds and buildings, and in the purchase, erection and maintenance of new ones, and assists in such enterprises as may advance the growth and prosperity of the borough.

Mr. Joseph M. Ely, secretary of the society, who kindly sends this report, says that they have a membership of 3,700 and that while the society has

been very successful so far, they feel it necessary to make new plans for the coming year to renew the interest. He considers that the most important work accomplished by the society has been reclaiming and restoring old landmarks and encouraging citizens to keep their own lawns in order and the grass cut in front of their property.—*F. C. S.*

COAL CINDER WALKS AND PATHS.

The New England Association of Park Superintendents have adopted a method of collecting experience which recommends itself both from practical and theoretical standpoints. From *Bulletin No. 1*, we abstract the following on the use of coal cinders for walks and paths:

J. A. Pettigrew, Boston, has found the use of soft coal cinders very satisfactory and economical and has used them for years. He uses about five inches of the material, first screening it through a $\frac{1}{2}$ inch or $\frac{3}{8}$ inch screen, laying the rough on the bottom and the fine on top, rolling each course with a hand-roller—a horse-roller not being necessary, besides the use of the horse tending to stir up material. Repairs are easily made; a little resurfacing with screened cinders is easily applied. Not adapted for grades exceeding 4 per cent., on account of liability to wash out.

Theodore Wirth, Hartford, has used coal cinders to a great extent; they are economical and a very well adapted material for the under drainage of walks. For the surface of walks, however, he always uses four or more inches of reddish gravel, having an abundance of that material at hand. He thinks the color of the gravel more pleasing to the eye and more in harmony with surroundings. He fears cinders will crush too fine and become dusty, whereas his gravel has splendid binding qualities, makes a smooth and firm surface, never gets dusty and even with grades of 8 or more per cent. does not wash if the water is occasionally thrown off over the border before it becomes of too great volume. He endorses Mr. Pettigrew's construction. The one drawback of the gravel walk is its tendency to become soft at the time of thawing and freezing in the spring, which may be the case with any walk built of soft material. Cinders as a binder between the last layer of broken stone and the top dressing of screening in drives, put on one inch thick, well washed down, and rolled wet with a heavy roller, formed a splendid body with the underlying stone.

From the 1896 report of the Boston Parks, cinders are considered as less liable to disintegration than any other material used there. Their porosity prevents them from heaving or getting out of

shape. To prevent them from grinding and becoming dusty an inch of hardpan is spread over the whole surface, and then a thorough sprinkling is resorted to. When partially dried out a half inch of pea gravel is rolled in with a heavy roller.

Jackson Dawson, Arnold Arboretum, says: Long before the present park system was inaugurated there was in many factory villages in New England, roads and sidewalks made of coal cinders and ashes. The reason at the time was scarcity of good road material, and also a desire to get rid of accumulated cinders from their boilers, which could not be utilized for any other purpose. Many of the roads today are clean and dry. These cinder roads when once well settled do not heave or become dusty as do gravel walks. Although at first they are hard to walk upon, they soon become settled and each rainstorm helps to make them clean and bright, and when once well washed and hardened no walk is more cleanly and elastic to the foot. The beginning of a good cinder walk is to have it well drained either by broken stones or coarse slag at the bottom, filling up with the finest material on top. If this walk is watered and rolled no better or more elastic walk can be had; it is also one of the cleanest and easiest cared for walks that I know of."

John C. Olmsted says: "Where extreme economy is necessary and especially as a temporary expedient I approve of the use of screened cinders for walks, but would certainly advise covering them with binding gravel, partly because of the greater durability of the latter but chiefly because of its much more natural and agreeable appearance.

H. S. Adams says the city of Cambridge, Mass., in former years built its sidewalks in the lower portion of the city almost wholly of house ashes. In the warm days of spring, however, the walks would "track" disagreeably.

C. F. Lawton, New Bedford, Mass., finds cinders when covered with stone screenings to make the best cheap walks obtainable. All the cinders from two of the largest mills in the city are taken and used entirely for sidewalks. After being carefully leveled, they are often rolled with a one-horse roller, and then an inch layer of screenings is laid on top. When they are trodden in the walk is hard and smooth, sheds water rapidly, and does not get muddy.

Charles S. Anthony, Taunton, Mass., uses gravel or cinders with a covering of fine or screened gravel or crushed stone dust. Crushed stone dust makes a most excellent covering, of a good color and easily kept smooth and hard.

GARDEN PLANTS—THEIR GEOGRAPHY, LVIII.

LAMIALES.

THE VERBENA, MONARDA AND AJUGA ALLIANCE.

(Continued.)

Audibertia is a genus of perennial or subshrubby North-west American plants some of which are commonly called "grease-woods." A



S. AZUREA
GRANDIFLORA.

SALVIA RUTILANS*.

S. FARINACEA.

grandiflora grows to three feet or so high and has large crimson purple flowers in interrupted bracteate spikes. Several are good bee plants, and in fact the tribes are full of honey yielding plants.

Nepeta is the "ground ivy" with 130 species in the northern hemisphere. *N. glechoma variegata*



SALVIA SPLENDENS* AND VAR. FOLIIIS AUREIS.

*Described in last issue.

is hardy to New York. *N. Mussini* is a Caucasus species used as a bedder. *Dracocephalum*, and *Cedronella*—"balm of Gilead," are other genera belonging the *Nepeteæ*.

Scutellaria "skullcap" has 100 widely diffused hardy and sub-tropical species, many of them meritorious, and especially such brilliant Central and South American kinds as *S. Mociniana*, of course tender at the north.

Physostegia has three North American species.

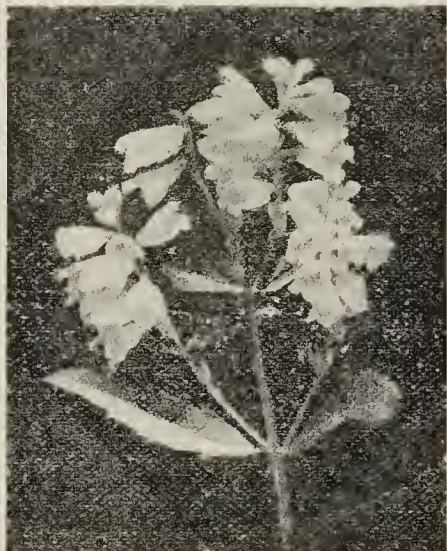
Colquhounia is a Himalayan and Malayan genus of three species. *C. vestita* has wooly leaves and orange flowers.



MONARDA PUNCTATA.*

of dwellings in some parts of the States. *L. Galeobdolon* is a handsome British species, and some others might no doubt be selected and improved. The genus is the plant of the allied group, but I think the *salvias* would be better known and therefore more appropriate.

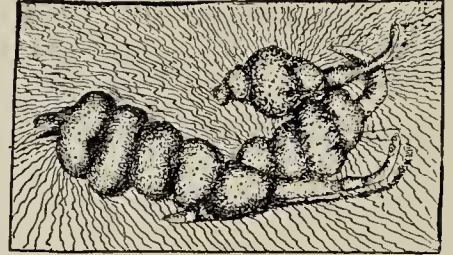
Pulornis "Jerusalem sage" has 45 species in Mediterranean countries and temper-



PHYSOSTEGIA VIRGINIANA.

ate Asia. *P. fruticosa* is shrubby with whorls of yellow flowers, and some others are quite ornamental.

Trichostema lanatum, and *Teucrium fruticans* are grown in Pacific coast gardens and a few of the *Ajugas* are used at the north.



STACHYS TUBERIFERA. (Edible.)

I am told that certain canescent forms of *Plantago* are pretty, and a variegated *P. lanceolata* has been admitted to gardens.

Anything of the kind must be propagated by division—not by seed.

The "Cyrilleæ" mentioned under *Oiaceles* are placed in this group by some systematists. The *Cliftonia* is called the "buckwheat tree" at the South and it may be that its position near to *Chenopodiales* is as good as any. It seems to have regular polypetalous flowers and is a pretty little tree or shrub which seems to bother the genealogical school of systematists considerably. They may have to dig deep for its relatives.

James MacPherson.

SOME NATIVE CLIMBERS.

In driving along a country road which was margined by one of the primeval pine stump fences, I was struck as never before by the beautiful way in which nature draped her rough places. This fence proved an ideal support for all the climbing vines in the vicinity, and was in places literally covered with virgin's-bower, bitter-sweet or Virginian creeper.

Which of the three species was most beautiful, it would be hard to say. They each had distinctive charms, and these, too, were in harmony with each other. The Virginian creeper, with its rapid growth, its wealth of rich green changing to bright or dark autumn tints, and its bountiful supply of dark blue berries, is one of the most popular plants to-day for draping veranda; but to see it run riot over the tree trunks is to form a new acquaintance. I recall one tree, a Norway spruce, which was almost entirely concealed by the vine. Doubtless this was of no particular advantage to the tree, yet if one should be so unfortunate as to have a tree die, the fact is suggestive of the great possibilities offered. Some shun this vine, thinking it is poison ivy. A simple rule that is infallible in distinguishing between the two is that the leaves of the harmless plants are grouped in fives, those of the poison one, which, by the way, is not a member of the same family, are invariably arranged in threes.

The clematis or Virgin's bower is a rapid grower

*Described in last issue.

and its small, starry blossoms appear in profusion during midsummer; while the plumose seeds are scarcely less attractive, and may be retained indefinitely for winter bouquets.

The bitter-sweet, with its glowing orange and scarlet seed capsules, forms one of the most pleasing features of the autumn landscape, and there is no reason why it should not run rampant, or seemingly so, in plots arranged by man after nature's pattern.

Bessie L. Putnam.

Something fascinating there is about a swamp—its rare flora, its gloom in daylight, its freshness in drought, its ever-present mystery. You can not grasp it as you can the dry woodland. The very birds are evasive, and its flora leads one deeper and deeper into the tangle where the woodcock springs from the thickets of Jewel-weed and the owl skims noiselessly from his twilight haunt. The plaintive cry of the veery from the tree-tops above only serves to emphasize its silence, while the scream of its warder, the blue jay, seems its voice speaking to the solitude. I usually find what might be termed a footpath threading a swamp, not always readily discernible, but sufficiently marked to make it appear a foot path, the highway of the hares and wild animals. These resort to it not only for food and water, but for warmth and security. The hibernating birds turn to it instinctively and seek it for their winter quarters.—*George H. Ellwanger in "The Garden's Story."*

TYPES OF ELECTRICAL OMNIBUSES.

Among the numerous types of automobiles exhibited at the International Motor Carriage Exposition held at Berlin was the one shown in the accompanying illustration. Vehicles of this character are now being used in Berlin to supplement the street railway service, and are made by the Union Electrical Co., of Marienfelde. The first of these was put into service on the first of September, 1899, in the city and has been from the start so popular that its seating capacity of 28 persons is constantly filled. The new omnibuses run swiftly and silently over the asphalted streets and seem to fulfill every expectation.

Another type of electric omnibus to be found in Berlin is shown in the illustration, taken from the *Electrotechnische Zeit-Schrift*, and is made by Messrs. Siemens & Halske. The designers have adopted a system by means of which the accumulators at certain periods of the run will receive a charge from the overhead wires of the tramway company. For this purpose a collecting bow is

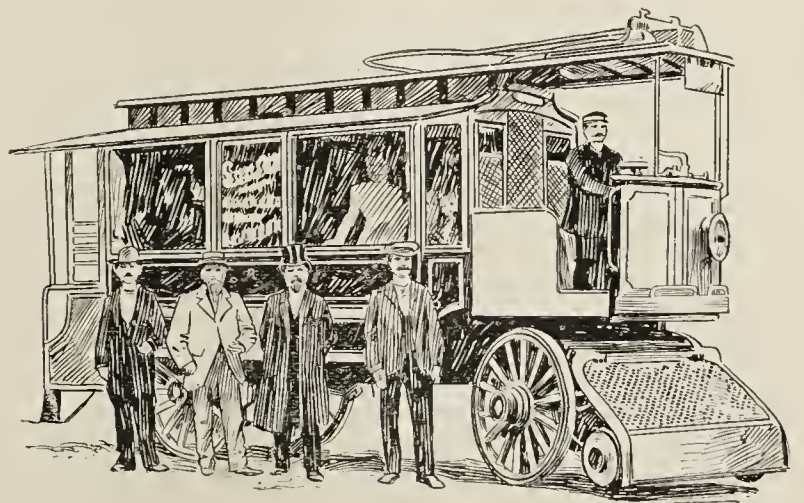
placed at the top of the car for making connections with the trolley wire, while on front of the bus two



ELECTRICAL OMNIBUS, BERLIN.

wheels are provided to make connection with the tramway rails.

An omnibus of this type is designed to seat 15 passengers inside and to carry 6 more on the rear platform. The front platform is reserved for the driver only. The weight of the buses complete with batteries and passengers is 6½ tons. The accumulators weigh only 1½ tons. Two motors are used on each axle, making four in all. These are so arranged that the wheels are driven independently. The motors drive by means of single reduction gearing with a ratio of 1 to 7.5 on the front wheels and 1 to 8 on the back. The regulation is effected by means of series-parallel control-



OMNIBUS TROLLEY CAR.

lers in the usual way. The whole object of the design is to keep down the weight of the accumulators and at the same time to have a bus which will run over routes which are not equipped with

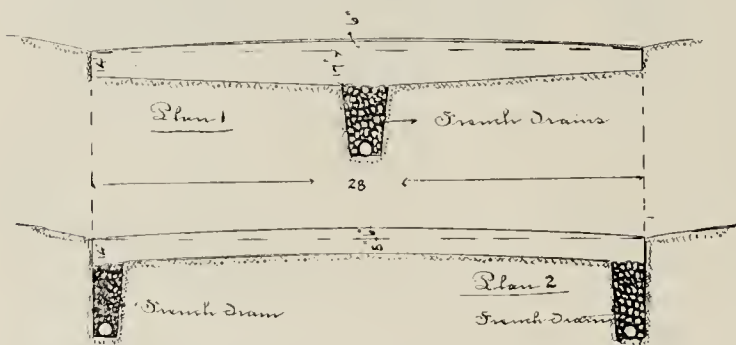
overhead wires. The guide wheels are attached to a light axle which is held in position by powerful springs. In a forced run of 30 km. an hour during the trial of the first vehicle built these springs and the entire apparatus proved admirably adapted to their uses. Sharp curves were turned without difficulty or danger.—*Street Railway Review*.

MODERN DRIVES FOR CEMETERIES.*

(Concluded.)

To preserve our macadam construction intact in clay soil, a system of French drains must be laid, adopting either of the following plans for the sub-grade.

I have heretofore recommended Plan No. 1 to cemetery officials, laying pipe as French drains, and yet of a size large enough to carry all surface waters, on account of its comparative cheapness and because the location of the open pipe in the center of the road places it at a point freest from all possible



root clogging, the constant danger to French drains in cemetery work. If this plan (No. 1) is adopted in cemeteries having clay soil, it is very important that enough laterals be laid to provide sufficient outlets for all future grave drainage systems. Having considered the various details of the drainage systems, which ought to be perfected whether the roads are macadamized or not let us discuss the next essential of good road construction, namely, a solid foundation.

Only two methods are used by modern engineers, the Telford macadam or the Macadam plan, and in either form of construction, uniformity in the sizes of material used, produce the best results. All materials are not serviceable for both of the above mentioned plans, but a safe rule to follow would be to use the softer stones in the Telford work and only the hard material in Macadam construction. Nature has provided every locality with material serviceable for road purposes and all of the following have been successfully used. The various limestones varying in hardness from chalk to marble and Medina stone, the granites, including quartzite and syenite, trap rock, including basalt and dolerite, common boulder stone, cobble stone, hill stone and sandstone, and, where obtainable scoria or slag, all make excellent road building material. Although many engineers recommend roads less than one foot in thickness, in a climate where the frost line extends from 12 to 30 inches into the ground, a road less than 12 inches thick is a very uncertain experiment, and can never surface properly under the great amount of rolling necessary in building modern macadam.

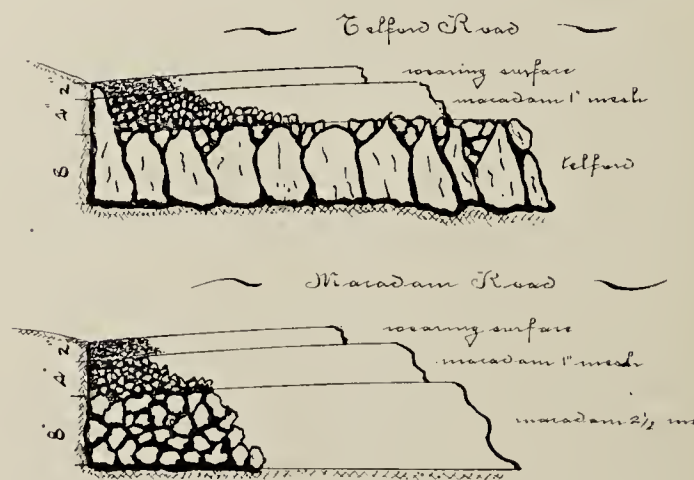
The following representations indicate the most approved methods now used in Telford and Macadam roads, planned heavy enough for the heaviest travel.

The specifications governing good Telford construction

must provide a solid subgrade thoroughly compacted, rolled and sloped so as to drain all seepage water toward the French drains. All material used in Telford work must be of uniform size, closely set with large ends down and grain of material running perpendicular to the bed, and after being in place, all surface projections to be broken off and interstices to be filled with spawls of the same material. This form of construction in the foundation constitutes the only distinction between Telford and Macadam road building. The above Telford foundation must be thoroughly rolled by a steam roller weighing at least 12 ton until the foundation stones are well knitted together and until there is no settlement under the moving roller.

If the Macadam plan is adopted, the specifications to assure proper construction, must prepare the sub-grades as above described and then provide the spreading of a course of material of a very uniform size of not less than 2 1/2 inch mesh for thickness at least 1 1/2 times the depth required in the plan for the depth of foundation desired, and to be spread so that the crown shall conform to the crown of the finished road. This foundation material must then be thoroughly rolled with a steam roller weighing at least 12 ton until same is compact and until there is no perceptible settlement under the moving roller. Experience shows that it requires about twelve inches of crude material to build up 8 inches of rolled foundation.

After the foundations have been thus prepared, the completion of both Telford and Macadam roads are identical. A course of material of a one inch mesh (preferable a material having cementing qualities) is spread over the foundation and is thoroughly sprinkled and rolled with a steam roller until the surface presents a smooth, hard, even surface. In this macadam dressing you will find that the work will require a course of crude material at least seven inches thick to obtain a course 4 inches in thickness after the rolling. Although macadam constructed to this point is often considered complete, and is used as such, as we find the same in miles of stone road in all sections of our country, yet to secure a clean road free from dust, ruts, mud and water, such as is absolutely necessary to preserve the landscape beauties so much sought in our modern cemeteries, it becomes



necessary to provide the third essential to modern road building, a clean, hard, wearing surface.

Nature has provided an ideal rock for this purpose, and although the same is perhaps the toughest stone known, if properly handled it will make a clean, smooth and almost noiseless wearing surface, practically free from dust and its disagreeable consequences, such as ruts, mud and water.

The best top dressing materials are the various trap rocks, preferably Lake Superior trap rock, which should be spread as follows: Upon the bed as prepared above, spread an even course of trap of a uniform one inch mesh to a depth of two

*A Paper read at the Cleveland Convention of the Association of American Cemetery Superintendents, September, 1900. By W. H. Evers, County Surveyor, Cleveland, O.

inches and then close out all interstices with a one inch course of trap dust. This trap to be then thoroughly rolled with a steam roller of at least 12 ton weight, said roller to be preceded by a sprinkler so that the material is rolled and compacted while in a very moist condition. This rolling must continue until all voids in the surface are closed and until the road sheds water and the roller does not track. Heretofore the importance of sprinkling and rolling has not been fully appreciated, but no macadam road is properly built, nor will it give a wearing surface free from ruts at all seasons, unless it is systematically treated as above, and all traffic kept from the newly finished road for at least three days.

Having considered the essentials in road building I heretofore append a small table of the comparative cost of 14 inch roads lately built in Cleveland, both on Telford and Macadam plan. Holding that good drainage must be provided even where roads are not surfaced, this table does not include cost of drains.

The limestone, slag and trap rock, all machine crushed, are much used here, and this table, in giving the cost of these materials f. o. b. Cleveland, may be of service in determining the cost of similarly constructed roads in other districts, where nature may have provided other and perhaps better road materials by substituting the cost of whatever materials may be used in place of the cost in these tables of limestone, slag or trap.

TELFORD STONE 4" TO 8" THICK AND 8" TO 16" LONG, COST USING MAHONING VALLEY LIMESTONE AND LAKE SUPERIOR TRAP ROCK, 17 1/4 C. PER SQ. FT. OR \$1.55 PER SQUARE YARD.

	DEPTH OF COMPLETED ROAD.	DEPTH BEFORE ROLLING.	COST OF MATERIAL F.O.B. CLEVELAND	COST OF MATERIAL REQUIRED TO LAY 1 SQ. YD.	COST OF LABOR AND HAULING.	COST OF ROLLING.	TOTAL PER SQ. YD.
Limestone Telford	8 in.	9 in.	\$1.25	\$.32	\$.30	\$.05	\$.67
Limestone 1" mesh	4 in.	7 in.	1.25	.25	.08	.04	.37
Trap Rock 1" mesh and dust	2 in.	3 in.	4.80	.40	.05	.06	.51
Totals	14 in.	19 in.		\$.97	\$.43	\$.15	\$1.55

COST OF ABOVE IN MACADAM PLAN—\$1.50 PER SQUARE YARD OR 16 2/3 C. PER SQUARE FOOT.

Limestone 2 1/2" mesh	8 in.	12 in.	\$1.25	\$.42	\$.15	\$.05	\$.62
Limestone 1" mesh	4 in.	7 in.	1.25	.25	.08	.04	.37
Trap rock, 1" mesh & dust	2 in.	3 in.	4.80	.40	.05	.06	.51
Totals	14 in.	22 in.		\$1.07	\$.28	\$.28	\$1.50

COST OF MACADAM USING MACHINE CRUSHED SLAG WITH TRAP ROCK DRESSING—\$1.22 PER SQUARE YARD OR 13 1/2 C. PER SQUARE FOOT.

Slag, 2 1/2" mesh	8 in.	15 in.	\$.60	\$.25	\$.15	\$.05	\$.45
Slag, 1" mesh	4 in.	8 in.	.60	.14	.08	.04	.26
Trap rock, 1" mesh & dust	2 in.	3 in.	4.80	.40	.05	.06	.51
Totals	14 in.	26 in.		\$.79	\$.28	\$.15	\$1.22

CORRESPONDENCE.

Hardy Azaleas.

I hope the correspondence between *J. M.*, p. 146, and *J. J.*, p. 168, as to hardness of rhododendrea—especially in the west—will continue. I have no doubt but thousands of dollars are yearly wasted on experiments on these beautiful mountain plants in the prairie regions with resulting failures of which we hear nothing.

The "pinxter flower" *R. nudiflorum* has a wide range both on dry and wet ground—from Canada to Florida, from Southern Illinois to Tom Green county, Texas. Will Mr. *J. M.* or Mr. *J. J.* tell us what they think is the cause of its tenderness at Chicago in temperatures not lower than parts of Canada and New England where it is perfectly hardy?

I might ask the same question as to *R. maximum*, *R. rhodora*, and the oft reputed varieties of *R. Catawbiense*.

In treating of "Ericales" *art.* rhododendron I felt constrained for want of this very information. *James McPherson.*

* * *

I notice Mr. Jensen's reply to mine concerning the hardness of the Ghent and Mollis azaleas. I would say that I do not for a moment question the accuracy of his observations concerning the behavior of these plants at Chicago and places outside of it. Chicago was not named at all in the first instance by Mr. Jensen, but "the northern parts of the middle states," for which locality I would repeat that I consider it misleading to consider them too tender.

As Mr. J. suggests, there is a difference between unsuitableness and hardness. Certain soils, heavy ones for instance, are unsuited to them.

J. M.

* * *

Monuments in Cemeteries.

At the recent convention of cemetery officials held in Cleveland, two or three papers were read discouraging the erection of monuments in cemeteries as they marred the beauty of the landscape and detracted from the park-like appearance so much desired in modern cemeteries. By some it was advocated that trees would form better memorials to those who have passed away than monuments of stone. If such ideas could be carried out and the people educated to that point, there would be but few park-like cemeteries. Imagine what a mass of trees and shrubs beautiful Graceland would be, if a tree or shrub were planted for each of the 70,000 interments made there! What would become of the splendid lawns and vistas that go to make that cemetery so beautiful? Mount Auburn would lose its charming appearance if trees took the place of monuments; 32,000 trees planted in rows to denote the different graves, would not give a very inviting appearance.

From time immemorial stone has been made use of as the most lasting of all materials for perpetual memorials. The great pyramids were the most prominent and are described in the Good Book as "a silent witness." Cemetery officials are inclined to lose sight of the fact that they conduct *burial grounds* and not parks. It is all very well to endeavor to make our cemeteries as park-like as possible, but it should be consistent with the fact that they are burial grounds. And should the people ever be educated to do away with stone memorials, and even to a limited extent make use of trees as markers, they will go a step farther and inter in their own pretty door yards or private parks. Then our occupation would indeed be gone.

One prominent member of the Association of Superintendents justly remarked after the discussion on the subject, that we superintendents are inclined to be cranks on certain subjects and in our enthusiasm ride our hobby to the extreme. Some were inclined to ignore the rights of lot owners. Another member said lot owners have only the rights of burial and their deeds only conveyed that right. Consulting an eminent judge on that point the writer was informed that it would be a difficult matter to convince a jury to that effect, no matter how legal; custom would over-ride all law, and cemetery officials would find that lot owners have certain rights given by custom.

A visit to our most celebrated museums and larger art institutions will show that the most artistic creations handed down to us are stone memorials of rulers in bygone days. Reader, if you can spare the time look through your files of PARK AND CEMETERY and you will find that all the views given of Graceland show a tomb or monument in the background. Will you attempt to say that these graceful pieces of architecture mar the beauty of the pictures. You need not go back any farther than the last June issue, if you are so very busy. The same number gives an illustration of the Fleischman tomb in Spring Grove. Take out the tomb from that picture and it would leave a meaningless mass of wood, water and lawn, beautiful to the eye and very park-like. But with the tomb it forms a grand picture of a "silent witness." The beauty of the landscape is intensified by such a piece of architecture.

In all trades or professions there are irresponsible members glib of tongue and full of assurance. The monument business is certainly no exception. Sales are all they aim at and they are willing to sell any kind of work, artistic or otherwise. Now these are the men that cemetery superintendents should combat. Some few years ago Graceland issued a rule forbidding the duplication of monuments. This rule has been extensively copied in other places and has tended greatly to improve the general appearance of certain cemeteries. The better class of monumental firms employ artists to design memorials and are erecting more artistic work and these the cemetery men should encourage. Dissuade your lot owners from copying.

Will any person who had the pleasure of visiting Lake View, Cleveland, maintain that the Rockefeller shaft with its magnificent proportions and graceful outlines in any way detracts from the harmonious effect of the landscape. The same can be said of others. But upon the other hand there are monumental stones which do not harmonize with the surroundings in Lake View which would be better hidden from view.

Upon the subject of headstones or grave markers, cemetery men are pretty well agreed, flush with the surface is all that is necessary. Still a word can be said in favor of those which are raised a little above the surface, when uniformity can be had. But there the difficulty comes. Nearly every lot owner desires a different style of marker. Take a look over any of our national cemeteries with their thousands of markers in rows or circles. There they present a harmonious effect by their uniformity. No one will say that the style of marker issued by the national government to indicate the graves of its dead soldiers is of artistic design. As single specimens when placed on graves they are hideous. But as a whole their effect is harmonious though prim and possibly stiff in appearance yet harmonious. This can be a lesson to us to try and have our monuments in harmony with the surroundings.

A great deal more can be written on this subject and it is to be hoped that some of the members of the association who congratulated the writer on the stand he took, *after* the meeting, will ventilate their views. It is a subject of interest to the public as well as to the cemeteries. At Cleveland some of the younger blood displayed ability to prepare papers. It is aston-

ishing how many suffer from "stage fright" at our annual meetings, yet privately, or when two or three are gathered together, ably express their views. PARK AND CEMETERY has frequently invited discussion in its columns. Now, let us hear some of the pros and cons concerning monuments in cemeteries,

Bell. H. Lawson.

LEGAL.

RIGHT OF ACTION FOR DISINTERRING OF BODIES AND DEFACEMENT OF GRAVESTONES.

As a general rule, one who purchases and has conveyed to him a lot in a public cemetery does not acquire the fee or full title to the soil, but only the easement or license of burial therein. But so long as he is in the rightful possession of the lot, or holds title to the usufructuary interest therein, or right of use thereof, he may maintain an action against any one who wrongfully trespasses upon it.

The rule is well established that one entitled to maintain the action may recover damages from any person who wrongfully trespasses upon, desecrates or invades the burial lot of another.

More specifically does the supreme court of Georgia hold, that one who is the owner of the easement or license of burial in a cemetery lot, or who is rightfully in possession of the same, is entitled to recover damages from any one who wrongfully enters upon such lot and disinters the remains of persons buried therein.

And the court holds that in a suit for damages for wrongfully disinterring a dead body, if the injury has been wanton and malicious, or is the result of gross negligence or a reckless disregard of the rights of others, equivalent to an intentional violation of them, exemplary damages may be awarded, in estimating which the injury to the natural feelings of the plaintiff may be taken into consideration.

In a recent case the plaintiffs were not only in possession of the lot at the time of the alleged trespass by the defendant, but, as the heirs at law of Jacob Jacobus, the court says that they had a complete title to the easement of burial therein by prescription or right acquired by long adverse possession, for the grave containing the remains of their brother and sister had been upon the lot, undisturbed, for nearly forty years. The presence of these graves, marked with headstones, upon the lot, it holds rendered the possession which commenced in Jacob Jacobus when he buried the first body upon it actual, adverse and notorious, and it was continued until disturbed by the defendant, in 1895. Having once been established, the possession, unless voluntarily relinquished, continued as long as the graves were marked and distinguishable as such and the cemetery continued to be used.

Furthermore, the court holds that, irrespective of the plaintiffs' title to the easement, or their possession of the lot, the petition stated a good cause of action for damages for the removal of the gravestones. The reason given is that if a gravestone or monument, which has been erected upon a cemetery lot, is defaced or removed during the lifetime of the person who erected it, he may, at common law, recover damages from the one who inflicted the injury; but, if the injury is inflicted after his death, the heirs at law of the person to whose memory the gravestone or monument was erected are entitled to maintain the action. This is clear, the court adds, when it is considered that a monument or gravestone which designated the grave of a particular person was considered by the common law in the nature of a family heirloom; and for this reason the common law, after the death of the person who erected it gave to the heirs at law of the person in whose memory the stone was set up the right to maintain an action against anyone who injured or removed it.

PARK NOTES.

The department of public works at Pittsburg are about to let contracts for work to the amount of some \$75,000 in Highland and Schenley parks. This with the planting of some 18,000 trees in its parks shows material interest in park affairs about the Smoky City.

* * *

Mr. Geo. L. Mesker has offered to donate forty acres of land for a public park for Evansville, Ind., provided that the city shall purchase from owners of adjoining property enough ground to create a park of sufficient capacity for the city's needs in the present and future.

* * *

By the sale of property devised under the will of the late Judge Peterson, Charleston, Ill., secures \$6,500 for park purposes. A like amount belongs to Newton, and Mattoon receives twenty acres of land and \$2,500. These Illinois towns are fortunate in being the recipients of a wise beneficence.

* * *

The Finance Committee of the Board of Aldermen of Buffalo, N. Y., have voted to issue \$20,000 in bonds for the purpose of improving the grounds and roads in the vicinity of the new Albright Art Gallery. It was also voted to favor the issuance of \$6,000 worth of bonds to be used on the surroundings of the New York State building, which will become the property of the Buffalo Historical society after the Pan-American Exposition is over.

* * *

In connection with tree planting in the avenues of St. Paul, Minn., which is now under the care of the park commissioners, properties thus improved the past season were assessed to the amount of \$982.51, which covered the planting of 235 trees. The assessments for cutting the grass along street boulevards, which covered a total frontage of 52,511 feet, were \$904.37. The expense to the property owner ranged between one and two cents per front foot.

* * *

Glen's Falls, N. Y., has been treated to a surprise in connection with its park efforts. The desirability of a park had materialized to the point of naming a day for a public voting on the question of purchasing a certain site, when Mr. Henry Crandall felt it incumbent upon him to inform the trustees of the village that in his will made some years ago he had provided to bequeath certain property to the village for a public park, and that he had no intention of revoking it. The property is centrally located and highly appropriate for the purpose.

* * *

W. K. Vanderbilt, Jr., has purchased the 3,000 acre Mountainside Farm, at Rahway and Ramsey's, N. J., the property of the late Theodore A. Havemeyer. He has also bought large tracts of land adjoining this farm in Passaic and Bergen counties. It is stated that on this large estate Mr. Vanderbilt will establish a game preserve in connection with a country home. The farm itself stretches from ridge to ridge of the mountains through which the Ramapo river flows. A stone fence surrounds the farm proper which is said to have cost Mr. Havemeyer \$85,000.

* * *

According to the superintendent of the Cincinnati parks, the elm borer has been decimating the elms in the parks under his care and he will ask the park department for 200 new European elms. He proposes to destroy all the remaining infected trees in order to kill the insects. Speaking of the eight hour day in relation to its effect on the work of mowing in the parks he says: "With an eight hour system we cannot get

over the vast acreage as it would ordinarily be done, and instead of a day's mowing being about two acres, there is now only about an acre a day done by each man."

* * *

Speculation is active in Watertown, N. Y., on the subject of the park now in course of development under the supervision of Mr. John C. Olmsted, of Boston. Some two hundred men are at work and it is expected that the Boston contractors will have the approaches, entrances and considerable driveway completed before winter. Plans for the administration buildings are finished, and this includes superintendent's house, stables, conservatories, etc.; a great deal of ground has also been prepared for planting. While all this work is progressing, the identity of the donors of the park is unknown to the public. It is rumored that the Flower family is interested in the project.

* * *

A meeting of citizens of Johnstown, Pa., was recently held for the purpose of forming the Johnstown Centennial Tree Planting association. The object is to commemorate the centennial anniversary of the founding of Johnstown by planting memorial shade trees in and about the public parks and property of the city, as well as before private residences, and to encourage the systematic planting of trees and providing for their intelligent care. Since the flood there has been a lack of shade trees in Johnstown, although much has been done in that direction. The park commission and other public bodies promise hearty co-operation.

* * *

Captain Frank West, acting superintendent of the Sequoia and General Grant national parks in California, has submitted his annual report. The first of these parks contains from 1,600 to 3,000 of the mammoth sequoia trees for which California is noted. The park itself is on a high table land from 6,300 to 7,500 feet in altitude and commands a view of some of the most magnificent mountain scenery in the Rockies. He recommends the extension of the park boundaries to take in a portion of this mountain tract, eastward to Mount Whitney and the main Sierra divide and northward to take in the King's river canyon. This section, he says, exceeds in beauty and grandeur anything to be found in Switzerland and is a part of the public domain unfitted for agriculture, but of importance as a game preserve and to conserve the water supply on which the immense citrus fruit interests of Tulare county depend. The General Grant park is only two miles square and is in very bad condition, on account of fallen timber and rubbish. It contains over 125 large sequoias, including the famous General Grant tree, and a little work would make it a marvelously beautiful spot.

* * *

At the Sixth Annual Convention of the Minnesota Federation of Women's Clubs, held at Duluth early this month, considerable attention was given to the subject of forestry and the proposed National Park in Northern Minnesota. Strong arguments were made by the speakers to prove the value of both subjects from the economic standpoint, and sentiment was kept well in the background. The Duluth people are more or less opposed to the park project, and were well represented in opposition at the meetings. It is unfortunate for their side of the question that their most powerful arguments involve too much of what may be termed "business aggressiveness" in the lumber interests of that city. Mrs. Alvah Eastman, of St. Cloud, who reported for the Town and Village Improvement committee, said that: "Improvement seems to depend not on the size of the town or the working club, but on the enthusiasm of the workers. A summary of the work was full of valuable suggestions and demonstrated that women were not slow to undertake municipal housekeeping with good results. As a suggestion for special work the improvement of country highways was recommended."

CEMETERY NOTES.

The new vault at the Somerton Hills Cemetery, Philadelphia, Pa., is nearing completion. Its cost is \$75,000.

* * *

The city council of New Bedford, Mass., has voted \$4,500 for the expenses of the city cemeteries for the remainder of the fiscal year.

* * *

The cemetery at Carson City, Mich., was despoiled by vandals last month. Some 25 monuments and slabs were broken, and 30 more overthrown. Many cannot be repaired. No motive but sheer ruffianism can be ascribed for the act.

* * *

The movement has started for the removal of the remains of the Confederate dead lying in Northern cemeteries to Southern cemeteries or private burial grounds. Congress, in the sundry civil bill, approved June 6, provided for the disinterment of these bodies and their removal to the South.

* * *

Mr. J. F. Knudsen, architect, has prepared plans for an attractive entrance to Mount Olive cemetery, North Sixty-fourth avenue and Irving Park boulevard, Chicago. It will be built of Bedford stone, with a frontage of 107 feet. At one end is the office, 41 by 43 feet, and a bell tower 70 feet high. Cost, \$12,000.

* * *

Plans for chapel and receiving vault have been decided upon by the directors of Graceland cemetery, New Castle, Pa. The building will be constructed on Gothic lines of greenstone, trimmed with brown stone, and roofed with red tile. The interior will be of fireproof construction, with open timber roof, tile floor and cut glass windows. The vault will be in the basement of the chapel and with modern improvements. The designs are by W. G. Eckels, architect. Cost, \$10,000.

* * *

Dr. H. H. Kane, president of the New York Road Drivers' Association, has issued an appeal for the establishment of dog cemeteries in the larger cities of the United States. London and Paris and possibly other capital cities have such cemeteries, but if the money to be expended for such a purpose could be diverted to the use of those humanitarians who are fighting a great fight to prevent cruelty to animals, and whose work has made thus far so little impression on the public mind, a great good to American civilization would result.

* * *

Mount Hope cemetery, Sparta, Wis., is an example of a cemetery in which the women of the town take an active interest and are represented in its management. Thirty-eight years ago it was started as an individual property, but for the past 5 years it has been in the hands of an association, and is now operating under perpetual care. All moneys received are expended in improvements except a ten per cent. reservation for perpetual care. Many improvements are being made, and it is rapidly becoming a beautiful spot.

* * *

Mount Moriah cemetery, Philadelphia, Pa., offers an interesting object lesson on what eccentricity can bequeath to us: "Some twenty years ago three eccentric men of wealth put up in the most secluded corner three tall shafts of rough hewn granite. They had been friends a long time, and they agreed as each died his shaft was to be broken and the fragments left where they fell. The second of this trio has just passed away and his column has been shattered, as was that of his former

friend years ago. No fence encloses the strange monuments and no names are carved on the granite."

* * *

There is a gravestone, 200 years old, lying in the north aisle of old Christ church, Philadelphia, Pa., which is looked upon with considerable awe by the vergers of the church. It is of greenish soapstone, and has at its head a skull and crossbones and hour glass, with the following inscriptions beneath: "Here lieth the body of Nicholas Pearse, who departed this life the 23d of November, 1700." "Also Mary, the wife of said Nicholas Pearse, who died the 21st of Dec., 1713." Also, Tinnacia, the wife of Reese, and sole child of aforesaid Mary Pearse, who died the 27th of Dec., 1714." The stone is said to act as a barometer, wet blotches appearing on its face at the approach of rain.

* * *

Col. LeGrand B. Cannon, of Burlington, Vt., recently made arrangements to carry out a scheme for the protection and preservation of the grave of John Brown, at North Elba, N. Y., which has been so neglected as to be almost lost sight of. The grave is five miles from North Elba and in the open fields which John Brown cleared for the use of negroes before he made his raid upon Harper's Ferry, and close to the old shingled cottage which he built with his own labor. Recently Col. Cannon put a force of men with a landscape gardener to grading and terracing the plot of land, and when completed he will build an iron fence 75 feet long on the four sides around the grave, with a suitable inscription on the panel. The enclosure will be known as John Brown's park.

* * *

The people of Lancaster, Pa., are considerably wrought up on the question of exchanging lots in Greenwood cemetery for the lots of lot holders in Shreiner's cemetery, an acre tract in the heart of Lancaster where reposes the body of the great commoner, Thaddeus Stevens. It is stated that the exchange is for the purpose of securing to the owners of Greenwood valuable building sites. Upwards of a hundred of Shreiner's lot holders have accepted the proposition, which includes the transfer of the bodies at the expense of the Greenwood people, and the latter say that the great statesman's only and distant relatives in the West have consented to the removal of his body to Greenwood. It is looked on as sacrilege to disturb the remains, and it is hoped the local historical society will oppose it. Stevens was the life-long champion of the negro race, and he selected Shreiner's because it is the only cemetery here where burial can be made regardless of color. Under such circumstances his wishes should be forever sacred.

* * *

The Cambridge, Mass., Cemetery commission are pushing the work of preserving the tombs and graves in the old Garden street burying ground, located just above Harvard square between the First parish church and historic Christ church. This burying ground is one of the oldest in the country, and is the resting place of many distinguished men of revolutionary days. The row of tombs in the rear of the cemetery is in the worst condition. The tombs and sarcophagi had been badly sprung by the weather, the brick work having fallen away and the stone caps and entrances heaved out of their places. Furthermore, the mortar had crumbled and was entirely useless. It was decided at once to straighten out these tombs as far as possible, lift the old stones from the ground and set them up in concrete beds. Those stones that had become badly cracked were filled up with German cement, thus taking away, in a measure, the temptation to chip and slice from curio hunters. The work has gone on in excellent shape, though slowly, and before winter sets in it is hoped that the greater part will be completed.

SELECTED NOTES AND EXTRACTS.

Ants in the Orchard.

A writer in *The Agricultural Gazette* of New South Wales, says on this subject: "I notice in several late numbers questions asking how to destroy ants. I would like to ask why people desire to destroy these insects. I have had over forty years' experience in gardening and fruit-growing, and find ants my best friend, and would be sorry to lose them. I never lose anything sound, either fruit or vegetable, by them; but find that they clean off many small destructive insects from the trees; I notice one writer advising lime; that he scattered lime under infected peach trees to keep away the ants, and the trees flourished after it. But I venture to tell the writer that the ants did more good to the trees than the lime, though lime does good if put on the trees." Of course, every one is at liberty to hold his own opinion about questions of this kind. It must be remembered, however, that the mere presence of ants in large numbers upon a tree is a sign that there is something wrong with it, and if the attraction be removed the ants will not return.—*Indian Gardening and Planting.*

* * *

Two Satisfactory House and Decorative Plants.

Foliage plants that may be considered all-around satisfactory for house and general use in decorations are really very scarce. Where the best of care is given them, quite a list might be made; but quite naturally, in the majority of cases, the care of such plants is very irregular, and under adverse heating and ventilating conditions they suffer more or less. No better plants, at the same time very ornamental, can be named than *Asparagus Sprengeri* and the Boston Fern, *Nephrolepis exaltata Bostonensis*. Very large specimens of either are remarkably handsome, and show off particularly well if grown in large baskets or placed on pedestals where the graceful stems may show off to greatest effect. Then, too, they come in useful for other purposes, as the stems may be cut and worked into bouquets of flowers very effectively.—*Meehan's Monthly for October.*

* * *

Garden Irises.

The Iris calendar begins with us in April with *I. pumila* and *reticulata* and ends in early October with the Scorpion, —a very large gorgeously spotted beauty,

reminding us amid the yellowing leaves and budding asters of our early Northern autumn, the lands of perpetual summer.

Between these extremes comes a long procession, amid which the grand German tribe shines conspicuously. The flowers are large, abundantly produced and show great variety in colors and color combinations; yet it must be admitted that in each of these particulars the *Kaempferi* are superior. Indeed, this comparatively new iris stands head and shoulders above all others of its class—both literally and metaphorically. With the exception of *Anglica* and *Hispanica*, the bulbous irises are not hardy in this climate. All are especially sensitive to an excess of water, hence should be planted in a very light, well-drained soil, and given a sheltered and sunny situation. Success and failure in about equal proportions may be expected by the amateur who attempts to grow bulbous irises out of doors in this climate. But what of that? One success hides a multitude of defects! As house plants, I am told they do well. But for outdoor planting nothing listed in all the catalogues will give one more satisfaction than the Japan and German irises (among the corn-rooted sorts) and the English and Spanish (among the bulbous.)—*S. O. Moberty, Minn., in The May-flower.*

* * *

The Salpiglossis.

Your note deservedly calls attention to the beauty of the different varieties of this fine annual. Their value in a cut state is not mentioned although this is one of their best characteristics, for they last well and lend themselves to graceful and light arrangement, and may be cut with any convenient length of stem. I think that I may safely say that one reason why they are not more often seen in gardens is the aggravating habit they have of dying off wholesale and leaving blanks in the beds or borders. Gardeners fight shy of such plants when there are other things that can take their places with greater certainty. If growers were content to leave the seeds in the packets until May, and then sow where the plants are to stand, there would be no fear of blanks, and very much better growth would result. The seed germinates quickly and the seedlings grow slowly at first, though after they are about 3 inches high progress is again rapid, and by the middle of August or earlier in hot seasons, there will be a glorious display

of flower, lasting until the advent of frost and in abundance to cut for the meanwhile. I do not claim there will be no losses, as some are certain to die, but by judicious thinning, and spreading this operation over three or four weeks, there will be no blanks in the bed or plot, and satisfactory results will ensue. A check to growth is the great bane of this and a few other tender annuals, the Zinnias, for instance, and I am sure that those who grow salpiglossis largely will agree with me that the above is the only way to deal with them in order to command success.—*J. C. Tallack in The Garden.*

* * *

Planting White Pine Seedlings.

My idea was to find a method by which planting could be carried on at any time in the year when the ground was free from frost, and at odd times when suited best to the planter. In the spring I bought 4,000 white pine seedlings six inches high and potted them in fours in Neponset paper pots, using well worked rich soil. They were then placed in the shade, under apple trees on the north side of the barn. They were well watered from time to time, and when rooted and started in the pots as many as convenient were carried in the wood lot and planted. As the paper pots are light a number can be carried with ease. Their bottoms are made in such a way that the roots soon protrude through uninjured and pots and all can be placed in the ground without disturbance to the young trees. The manner in which the pots are put together is such that they soon become loosened and rot apart. I have planted in dense sprout growth and pasture land under bushes in the shade. Thus have the seedlings been protected from sun and drying winds.

How far this method could be carried in extensive plantations I do not know, but it has solved the problem of planting at odd times all through the summer at small expense, without loss of seedlings. With an ordinary trowel I have planted one hundred pots in an hour, and thus far no trees have died. Any number of potted trees can be carried to future plantations and left in places near the field of planting, to be placed in the soil when convenient. The pots are so small that even when wetted they weigh but little. My trees cost me here potted about 8 cents. We have done the work ourselves, which may seem a large sum; but the ease with which they are transplanted and the small number lost in the process will offset this.—*Henry Brooks in The Forester.*



ESTABLISHED 1890.

OBJECT: To advance Art-out-of-Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

CONTRIBUTIONS: Subscribers and others will materially assist in disseminating information of peculiar interest to those engaged in landscape gardening, tree planting, park and cemetery development, etc., by sending early information of events that may come under their observation.

DISCUSSIONS of subjects pertinent to these columns by persons practically acquainted with them, are especially desired.

ANNUAL REPORTS of Parks, Cemeteries, Horticultural, Local Improvement and similar societies are solicited.

PHOTOGRAPHS or sketches of specimen trees, new or little known trees and shrubs, landscape effects, entrances, buildings, etc., are solicited.

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ASSOCIATION OF AMERICAN CEMETERY
Superintendents: President, Geo. M. Painter, "West Laurel Hill," Philadelphia; Vice-President, Frank Eurich, "Woodward Lawn," Detroit, Mich.; Secretary and Treasurer, H. Wilson Ross, Newton Centre, Mass.

The Fifteenth Annual Convention will be held at Pittsburg, Pa., September, 1901.

THE AMERICAN PARK AND OUT-DOOR ART
Association: President, L. E. Holden, Cleveland, O.; Secretary, Warren H. Manning, Tremont Building, Boston, Mass.; Treasurer, O. C. Simonds, Chicago.

The Fifth Annual Convention of the Association will be held at Milwaukee, Wis., June, 1901.

Personal.

J. Clyde Power, superintendent of parks, Indianapolis, Ind., has been engaged to improve Riverside Park, Logansport, Ind.

The trustees of the Wiltwyck Rural Cemetery association, Kingston, N. Y., have elected Henry Down superintendent of the cemetery.

Warren H. Manning, of Boston, has recently been west looking into a number of commissions for park work which he has in hand and incidentally lecturing on out-door art. He has undertaken to prepare plans for improvements in the park properties of Des Moines, Ia.

Samuel Parsons, Jr., landscape architect, New York City, and formerly superintendent of Central Park, New York, has been appointed landscape architect for the great boulevard and park scheme,

so long contemplated for Washington, D. C. Plans for the project are now being prepared.

After long and faithful service, Mr. Craig, superintendent of the cemeteries of Hamilton, Ontario, has resigned. Appropriate resolutions were passed by the board of trustees.

Obituary.

We regret to record that Mr. J. H. Doswell, superintendent Lindenwood cemetery, Fort Wayne, Ind., passed away on October 13, after a sad sickness extending over the last 3 years. He was a charter member of the A. A. C. S. and the last convention he attended was that of Cincinnati in 1897.

The maintenance of flower beds on the station grounds of the Chicago & Northwestern railway during the summer is to be discontinued, and natural gardening will take their place.

The paper read by Rev. G. F. Houck, at the Convention of the A. A. C. S. at Cleveland on "The Sunday Funeral; and Funeral Car," is having a wide circulation in the Catholic press.

Writing of the good effect our recent remarks on the Tacoma parks, Tacoma, Wash., had upon the community and press of that locality, Mr. E. R. Roberts, superintendent, says: "We have a great long contract and for a long time to come to get the people to realize what natural beauties are. For myself I have been alone for years fostering the love of nature in humanity, in fact ever since I left my grandmother's garden which was always beautiful and inviting—constant love reigned in her garden."

The awarding of prizes in the garden planting contests inaugurated by Mr. W. J. Stevens, Superintendent of Public Schools, Carthage, Mo., was an interesting and successful event held in the High School building, Oct. 6th. Although some 1,500 pupils entered there were only 300 competitors at the final awarding dates, but the institution of the work as a remarkable incentive to energy and healthful moral growth was thoroughly established. Ray Johnson, the boy who took the \$10 prize for his vegetable garden, has grown vegetables on his fraction of an acre to the amount of \$4.80 per acre. The system will be improved next year to equalize conditions and give all competitors as far as possible equal chances. Annual prize giving for children's gardens is a feature worthy of extended adoption. In connection with the above entertainment the Central school gave an exhibit of wild fruits and flowers.

BOOKS, REPORTS, ETC., RECEIVED.

JOY AND OTHER POEMS. By Mrs. Danske Dandridge. New and enlarged edition. G. P. Putnam's Sons, New York and London. Price \$1.25.

One feature of interest attaching itself to this book of poems is the fact that the readers of **PARK AND CEMETERY** are well acquainted with Mrs. Dandridge from her delightful descriptions of the plants and flowers cultivated in her summer home, "Rose Brake," Shepherdstown, W. Va. The main feature of this book of poetry

is, however, its intrinsic merit and coupled with that, its fascinating allurements. It is fairly impossible on first taking it up to lay it down again. We read from poem to poem surprised at the peculiar varieties of rhythm, and that gift of descriptive verbiage which is peculiarly the poets to round out his deeper meanings. Robert Herrick is held in reverence for his charming nature poems, but the old Elizabethan poet had not the culture of the nineteenth century to absolve his writings from the grossness of his times, and it would seem to have been reserved for the writer of "Joy" to take up the poetic strain of that rich period of English letters and impart to it the chasteness of to-day. In refined, yet exuberant terms the delight of soulful humanity in nature's choice gifts is set forth, and a rare genius is displayed in the interpretation and expression of the manifold suggestions evolved from nature's mysterious workings. The collection covers a broad field and in every direction she treads, graceful, delicate fancies answer the touch of her wand, and she imparts them to us and explains them in a tender and womanly fashion, and in a style hitherto unknown in American poetry. Mrs. Dandridge's uplifting and charming book will be a delightful accompaniment to the material study of art out-of-doors and our readers will never regret a closer acquaintance with such inspiring verse.

HEDGES, WINDBREAKS, SHELTERS AND LIVE FENCES. A treatise on the planting, growth and management of hedge plants for country and suburban homes. By E. P. Powell. Illustrated, 12mo, pp 140, cloth. Orange Judd Co. New York. Price 50 cents.

The above is quite a practical work on the subject on which it treats and since the main question is an important one, either in relation to the landscape or home grounds, and one with which admits of discussion, the book is a timely one. The author knows whereof he writes and writes in pleasing and attractive style; he argues the questions thoughtfully and intelligently, and at the same time gives all the necessary practical details connected with choice of material planting, care and maintenance. Not only is the book of value to the farm and large areas of land but equally so to the home and its surroundings, for the directions while being full for the carrying out of particular purposes, they are concise and to the point. To the rapid development of electricity the author gives much credit for the movement now in progress from the city to the country home, and for the latter the book affords a fund of information to the end of increasing beauty and delight in its associations through the medium of out-door improvement.

* * *

The Graceland Cemetery, Philadelphia, Pa. Descriptions and views, together with Rules and Regulations. This cemetery, now in rapid course of development, is described and illustrated in the above pamphlet. The site includes features of historical interest, which are shown in handsome halftone plates. The improvements are being carried out on modern lines in all respects.

Annual Report of the Park Department of the City of Cincinnati, 1899.

DEPARTMENT OF AGRICULTURE, WASHINGTON. The Practice of Forestry by Private Owners. By Henry S. Graves. Illustrated. Progress of Forestry in the U. S. By Gifford Pinchot. Illustrated.

Recently issued pamphlets of the West Laurel Hill Cemetery, Philadelphia, Pa., comprise an illustrated Rules and Regulations to Sept. 1, 1900, and an illustrated descriptive 8 page circular.

With the compliments of Mr. Wm. T. Lockwood comes a very handsome brochure of photogravure plates of some of the beautiful and interesting features of Tarrytown on the Hudson.

Memorial Chapel, Lakeview Cemetery, Cleveland, O., and pamphlet on Care of Graves.

Constitution, By-Laws, Rules and Regulations of Forest Cemetery Association, Circleville, O.

Report of Mankato Cemetery Association, Mankato, Minn.

Rules and Regulations Rochester Cemetery Association, Topeka, Kas.

A Wise Provision.—Permanent Care of Your Cemetery Property, Rosehill Cemetery Co., Chicago.

The new Fall and Spring Catalogue of Thomas Meehan & Sons, Germantown, Philadelphia, Pa., is highly worthy of special note. A perusal warrants the belief that neither time nor money has been spared in its production, and that it is an accurate and reliable handy guide to the choice and purchase of planting material for the large or small estate or home grounds. We have spoken of it before as a work of reference and the instruction given in pruning and the care of trees and shrubs is of added value in connection with its descriptive text concerning the extensive lists of trees and plants offered in its pages. The name of Meehan in American horticulture is a household word and the reliability of the firm goes without saying. The catalogue will be mailed to applicants for six cents in stamps.

Trade Catalogues, Etc.

Bulbs and Plants. F. R. Pierson Co., Tarrytown-on-Hudson, N. Y.

Price List, Fall of 1900. Phoenix Nursery Co., Bloomington, Ill.

Kelsey's Hardy American Plants and Carolina Mountain Flowers. Harlan P. Kelsey, Tremont Building, Boston.

Catalogue of Holland bulbs and specialties for fall planting, 1900. Ellwanger & Barry, Rochester, N. Y.

Price List of Tree and Shrub Seeds, forest collected seedlings, etc. J. H. H. Boyd, Gage, Sequatchie Co., Tenn.

Specialties in choice hardy trees, shrubs, roses, plants, etc. Autumn, 1900. Fred'k W. Kelsey, 150 Broadway, New York.

The Bomgardner Lowering Device. Described in advertisement on page VII.

Wholesale Catalogue, Fall of 1900. Mount Hope Nurseries, Rochester, N. Y. Ellwanger & Barry.

Fruitland Nurseries, 1900, No. 1. P. J. Berckmans Co., Augusta, Ga.

Wholesale Catalogue, 1900. Conifers, Palms, Trees, Shrubs, Seeds, etc. Pinehurst Nurseries, Pinehurst, N. Y.

WE beg to call the attention of Park and Cemetery Superintendents, Landscape Engineers and others interested in the planting of high-class ornamentals, to our very complete assortment of shrubs, trees, roses, perennials, etc., all of which are set forth in our full descriptive catalogue, which will be sent free to all applicants. Estimates furnished.

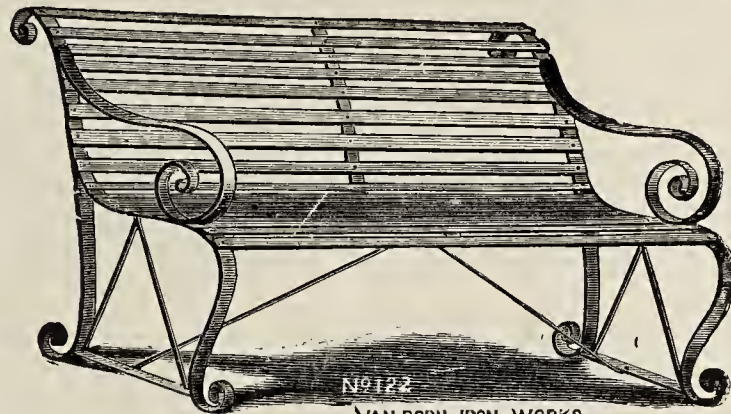
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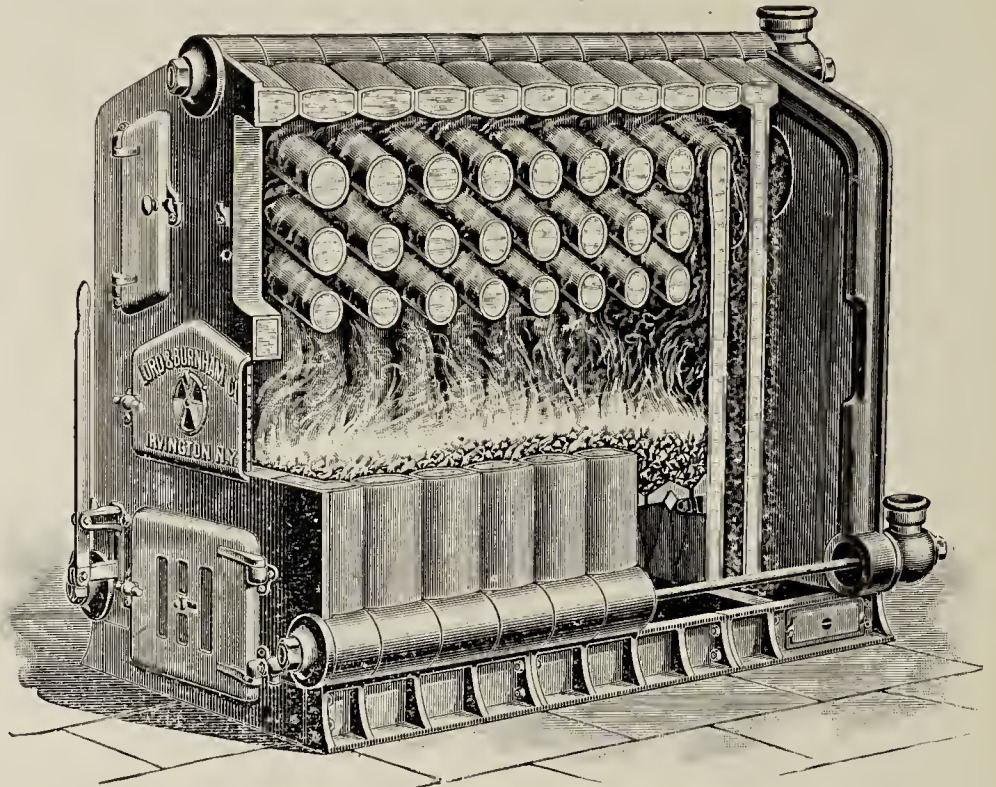
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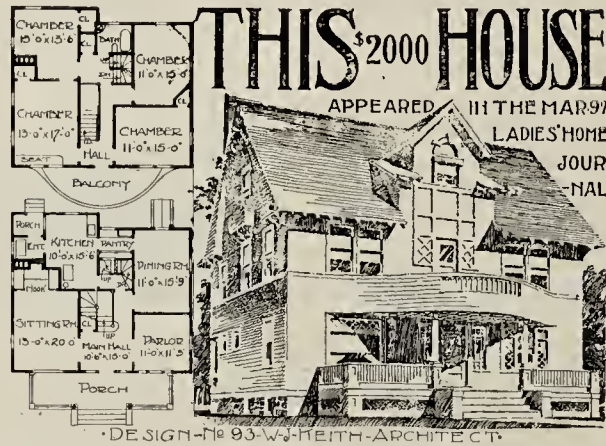
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VOL. X. Chicago, November, 1900. NO. 9

CONTENTS.

EDITORIAL—Two Important Conventions—The Bill-Board Nuisance—Park Flower Shows—Interest in Small Cemeteries—Care of Street Trees—The Sunday Funeral.....	197-198
*The Park System of Manchester, England.....	199
*Hope Cemetery, Barre, Vt.....	202
Flowering Trees for Ornamental Planting, II.....	204
*Improvement Associations—Prizes for Planting.....	205
*A Summer Scene in the Isle of Wight, England.....	208
*The Norfolk Island Pine, Araucaria Excelsa.....	209
Seasonable Suggestions.....	210
The Chicago Flower Show.....	211
The Tree Warden Law of Massachusetts.....	212
*The Adams Monument, Rock Creek Cemetery, Washington, D. C.....	213
*Garden Plants—Their Geography, LIX.....	214
*Correspondence—Monuments in Cemeteries.....	216
Park Notes.....	217
Cemetery Notes.....	218
Selected Notes and Extracts.....	219
Reviews of Books, Reports, etc.....	220
<i>*Illustrated.</i>	

TWO IMPORTANT CONVENTIONS. At the time of going to press two important conventions are about to be held in Chicago, that of the National Good Roads and Improvement Association and the National Irrigation Congress. The former will be participated in by all classes having the interest of good roads at heart, including official representatives from many of the states as well as professional practical men. It is a question altogether national in character, and would be a matter of immediate and general attention but for the fact of the great outlay, in a general sense, necessary for improvement and construction purposes. The actual loss to the country through the bad roads amounts indirectly to enormous figures, and is a potent argument in promoting reform. The Irrigation Congress includes the discussion of all matters pertaining to the conservation of natural conditions in the matter of water supply, reforesting denuded areas of forest land and the irrigation of arid lands capable of agricultural development by irrigation methods. It is expected that practical results may be the outcome of these conventions.

THE BILL-BOARD NUISANCE The advertising bill-board has become a very prominent matter in the hands of the devotees of Municipal Improvement in Chicago and a strong sentiment prevails to continue the agitation until the bill-board nuisance is brought within the bounds of common decency.

Many of the most prominent men in Chicago official public life are enlisted in this reform, and in spite of a strong fight in the city council an ordinance was passed in July last to effect reform, and this has been previously noted in these columns. Further efforts are now in progress to make the ordinance more effective and to ensure the carrying out of its provisions besides further improving its powers. The park commissioners also realize the thoroughly objectionable features connected with bill-board advertising on the boulevards and park outskirts and are joining heartily in the work. The question of offensive public advertising is attracting the attention of all progressive officials. The mayor of Oakland, Calif., has introduced an ordinance to prohibit advertising on the street sprinkling carts used in that city in the season, and no cart will be employed unless painted to the satisfaction of the superintendent of streets. In Cleveland, O., an ordinance has been passed prohibiting the erection of any bill-board containing more than fifty square feet, and under its powers arrests have been made for violating it. The city beautiful is in a fair way of being realized in the future, if present interest can be maintained, notwithstanding the opposition which is manifested by those who are in benefit by such transgressions against public good taste.

PARK FLOWER SHOWS Following close upon the heels of the annual chrysanthemum show of the Horticultural Society of Chicago comes that of Lincoln Park of that city, which year by year improves in both quantity and quality. The other parks also offer exhibits of the "Autumn Queen" for the delectation of their localities. The question of floral displays in our parks is a leading one and from many points of view is one that should be seriously considered. The very fact of the drawing power of such exhibits, for instance the 15,000 visitors at the opening of the chrysanthemum show at Schenley Park, Pittsburgh, makes it not only expedient to thus minister to public taste, but such a fact is in the nature of a demand upon park officials. It would redound to the popularity of our parks were such floral exhibits a matter of regular occurrence, either regulated by the seasons, or by the time of flowering of certain widely known flowering plants. And to further popularize such refining and educating influences as are involved in pe-

ridical flower shows, some judicious advertising would not be out of place and would afford information at present quite difficult and uncertain to obtain.

INTEREST IN SMALL CEMETERIES One of the most serious drawbacks in the way of improving our small cemeteries is the difficulty of creating sufficient interest in their welfare even among those most particularly interested. It is a matter of common protest from those actively struggling to promote better conditions in the small burial places, that the directors, trustees or others at the head of affairs, manifest utter indifference, not only as to the question of providing funds, but in the actual material well-being of the grounds. To remedy such a deplorable condition of things it would be difficult to advise owing to varying local conditions, but it should be possible for the Improvement Society, if such exists,—a development of present day progress,—to shake up the dry bones in the case, and demand change, or a campaign of education undertaken to enlighten and convince the community of the truth of Franklin's words that he could determine the character of a community by the condition of its graveyard. There is enough reflection in this to rouse the dormant enthusiasm of any individual interested in the cemetery, to healthy action.

CARE OF STREET TREES In another column will be found the Massachusetts Tree Warden Law, designed to protect and provide for the street and public trees throughout the state of Massachusetts, and it affords many a suggestion for similar action in other states and localities. Where sentiment has not been active or wise enough to give due attention to this important subject, all local conditions wherein trees play a prominent part have suffered. Trees are a very much more important factor in communal well-being than they are given credit for, a fact everyone can readily realize by observing the difference between a treeless and foliage embellished village or town, and there are many of the former practically in existence to-day. And it is a matter for congratulation that the general government itself has taken up the subject of reforesting the country, a question of wide import and one intimately related even to the decorative and shade giving trees of the city; for the general knowledge disseminated will greatly increase the understanding of the value of a tree as a necessary part of our daily existence. To protect and care for the trees is the duty of every community, and it is an investment giving large interest.

THE SUNDAY FUNERAL

One of the needed reforms in connection with cemetery management is that of the Sunday funeral, which has been under discussion now for a number of years, and which resulted in some diminution of the evil, though there remains ample grounds for still further reform. It is a good sign however for the cause, when the parties chiefly in interest, viz: the clergy, cemetery officials and funeral directors join hands in the movement, and were this to become more unanimous, there is no doubt but that the Sunday funeral throughout the country would be a thing of the past, except in extraordinary cases. It is necessary that there must be exceptions in the complete abolishment of the practice, for instance in the case of contagious diseases, or where the welfare of the community might in any way be imperiled by a postponement of the ceremony, but this is easily provided for. There are so many reasons why the Sunday funeral as a custom should be discontinued and so very few in its favor, that to urge co-operation among those having the opportunity and power to encourage its discontinuance becomes a duty. One has only to remember such incidents as may have interested him in a visit to the cemetery on Sunday where possibly several funerals were in progress, to enlist his conviction against the observance—the unruly intruders, the unseemly movement from one grave to another, the absolute disregard of the rights of lot owners, the damage to the lots, and the general lack of a becoming sympathetic demeanor—this and much more inevitably serve to prove that Sunday under present cemetery conditions is not the day for such a service. This does not take into account the rights of those called into the extra service on the Sabbath, and this is a very important feature of the question. Take it all together the Sunday funeral except in rare instances serves no useful purpose, while it infringes on the rights of many and imposes unnecessary and irksome extra duties upon those necessarily called upon to serve. Attention to this needed reform is especially directed to the clergy, funeral directors and cemetery officials of our small towns and villages. In such communities it is often difficult to inaugurate such a movement, but it is quite as necessary there as in the large cities, and the man who starts such a reform and carries it to success may be sure he is working in a good cause and is deserving of the good will of his neighbors. Here is a suggestion for the clergy. In connection with the general question great credit is due to the Catholic church for the active part it has taken in promoting and encouraging this much needed reform.

THE PARK SYSTEM OF MANCHESTER, ENGLAND.

By the courtesy of the parks committee of the city of Manchester, England, through its general superintendent Mr. R. Lamb, we are enabled to present to our readers the following interesting details and illustrations of the parks of Manchester, a city of over half a million inhabitants, and known throughout the world by its vast commercial and manufacturing enterprises.

The methods of control and management are worthy of study, in view of the possibilities of thereby securing efficient service, honest administration, and proper care of the park properties for the public benefit.

The park and recreation grounds of the city are under the control of the City Council, and their management is deputed to a committee of about twenty-four members, consisting of Aldermen and Councillors called the parks and cemeteries committee, which meet once in every two weeks for the purpose of transacting the general business of the parks and cemeteries. In order to better facilitate the control and administration of the parks, the general committee is divided into thirteen or fourteen sub-committees of from eight to ten members, each sub-committee being allocated to one park. The sub-committees meet once a month for the transaction of business in connection with their respective parks, and in due course report to the general committee for its approval or otherwise.

The recreation grounds are managed by two sub-committees, the city being divided into two divisions, north and south, and the committees report the result of their deliberations to the general committee as in the case of the parks sub-committees.

The parks committee employs about 250 men on revenue and capital accounts, over which is placed a general superintendent who is responsible to the committee for the efficiency, condition and good government of the parks department.

As regards the disposition of the men: At each

park a staff of men is appointed in accordance with the extent and character of the park, and over these a resident head gardener is appointed who is responsible to the general superintendent for the order and condition of the park under his charge.

A characteristic illustration of each of the four following parks is given:

Queens park is 30 acres in extent, and its character is almost wholly ornamental. There are three small grass plots reserved for children as a playground, and the remaining portion of



THE MANCHESTER PARKS, ENGLAND. BOGGART HOLE CLOUGH.—
VIEW IN OLIVER CLOUGH.

the park is devoted to flower garden, grass lawns, ornamental shrubberies, woodland and water, a considerable portion being taken up with the museum and picture gallery. There are also gymnasias fitted up for males and females respectively. Provision is also made for bowling. Something like 100,000 flowering plants are planted out in the flower beds every spring, and the whole area is well laid out with asphalt walks. No provision is

made for cricket or football. Cost to March 31, 1898, \$68,600. Museum, \$67,000.

Philips park is over 31 acres in extent. It is provided with two bowling greens, an open air swimming bath, gymnasia for males and females respectively, two small plots of grass reserved as playgrounds for children, and a series of ornamental lakes. The remaining portion of the park is devoted to grass lawns, flower gardening, ornamental shrubberies and woodland. From 100,000 to 150,000 flowering plants are planted out in the flower beds every spring; the whole of the area is provided with asphalt walks. There is no provision in this park for cricket or football. Cost to March 31, 1898, \$98,000.

Alexandra park is 60 acres in extent. About one half of the area is an open grass sward reserved for playground purposes, including cricket, tennis and cricket and football for boys up to about 14 years of age. Gymnasia for males and females are provided, as well as a bowling green, and a large ornamental lake. The remainder of the park is devoted to flower gardening, grass lawns, ornamental shrubberies and woodland. The park is well laid out with gravel carriage drives and asphalt walks. About 100,000 flowering plants are planted out in the flower beds every spring. Cost to March 31, 1898, \$388,800.

Boggart Hole Clough, some 76 acres in extent, of which two illustrations are given, was purchased by the corporation a few years ago. It is situated not quite a mile within the city boundaries, and is a beautifully romantic tract, and well suited for a national public park. The two views speak louder than words. The land cost nearly \$25,000, and to March 31, 1898, the total charges for purchase and improvement amounted to about \$120,000.

Birch Fields park has an area of over 32 acres. It is laid out in large stretches of well kept grass swards, with a view to giving the greatest facilities for tennis, cricket, football, bowling, male and female gymnasia, etc. The whole area is surrounded with an ornamental border of trees, shrubs and flowers. Cost to March 31, 1898, \$122,300.

Gorton park is 16 acres in extent. It has bowling green, male and female gymnasia, and the remainder is laid out for playground, cricket, football, etc., the whole being surrounded with an ornamental border of trees, shrubs and flowers. Cost to March, 31, 1898, \$141,500.

In all including the six parks mentioned above, Manchester possesses 32 parks and recreation grounds, including the "Brookdale Estate," a 45 acre private property, recently purchased, and a design for the improvement of which by Mr. Lamb

and which he has kindly forwarded, has been provisionally approved. It cost \$132,500 and the committee has voted \$62,500 for laying it out. It lies principally within the city's boundaries.

The areas of the smaller parks not previously described range between 19 acres and the fraction of an acre, and are generally well distributed.

Among the larger are: Lewis recreation grounds, 19 acres, principally for physical recreation. Higher Crumpsall, 12 acres, shrubberies and recreation. Openshaw, over 7 acres, gravel space for recreation, gymnasia for both sexes, and bowling green. Cheetham park, over 5 acres, ornamental gardens, gymnasia, bowling, tennis and recreation. Ardwick green, over 5 acres, similar in character to foregoing. Harpurhey, over 3 acres, gravel space for recreation, shrubberies and gymnasia.

And these descriptions will fairly apply throughout the remaining tracts of the system. It will undoubtedly be observed that physical exercise is considered of very high importance in the laying out of an English city's park system, and this point is receiving very close consideration by the authorities in this country. Physical recreation has in the main, both in connection with our public schools and public parks been neglected, or only an apology for such healthful requirements established. Of course there are some striking exceptions, but physical recreation for the masses has been overlooked.

On March 31, 1898, the whole system of parks comprised some 326½ acres, which up to that date had cost the corporation approximately \$1,839,500.

Some valuable suggestions may be found in the following particulars regarding the Municipal Nursery, contributed by Mr. Lamb: "The atmosphere of Manchester being so polluted, more so perhaps than any other city in the kingdom, with smoke, sulphuric acid and other chemical fumes, a fair amount of foliage and vegetation generally, can only be maintained by constant renewals and applications. Under these circumstances the parks committee found it very expensive to keep the parks at anything approaching a medium standard of efficiency in respect to vegetation, and they therefore decided to initiate a new departure in municipal progress, viz: to grow their own trees and shrubs. For this purpose they rented a few acres of land from the Cleansing committee of the corporation as an experiment, the land in question being raw bog, part of an estate purchased by that department for the purpose of using up the towns refuse, and so well has it answered the purpose, that the parks department have now a nursery of 65 acres, all stocked with hundreds of thousands of



1. Alexandra Park.—View of Avenue.
2. Queen's Park.—View of Flower Garden with Museum and Art Gallery.

THE PARKS OF MANCHESTER, ENGLAND.

3. Phillips Park.—View of Flower Garden with Cemetery and Chapels in the distance.
4. Boggart Hole Clough.—View of Natural Banks.

trees, shrubs and herbaceous plants in various stages of growth coming on in relays for distribution in the parks as may be required, as well as for equipping new parks and recreation grounds, twenty of which have been laid out during the past eight or ten years. The number of trees and shrubs supplied for furnishing purposes from the nursery last year was 20,250 trees and shrubs, and 40,000 herbaceous plants. This does not include the bedding plants mentioned in the descriptions of parks in preceding pages.

"A special feature in the nursery is the growing of suitable specimen trees and shrubs in tubs, for the purpose of decorating the squares and public buildings, etc., where it is impracticable to plant trees, in the city.

"During the summer months from six to seven hundred of these are placed in the city every year, which is the means of giving a refreshing relief to the eye and mind of the thousands of busy toilers whose lot it is to live in the dreary surroundings of bricks and mortar inseparable from city life.

"I have already referred to the impurities of the atmosphere of Manchester, it will therefore be readily understood that the varieties of trees and shrubs which will succeed, (in some measure,) under such conditions are extremely limited, and therefore it is only such available varieties that are reared in the corporation nursery. There are: Laburnums, Ash, Birch, Sycamore, Lime, Philadelphus, Poplars of varieties, Elders of varieties, (very good for standing smoke,) Privets of varieties, (very good for standing smoke,) Ribes, Weigelias, Willows of varieties, Dogwood of varieties, Deutzia, Honeysuckle (very good for standing smoke,) Rhododendrons of varieties (Cunninghams white and blush being the two best varieties for standing the atmosphere of Manchester and of which we raise many thousands from layers,) etc. And the following Herbaceous and Alpine plants in varieties, viz: Antennaria, Aubretia, Asters, Aquilegia, Auriculas, Antirrhinums, Campanulas, Canterbury Bells, Chrysanthemums, Carnations, Daisies, Dactylis, Delphiniums, Doronicums, Helianthus, Iris, Lysimachia, Myosotis, Megesia, Penstemons, Pansies, Phlox, Pinks, Polyanthus, Primroses, Pyrethrum, Spireas, Solidago, Sweet Williams, Saxifrages, Sempervivums, Sedums, Stocks, Veronicas, Wallflowers, etc.

Music is provided quite liberally in 18 of the parks, from one to three times a week in the season. Certain small charges are made for the use of the tennis courts and bowling greens, and the regulations governing the public use of the parks are more or less strict and are rigidly enforced. The policy of the department is to encourage outdoor recreation for the masses.

HOPE CEMETERY, BARRE, VT.

On the opposite page will be found a plan prepared by Mr. Edward P. Adams, landscape architect, Boston, Mass., for the development of Hope Cemetery, Barre, Vt., and upon which work is in progress. The site is very picturesque and well situated as to surface conditions for a cemetery. The approach by the ravine road could hardly be excelled.

In his report upon the proposed work considered from the point of view of development on the lawn plan, Mr. Adams advised that the "avenues should follow the natural contour of the ground except at sudden changes of grade at ridge or hollow, and the valley lines indicate usually the best locations for them. Vistas down the tree covered slopes will add much to the beauties of the drives, and paths for pleasant walks can go where drives cannot. Rustic hand-rails should protect the steepest slopes where they would be partly hidden by the trees.

"In every section some places should be left for planting trees and shrubbery in groups to harmonize with the picturesqueness of the natural scenery, and for a graceful background for the monuments. No regular setting out of trees along avenues should be attempted."

The plan shows the general features as proposed by the designer.

FLOWERING TREES FOR ORNAMENTAL PLANTING —II.

It is probable that no trees are more strikingly showy for this purpose than the double flowering peaches. These look like huge bouquets of roses when they bloom. There are several varieties offered by many nurserymen under different names. Thus what one dealer calls "*Persica vulgaris camelliæflora plena*" is the same tree described in another catalogue as "*Amygdalus Persica*, double-flowered crimson variety," and in a third is called "*Persica communis sanguinea flore pleno*." This is called the "Blood-red double-flowering peach," and is the most startlingly vivid of all blossoming fruit trees. The pink variety is also a beautiful small tree and there is one that bears pure white semi-double blossoms, and another with variegated flowers, pink and white. Nothing can be imagined more ornamental than groups of these trees in early May when their effects of bright coloring contrasted with the fresh green grass are unsurpassed in brilliancy by anything that flowers at the same time. Not a green leaf has yet appeared upon their branches when they flower. I have seen them in situations where they stood in full relief against a background of tall evergreens and here the effect was superb.



We have planted a number of these trees in the grove in different positions. They are said to be short lived as most peaches are. Ours are now ten years old. The very finest and largest died suddenly last summer but all the others are doing well. One of them suffered very much from leaf-curl when it was small and I was afraid it would contaminate the others but it did not as it was planted apart from the rest, and it has in great measure outgrown the disease, though still slightly affected by it. These peaches have to be watched for borers just like fruit peaches. I do not know whether they suffer from the yellows or not. Mine are quite healthy.

Cherries bloom about the same time as the peaches, some varieties a little earlier and some later, and all are very ornamental when in flower. Old trees of such varieties as the Black Tartarian sometimes grow very large and look when out of flower more like forest than fruit trees. We have one of these old giants planted north of the house which it overtops. It is at least forty years old and is in full vigor, showing no appearance of decay. This tree blossoms in April and is a fine sight for several days covered with soft cloudy masses of bloom.

Even earlier by a day or two is the beautiful Japanese Weeping Cherry. I know no weeping tree that is so graceful, so Japanesque, if I may coin a word, in effect as this tree. There is nothing tame in its symmetry as there is in the Weeping Willow, for instance, but it has an artistic irregularity of outline far more effective. Its limbs take on all sorts of odd contortions and picturesque loopings and queer upward quirks but all end in a downward sweep and are clothed in flowering time with rosy pink blossoms down to the tips. These flowers have narrower, more pointed petals than those of the fruit cherries.

My specimen is about fifteen feet in height and its slender branches touch the ground on one side only. It is, when in bloom, like a fountain with pink spray.

There are a great many kinds of flowering cherries. Another weeping Japanese variety has white flowers, and there is the dwarf weeping cherry which has to be grafted standard high and is pretty for small lawns. Then there are the wild cherries, sand cherries and bird cherries, all ornamental and particularly desirable for copses and plantations where a natural effect is desired and the double-flowering ones might seem out of place.

But near buildings and in parks and private grounds no trees are more ornamental than Siebold's double-flowering cherries, which come in two varieties, the white and rose-tinted. These

do not seem to make large trees. Mine seem to have stopped growing and are only ten feet in height but probably they do better elsewhere. The blossoms completely cover the branches and they bloom later than other cherries and remain longer in perfection. These are most effective in groups of several planted together and quite near a path or in some conspicuous position where their beauty will show to best advantage.

Pears are not planted for ornament as much as they deserve to be. In habit of growth they are often very graceful, many of them having pendent branches which gives them a picturesque appearance. Old pear trees sometimes attain to large size and fine form. Both in flower and in fruit these trees are ornamental and they color richly in the fall retaining their foliage until late in the season.

The same may be said of Medlar trees with their large white flowers and handsome foliage, yet how seldom they are seen in ornamental gardening.

Pyrus salicifolia argentea is a beautiful little tree with narrow silvery leaves and clusters of white flowers with rose-colored stamens. I see that some nurserymen are beginning to offer some of the rarer flowering trees described in my last article which have hitherto been scarce and hard to procure. It is possible to obtain *Prunus myrobalana flore roseo pleno*, *Amygdalus communis flore roseo pleno*, which is a large double-flowering almond, also *Amygdalus Davidiana* in both pink and white varieties, at moderate prices. The taste for such things is growing and the free use of them makes parks and home grounds ideally beautiful.

The Mountain Ash is a pretty little tree, ornamental in foliage, fruit and flower. There are a great many varieties of this tree, those most commonly planted, however, are the English Mountain Ash, *Sorbus aucuparia*, and the American, *Sorbus Americana*.

Amelanchier Botryapium is a tree of many names, Serviceberry, Shadblow, Juneberry and Wild Pear being among the number. It is the beautiful little tree that whitens our woods and copses early in spring, some time before the dogwoods flower. It is said to grow thirty or forty feet in height, but I have not seen it so large as this. Here it is a tree of remarkably slow growth, of slender shape and pretty, delicate, narrow-petalled bloom. It is a graceful little tree and well suited to the wilder parts of parks and copses.

I have by no means exhausted the great family of the Rosaceæ, but would defer the flowering apples and crabs to another time.

Danske Dandridge.

IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

PRIZES FOR PLANTING.

Letters received by this department indicate a general desire for knowledge of specific methods that have been successfully used in developing this popular means of creating personal interest in improvement work.

1. Front and Side Yards.

FIRST CLASS—EIGHT PRIZES.

The first class includes all improved property where planting has been done previously.

SECOND CLASS—EIGHT PRIZES.

The second class includes property where little or no planting has been done previously, the greatest improvement in appearance to be considered with other features.

2. Back Yards.

For the best kept back yards, whether lawns, shrubs, flowers or vegetables. General neatness of yard and surroundings and condition of lawn, trees and vines to be considered.

FIRST CLASS—EIGHT PRIZES.

The first class includes all improved property where planting has been done previously.

SECOND CLASS—EIGHT PRIZES.

The second class includes property where improvement



FRONT YARDS.

N. C. R. Prize Contest. Hardy Shrubs and Annuals.

The prominent part taken by the National Cash Register Co. in such matters has been widely and favorably commented upon, but this phase of it has not, it is believed, been as fully exploited as its excellent results deserve. The following detailed list of prizes and conditions explains itself, is full of suggestion and should prove helpful:

No one will be permitted to have more than one first prize. He may, however, take lower prizes in more than one division.

Entries must be made before June 15, 1900, on blanks which may be obtained of the South Park Improvement Association. In cases of question as to the class to which property may belong, the judges will decide.

has not been attempted in the past, the prizes going to those showing the greatest improvement.

3. Vine Planting.

For the most artistic effect of vines on houses, verandas, outbuildings, fences, posts or summer arbors. Arrangement, design and condition to be considered.

FIRST CLASS—SIX PRIZES.

The first class includes Boston ivy, akebia, clematis, honey suckle, grape and other permanent vines.

SECOND CLASS—SIX PRIZES.

The second class includes morning glories, moonflowers and other annuals.

4. Window and Porch Boxes.

For the most artistic effect. Arrangement, box design and condition of plants to be considered.

PORCH BOXES—SIX PRIZES.

5. Boys' Vegetable Gardens.

TEN PRIZES.

Care of grounds, quality and quantity of product and attention to duty to be considered.

6. Vacant Lots.

SIX PRIZES.

General neat and attractive condition of lot, trees, fences and surroundings to be considered.

7. Best Planted Premises Along Railroads.

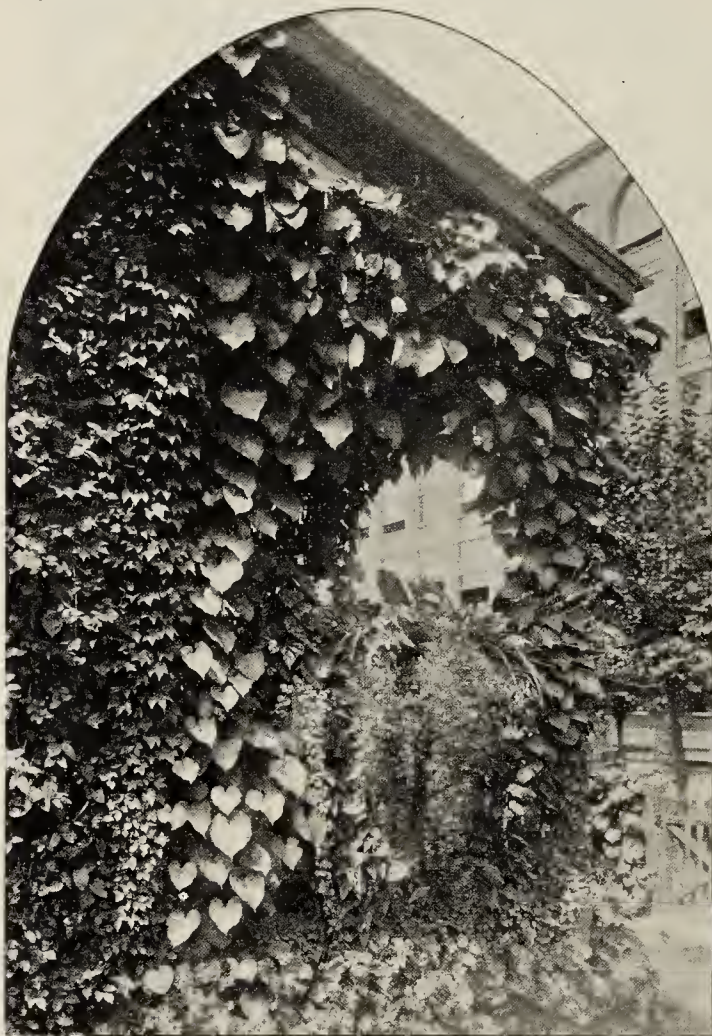
FIVE PRIZES.

For the best planted yards, whether front or back, adjoining any of the steam railroads leading into Dayton. The yards must be within view of passenger trains as they pass through the city. Artistic arrangement, condition of lawn and borders, cleanliness and general appearance of houses, fences, walks, trees, vines and lawns to be considered.

Special Prizes.

The Outdoor Art committee of the Woman's Guild offers a prize for the best floral division between yards.

Twenty prizes by the South Park Improvement Association, one each in the twenty South Park districts, for the best general appearance between the centers of street and alley.



BALCONY BOX.

N. C. R. Prize Contest. Begonias, Asparagus Sprengeri (feathery trailing plant) in box. Permanent and annual vines on house.

An official of the company says that in judging the prize yards "a basis of thirty points is taken, divided as follows: Ten points for the

general condition of the yards, ten for the artistic arrangements of the shrubs and vines, and ten for the condition of the plants, shrubs and vines.



A HOME IMPROVED WITH VINES.

Public School Contest, Carthage, Mo. Moon Vine on front veranda. Size when set out 6 inches. Price 8 cents. Madeira vines on front of house to the right of the veranda. Dry tubers planted in spring. Price 20 cents. Japanese Morning Glories on front of house beyond the Madeira vines. Seed sown in spring. Price 5 cents.

Twenty-eight was the highest per cent. reached this year."

* * *

At Carthage, Mo., a town having already a more than local celebrity in the matter of attractive appearance, there was held this year the first of what is intended to be an annual "vine, flower and vegetable contest" open only to pupils of the public schools.

Mr. W. J. Stevens, the superintendent of schools, is given credit for originating this admirable movement and to him are due thanks for the following information:

Prizes and Rules Governing Contests.

I. BOYS' VEGETABLE GARDENS—SIX PRIZES.

Space limited to two square rods. Each contestant is required to furnish the judges with a plan of plot showing size of beds, and a list of what was planted; also a brief written history of the garden. In making awards, quantity and quality of vegetables and attention to business to be considered.

II. GENERAL VINE PLANTING—FIRST AND SECOND PRIZE IN EACH SCHOOL.

Award to be made for the greatest *improvement* in the appearance of the home by the artistic use of vines (all to be grown from seeds, dry tubers or small plants sown or set out this year) on houses, verandas, outbuildings, fences or stumps.

III. ASTER GROWING—FIVE PRIZES.

The best aster bed, size 5x10 feet. Judges to decide everything. No conditions.

IV. ASTER BOUQUET—FOUR PRIZES.

The best bouquet made from the children's beds.

All pupils in the public schools were permitted to enter the contest except the children of professional gardeners or florists. Children were urged to secure the assistance of older members of their families, the intention being to enlist the interest of all in the growth of flowers.

Supt. Stevens states that prompted by the experience of this year, the following alterations or additions to the rules will be made, viz: (1) Winners of first prizes this year will be excluded from the next contest. (2) Only one entry will be allowed in any family, and (3) two complete sets of prizes will be offered in each contest, viz.: (a) one for those who have access to city water, and (b) one for those who are out of reach of hydrants.

In the vegetable contest a number of the boys raised a second, and some even a third crop—the latter being limited to turnips, radishes and in a single case (that of the first prize winner) beans.

Fully 1,500 boys and girls started into the contest in the spring, but for one reason and another dropped out until only 300 remained.

The regular and several special prizes, aggregating in money value nearly \$100.00, were awarded at the exercises that closed the

contest and which took the appropriate form of a wild flower and fruit exhibit with a suitable program, and amid an inspiring display of the wealth of the woods as found in that truly beautiful country—southwest Missouri.

NOTES.

The Rural Improvement Association, of Keene, N. H., pays children for gathering the eggs and destroying the nests of the tent caterpillar which has been very destructive in that city. This move might profitably be introduced in many other places to the immediate end of disposing of objectionable insects and to the further advantage of interesting and instructing children in such matters. Public interest would also be aroused by this protective measure and the usefulness of the improvement society demonstrated among all classes.



STUMP COVERED WITH CYPRESS.
Grown from seed sown in spring. Presumably the little maid points with pride to the very pretty result of her own work.

Miss Mary A. A. Prentiss, the secretary of this association, also reports that from 800 to 1000 trees along public highways have been tagged for preservation by their society since its organization in 1886. Tags for this purpose are provided by the state. This is another form of improvement work that is unknown in the middle west and one that well deserves to be noted.

* * *

The City Improvement Society of Greeley, Colo., offers prizes for well-kept premises, flower gardens and lawns and in other ways gives evidence of making a vigorous campaign in the interest of the cleanliness, healthfulness and beauty of the city.

* * *

The Village Improvement Society, of Williamston, Mass., and the Helena (Mont.) Improvement Society both offer prizes for the planting and care of trees.

* * *

From Mrs. W. H. Gray, president of the Village Improvement Society of Stephenville, Texas, comes the report that her society this year offered prizes for the neatest back yard, prettiest front yard, best sidewalks, and best bed of flowers arranged by school children. This goes to show that the custom of prize giving is spreading to all parts of the country, is found to be a good plan for interesting individuals in the work of associations and is an all round paying investment.

* * *

Mr. L. Woolverton, secretary of the Ontario (Canada) Fruit Growers' Association, says that there are no improvement associations proper in his province but that their work is to a certain extent undertaken by local horticultural societies. The government grant to these societies is said to be spent for the benefit of all members equally for the cultivation of the taste of the general public in floriculture and arboriculture. These societies distribute seeds and young plants among school children on condition that they will make an exhibit of the resulting plants at the time of the summer exhibition. They also give prizes to individuals for well kept gardens and even undertake to lay out certain parts of public parks.

* * *

Miss Bessie A. Baker, secretary of the Beverly (Mass.) Improvement Society, reports that in the spring of 1900 the society distributed 1,180 packages of flower seeds, giving ten to each of 118 children of the public schools. They then offered prizes as follows: \$10 for the greatest improvement in a yard facing any steam railroad, and two \$10, two \$5, two \$2 and five \$1 prizes for the

greatest yard improvement in other parts of the town.

Some such plan as this should be followed in many towns and would doubtless be productive of excellent results in exciting comment and interest. It would be especially to the advantage of railroad towns to use every legitimate effort to induce residents to improve the appearance of grounds facing on railway rights of way which are notoriously neglected and unsightly.

Improvement societies using their influence to so alter for the better the railway rights of way passing through their towns, would doubtless be able to secure the aid of railway companies in doing larger work along similar lines after such demonstration of their interest and influence.

Prizes for vine planting on old buildings, fences, etc., facing on railway rights of way should result in a wonderful amelioration of the squalor and general unsightliness that usually line a railroad the moment corporation limits are entered.

F. C. S.

A SUMMER SCENE IN THE ISLE OF WIGHT.

The visitor to Europe who includes the Isle of Wight in his tour, and all should do this, will find there many plants flourishing which he will not find hardly anywhere else in England, and this, should he be one familiar with horticulture, will give him a very great deal of pleasure. In the illustration accompanying these notes there are, for instance, two or three kinds which will not give satisfaction on the mainland.

On the walls of the dwelling are three "vines," English ivy, Yellow Banksian rose and *Edwardsia microphylla*, the New Zealand laburnum. This has yellow, pea shaped flowers, belonging to the natural order Leguminosæ. It is classed as *Sophora* by late authorities. It is not a vine, but needing protection in many parts of England and doing well when grown to a wall, it is often found in places where vines are looked for.

The lovely Banksian rose is not hardy enough for use here, excepting in the southern states.

The little girl nearest the dwelling is hiding behind a fine bush of the beautiful *Leycesteria formosa*. It is a distinct and interesting plant, and one which, fortunately, will live out as far north as Philadelphia, and no doubt still further if protected at the root. And as the shoots from the ground flower freely in late summer, there is but little loss in permitting the tops to be frozen down. I have seen fine plants of it in the public grounds at Washington, D. C., as well as smaller ones in the gardens of Philadelphia. The flowers are in droop-

ing racemes, are white, tinged with purple, and are followed by berries of a purplish color which are as pretty as the flowers. It is a native of the temperate Himalayas.

Hardly visible by the side of the *Leycesteria* is a New Zealand plant, *Cordyline indivisa*, a plant not unlike a *dracæna* in appearance, and generally found here in collections of indoor plants.

Quite close to the dwelling, its branches reaching almost to the top, will be seen a vigorous young tree of the Australian Blue Gum, *Eucalyptus globulus*. This ornamental and valuable timber tree is not reliably hardy even in the Isle of Wight. It can stand but a degree or two of frost without injury. The wood of this and other *Eucalyptus* is very hard, besides that a tincture from its bark and leaves finds a place in druggists' lists.



A SUMMER SCENE IN THE ISLE OF WIGHT, ENGLAND.

Seeds of this plant sown indoors in March, the seedlings planted out of doors in May, give highly ornamental plants six to eight feet high by autumn.

On the left of the building is a good sized shrub of pomegranate. This is hardy there, as in fact, it is here to some extent. Though flowering there it does not bear fruit, the summer not being warm enough. In our southern states it perfects fruit, and this fruit sometimes finds its way to northern markets. But while passably well flavored they are not of the melting sweetness of those which found their way to Selim's table, as described in "The Light of the Harem":

"The board was spread with fruits and wine,
With grapes of gold, like those that shine
On Casbin's hills; pomegranates full
Of melting sweetness, and the pears
And sunniest apples that Caubul
In all its thousand gardens bears."

The "tree" yucca in the picture is gloriosa. There are other tree yuccas but this and its varieties are the only hardy ones for England and, I may add, for warmer parts of the northern states. It is hardy in Pennsylvania, though but few planters appear to know it. Were it not to flower it would get very tall in time, but after a few years growth it produces a flower spike from the apex of its growth and this arrests its growth in that direction, as a side shoot, or two or more shoots, are made. These grow on for a few years, when they in turn flower and other side shoots appearing, a shrubby small tree is made in time. The panicles are sometimes six feet in height, and when the lily-like white flowers are expanded there is a beautiful sight. The flowers come in August, sometimes later, in England, at times so late that they fail to perfect themselves before winter comes. This yucca behaves strangely in our northern states. It rarely makes a trunk as it does in England, and as the illustration shows it. When three or four years old and just as it begins to make a trunk, it flowers. This starts out the side shoots, and these shoots in turn flower soon, so that no trunk is made. I suggest that in England it does not flower for many years—as its straight trunk proves—and thus it forms the trunk. May it not be that our great heat brings on fructification at a much earlier age? We get the flowers but not the trunk.

The children and attendants are those of an American family who was in possession of the place last summer, and to one of whom, Miss Gertrude Wheeler, I am indebted for the photograph.

Joseph Meehan.



THE NORFOLK ISLAND PINE,
ARAUCARIA EXCELSA.

ONIFERS number some rarely beautiful specimens. *Araucaria Excelsa* is curious and handsome. An evergreen, it is catalogued as "Christmas Tree Palm" and "Star Palm." It is not a palm at all, but is so called partly, because of the frequency with which it is grown in tubs for conservatories in winter, and in summer for out-door decorative purposes, along with *Cocos Weddeliana*, *Areca Lutescens*, *Kentia Balmoreana*, *Latania Borbonica* and other palms and cycads. They ornament the green house during the winter months and for park or garden ornamentation are not excelled in summer.

The Norfolk Island Pine derives its fanciful names of "Christmas" and "Star Palm" mainly from the disposition of the leaves. They grow in

whorls, star-shaped in the divisions, broad at the base, tapering to a pointed terminus, and all spreading out in flat form. These whorls grow one above the other, the newly formed one, just starting growth, making a bract on the top of the shrub or tree. It is used as a Christmas tree, from its formation, so neat, so beautiful and seemingly formed for the express purpose of receiving tapers, tinsels and bon-bons. Too rare and costly to be cut, however, for Christmas tree, the *Araucaria* is grown in tubs, year by year increasing in height. Like all evergreens it makes deliberate growth. One whorl a year is about the average. A tree that



THE NORFOLK ISLAND PINE, *Araucaria Excelsa*.

In the conservatory from three to ten years growth.

numbers five or seven whorls is at its best appearing. The leaf construction is so beautiful, unique and striking that it is difficult to describe. As said before, each leaf is flat-spreading, like one point of a star, ready for upholding light and fanciful Christmas gifts. And the leisurely growth, year by year, keeps the Norfolk Island Pine within desired proportions. A two or three year old plant to start with, will be handsome and graceful in size for five or seven years to come, in apartments where such decorative plants occupy posts of honor.

During the winter months it is easily cared for, not subject to diseases nor attacks of insects, nor is it sensitive to cold as applied to hard-wood, hot-house plants. Native of far southern lands, way down in and near Queens land, this is a tropical

conifer. The climate of Southern California suits its admirably.

At Santa Barbara the trees grow 150 feet high, which is the reported height of the trees in their native habitat. In Florida they grow only in the extreme southern borders. Very light frosts do not affect them, but even a light freeze is fatal.

Strictly a pine, a conifer, balsamic in odor, dark, rich green in color, the leaf construction is yet more beautiful than is seen in any tree of its kind or kindred. Twice pinnate, each narrow division, from the mid-rib is crinkled and creped, like the beautiful, dark green moss on brooksides. It crunches in the hand like crepe paper, but rebounds with the wiry strength of a true pine. A singular, but fascinating combination of strength and delicacy is shown in the unique fern-like foliage of the Norfolk Island Pine.

At a glance, it seems as if a breath would start the frond like leaves to trembling, whereas the mid-rib is as strong and firm as iron wood, and the subdivisions are each on a strong, wiry mid-rib, exceedingly graceful, delicate, indeed ideal in appearance, it is a powerful tree when grown to full size, and a very sturdy, self sustaining plant when from medium to small.

The Horticultural Hall, New Orleans, has them of varying sizes, and they are among the most attractive plants in the large collection of all kinds of rare plants.

The maximum of beauty and perfection is obtained by following the formula of the New Orleans Horticultural Hall. They keep the plants in tubs, under glass, from fall to spring and decorate the most conspicuous points with them, out in the park during the spring, summer and early fall months.

In private collections the same formula is followed. The beauty of the foliage is enhanced by exquisite cleanliness. Leaves constructed with the crinkled, curled, up-turned edges, like these, are calculated to collect dust. Frequent spraying and now and again submerging the plants upside down in water, cleanses them, and vigorous shaking frees the foliage of superfluous moisture and freshens it up like a plunge in the river, and a shaking when out on the bank, does a Newfoundland dog.

The florists use fir-tree oil for palms and pines, but at home, the soapy water made by Gold Dust washing powder, in a stationary bath tub, or some such receptacle that will hold as much as a barrel or enough to give a good sized plant a genuine turn-over and up-and-down bath, shaking the whorls free from the water before setting it up right again, might learn the florists an item of value about preserving the perfect beauty of this, the most beautiful of all the conifers.

There are two other varieties, neither so beautiful as *Excelsa*, yet both of them are very attractive evergreen conifers. *Araucaria Bidwelli* is the hardiest, coarsest of them all, and *A. Imbricata* or "Monkey Tree" has needles or sharp pointed leaves, and whereas the *Excelsa* is velvety, this is shining and varnished in appearance.

G. T. Drennan.

SEASONABLE SUGGESTIONS.

When the ground freezes surely it is time to cover up for winter such roses as require it. These are the sorts known as everbloomers in the middle states. Further north the hybrid perpetuals are the better for protection. Everbloomers may be cut back to within a foot or less of the ground, and soil, manure, leaves, sawdust or any such material be placed over them.

One of the best of ferns for dwellings in winter is the common *nephrolepis tuberosa*. It flourishes in an atmosphere which would be death to most ferns and it is the only good fern for the lawn in summer. Set in but partial shade it thrives well.

Plants in pots or boxes become a trouble in winter because of the water draining from them. This is remedied by having a tin or zinc lined box placed along the window shelf in which to place the plants. Watering can be attended to much better when this is done.

The *Ladies' Home Journal* advocates that beds of bulbs be permitted to freeze below the bulbs and then be covered up to prevent thawing. The opposite of this is a better way. Cover with manure, leaves or like material *before* the freezing. This leaves the bulbs in position to carry on activity of the root all winter much to their betterment.

Inside roses intended for forcing should not be pruned until the forcing is about to commence, otherwise there is a tendency to make new growth as soon as pruned which is undesirable. Florists often start the half of a rose house before the other half by pruning it.

The palm, *Areca lutescens*, makes an excellent appearance in the dwelling house in winter. But few palms will do this. It needs lots of fresh water when in a warm room. The pots must be well drained, then no fear need be entertained of overwatering it.

Forest leaves are the best protection that can be placed about plants in winter. But a few inches keep out frost. Placed over plants requiring protection or even such ones as hardy perennials, they are invaluable. It is well spent time to get together large heaps of them.

It is customary to continue the planting of deciduous trees until the freezing of the ground prevents, but it is undisputed that it is better to set them early in fall. Early fall or early spring is better for trees and shrubs, whether evergreen or deciduous.

The present time sees most of the trees and shrubs bereft of foliage. It is well to remember the colors the leaves of various kinds take on, to be of use when plantings are contemplated. The sweet and the sour gum, oaks, tulip poplar, maples and many others have lovely shades of color, and hardly one the counterpart of another.

Vitis heterophylla variegata is one of the most pleasing of vines in the fall. First there is the variegated foliage, and its fairly rapid growth. In the last weeks of autumn the berries which have succeeded the small white flowers change to a purple color, and from this to a deep blue, and often there are green, purple and blue colored flowers on the same bunch of berries.

The wild prairie rose, *setigera*, is valued as well for its late period of blooming as for its bright pink flowers. The most of the June roses are out of flower when this comes in. For a time plants were hard to get, but large ones are seeding now, which makes the plants more plentiful.

The work of tree and shrub planting could be much advanced in spring were the stock on hand early. Many believe it a decided advantage to buy in the fall and heel in the stock, covering it almost entirely with soil for the winter.

Referring to an item on the absence of green trees and flowers in cities, how much this might be bettered by the planting of *Ampelopsis Veitchii* to the walls of city dwellings. It would completely change the character of a city, and decidedly for the better, and in a way to better the health of the people.

Figs do very well as garden bushes and are now no ways uncommon. There are two ways of protecting them in winter. One is to sever the roots on one side, bending the bushes over on the other, prostrate with the ground, covering them with six inches of soil. The other, to dig up entirely and bury underground, not to be disturbed till spring.

Nothing excels the Californian privet in the way of quickly forming a hedge, but for a pretty fall display the *Berberis Thunbergii* is unequalled. The neat foliage and bright red berries form a beautiful picture, and the plant itself makes a hedge of fine proportions with but little trimming.

Aster tartaricus should be in every garden. It is an Asiatic species, growing to a height of six or

seven feet, bearing light blue flowers in the greatest profusion in the last days of autumn. It is excellent for cutting and for the filling of vases.

Among late flowering fall shrubs the *Buddleia intermedia* and *B. variabilis* should not be overlooked. The flowers are light pink, on long racemes. If cut back well in spring the shoots which follow bear very vigorous racemes of flowers. This season these shrubs were still flowering when freezing nights came.

Joseph Mechan.

THE CHICAGO FLOWER SHOW.

The best thing about the tenth annual flower show of the Chicago Horticultural Society was its poster. It is the work of Allen E. Philbrick, and is so good that it is selling very well as a picture, —a most unusual thing in the history of advertising lithographs, but one that is easily understood by those who appreciate its delicate tones and harmonious colors.

The feature of real importance in the Chicago show is that it shall be a social success. It might be supposed that this is reversing the correct sequence; that the prime necessity should be an artistic exhibition. But this is a false impression. True, an effort is made to give as attractive a show as is absolutely necessary, but above that and above everything, society must be interested, secured in fact.

So, at this exhibition there were enough flowers to keep each other company and plenty of room for society. The flowers, being beautiful in themselves, could not look less than charming with such a setting as the Auditorium offers, and society came in numbers either to judge or watch its leaders judge.

Table and box decorations, and bridal bouquets were what interested the bulk of the crowds, though the annual floral curiosities so thoughtfully provided created the usual excitement. These were a grafted chrysanthemum showing many varieties on one plant, and a grafted geranium showing six, all with their war paint on, or at least at war with each other.

There was a marked dearth both of chrysanthemum plants and cut blooms, partly accounted for by the early date of the exhibition. Still many good flowers were shown. Among varieties that led were Maj. Bonnaffon, yellow; Mrs. Robinson, Mrs. F. A. Constable and Evangeline, white; Vivian Morel, Mrs. Perrin and Orizaba, pink; Geo. W. Childs and Intensity, red; and Mongolian Prince, bronze. Good blooms were also seen of Mayflower, Chito, Modesto, Pennsylvania, Lady Hanhan, Snow Queen, Mrs. W. C. Egan, Ivory, the Bard and others.

Harry Eaton, a white flower, carried off the cup in the seedling class. It has the type and general characteristics of its Wanamaker ancestry but it is larger.

Mr. Stromback has several promising seedling chrysanthemums this year. The two best he has named Mrs. Yates and Mrs. Woodworth, and they were on exhibition at this show. The last received considerable favorable attention from the growers present and one of them is arranging to get a stock of it.

Carnations were unusually fine and abundant and numbers of excellent roses were on exhibition. Bassett and Washburn made their usual attractive display of American Beauties and showed some superb Kaiserins. They also won first prize for a new rose "never exhibited before" with the variety heretofore known as No. 19, which the originator has christened Marquis d'Elita, and they sent well grown specimens of Golden Gate, another new rose, while Reinberg took first prize with the other new comer in roses—Liberty.

The new rose, Queen of Edgely, proved a drawing card, although as shown here, apparently in competition with the trophy it won in the east, it is far from being an impressive rose. The contrast between the tall and showy silver cup and the medium-sized and medium-stemmed flowers, was not to the advantage of the "Queen." It is far behind its parent, the peerless American Beauty, having the same tendency to fade on the borders of the petals and being much paler in color, is less able to endure the resulting washed-out effect. It is but fair to say that the specimens shown traveled far and probably to their disadvantage in this respect, but the blooms certainly seemed deficient in substance.

The box decorations which occupied the lower tier of boxes on either side, proved a pleasing and telling feature that added greatly to the general effect, which was distinctly good.

It is pleasant to know that the fund for the Galveston sufferers realized from the sale of cut flowers generously donated by the various growers, amounted to three hundred dollars.

THE TREE WARDEN LAW OF MASSACHUSETTS.

AN ACT TO CODIFY AND AMEND THE LAWS RELATIVE TO THE PRESERVATION OF TREES.

Be it enacted, etc., as follows:

SECTION 1. Every town shall at its annual meeting for the election of town officers elect a tree warden, who shall serve for one year and until his successor is elected and qualified. He may appoint such number of deputy tree wardens as he deems expedient, and may at any time remove them from office. He and his deputies shall receive such compensation for their services as the town may determine, and, in default of such determination, as the selectmen may prescribe. He shall have the care and control of all public shade trees in the town, except those in public parks or open places under the jurisdiction of park commissioners, and of these also he shall

take the care and control if so requested in writing by the park commissioners. He shall expend all funds appropriated for the setting out and maintenance of such trees. He may prescribe such regulations for the care and preservation of such trees, enforced by suitable fines and forfeitures, not exceeding twenty dollars in any one case, as he may deem just and expedient; and such regulations, when approved by the selectmen and posted in two or more public places in the town, shall have the force and effect of town by-laws. It shall be his duty to enforce all provisions of law for the preservation of such trees.

SECTION 2. Towns may appropriate annually a sum of money not exceeding in the aggregate fifty cents for each of its ratable polls in the preceding year, to be expended by the tree warden in planting shade trees in the public ways, or if he deems it expedient, upon adjoining land, at a distance not exceeding twenty feet from said public ways, for the purpose of shading or ornamenting the same: *provided, however,* that the written consent of the owner of such land shall first be obtained. All the shade trees within the limits of any public way shall be deemed public shade trees.

SECTION 3. Whoever, other than a tree warden or his deputy, desires the cutting or removal, in whole or in part, of any public shade tree, may apply to the tree warden, who shall give a public hearing upon the application at some suitable time and place, after duly posting notices of the hearing in two or more public places in the town, and also upon the said tree, *provided, however,* that the warden may, if he deems it expedient, grant permission for such cutting or removal, without calling a hearing, if the tree in question is on a public way outside of the residential part of the town, the limits of such residential part to be determined by the selectmen. No tree within such residential part shall be cut by the tree warden, except to trim it, or removed by him without a hearing as aforesaid; but in all cases the decision of the tree warden shall be final.

SECTION 4. Towns may annually raise and appropriate such sum of money as they deem necessary, to be expended under the direction of the tree warden in exterminating insect pests within the limits of their public ways and places, and in the removal from said public ways and places of all trees and other plants upon which said pests naturally breed: *provided, however,* that where an owner or lessee of real estate shall, to the satisfaction of the tree warden, annually exterminate all insect pests upon the trees and other plants within the limits of any public way or place abutting on said real estate, such trees and plants shall be exempt from the provisions of this section.

SECTION 5. Whoever affixes to any tree in a public way or place a play-bill, picture, announcement, notice, advertisement, or other thing, whether in writing or otherwise, or cuts, paints or marks such tree, except for the purpose of protecting it and under a written permit from the tree warden, shall be punished by a fine not exceeding fifty dollars for each offence.

SECTION 6. Whoever wantonly injures, defaces, breaks or destroys an ornamental or shade tree within the limits of any public way or place shall forfeit not less than five nor more than one hundred dollars, to be recovered by complaint, one half to the complainant and the other half to the use of the town.

SECTION 7. Whoever negligently or carelessly suffers a horse or other beast driven by or for him, or a beast belonging to him and lawfully in a public way or place, to break down, injure or destroy a shade or ornamental tree within the limits of said public way or place, or whoever negligently or wilfully by any other means breaks down, injures or destroys any such tree, shall be liable to the penalties prescribed in the foregoing section, and shall in addition be liable for all damages caused thereby.

SECTION 8. It shall be the duty of the tree warden to enforce the provisions of the preceding sections.

[Approved May 4, 1899.]

THE ADAMS MONUMENT, ROCK CREEK CEMETERY,
WASHINGTON, D. C.

One of the famous mortuary monuments of the country, by reason of the remarkable figure which constitutes its main feature, is the Adams monument in Rock Creek cemetery, Washington, D. C. This figure which was modelled by St. Gaudens, is

The monument as shown stands on a pentagonal base and forms one of its sides, the statue facing inwards, while a granite seat constitutes the three sides facing the figure. The whole is surrounded by an evergreen hedge, which preserves the seclusion and adds to the impressiveness of the memorial. So secluded is it that a perfect photograph



Photo by Bliss Bros., Buffalo, N. Y.
THE ADAMS MEMORIAL, ROCK CREEK CEMETERY, WASHINGTON, D. C.—AUGUSTUS ST. GAUDENS, SC.

one of the greatest, and as an art critic puts it, one of the most terrible statues we have in this country. It is impossible to name it. It is called "Grief" by some, by others "Death." It cannot be described. The sculptor has modeled the inscrutability of death, and one can study it and study it and the longer one does so, the more weirdly fascinating it becomes. It appears to know all there is to know and is a positive and negative to every sentiment one can suggest concerning the unknown.

is impossible except in winter, when the deciduous foliage is gone. The figure is seated on a boulder-like block of Quincy granite and the rest of the monument is of pink Milford granite. The shaft backing the figure is highly polished and richly carved with classic bands. The slab beneath the figure is also highly polished. No inscription of any kind, not even a family name, serves to inform the observer in regard to it. In this it is silent.

GARDEN PLANTS—THEIR GEOGRAPHY, LIX.
CHENOPODIALES.

THE MIRABILIS, AMARANTUS AND COCCOLOBA
ALLIANCE.

Contains 31 tribes, 230 genera and 2,016 species. A large proportion are humble and even abominable weeds.

Many of the garden plants however are brilliant in color or beautifying in form, especially as the warm regions are approached.

The Apetalous (or for those who wish more than one term the Monochlamydeous) plants begin here. They are distinguished generally by the indistinct character of their floral envelopes which are often mere leafy processes surrounding the few organs necessary to the perpetuation of the plants. A few of the tribes are mimetic and were placed by the older botanists such as Bartling and Brongniart in the vicinity of the Dianthi and Silenes.

The Mirabilicæ have but a calyx which seems a corolla. The ovaries too are said to be absolutely distinct. Still there are latter day botanists who revamp the old ideas and deem it advisable to distribute these plants among other groups (even Euphorbias near the Hollyhocks,) and regard them as apetalous forms of polypetalous plants. There is nothing for the gardener in the midst of the confusion but to adopt the system best known in the world—best adapted to landscape effect—and aid as he may in perfecting it. Mere provincialism is not to be regarded. A state of isolation may be a source of strength, but not if it ignores all around it, and persistently strives after the unattainable. There is no way to restore the dead and buried



MIRABILIS JALAPA.



generations of plants to a genealogical system, for there is no full record of them. The geological records are merely suggestive. Americans I take it, will most conveniently learn plants from gardens as others have done and gardens should not be contradictory and confusing.

Mirabilis "Marvel of Peru" has 10 or 12 species of beautiful plants mostly from the warm parts of America. The flowers open towards evening,

have a great range of color from yellow and white, to pink, red and purple, and are often deliciously fragrant. They are perennial, but mostly treated as annuals. Two or three species are found in Texas and the common "four o'clock" is possibly naturalized there.

Allionia is monotypic but variable in Western North America, Cuba, Venezuela and Chili.

Bougainvillea has 7 or 8 species from sub-tropical and tropical America. They are mostly beautiful and gorgeous climbers. In the tropics they are seen growing through large trees. Even in southern California some do well. In central New



BOUGAINVILLEA GLABRA.—*Gardener's Chronicle*.

Jersey B. glabra does well plunged during summer, and the dwarf form may prove a good bedder. Such plants should be spurred in, lifted early, and kept dry enough to be dormant during winter. The large bracts are colored from pale pink to magenta or sometimes dull red and on large plants are produced in immense profusion rendering the genus a perfect tropical glory.

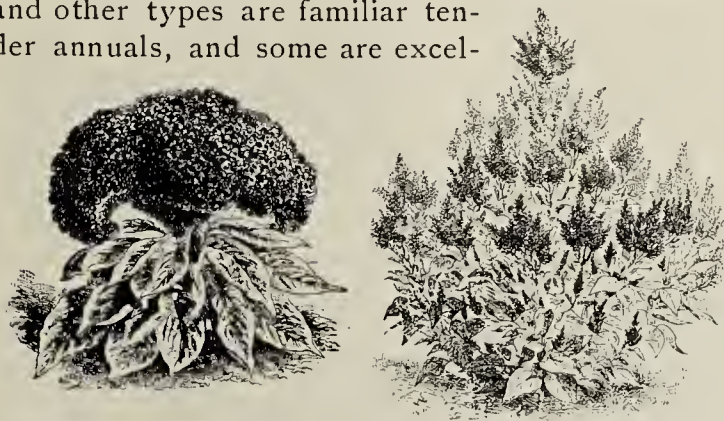
Abronia has 10 species mostly in Western North America. Some have showy involucre in delicate shades of color ranging from white through yellow and orange to pink. Although perennial they are often treated as annuals. Several show best in the evening or early morning, and like many Pacific coast plants are uncommon in Atlantic States gardens.

Illecebrum seems to be now regarded as monotypic. *I. verticillatum* is an insignificant weed, but the tribes Illecebreæ and Paronychieæ have been so bandied about between polypetalæ and apetalæ that they are more and more difficult to trace.

Paronychia has 45 species in eastern and southern Europe, western tropical Africa, and in warm and temperate America. They are mostly herbs of but little merit ornamentally, but the Algerians make a sort of beer from one of them.

Herniaria has 8 or 10 species in Europe, Western Asia and north and south Africa. Some have been used in carpet bedding.

Celosia is more ornamental and a highly appreciated genus of 35 species found in the tropics of Asia, America and Africa. The "Cockscomb" and other types are familiar tender annuals, and some are excel-



CELOSIA CRISTATA.

CHAMISSOA PYRAMIDALIS.

lent autumn flowering pot plants. One or two shrubby forms are in the tropics.

Amarantus has 50 species widely dispersed in tropical and warm regions. They are mostly annuals, some, both of the foliage and flowering varieties very showy, while others are vile weeds. In India two or three are used as pot herbs, and their seeds as corn which is parched like pop-corn. *A. caudatus* seems to be one of these, at any rate I have received seeds of it among others but not in the variety of color I desired. *A. bicolor*, *A. melancholicus*, vars. and *A. salicifolius* are fine foliage plants, needing hot bed help north.

Achyranthes has 12 species in tropical and warm regions. The plants under the name in greenhouses are often Iresines.

Telanthera "altenanthera" has 50 species in the sub-tropical and tropical parts of America and Africa. They are well-known carpet bedding plants which botanists tell us have now found their rightful title. Some of the best colored forms are best propagated during the last weeks of summer.

Altenanthera proper has 20 species distributed over the warm parts of the world, with a species or two near the Mexican border.

Gomphrena "globe-amaranth" has 70 species. Some South American species are shrubby, but the annual, E. Indian *G. globosa* in variety is the most grown.

Iresine has 25 species from the sub-tropical and tropical parts of America. Some of those with

highly colored red and yellow foliage are useful plants for massing in beds. They have a wild representation in a few species along the Rio Grande.

Hablitzia has 1 or 2 species from the Caucasus and Asia minor. *H. tamnoides* is an herbaceous climber of no particular value except for that fact.

Beta "beet" is in 13 species of mostly maritime plants from western and southern Europe and northern Africa. When gardeners desire a cheap highly colored foliage bed the "Chilian" beets may be commended. They are varieties of *B. cicla* supposed to have developed their variegated quality in Chilian gardens.

Atriplex has 20 species of shrubs and annuals in temperate and warm regions. *H. halimus* is a Tar-



AMARANTUS SILICIFOLIUS.



GOMPHRENA GLOBOSA.

tarian shrub in a few varieties. *A. canescens* and a few others on the Mexican boundary are mealy shrubs. Some of the annual forms have highly colored foliage, but are not very durable. The "greasewood," *sarcobatus*, is a shrub but rarely taken into gardens.

Rivinia is probably a monotypic but variable plant from tropical America grown for its berries.

James MacPherson.

An Expressive Epitaph.

Cyclists occasionally discover quaint and interesting items that never meet the eye of the ordinary tourist, who makes few divergencies from the beaten track.

A party of Midland wheelmen lately visited the churchyard of the village of Enville. On one of the tombstones they discovered the following epitaph

"He was—
But words are wanting to say what;
Think what a husband should be—
—he was that!

Of all the epitaphs I have ever seen, read or heard of, I think this must be awarded the palm for expressive originality.—*Exchange*.

CORRESPONDENCE.

Monuments in Cemeteries.

KANSAS CITY, MO., Nov. 9, 1900.

Editor Park and Cemetery:

DEAR SIR,—In your valuable paper, PARK AND CEMETERY AND LANDSCAPE GARDENING of October on page 191, our worthy Brother Bellett Lawson seems to have misunderstood some of the proceedings of the meeting and given out for publication an erroneous idea of the work of our convention. He will find that there was no suggestion of the use of a *tree for a marker*, which would mean to plant ten trees on an ordinary 20 ft. by 20 ft. lot.

I do remember that a tree was suggested for a monument—but all know that an elm with its branches extending 20 feet to 40 feet each side would not be planted as a marker at the head of a grave, or as a monument on a 10 ft. by 10 ft. lot or a 20 ft. by 20 ft. lot—but the man who saves \$500 to \$5,000 on a monument can own ground enough to have the elm instead of the stone.

Mr. Scorgie of Boston

ment, yet his grave is never lost. How often we see the man we know the least of in life, the man who has done the least for his fellow man, have the greatest shaft.

When a burial ground becomes a stone yard, as is the tendency today, it is time for the superintendent to suggest the opposite rather than encourage it. I only ask our brother to examine the two views. No. 1 is Graceland with its beautiful trees and shrubs, the other a tombstone yard. The quiet of the one is far more suggestive as "a last resting place;" an earthquake would bury you so deep under stone work in the other that the sound of Gabriel's trumpet would never reach you.

The park is much to be preferred to the stone yard. The eminent judge who gives his opinion without knowing



PLATE 1.



PLATE 2.

gave us some idea of the durability of a monument and the probable cost to keep it in repair. By his figures the tree would be far less expensive.

There is no cemetery in the country where this idea is put into effect more than in the "beautiful Graceland cemetery" he refers to; fewer monuments are to be found to the acre in the new section than in any other cemetery I have visited, and more ornamental trees and shrubs exist than in any cemetery I know of. People are gradually learning that a cold gray stone erected on the family lot will not help to make those who lie there more famous or their rest easier, and more often the man with the greatest honor has the most insignificant monu-

ment and great piles of stones transform the cemetery that was once beautiful into a hideous stoneyard with stiff straight lines on every side and the line of beauty so gracefully illustrated in most of our trees and shrubs is obliterated from view.

If Brother Lawson wishes to encourage the stone work in his cemetery its future will be a stone yard long before the beautiful Graceland will be marred by such relics of the past age. It is not one shaft in the landscape or one vault at the end of a vista that destroys the beauty of a cemetery, but the many thousand that will clog up that vista that will surely spoil the beautiful picture as we see it today.

Sid. J. Hare.

what agreements are stipulated in the deed throws little weight on the case. Most of us realize and know that we will not be able to educate all to our ideas, but each one educated helps to lessen the stones in the stone-yard.

"Pride of the living" erects more monuments in our cemeteries than are erected through love of the dead. As Brother Lawson told us the monument he erected in Canada was so much nicer than the others that the people became jealous. What this jealousy will do will be seen in future years when others will try to outdo his efforts. So it goes on and the landscape idea is

PARK NOTES.

Mr. Geo. L. Mesker and Mr. John Nugent have respectively offered 40 acres and 20 acres of land to Evansville, Ind., for park purposes free of all conditions.

* * *

The trustees of the Cathedral of St. John the Divine in New York city contemplate in the future the establishment of a public park on the grounds surrounding the edifice.

* * *

The Minnesota-Wisconsin Interstate Park commission, who have in charge the interstate park at the Dalles of the St. Croix river, is endeavoring to purchase some 600 acres of land adjacent to the properties already improved. The last Wisconsin legislature appropriated \$6,500 for land purchases.

* * *

The park question has assumed large proportions in Chicago and several large parks and a number of small park schemes are under discussion and contemplation by the special committee on the subject appointed by the city council. The establishment of a metropolitan park district is also under consideration.

* * *

It has been reported that the late Col. J. B. Armstrong, of Cloverdale, Calif., left a provision in his will looking to the deeding of the famous Armstrong bottom lands near Guerneville to the state for a park. The lands in question comprise several hundred acres of the finest redwood timber in California.

* * *

That individual tastes must yield to public requirements has been once more confirmed by the Appellate division of the New York Supreme Court in the case of Mrs. Elizabeth S. Clark, a property owner, who sought a perpetual injunction to restrain the authorities from erecting the soldiers' and sailors' monument on Riverside Drive, opposite her residence in New York City. Her suit was denied.

* * *

The commissioners of the three principal park systems of Chicago are joining forces to formulate a plan for driving the advertising billboard off the boulevards and park boundaries. The leading spirit in the work has remarked: "We will do away with these billboards if fighting will carry the day. They ruin our boulevards from an artistic standpoint and are becoming so plentiful along the borders of the parks that some of the most beautiful views are obscured."

* * *

An idea of the cost of creating small parks in the crowded districts of New York city may be gathered from the fact that the council and aldermen passed a resolution providing for an issue of city stock to the amount of \$2,045,424.62 for the purpose of paying awards to property owners for land taken to form the new park in the eleventh ward, Manhattan. This park is to be bounded by Houston, Stanton, Pitt, Willett and Sheriff streets, in a thickly populated tenement district.

* * *

The effect of the beautiful fall in the northern Mississippi valley has been quite remarkable. In Riverview park, Quincy, Ill., on October 26, there were lilacs, Japan quince and syringa in bloom and many of the annuals were as fresh and bright as in spring. To add to the beauty the fall coloring on certain of the shrubs and trees was developing rapidly and altogether nature was in a most charming and attractive mood. These conditions have been reported as far north as St. Paul.

In an article in the Chicago Sunday *Tribune*, on "Parks, Boulevards and Their Influences," by James Jensen, late superintendent of Humboldt Park, Chicago, he says: "The influences of parks and boulevards are far reaching. Parks may become a nuisance and a disgraceful spot upon the city's history, or they may carry the city to fame and glory. Bad management will not only depreciate real estate value, but make these spots intended for recreation and pleasure hiding places for crime and immorality. Does it not become the solemn duty of every inhabitant to watch with jealous eyes these gems, the crowning success of public enterprise, the pride of every city?"

* * *

In the public park of Joliet, Ill., a successful effort has been made to create a fern corner, in which to cultivate a large family of ferns. This was commenced last year and some difficulty was experienced in protecting them from vandalism. The topography and physical nature of the park at Joliet particularly adapts it to such an effort. A superintendent takes special charge of this department and in his detailed report he says: "Seventy-four species and varieties have been collected, perhaps half as many mosses and a large number of the sub-families, peat mosses, liverworts and other close kindred of the ferns. The ferns are now labeled and named under the old system and an attempt will be made to label the mosses before another season and perhaps all the plants and trees in the park."

* * *

The national park which has been created in Idaho by the interior department and which awaits the ratification of Congress, takes in Shoshone Falls and Blue Lakes on Snake river in south Idaho and includes some of the most beautiful scenery in the world. It is twenty five miles from a railroad and a trip by stage or horseback from Shoshone Station on the Oregon Shortline, through a wild country is necessary to reach this region of natural wonders. The falls themselves are rivalled only by those of Niagara, although Niagara lacks the wild and weird setting that Shoshone possesses. Half a mile above the falls the river is 1,200 feet broad and flows in a canyon 800 feet deep. The water itself is many fathoms deep. Toward the falls the channel narrows. The river, 900 feet wide, sweeps swiftly through a narrow gorge with precipitous lava sides 1,200 feet high. It reaches a 2,201 foot precipice and plunges over with a roar which is re-echoed by nature's walls on either side.

* * *

Mr. Warren H. Manning, in a report recently made to the park commissioners of Des Moines, Ia., summarizes briefly the advantages of parks to a city as follows: "They preserve for all time beautiful landscapes that would eventually be mutilated or destroyed by private ownership. They provide a place where the native flora and fauna may be preserved and perpetuated. They have a sanitary value in removing noxious gases from the air and in preventing the contamination of water courses. They promote public health by providing a place where nervous and sick people can frequently go to enjoy quietly a complete change of scene and surroundings, as well as a place where energetic and youthful persons can frequently engage in all active forms of recreation. They have an educational value by providing a place where growing plants and animals, geological, topographical and soil conditions and methods of propagation and cultivation may be studied. They add to the value of adjoining private property by giving an assurance of permanently attractive conditions. They make a city more beautiful and desirable as a place of residence, conditions that add to the pleasure and comfort of all citizens, and tend to keep in and draw to a city people of wealth, influence and leisure."

CEMETERY NOTES.

A chapel, waiting room and receiving vault is about completed in East Hill cemetery, Rushville, Ind. It is constructed of dressed Bedford stone and complete will cost about \$7,000.

* * *

The village of Buchanan, Mich., has recently purchased 45 acres of ground adjoining Oak Ridge cemetery for the purpose of enlargement. In cemetery matters Buchanan is rapidly coming to the front as a progressive community.

* * *

A new chapel is to be built in Pilgrim's Rest cemetery, Milwaukee, Wis., at a cost of \$4,000. The building will have ground dimensions of 36 by 70 feet, two stories in height, and will be finished in hardwood.

* * *

Morningside cemetery, a new cemetery at Syracuse, N. Y., adjoining Oakwood, is being laid out by Mr. J. H. Shepard, of Rochester, and his design contemplates more distinctly park-like conditions than usual. Walks and drives will be as limited as possible, the sections being large in extent. The lawn plan will be strictly adhered to in its latest development including perpetual care.

* * *

One of the unfortunate episodes in the late strike of the Pennsylvania coal miners, and for which there can be no excuse, was the desecration of the Vine Street cemetery, Hazelton. The spirit of destruction was let loose and an outrageous amount of damage perpetrated. It was finally discovered that the work was that of gangs of boys, whose dense ignorance prevented them from realizing their offense.

* * *

A short time since an automobile was picking its way through the circuitous paths of Evergreen cemetery, Portland, Me., when it encountered a funeral procession, halted at a grave. The horses attached to the hearse became frightened and were with difficulty prevented from running away. The association lost no time in revising the cemetery rules by inserting a paragraph stating that automobiles will not be permitted within the gates.

* * *

The board of managers of Oak Ridge cemetery, Springfield, Ill., have been busy making permanent improvements in that cemetery, among them a fine entrance gate and driveway, superintendent's house, stone gate-keeper's house at main entrance, offices, etc. Dr. H. Wohlgemuth, president, writes that the rebuilding of the Lincoln monument, located in Oak Ridge, is nearing completion and promises to be an enduring structure.

* * *

The Foster W. Mitchell mausoleum, Franklin cemetery, Franklin, Pa., is constructed of Barre granite and is 14 ft. 6 in. by 12 ft. by 14 ft. in height. The interior is of Italian and Tennessee marbles. It is designed to contain 24 bodies, 16 below ground level and eight above. The outer door is a bronze grille and the inner one heavy plate glass. Granite columns are a feature of the front, while on each side of the entrance are vases also cut from Barre granite.

* * *

The buildings at the new Knollwood cemetery, Canton, Mass., are rapidly nearing completion and will soon be ready for dedication. The cemetery property comprises between 400 and 500 acres, located in Canton and Sharon. The chapel,

waiting room and offices is a building 70 by 30 feet, constructed of field stone with a loggia 12 by 14 feet. It is covered with stained shingles. The general waiting room is 22 by 18 feet, finished in cypress wood and the controllers office 12 by 14 feet, in quartered oak, with a fireplace of mottled green brick. The women's private waiting room is also 12 by 14 feet and finished in enameled tile of a greenish tint. The upper story contains private office and drafting rooms. The Receiving Tomb to cost in the neighborhood of \$100,000, is also well on the way to completion.

* * *

The following interesting items occur in the last annual report of the cemetery of Spring Grove, Cincinnati, O., for year ending September 30, 1900: Total receipts including last year's balance, \$131,820.50. Among these receipts were: Sale of lots, \$45,670.70; interments, foundations and single graves, \$23,826.84; improvement of lots, \$11,209.12. The total expenditures were \$128,275.61, which included: Labor and material, \$31,112.01; interments and foundations, \$7,845.09; salaries, \$11,650; paving Spring Grove avenue and sidewalks, \$23,077.90; photographs for Paris Exposition, \$392.95. There were 100 lots and 30 fractions sold during the year amounting to 51,615 square feet. The number of interments amounts to 65,232, and there are 12,638 single graves occupied. There are 10,185 lot holders.

* * *

Mr. E. Fries, president of Lake View cemetery, Galveston, Texas, in a communication received from him thus speaks of the effects of the late terrible storm: "It is impossible to describe the destruction, one must see it and then it will be wondered how it was possible. Of the brick wall around Lake View cemetery, which contains 20 acres, built of the very best material, using cement mortar, and which shows for itself, blocks 30 and 40 feet long were blown bodily out from the foundations. Of course most of this destruction was done by heavy timbers floating in the water. All but one of the monuments were blown down,—some of the granite spires were twenty feet high. Office, porter's lodge and tool house were wiped out of existence. Of the receiving vault, which was built very substantially of Georgia marble, the marble doors, 2½ inches thick, were broken in pieces; three of the catacombs were demolished, two slabs of the roof broken and two caskets with bodies floated away and have not been found. Six bodies were also washed out of the ground from recent burials. The improved lots were not disturbed."

* * *

A handsome stone mortuary chapel, the gift of Mrs. Mary M. Clapp, was recently dedicated in the Pittsfield, Mass., cemetery. It is constructed of Lee granite and is 45 by 25 feet, with a wide porte-cochere forming the entrance under a square tower. The style of architecture is old English and it was designed by Geo. C. Harding, architect. The tower is 24 feet high. The roof is of red slate with copper gutters and ridge roll. The woodwork is of cypress three feet high in wainscoting, and a delicate shade of Roman buff brick, reaching to the roof. The floors are of hard pine, covered with heavy green Brussels carpet. The heating is by hot air radiation and electricity is used for lighting. The cost is about \$15,000. The windows are cathedral glass with leaded sash, and the colors are green and amber and bordered with rich shades. The large memorial window in the west end of the building is to the late Edwin Clapp, for many years a trustee of the cemetery corporation. The pulpit is made of brass highly polished, with an adjustable reading desk, and constructed especially for this chapel. The pulpit chairs and table are of Chinese teakwood with marble tops. The pews are of elm and the furniture for the minister's room is all of solid oak.

SELECTED NOTES AND EXTRACTS.

Berberis Thunbergi for Its Foliage in Autumn.

No more brilliant autumn feature among deciduous shrubs is to be found than a mass of the barberry, whose leaves before they drop change in tint to a rich fiery red that quite glows in the sunshine, while it possesses one great advantage over many shrubs remarkable for the brightness of their decaying leaves, for when at their best most of them quickly become bare, whereas those of the barberry are retained for some time. Taken altogether it is a very desirable shrub, for though of somewhat dense growth and usually assuming the character of a spreading bush about three feet high, yet its growth is very graceful. Next, the leaves when partially unfolded, forming as they then do little rosettes of tender green along the shoots, are particularly pleasing and directly after this the flowers appear. They hang down in considerable numbers from the undersides of the branches and in color are sulphur yellow inside and brownish on the exterior. As a rule it does not berry freely, yet sometimes the berries are borne in quantity. When such is the case they form quite an additional feature, as the oblong shaped berries, though rather small, are of a bright sealing-wax red and frequently remain attached to the plant throughout the greater part of the winter, thus rendering the specimen an object of beauty long after the leaves have fallen. The barberry, which is also known by the specific name of *Sinensis*, was introduced about a century ago, but it is only within the last twenty years that its merits have been generally recognized. Like most deciduous barberries this will hold its own in dry sandy soil and seen in a mass or clump it is most brilliant, and in this way it appeals more strongly to one than isolated examples. — *The Garden*, London.

* * *

The American Lotus.

In your late number you quote from Longfellow's *Evangeline*, "And resplendent in beauty the lotus lifted her golden crown above the heads of the boatmen." I have seen the blooms four feet above the water level in the "patch" at Grass Lake. This patch now covers about 100 acres. When I began shooting there about twenty-five years ago, there was not over one-half acre. I have heard Robert Douglas describe a bed south of St. Louis, Mo., that he and Prof. Sargent drove through, the flower heads being on

a line with their shoulders when sitting in the wagon. Ducks are reported to be fond of the lotus seed, and I think that, in order to reproduce themselves, Nature gave the plant the strong flower stock, sending the seed pod above the reach of the ducks. A very little frost kills it, and the seed-stem topples over with the apertures downward and under the surface of the water, thus scattering the seed. I have gathered the flowers by the boatload and a *very few* only were floating on the surface of the water. I have tried to get the "sweet potato-like" root with a six-foot garden rake tied on the end of an oar, but without success. My experience has been with this one bed; possibly in other beds the flowers float on the water, which is decidedly against the rule in this one.—*Thomas H. Douglas*, Waukegan, Ill., in *Mechan's Monthly for November*.

* * *

Forest Leaves.

In many parts of the country forest leaves are plentiful and easily gathered. There is nothing that is better for a soil that is inclined to bake and settle solidly than to work in forest leaves. Gather these and cover the garden with them and plow them under and after this has been repeated for two or three years the soil will become mellow and friable as well as much richer, as forest leaves are a very good fertilizer. — *Garden and Farm*.

* * *

A Fern Bed.

A much shaded corner in an otherwise sunny lawn had long been an objectionable spot because there was an ugly rough wall to be hidden and the place was too damp for any vines or shrubs to do well in. Time and again various varieties had been set out there only to lose their beauty and health. Finally, during a woodland drive, a large bed of the tall, heavy-fronded "Brakes" was seen and at once an idea came with regard to that shady corner. So next the wall was set out a row of these "grown up" ferns, next them a quantity of the small swamp fern, a row or two of the finer summer ferns harmonized well with these, and a wide border of the very delicate little wood ferns completed the collection. A quantity of leaf mold was dug into the soil and with no other preparation those ferns thrived finely, filling the corner full of graceful waving plumes and hiding the wall completely.—*K. W. Lawson*, N. J., in *The Mayflower*.

* * *

Scotch Heather—*Erica Vulgaris*.

In reply to a correspondent in the *New York Tribune*, Mr. Frederick W. Kelsey expresses the opinion "that as the plants are so comparatively cheap there would seem no occasion for hesitancy in their use or in experimenting with them in this country, unless in situations where there are unfavorable conditions of soil and climate—where drouth in summer is frequently trying for any of the evergreen shrubs." From seeing the Scotch heather growing in its native habitat in Scotland and northern Europe one would conclude that the plants should succeed with ordinary treatment here.

* * *

What Shrubs Flower Memorial Day.

Noticing what several florists have said in regard to flowers found in most demand on Memorial Day; it leads me to give the experience of many years in the way of shrub flowers useful for the same purpose. My experience is not only that of a grower, but I have "detailed" myself for many years to overlook the filling with flowers of the wagon which our local G. A. R. Post sends for them. There are but two or three sorts available and desirable, and these are snowballs and weigelas, principally, with, perhaps, a little spiræa and exochorda. But snowball and weigela are the old reliables. Let me add, however, unless one has the old snowball as well as the Japanese, the "snowball" supply may fail. Having in mind the vicinity of Philadelphia, the snowballs are usually a little ahead of time; rarely behind it. The old sort, *Viburnum opulus sterilis*, precedes the other by nearly a week, and it is nearly always out of flower at the period named, as was the case last May. The Japanese, *Viburnum plicatum*, is usually just in time, though I have known it, too, to be too early on one or two occasions in the last ten years. Thus, the Japanese is much to be preferred to the other, both as a beautifully-shaped shrub and for its flowers. Weigelas rarely entirely fail and where two or three varieties are grown, there need be but little fear of lack of flowers, as there are a few days' difference in their time of blooming. Because of the long branches of flowers which may be cut from them, they are just what are wanted by the ladies who make up the bouquets for the Posts, and the same is true of the Japanese snowball. The early spiræas, *Reevesii* and *VanHouttei*, *prunifolia* and *Thunbergi*, are nearly always past flowering; sometimes the double *Reevesii* is still available. May I call attention to the error of so many who write "Decoration Day." The G. A. R. authorities have often called attention to this. It is "Memorial Day." — *The Florists' Exchange*.



ESTABLISHED 1890.

OBJECT: To advance Art-out-of-Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

CONTRIBUTIONS: Subscribers and others will materially assist in disseminating information of peculiar interest to those engaged in landscape gardening, tree planting, park and cemetery development, etc., by sending early information of events that may come under their observation.

DISCUSSIONS of subjects pertinent to these columns by persons practically acquainted with them, are especially desired.

ANNUAL REPORTS of Parks, Cemeteries, Horticultural, Local Improvement and similar societies are solicited.

PHOTOGRAPHS or sketches of specimen trees, new or little known trees and shrubs, landscape effects, entrances, buildings, etc., are solicited.

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The Fifteenth Annual Convention will be held at Pittsburg, Pa., September, 1901.

THE AMERICAN PARK AND OUT-DOOR ART Association: President, L. E. Holden, Cleveland, O.; Secretary, Warren H. Manning, Tremont Building, Boston, Mass.; Treasurer, O. C. Simonds, Chicago.

The Fifth Annual Convention of the Association will be held at Milwaukee, Wis., June, 1901.

Will those who are in arrears for their subscription to PARK AND CEMETERY kindly forward the amounts due?

Readers are again reminded to send to PARK AND CEMETERY copies of published reports of parks, cemeteries, improvement societies, horticultural societies, etc., that may have been issued this year.

Readers will confer a favor upon the publisher by placing their orders with the advertising patrons of PARK AND CEMETERY, when circumstances will warrant so doing, and in every instance naming this journal when corresponding with advertisers.

Personal.

Mr. W. C. Hood, formerly of Elmwood cemetery, River Grove, Ill., now occupies the position of landscape engineer, Fairlawn Park, Decatur, Ill.

Mr. H. J. Doswell has been appointed superintendent of Lindenwood cemetery, Fort Wayne, Ind., to succeed his father, John H. Doswell, whose decease was recorded in the last issue. The superintendent has been connected with the cemetery as assistant to his father for about 19 years.

Mr. Sid. J. Hare, Kansas City, Mo., has been commissioned to prepare plans for a cemetery at Salem, O.

Mr. E. R. Roberts, landscape gardener, Point Defiance Park, Tacoma, Wash., advises us that the commissioners have decided to commence the building of a large conservatory in that park, with all modern improvements.

Obituary.

Mr. R. B. Campbell, superintendent of Holy Cross cemetery, Philadelphia, formerly a member of the Association of American Cemetery Superintendents, died quite suddenly in September last, during the time of the convention at Cleveland.

The Association of American Cemetery Superintendents has printed for distribution 5,000 copies of the paper on "The Sunday Funeral," read at the recent Cleveland convention by the Rev. Geo. F. Houck. They can be obtained of the secretary, Mr. H. Wilson Ross, Newton Centre, Mass.

Receipt is acknowledged with thanks for an invitation from the director of the Missouri Botanical Garden, to the Eleventh Annual Banquet to Gardeners, Florists and Nurserymen, provided for in the will of the late Henry Shaw, which occurred at the Mercantile Club, St. Louis, November 3.

By a recent purchase, Thomas Meehan & Sons, the nurserymen and landscape engineers of Germantown, Philadelphia, acquired two extensive properties adjoining their Dreshertown nurseries. These will be added to the already large acreage and planted immediately with the better class of hardy ornamentals. It is evident that this firm believes in the policy of expansion.

In a communication to the Milwaukee *Sentinel*, Mr. C. B. Whitnall advocates the use of the city's garbage for soil making, by depositing it on certain areas, covering it with earth and allowing it to decompose and form soil which would be of great use in the parks and nursery gardens. Milwaukee spends some \$45,000 per annum for garbage cremation.

The Tower, recently erected in Castle Craig, Hubbard Park, Meriden, Conn., and presented by Mr. Walter Hubbard to the people, was informally opened by an oyster roast given by the park commissioners of Meriden to the members of the city government and prominent citizens.

Referring again to the exceptionally fine fall and its effect on tender planting material, Mr. F. D. Willis, secretary Oakland cemetery, St. Paul, writes that the first killing frost appeared Nov. 8. Until that day cannas, coleas, geraniums, nasturtiums and all such flowers had been in fine bloom in the open, and only coleus, begonia and such extremely delicate plants were tipped by the earlier

light frosts. The autumn colorings have been unusually beautiful in that locality. An excessive rainfall, 9.39 inches in September and 7.55 in October, produced beautiful lawns but prevented grading improvement operations.

The attention now being paid to municipal improvement is further emphasized by the issue of "Midland Municipalities," a journal devoted to the interests of city government and published in Marshalltown, Iowa. It is interesting to note that on the editorial staff are Frank G. Pierce, mayor of the city, and Prof. Thos. H. Macbride, well known in connection with improvement matters. In the first issue Prof. Macbride contributes a practical paper on "Street Improvements in Prairie Towns."

At the opening of the chrysanthemum show in Phipps' conservatory, Schenley Park, Pittsburgh, the last Sunday in October, some 15,000 people were admitted. This demonstrates the propriety of extending park work to occasional special displays of flowers.

The Association of Agricultural Colleges and Experiment Stations will hold a convention in New Haven, Conn., Nov. 13, at which a number of important papers by prominent teachers and experimenters will be read. Prof. Bailey of Cornell University will discuss the nature study movement and Prof. Card of Rhode Island, The Educational Status of Horticulture.

At the flower show of the New Jersey Horticultural Society held at Orange, N. J., November 14, 900 entries were made of exhibits by the school children. A great deal of public interest is being manifested and the society deserves commendation for extending such encouragement.

The Bomgardner Lowering Device Co., Cleveland, O., have made great improvements in their lowering device. It is now constructed so that it can be telescoped either way, reducing it at will from 7 ft. 6 in. to 6 ft. 7 in. or from 34 in. to 22 in. in width, or vice versa. It can thus be made to conform to the dimensions of any grave. Three sets of webbing are provided so as to accommodate the various requirements. They are getting out some cuts to illustrate these improvements which will appear in their advertisement in the next issue.

BOOKS, REPORTS, ETC., RECEIVED.

THE FARMSTEAD. The Making of the Rural Home and the Lay-Out of the Farm. By Isaac Phillips Roberts, Director of the College of Agriculture and Professor of Agriculture in Cornell University. New York: The MacMillan Company, 1900. Price, \$1.50.

This latest work of Prof. Roberts is not only remarkably interesting but is broadly instructive. From a practical standpoint it discusses and illustrates the various details connected with the farm house and buildings, as well as the surroundings, in the light of advanced experience. In the opening chapters he enters a plea for farm life, which cannot fail to carry conviction to the thoughtful reader, but it is from the view point of intellectual activity and not from mus-

cular ability. Apart from the practical value of the book which as a whole is devised to direct and assist in the establishment or reconstruction of a farm plant, if we may use the term, it is a valuable contribution to the "economics" of farming. As a guide to the nature of the book, some chapter heads are given as follows: "The Farm as a Source of Income;" "Educational Opportunity of the Farm;" "Selection and Purchase of Farms;" "Locating the House;" "Planning Rural Buildings;" "Building the House;" "Water Supply and Sewage;" "The Home Yard" by Prof. L. H. Bailey; "Barns, Outbuildings and Accessories," "The Fields," etc., etc.

"Municipal Public Works," a discussion of matters of interest to municipal officials. An elementary manual of municipal engineers. By Ernest McCullough, C. E. This practical collection of articles was originally written for the trustees of a California town and were afterwards published in pamphlet form. It met with so gratifying a reception that the author revised the work and considerably enlarged upon the several subjects. It contains a large amount of valuable practical matter on street making, draining and sewerage, street lighting and such details of municipal activities.

Pamphlet descriptive of Mount Olivet cemetery, San Francisco, in San Mateo county, Calif. The pamphlet is illustrated with half tones of its permanent buildings and other features. Its buildings are constructed of stone. In area it is 200 acres and it is conducted on the lawn plan with perpetual care.

Society of American Florists—Department of Plant Registration.

N. Studer, Anacostia, D. C., registers *Nephrolepis Washingtoniensis erecta*, a seedling originated in Anacostia four years ago. Fronds thick and leathery with metallic lustre, five feet and upwards in length and nine inches or more in width. Habit upright. Also, *Nephrolepis Washingtoniensis pendula*. Seedling originated in Anacostia about four years ago. Fronds thick and leathery with metallic lustre, five feet and upwards in length and twelve inches or more in width, with dark brownish midrib. Habit drooping.

The Geo. Wittbold Co., Chicago, Ill., registers *Nephrolepis Wittboldii* originated in 1897. Fronds 2½ to 3 feet long and 10 to 12 inches wide: pinnæ undulating or wavy in all growths; texture leathery.

M. H. Walsh, of Wood's Holl, Mass., registers new rose, "Flush o' Dawn." Hybrid tea, flowers light pink, changing to white, fragrant, five to six inches in diameter when open. Vigorous grower, stems two and one-half to three feet; foliage dark and glossy; continuous bloomer.—*Wm. J. Stewart, Secretary.*

Trade Literature, Etc

Hints for Fall Planting and An Autumn Reminder are two little choicely illustrated pamphlets issued by Hiram T. Jones, Union County Nurseries, Elizabeth, N. J. They are attractive both in style and contents.

The folder pamphlet issued by the McMillan Company, Publishers, New York

City, descriptive of the Cyclopaedia of American Horticulture, is a neat appeal to the enquiring book-buyer. It is profusely illustrated with specimen cuts from the great work.

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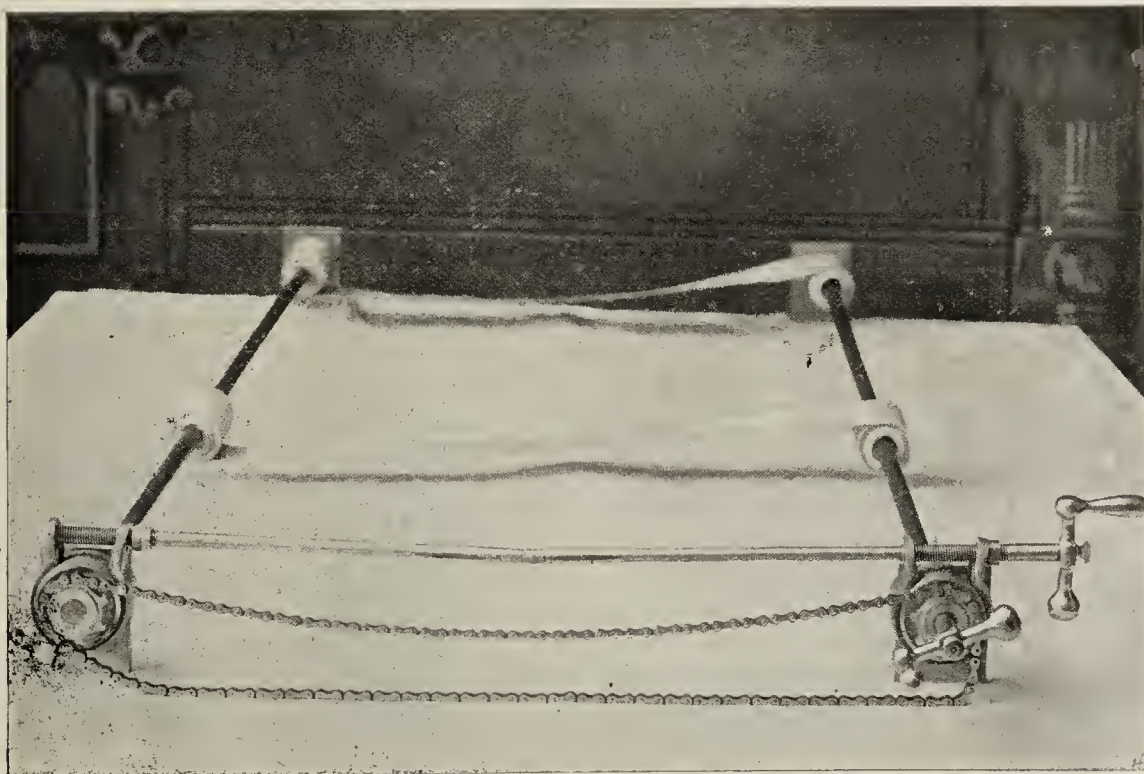
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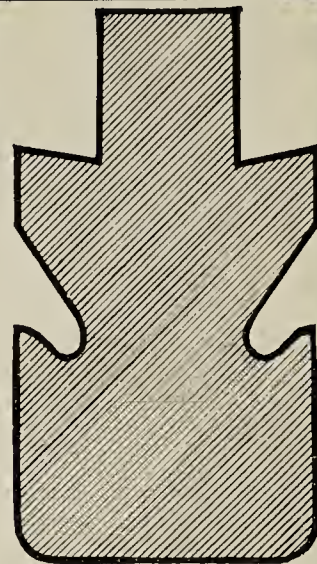
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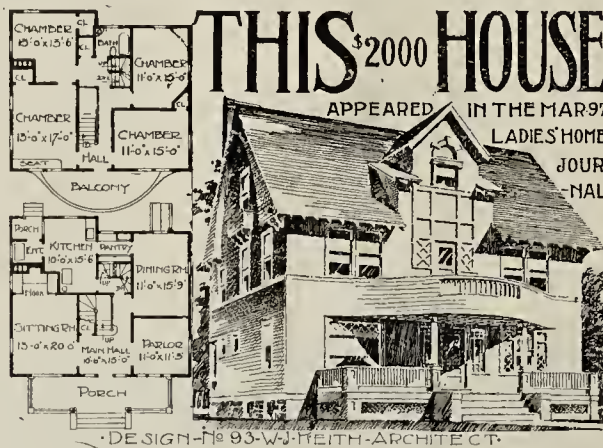
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CONTENTS.

EDITORIAL.—A Happy New Year—The Preservation of Scenic and Historical Places—The Billboard Nuisance—Public Statuary—Protection of African Fauna—Outdoor Improvement	221, 222
*The Tower, Hubbard Park, Meriden, Conn.....	223
*West Park Cemetery, Cleveland, O.....	224
*Lord's Park, Elgin, Ill.....	226
*Subterranean Irrigation of Street Trees at Dresden, Germany	228
*Improvement Associations	231
Japanese Privet Hedge	232
*Memorial Fountain, Lee, Mass	233
*Statue of Daniel Webster, Washington, D. C.....	234
*The Bonnev Memorial, Lowell Cemetery, Lowell, Mass..	235
Notes, Chiefly Historical, on London Burial Places	235
*Garden Plants, Their Geography, LX.....	237
The Shaw Annual Banquet, St. Louis, Mo.....	239
*A Modern Burial	240
Park Notes	241
Cemetery Notes.....	242
Selected Notes and Extracts	243
Reviews of Books, Reports, Etc.....	244

*Illustrated.

A HAPPY NEW YEAR Before the next issue of this journal the Twentieth Century will have dawned upon us, and thinking men and women, will be casting their thoughts backwards and forwards—in retrospect or anticipation. The world appears to this generation to be moving very rapidly, and judging from past standards this is true. The past decade has witnessed such remarkable strides in invention and application, and the forces of nature have been compelled by the genius of man to yield their helpfulness in such full measure, that it is hardly possible to conceive of greater issues being consummated for some time to come. But progress is yet the watchword and none can foretell what a decade will bring forth. And in our own particular line of work the advances made in out-door art and improvement has been equally remarkable if we stop to think, and promises still more rapid development in the near future. The fact that a beautiful village or home exerts a powerful influence on the residents is becoming a well recognized conclusion, and is of itself sufficient stimulus to keep the work moving, and so while wishing our readers and patrons a Happy New Year, the hope that it may usher in renewed and still more extended effort in the promotion of art out-of-doors to the happiness and welfare of all, we feel sure, will be reciprocated.

THE PRESERVATION OF SCENIC AND HISTORICAL PLACES The report of the New York Society for the preservation of scenic and historic places,

draws attention to the value of such associations and suggests that every state should thus endow itself, because every state, if it has not already secured or discovered such objects of interest, will assuredly do so in the future. But it is true, without doubt, that every state in this richly blessed country does already possess at least localities of high scenic interest, or natural phenomena, worthy of public care and preservation. It is needless to discuss the reasons for such public care, the object lessons already in existence prove the desirability of such a course. In fact the movement is becoming world-wide, a large number of such societies being in existence in England, and the mutual interest in the question between the two countries has led to a very strong effort to infuse more enthusiasm in the work of forming such societies on both sides of the Atlantic. It is a cause which will assure a vast amount of interest both to present and future generations.

THE BILL BOARD NUISANCE The exponents of Municipal ethics are securing a healthy constituency in many parts of the country looking to the reduction to within reasonable limits of the so-called bill board nuisance. And it is a happy condition for the rapid consummation of their efforts that the abuses of public advertising have become so flagrant, that the vast majority of our citizens, excepting of course, those commercially interested in the bill board system of advertising, are already recognizing the incongruity of such a blemish in public thoroughfares. It speaks well for the intelligence of the people and is a promising augury for the expansion of our art instinct as a nation, that so satisfactory a response is so readily offered. Great strides are being made in our large cities looking to the securing of ordinances controlling the nuisance, and at a meeting held last month at the Art Institute of Chicago, at which many prominent citizens were present, an amendment to the ordinance passed by the city council in July last was proposed, with the object of making it more effective. The meeting was also informed by the legal adviser of the Lincoln Park Board that there was already a law on the statute books of Illinois, and had been for very many years, declaring bill board advertising to be a nuisance, prescribing severe penalties for abuses, and only requiring the action of the city council to put it into active exercise.

PUBLIC STATUARY Statuary in the public streets and other suitable locations in our cities is conceded to be a highly important feature of municipal embellishment. There are essentials, however, which bear directly upon the question, and among them are appropriateness of subject, artistic merit of the work, and harmony of surroundings. Either of these points involve not only due consideration from their own particular bearing upon the matter in hand, but also high qualities of artistic temperament and learning on the part of those entrusted with a solution of the problem governed by them. A statue or monument properly chosen, artistically satisfactory and harmoniously set, cannot but be a "thing of beauty and a joy for ever" in any city, but alas! how few we have all over the broad land which will pass muster under the above conditions. There is a strong hope, however, that we have nearly or quite seen the last of the "hap hazard" monument in our public places, whether created at public expense or by private donation. City art commissions are establishing themselves, where such have been appointed, in the confidence of the people, and the ridiculous fact of city aldermen, such as we have so long known, sitting in judgment on a monument as art critics and arbitrarily deciding on details must be forgotten in the brighter prospects of the dawning century.

PROTECTION OF AFRICAN FAUNA It is a matter worthy of record that seven of the European powers have recently signed an agreement in London, through their diplomatic representatives, guaranteeing the proper protection of the wild animals of Africa. It is not a day to soon, for many of the finest of the African mammals are on the point of extinction and possibly one or two species have hopelessly disappeared. Some of the African animals offer opportunities of subjection to domestic uses, but the hunters and the craze, common to the Caucasian, to kill for sport alone, consigned this possibility to the background, and it will take a long time to make good the lost opportunity. It is a great pity that our own government did not earlier awaken to the desirability of protecting the fauna of this North American continent, for not alone might the requirements of commerce have been better served, but a broad educated interest would have been conserved and a great attraction added to our wealth of natural possessions.

OUT-DOOR IMPROVEMENT At the annual meeting of the Michigan State Horticultural Society, held in Grand Rapids, Mich., early this month, it was clearly demonstrated how readily and appropriately the question of art-out-of-doors may be made

to constitute a prominent feature of the program of such societies to the advantage of all interests concerned. In the case in point, one afternoon and evening was devoted to this subject under the head of Improvement Association work, and it brought out quite a large attendance and unquestionably secured the close attention and interest of those present. And more than this, the press of the city devoted a great deal of space to these proceedings, which also serves to show not only the growing interest in the question at large but its importance as worthy of a prominent position in the news of the day. Looking around for promising mediums for the dissemination of information on out-door improvement and improvement association work, the horticultural society, which flourishes in practically all the states of the union, presents conditions and opportunities of the highest import, because through its membership the remote country places can be more easily reached, and because that membership once made to realize the advantages to be gained by improving our surroundings generally, become intelligent and active missionaries in the cause, and by beginning work at home convert their neighbors.

* * *

Another feature which fitted into the program of the above Horticultural Society was the Forestry question. Of all the states in the union, Michigan for the very reason of its enormous lumber interests in the past, is forced to take up this important matter. After many years of effort on the part of a number of its patriotic citizens the subject of forestry is rapidly becoming a paramount public question, for it is being realized on all sides that the destruction of the forests, without adequate provision for their re-establishment has done an incalculable damage to the state's interests, not only from the standpoint of climatic considerations, and the many interests incident thereto, but from the commercial side. Papers were read at the session devoted to the subject, of great value and suggestiveness, and it was clearly shown that if public interest can be excited and sustained, no insurmountable difficulties stand in the way of reforesting the denuded areas which the thoughtless rapacity of man has left so desolate and harmful to the welfare of the state. One of the more difficult problems to solve is that of protection from fire, and careful legislation will have to be enacted to safeguard the existing woodlands as well as those hoped to be set out. The intricacies of this feature of the subject need much deliberation in connection with both the practical and theoretical aspects, and is a most necessary prelude, as it were, to reforestation as a practical measure in the cause of public welfare.

TOWER AT HUBBARD PARK, MERIDEN, CONN.

A warm, pleasant October afternoon, and a most delightful host made the opening to the public of the tower just completed in Hubbard Park, on Castle Craig of the Hanging Hills of Meriden, Conn., an entirely successful affair. The host was the Park Commissioners. The guests were the entire city government and prominent citizens. The tower was Mr. Walter Hubbard's latest gift to the park. The entertainment was a most bountiful oyster roast with all its fixings. The result was a most royal good time and three hundred men prouder than ever of the hills of their beloved city and of the tower which crowns next to the highest

The tower itself is round, thirty-six feet in height and eighteen feet in diameter, built of stone found on the spot and reared near the edge of the precipice. It overlooks the city of Meriden and the wide, beautiful Southington valley. From its top is one of the finest panoramic views in the world; Long Island Sound with vessels passing to and fro may be seen in the south, while at the north Mt. Tom and the Holyoke range of mountains in Massachusetts, and the Bolton and Berkshire Hills on the west and east. Fully one-half of the state with its cities, villages and farms are in view. The gilded dome of the beautiful capitol of Hartford is set like a gem in the Northern land-



TOWER ON CASTLE CRAIG, HUBBARD PARK, MERIDEN, CONN.

of them. But proudest of all of their fellow citizen, whose energy and generosity has made these grand and beautiful, but heretofore inaccessible heights, now practical to ascend by easy foot paths and an easier carriage road.

Of these Hanging Hills, over a thousand feet in height, only one, the West Peak, has been comparatively accessible, but Castle Craig broader, more picturesque and only a yard or so less in height than is its rival, the West Peak, seamed with the deepest of gorges, with a precipitous face of several hundred feet, was inaccessible except to the strongest and most experienced mountain climbers. But now all this is changed, for within its dark ravines winding paths lead up to the top, and by beginning back a mile or so a circuitous but easy carriage way was found.

The outlook is one which takes hours to comprehend while more than one visit is needed to drink in its glories.

These hills are the highest land on the Atlantic seaboard within fifty miles of the coast from Maine to Florida. They are higher than Mt. Royal park at Montreal, Blue Hills near Boston, East Rock in New Haven, or Eagle Rock of the Essex County parks, New Jersey. These five are the mountain parks of the eastern coast. All have rich beauty and magnificent views of their own. Each differs so much from the other that comparisons are not desired, but of this I am sure, let a person journey ever so far, he will never regret a visit to the tower on Castle Craig in Hubbard park, Meriden, Connecticut.

G. A. Parker.

PARK AND CEMETERY.

WEST PARK CEMETERY, CLEVELAND, O.

The new West Park cemetery, Cleveland, O., the latest addition to the city cemeteries, is situated in the valley of Big Creek, and while somewhat distant from the city of today it is a cemetery for the future.

For a long time there has been a demand for more cemetery area in Cleveland. Quite persistently has this been voiced for years past in relation



VIEW IN WEST PARK CEMETERY, CLEVELAND, O.

to another city cemetery. In this direction the city authorities appear to have made a poor speculation when they purchased a piece of low-lying marshy ground on Lorain street and expended considerable money upon it. This was abandoned and the site changed to the present beautiful spot in the valley of Big Creek. The work in the new cemetery, all that is to be done for the present, at least, has been finished at a cost so far for development of \$21,500.

West Park cemetery is about a mile and a half south of Lorain street and a quarter of a mile outside the city limits. In time it will undoubtedly be included within the city boundary, but it is large enough so that its beauty can never be spoiled by the growth of the city around it. At present the cemetery is inaccessible for there is no street car line to it. The franchise for a line that will pass it is already in the hands of a company, however, and it is said that there will soon be a line of street cars past the cemetery gates.

This is the only cemetery the city has that has been laid out and beautified in accordance with modern landscape cemetery development. Its macadamized drives, its series of lakes, its fountains, rockeries and waterfalls, its lawns and studied planting plan now nearing completion, are expected to make this one of the beautiful burial places in the state.

Willow Lake is one of the attractive features in the cemetery. It is an artificial lake, although but little was done to assist nature in its formation.

There was a deep ravine that ran through the cemetery grounds and this was dammed at the lower end of the ravine and the narrow basin so formed soon filled with water. This lake is to be spanned by a handsome bridge that will connect the drive leading from the cemetery office to the drive that is to lead to the proposed vault and chapel. The outlet of the lake where the water escapes, and flows down the steep bank of Big Creek is another of the pretty places in the new cemetery.

Bordering the drive on one of the hillsides where the temporary vault is built, it is proposed to reserve a whole section, No. 17, for vaults and mausoleums; this is scarcely likely to add to the beauty of the place, however. The gates to the cemetery are massive and imposing and appropriate.

The main drive of the cemetery is along the bank of Big Creek, winding in and out with the curve of the bank of the river and overlooking all its beauties for a long distance.

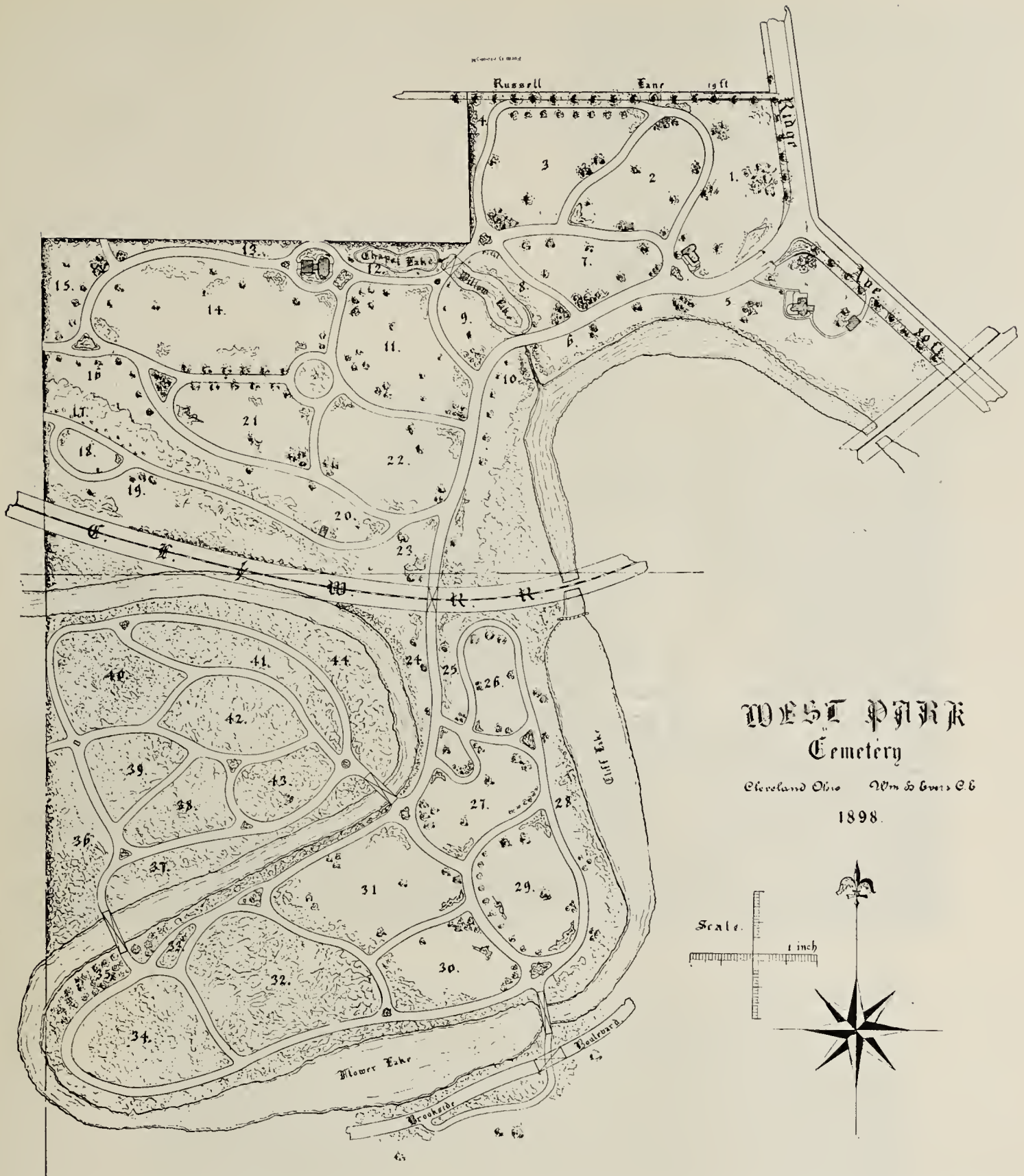
A great deal of work has been done. Thirty-eight of the ninety acres included in the burial ground have been improved and this is considered to be enough for the needs of the city for years to come. A mile and a half of sewers and a half mile



OUTLET OF WILLOW LAKE, WEST PARK CEMETERY, CLEVELAND, O.

of water pipes have been laid and lake water will be at hand all through the cemetery for the trees, shrubbery and plants. The work has been carried out under Mr. Win. H. Evers, civil engineer. The cemetery is divided into twenty-three sections and subdivided into lots, varying in size from seventy to four hundred square feet.

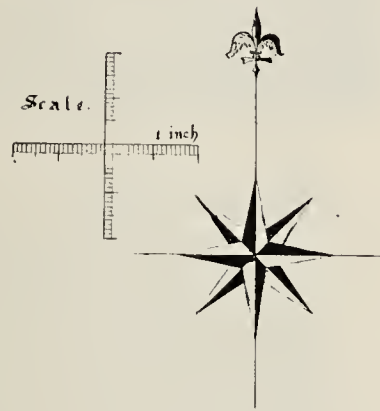
Many lots have already been sold and the price has been set at 60 cents per square foot until April 1 next



WEST PARK
Cemetery

Cleveland Ohio Wm S Green C E

1898.



Fifty-two of the ninety acres included in the ground will remain unimproved for the present, until the demands on the new cemetery make it advisable to complete it or a portion of it. The plans have been made so that a section can be improved at a time without marring the general appearance of the cemetery as a whole.

The plan as shown above, suggests the possibility of making the water features of the cemetery,

more than ordinarily beautiful. An opportunity for the exercise of a refined taste in the general plan is always greatly enhanced by ample water area, and when this is supplied by a meandering brook or creek, marginal planting can be carried out to such an extent as to add very greatly to the landscape effects of the cemetery generally. The suggestion as to its becoming a beautiful burial ground should be realized.

LORD'S PARK, ELGIN, ILL.

Lord's Park, Elgin, Ill., the gift of Mr. and Mrs. George P. Lord, to that city, is an example not only to those citizens of means seeking an avenue through which to benefit their fellowmen, but equally to municipal corporations not alive to the propriety, not to say necessity, of providing appropriate places for recreation and out-door pleasures for the community. The site of this park, situated in the suburbs of the city, was always noted for its beauty and the fertility of its soil, judged by its natural adornments, and might have been doomed to subdivision by the enterprising real estate man, but for the philanthropic leanings of Mr. Lord,

mingle their dainty blossoms with the early blades of grass, myriads of ox-eyed daisies glorify the summer; and within a short distance of where the cannas rear their lofty tips in well trimmed beds, wild asters and golden rod send forth their slender stems to add to the mellow beauty of harvest time."

The park is situated at the eastern edge of the city only a trifle over a mile from Fountain Square, the principal entrance being directly opposite the terminus of the Chicago Street and Forest Avenue Car Line. It is in Cook County and was originally under the jurisdiction of the Cook County officials, but by special legislative enactment became a part of the City of Elgin. It covers an area of about



[Photo by D. J. Chamberlain.]

A SUMMER SCENE.—VIEW IN LORD'S PARK FROM ABOVE THE UPPER LAKE.

who quietly and unostentatiously secured the property, and tendered it to the city as a free gift, under proper conditions, which was accepted on March 6, 1893.

As a writer described it: "Nature endowed it with a wealth of oak, hickory and other deciduous trees; a rolling surface which sometimes deepens into valleys and again rises into considerable bluffs; a beautiful brook meandering through its entire length; and a fertile soil which carpeted itself with wild flowers in great variety and profusion."

Nor have the improvements altogether deprived it of its original natural beauties for: "There are still quiet, shady nooks, the violets still bloom on the sunny slopes, anemones and shooting stars

70 acres, of which 62 were described in the original deeds from Mr. and Mrs. Lord, and something over 7 have since been acquired by purchase.

It is to the credit of Mr. Lord and his business sagacity that he did not lose interest in his gift, but has constantly kept in touch with the improvements carried out by the city, adding thereto by many subsequent generous donations, his latest being that of a shelter house.

The park has been improved by the landscape gardener, and two spacious lakes have been created by the construction of dams. The driveways are covered with crushed stone, and the walks are of gravel or asphalt. A zoological collection is gradually being collected, and the birds and animals

are properly housed and cared for. Music is regularly provided in the season and is given from a band stand which is brilliantly lighted in the evening by electricity.

A permanently constructed shelter house and a commodious and handsome pavilion, the basement of which is heated in winter for the accommodation of skaters, are also features of the park. In the construction of the latter building Mr. Lord also contributed materially. Other embellishments of the grounds have been provided, as for instance, fountains and bridges connect the island in the lake with the main land. One of the fountains was presented to the park by the employes of a large firm,—in itself a capital suggestion for similar efforts elsewhere.

In winter skating is the chief amusement and with two large lakes, both of which are kept clear of snow, there is ample room for all who care to indulge in this healthful sport, and provision is made for the comfort of the skaters in the pavilion, in the basement of which are banquet and shelter rooms, which are warmed for those participating in the winter revelry on the ice.

It may be said in conclusion that the permanent improvements of this park have only commenced in the eyes of the people of Elgin, and that liberal appropriations will be required of the city council for years. The example of the honored donors should be incentive enough to excite the bounty of others to continue such a beneficent work and bring it to a complete consummation. We are indebted for the illustrations to the *Elgin Daily*



[Photo by P. H. Jensen.]

LORD'S PARK,—A WINTER IDYL,—WATERCRESS BROOK.

News, through Mr. H. P. Zimmerman, private secretary of the Hon. Geo. P. Lord, who adds that the citizens of Elgin are awakening to the fact that money expended for park purposes is not money wasted, though city councils have not yet been educated to the importance of adequate appropriations for such necessary contributions to the public welfare as the parks.



LORD'S PARK, ELGIN, ILL.—THE LOWER LAKE, LOOKING NORTH.

SUBTERRANEAN IRRIGATION OF STREET TREES AT DRESDEN, GERMANY.

Of the large cities, Washington, perhaps, possesses the best street tree plantations in the United States. Many of the cities of the south and of Connecticut and Western Massachusetts are deservedly famed for their avenues of street trees. But in the large cities numerous agencies concomitant with urban life threaten, with ever increasing power, to destroy the street trees cultivated in the usual manner. Soil surcharged with gas and electricity, atmospheric gases and their residue, smoke and overhead telegraph wires are agents baneful to thrifty vegetable life. To be successful in the culture of street trees in the larger cities of America it is necessary to adopt decidedly artificial means of maintenance. In opening a discussion of the street tree problem we present an adapted translation of an article dealing with a detail of the subject. The following is taken from *Moeller's Deutsche Gaertner Zeitung*, Vol. XV., p. 406, and is by M. Degenhard, City Garden Director.

The editor of this publication desired a description which would be a revision to date of the comprehensive essay on subterranean irrigation which appeared in a former number of this periodical. They informed me that the first treatise was frequently reprinted and is now found in many cities of the magistracies which is very adulatory for our Dresdenian arrangement.

Below I shall describe this simple and suitable method without confining myself to the original description which I have not at hand and choose not to trouble to obtain and which I later gave to a garden journal desiring it. I wish it would benefit the well being of street trees, the people and beasts, particularly the carriage horses suffering from heat.

I was still a novice in my position of city gardener when the question presented itself as to which is the best, most efficient method of watering trees. After speaking of drain pipes to the commissioner, afterwards mayor, Dr. Stuebel, he made observations as to this method of tree watering and found a short section in front of the theatre at Hanover watered in this way. The pipes were merely butted. Soon thereafter I had an opportunity to visit my colleagues at Hanover and found the condition as explained to me but the arrangement was so primitive that I could not forego adopting real improvements on it. There was too great a loss of water through the joints of the loosely laid pipes which were short and easily disjointed.

The distribution of the water was, however, deceptive, particularly for great distances and espe-

cially in porous soils. I therefore ordered longer pipes, now 60 cm., with collars made out of clay and which allow of their being conveniently slipped over the pipes.

To prevent the escape of water between two distant trees the pipes are entirely sealed but only partially sealed in other sections, according to the requirements of the trees and the character of the soil.

Certainly I experimented with a section previous to filling in the excavation so that the sealing could be thickened or lessened thereby obtaining the most perfect and equal distribution, in other words, that at the filling points the openings would be closed more than in the middle and less toward the ends furthest from the filling points. In time the experienced workmen knew how to fix the pipes to conduct the water for the purpose of procuring a proper seepage throughout the length of the pipe, also when more or fewer trees are to be connected by one clay pipe through different soils. We connect from four to ten trees according to the distance of the spacing, *i. e.*, from five to 10 m. and the sort of tree, its thrift and the porosity or imperviousness of the soil.

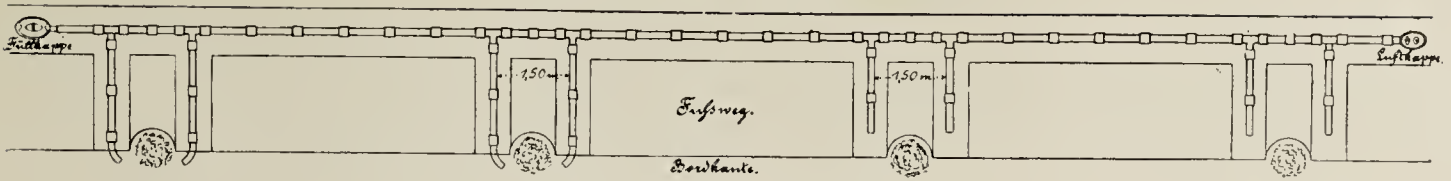
Figure 1 indicates a double branch leading to each tree. The ends may be advantageously provided with curved pipes obtaining thereby an almost encircled watering which allows the establishing of a gutter shaped basin around such trees which must unfortunately be planted closer than we should like to have them.

The end of the pipe is closed by placing over it a stone or potsherd in a manner to enable sufficient water to escape without inequalizing the pressure of the water.

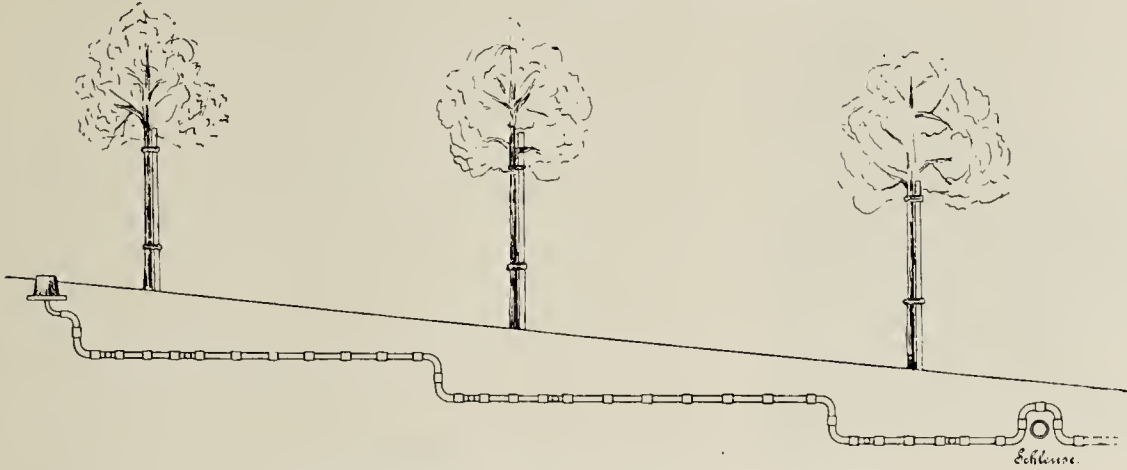
The watering of trees has been adopted in Dresden since 1877, or really since 1876, and of the 30,000 street trees 9,737 will be watered this year. To date, *i. e.*, during the past twenty-four years there has been but a single instance of a so-called root knot which has stopped a conductor. A second instance occurred by an employe forcing a pliable root into the crevice at a joint of the pipe, which resulted in the matting of a root inside the pipe.

Watering is now done without undue conspicuousness or interrupting traffic.

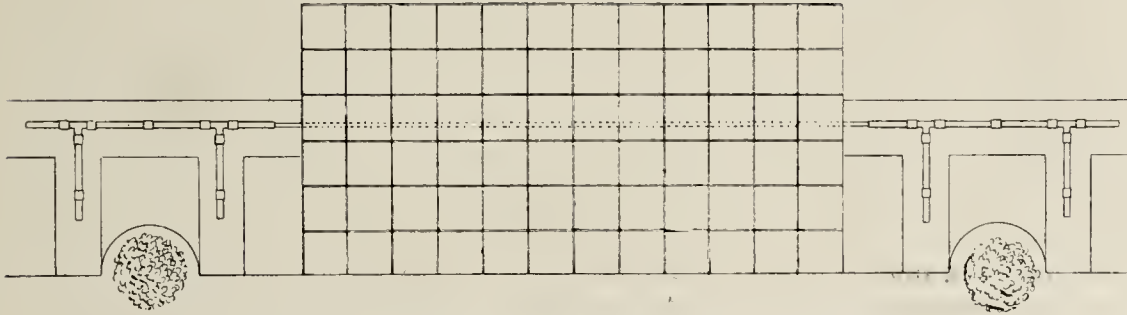
More recently we provided several water cocks so as not to be dependent upon the fire hydrants and fire department which the taxation provided. The fire hydrants were expensive and inconvenient because they are located in the streets and only a fireman is allowed to turn on the water from them. Though we employed hose bridges over which many horses refuse to pass, traffic and our work



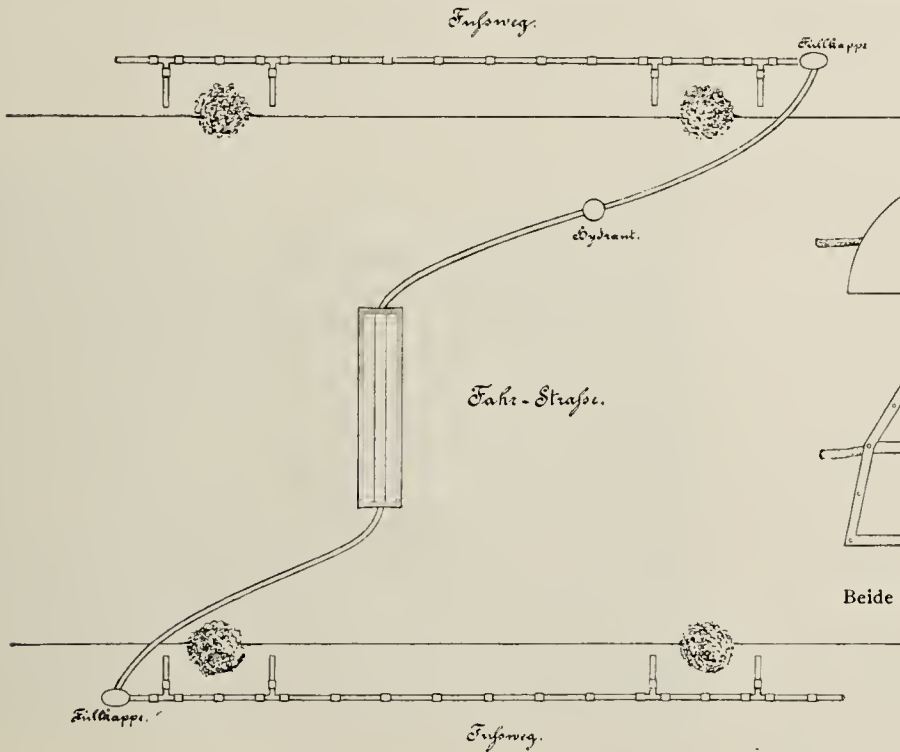
Figur 1. Leitung nach den Bäumen.



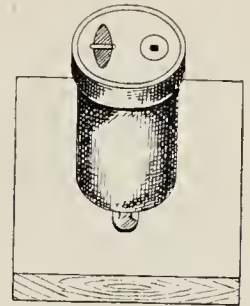
Figur 2. Bewässerung einer Baumpflanzung auf schiefer Ebene.



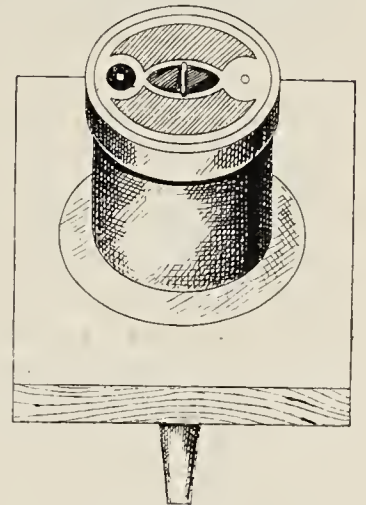
Figur 3. Unterführung einer gepflasterten Einfahrt durch Bleirohr.



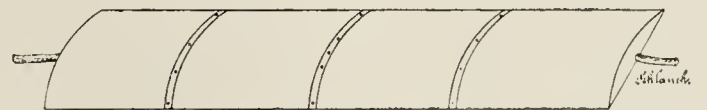
Figur 4. Verwendung der Schlauchbrücken bei der Bewässerung, um den Fuhrwerksverkehr nicht zu stören.



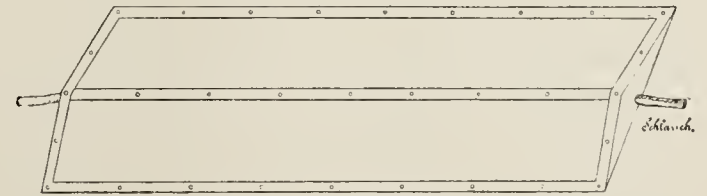
Figur 5. Gusseiserne Luftkappe auf einer Holzbohle befestigt.



Figur 6. Gusseiserne Füllkappe auf einer Holzbohle befestigt.



Figur 7. Schlauchbrücke.



Figur 8. Schlauchbrücke.

Beide Schlauchbrücken sind aus Holz hergestellt und mit Eisen beschlagen.

Subterranean Irrigation of Street Trees in Dresden.

KEY TO TERMS USED IN ABOVE ILLUSTRATIONS.

Figure 1. Füllkappe (fill-cap;) Luftkappe (air-cap;) Fussweg, (foot path;) Bordkante, (curb;) Leitung nach den Bäumen, (conduction to the trees.)

Fig. 2. Bewässerung einer Baumpflanzung auf schiefer ebene, (watering of tree plantation on a slope;) Schleuse sluice.

Fig. 3. Unterführung einer gepflasterten Einfahrt durch Bleirohr, (conducting lead pipe under a concrete entrance drive.)

Fig. 4. Fahr-Strasse, (street;) Verwendung der Schlauchbrücken bei der Bewässerung um den Fuhrwerksverkehr nicht zu stören, (arranging the hose bridge in watering to avoid disturbing traffic.)

Fig. 5. Cast iron air-cap fastened on a board.

Fig. 6. Cast iron fill-cap fastened on a board.

Fig. 7. Schlauch, (hose;) Schlauch-Brücke, (hose-bridge.) Fig. 8. Both bridges are made of wood and reinforced with iron.

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were, nevertheless, much hindered. In streets where there was much traffic during the day and the fire hydrants were between ruts or electric car tracks we were compelled to do the watering by very expensive night work.

By the use of our own valves we were enabled to do the watering with one man during the congested periods of traffic and the laborer can manipulate two and even four systems at the same time. These he allows to run for one or two hours and in the meantime cultivate the basin around each tree with a digging fork. If the winter has been dry we begin to water the street trees as early as March and continue until autumn. Four men suffice to supply water to each system two to three or four to five times according to the requirements of the sort of tree and its location. Gardeners and laborers acquire the knowledge of determining by sight those trees which require water at a given time. The Horse Chestnuts in the center of the city are the first to be watered, so that they will not, as in former years, begin to lose their leaves as early as June and July. Thereafter we start on the Linden, then Oaks, thereafter Maples (*Acer platinoides* first), etc. The trees indigenous to southern localities, such as *Gymnocladus*, *Sophoras*, *Gleditschias* and *Ailanthus* require no watering or at most only during their earlier growth and then only during unusually dry periods or in dry soils, according to their location.

There is a particular advantage in this system for watering on sloping streets. By the former method, *i. e.*, watering from above, it was difficult to retain a horizontal basin around the tree. It necessitated excavating the foot path to a great depth at the upper end of the basin and throwing up a dam on the lower side of the basin.

Figure 2 shows a tree plantation on a slope. At the inlet the pipes descend to a depth sufficient to allow but a slight grade for flow. Beyond each tree the proper grade is provided by an elbow leading down. The system is to always follow the general grade of the street.

Obstructions encountered can be passed by scaling or tunneling, but the pipes must be cemented. Concrete drive entrances are to be avoided as much as possible. In cases where they must be passed, lead pipes should be used because they are less brittle and less easily affected by heavy stones in the drive sinking under the weight of wagons.

We have now provided for particular trees and stretches of planted areas where less traffic takes place by using earthenware stoppers instead of the expensive fillcaps (Fig. 6) and aircaps (Fig. 5). To avoid the use of the latter we prefer to make the

stretches shorter and increase the filling stations.

We hope that this experience will be approved by experiment when it can be adopted, *i. e.*, where the earthen stoppers are located in gravel paths where they and the pipes or the pipe-openings will not be injured.

In Dresden we have about 230,000 lineal feet of irrigating pipe and of the 30,000 trees, 9,737, on one hundred streets, are irrigated.

The price of one 60 cm. (about 2 feet) long earthen pipe is 6 pf., ($1\frac{1}{2}$ c.); one collar, 2 pf., ($\frac{1}{2}$ c.); one elbow, 8 pf., (2 c.); one "T" or "Y," 15 pf.; ($3\frac{3}{4}$ c.); one iron "fill-cap," 3 m., 10 pf., ($77\frac{1}{2}$ c.); one air cap, 90 pf., ($22\frac{1}{2}$ c.)

Lastly, it is necessary to allow for an air-valve at the end of each section to prevent back pressure of air in the pipe, otherwise the even flowage of the water will be prevented.

We provide subterranean irrigation to young trees for the first time five to ten years after they are planted because until then, water applied to the surface suffices. The trees thrive better in partial dryness because we have here no more so-called "tree-hole" planting. Our custom is to provide a channel $1\frac{1}{2}$ m. (about 3 feet) deep, with prepared loam. We provide what is, in fact, a bed, and the trees which are of, so far as we can purchase, uniform size, prosper uniformly and healthily.

The care of street trees would be for discussion in a second article. I have gathered varied experiences which older colleagues confirm as being correct but which deserve to be hailed as welcome guides for the younger colleagues, also concerning the best sorts for planting and the advantages of special forms cultivated upon which an expression would be desirable.

After a recently completed tour during which I could compare the tree plantings in many cities of England as also of Paris, I noticed the dearth of good street trees and the deficiency of watering and this even in Paris, which heretofore worked exemplarily. Though subterranean irrigation existed in Paris I had not in 1867 nor in 1869, nor in 1889 discovered the system employed. I should be pleased to hear from a colleague concerning it.

The solution of the question as to suitable watering of street trees is of great importance because in a city nothing is of greater ornament than good, thrifty street plantings.

E. M.

* * *

The above article is timely and suggestive from the fact that the number of street trees being planted in this country is increasing enormously each year. To make a success of street tree planting, and to secure proper results, only those of experience should be intrusted with the work.

IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

AN EXAMPLE.

The "little object lesson" which occupied this page in the October issue was so well received that we give another, different in character and material but equally useful in illustrating a principle.

Use.—This is a back door planting and its whole duty from the point of view of usefulness, is to screen from public view the essential, thoroughly respectable, but not always attractive back door life that must needs have a place in every home. Such a planting adds to the comfort of everyone living in a neighborhood (especially to that of the occupants of a house so sheltered) and also of the passing public.

Beauty.—Its other duty is to dare to be as pretty as it can,—and is it not attractive? To fully appreciate all that it stands for, observe this unfenced door yard before the handsome group of semi-tropical plants were planted, as shown in the illustration "Shaven and Shorn."

Character.—It is a plantation of tender material, admirably conceived and excellently well done. But it will be cut off by the first frost, therefore it is only a passing show and a temporary screen. It took the small plants and dry



A BACK DOOR SCREEN, CARTHAGE, MO.

tubers used, about one-third of the growing season to attain a useful height and their full beauty, therefore it is safe to say that the really satisfactory appearance of such a plantation is limited in

a region of frost and snow, even under the most favorable conditions, to four months.

Permanence.—If a growing screen is a good thing to have during a small part of the year, why



"SHAVEN AND SHORN."

would it not be a better thing to establish a permanent screen of hardy material the first cost of which in labor and money will be but slightly in advance of what is expended each year on the tender planting, and which will continue to thrive, to shelter and to beautify for many years; not for four or five months of one year, but for twelve months of every year.

"Shaven and Shorn."—This photograph suggests the painful experiences of Mulvaney after he was "rejuiced." It clearly shows the bald appearance of the back door without the protecting bed of semi-tropical plants shown in the other illustration. It also proves that after the frosts cut off the tender plants, the occupants of the cosy home missed the pleasant shelter of the leafy screen and set about creating one of permanent character. By looking closely, the shrubs set out this fall may be seen bent to the ground. As Mr. Stevens, to whom we are indebted for both of the photographs, says: "Some shrubbery has been planted, but it will be bent to the ground so that the rear view of the back of the house from the street will be seen in all of its ugliness and bareness."

The two illustrations given on this page admirably display the "before" and "after" condition of the home, and show how it is possible in a short time to create attractive surroundings.

Practicability.—It is a simple matter to plan such a screen so as to insure rapid growth, (if desired, tender material can be used to reinforce the young shrubs during the first year, though this is not essential) as well as an attractive appearance throughout the entire year. It may have bud and bloom from early spring till late summer, lovely coloring and interesting fruits in the fall and beau-

tiful forms and evergreen foliage in winter. It may easily be made a continuous delight to mind and eye, the summer and winter haunt of cheerful little feathered neighbors, and a perpetual shelter to the necessary, homely and homelike back door.

NOTES.

At the annual meeting of the Wenham, Mass., Village Improvement Society, held in October last, the secretary reported the exterrmination of caterpillars from the trees and shrubs on the roadsides of the town; the grounds around the town hall cared for; the planting and care of the various squares and of the school house grounds; and prizes given to school children for greatest improvement shown and best work done by them on school grounds. The society voted to have street trees examined and state tags placed on those deemed worthy of preservation.

* * *

The Beverly (Mass.) Improvement Society was organized twelve years ago to "improve and adorn the city of Beverly and to preserve its natural beauties," and has during that time improved three out of its five railway station grounds with the result of now seeing a strong possibility of securing two new stations. It has each year given \$10 to the School Art League and the same amount for the embellishment of the hospital grounds; has presented each of the city schools with ten trees; has planted some trees in the cemeteries and many along the adjacent streets; destroyed the nests of tent caterpillars each year; protected and re-protected fine trees; placed rubbish barrels on the streets; done ornamental planting on the grounds of schoolhouses, factories and public buildings; placed lists of local places of interest in libraries, post office, railway stations and other public places for the benefit of tourists and summer visitors (and who shall say with how much benefit to the town); given illustrated lectures for the purpose of interesting the town people in its work; given prizes to children for the greatest improvement in back door yards from planting flower seeds, and has each year given a social reception in January to help along in the good work of keeping alive the active interests of the best residents in the local improvement society,—that modern development of civilization that has all the interest of a fad, yet is something more than a fad, for it has come to stay. "We could not get along without it." That is the verdict wherever such an organization is established. Thanks are due to Miss Bessie A. Baker, secretary of the Beverly society, for the above information.

R. C. S.

JAPANESE PRIVET HEDGES.

The demand for the Japanese (Californian) privet for hedges is continually on the increase, and well may this be for there has been no shrub before its time of such utility as this. Privet hedges are not new, remains of many a one being visible in the vicinity of our older cities, but these were formed of the common European species, *Ligustrum vulgare*, a kind not well suited to the purpose, as events proved, and certainly not nearly the equal of the Californian, as the Japanese is commonly called. It has no doubt received its name from the fact that it came to be well known in California before it was East and the Eastern folks called it Californian. Its proper name is *Ligustrum ovalifolium*. Attention was soon attracted to it because of its very large, almost evergreen leaves, which are of a shining green. Then, too, its ease of propagation, rooting readily from cuttings, and its submittal to all kinds of pruning renders it an ideal hedge plant.

The plant is without thorns rendering it quite within the list of ornamental hedge plants, but outside that of defensive ones. In the vicinity of Philadelphia it is almost evergreen and if in well sheltered places, quite so, unless the winters are severe. It will hold its leaves until the new ones are about to appear.

I am writing this January 25th, and though the mercury has touched 6 degrees already, not a leaf has fallen from a small hedge of it here, in a partly sheltered place, though some have been pretty well browned. But let the weather be what it will there will be foliage enough on this hedge that its object, that of a screen, will be effected.

The propagation of this plant can be accomplished either by hard wood in spring or by soft, young wood in summer. Hard wood cuttings are made in winter, the shoots of the previous season being cut into 9 inch lengths, kept buried in earth in a cool place till spring and then set out in rows in the open ground. Every one usually roots. Summer propagation consists of using soft, half ripened wood and placing them in sand in a close frame or greenhouse.

A good size to use for hedging is that of two-year plants, as they possess vigor enough to make a good growth the first year. These should be set a foot apart in well cleaned, prepared ground. Nine inches is thought far enough apart by some. As soon as planted cut them down to about four inches above ground. Clear away the tops and spread manure about the plants to a depth of two or three inches. This cutting down will cause several shoots to take the place of one, and in the fall quite bushy plants, perhaps two feet high, will



FRONT VIEW.

MEMORIAL FOUNTAIN, LEE, MASS.

REAR VIEW.

result. But this growth, let it be two feet or less, must also be cut back at the close of winter to about one foot, to encourage a very thick base, this being the foundation of a good hedge. This cutting back should result in giving a good, thick hedge to start with and after this the pruning may be to give the "hedge" shape to it. This is done by trimming it twice a year, once in early summer and again when growth is nearly over in summer.

What adds to the popularity of the plant is its endurance of pruning. It may be cut two or three times a year and closely cut and still a good hedge is there and should it be that it has been neglected in any way and become bare and unshapely it may be cut down to the ground and it will spring up again as fresh as ever.

As to its hardiness, not until the severe winter of 1898-1899 was it ever hurt. The week of zero weather then killed the tops partly where the plants were in unfavorable positions, but many a hedge, my own among them, was not hurt at all. It may therefore be classed as quite hardy.

A true evergreen sort, hardy hereabouts, is on trial, and promises to be a great acquisition. It is the *Ligustrum Japonicum*. The foliage is of a beautiful green, shining, dark and glossy. It is not unlike the myrtle, *Myrtus communis*, such a familiar shrub in the south of England. So far it

has stood very well in these parts. It was injured partly in the last severe winter, but only to the extent of a loss of tops, serving as a good pruning. The six degrees above zero, already mentioned as having occurred already this season, has not even browned its leaves. About Washington, D. C., it is a great favorite, there being many of them about the Capitol grounds.

Joseph Meehan.

MEMORIAL FOUNTAIN, LEE, MASS.

In the fall of last year, there was dedicated at Lee, Mass., a fine memorial fountain of particular interest. It was begun by the Loyal Temperance Legion under the leadership of Amelia Jeannette Kilbon, and was completed by other friends as a tribute to her memory, for she died before the work was fairly underway, and the ceremonies attending the dedication were impressive.

The fountain was designed by Daniel Chester French, and cut from Lee marble; and as a work of art it will occupy a high place in the public memorial of Western Massachusetts.

The illustrations giving front and rear views explain the main features. The dolphin which adorns the rear face, and which is a beautiful piece of modeling was designed by Mr. F. Edwin Elwell, sculptor, of New York.

PARK AND CEMETERY.

STATUE OF DANIEL WEBSTER, WASHINGTON, D. C.

The erection of a monument to Daniel Webster in Washington was a timely incident and worthy of the great interest taken in its inauguration, and the memorable ceremonies attending it. It was the gift of Mr. Stilson Hutchins of Washington, and

in his most characteristic pose, his features sternly set, and the attitude as of a speaker pausing before some weighty utterance. Mr. Hutchins says the sculptor has caught the conception of the Webster of his memory.

The pedestal is eighteen feet high, of red gran-



THE WEBSTER MONUMENT, WASHINGTON, D. C.

will be in itself another mute though powerful protest against the well deserved stigma that we can find few subjects worthy of memorializing other than warriors.

The statue was modeled by Sig. Trentanove, after a close study of all the material available for a portrait statue, and it was cast in bronze. The figure is twelve feet high and Webster is portrayed

ite, highly polished. The die is relieved by bronze panels representing some of the greatest scenes in national life and the greatest in the career of the orator.

In each of the panels Webster's figure stands out in bold relief, showing that the greatest attention has been paid to the details. Congress appropriated \$4,000 for the construction of the pedestal.

THE BONNEY MEMORIAL,
LOWELL CEMETERY,
LOWELL, MASS.

The Bonney memorial illustrated herewith stands in the Lowell cemetery, Lowell, Mass., and is one of the growing number of artistic cemetery memorials scattered over the country. The statue entitled "The New Life," was modelled by Mr. F. Edwin Elwell, the New York sculptor, and was first conceived by the artist some eleven years ago. It was purchased by Mr. Charles S. Lilley after a visit to Mr. Elwell's studio, at the suggestion of Mr. D. C. French, and is about the only case on record in America where an ideal statue of heroic size was ever sold in the clay. The design of the monument was by Mr. Henry Bacon, architect, and it is constructed of Milford, Mass, pink granite, the blocks being of large dimensions, very thoroughly secured, and it rests on a foundation of hard brick laid in Portland cement on a bed of concrete. The letters of the inscription on the back are cast in bronze and sunk into the granite, being secured by pins and a special cementing material, so as to ensure permanent conditions.



THE BONNEY MEMORIAL, LOWELL CEMETERY, LOWELL, MASS.

NOTES, CHIEFLY HISTORICAL, ON LONDON BURIAL PLACES.—V.

For a while the reform in the London burial places went no further than the closing of the crowded inter-urban grounds against further burials, and the leaving of them to neglect and to abuses nearly as great as those to remedy which the reform legislation had been sought. They became the dumping grounds of all sorts of rubbish and were eyesores of the worst character. Two notable cases of exceptions are worthy of mention. The burial grounds of the Jews and those of the Friends or Quakers. The Hebrews are particularly pledged to preserve their burial places. It is not in deference to a specific law that they do so, but a binding obligation handed down

from the most ancient times inhibits any disturbance of an existing burial place and prompts the keeping of it in good order. The Society of Friends also keeps its burial grounds in good order, though some of them in London have disappeared. In fact many of the burial grounds in London have passed out of existence since the general closing in the middle of the century. This has been due to the encroachment of streets that had to be opened or widened, buildings that were erected and railroads which have been built. In all over one hundred burial places have thus wholly or in part disappeared in London during the past half century.

* * *

The "Burials Acts" by which the intra-urban burial grounds and vaults were closed to the reception of further bodies left the burden of the care of these places of sepulture upon the "Burial Board or Churchwardens as the case might be." They were required to maintain the churchyard or burial ground in decent order and in good repair at the expense of the "overseers," to be paid out of the "poor rates" unless some other fund were provided

for the purpose. This brought in many cases the Burial Board or Churchwardens into conflict with the rector of the parish, the latter being by law during his incumbency the holder of a freehold right in all the land and buildings enclosed within the churchyard fence or walls. It is not surprising therefore, that so many of the burial grounds should have fallen into gross neglect, despite the legislative effort to keep them in good and wholesome order. Greater difficulties still arose in regard to unconsecrated and private burial places and even the dissenters' burying grounds. The worse than neglect which some of those suffered became notorious.

* * *

Several of the burying grounds were converted into gardens before 1877. The pioneer in such a radical movement as this was St. George's in the East. The obstacles to be surmounted before this conversion could be effected were great. But when it was accomplished a useful precedent was established and it was quickly followed by the dean and chapter of St. Paul's. St. George's became in place of "a graveyard dank and clayey," a garden of three acres "always bright and neat and full of people enjoying the seats and the grass and the flowers and the air."

* * *

A new movement was begun in 1882. The Metropolitan Public Gardens Association was formed. It grew out of two organizations, the Kyrle Society and the National Health Society. Each of these had an "Open Space Committee," making what effort was possible towards securing "out-door sitting rooms," as some one very aptly called them—open spaces furnished with seats in the midst of the poor districts. The funds available for this purpose were scanty, and the two committees accomplished but little save that they influenced public opinion in the right direction.

They did, indeed, procure grants of seats for some of the churchyards which were being laid out as gardens and they were valuable in showing the advisability of an association expressly designed for preserving, acquiring and laying out open spaces in the midst of the densely populated city. The Public Gardens Association resulted and absorbed into itself the Open Space Committee of the National Health Society. The Kyrle society continued its separate existence and under the stimulus given to its work by the newer movement, laid out as gardens four very important graveyards.

* * *

There was no better way of providing for the

wants of the poor of the congested London districts than by providing breathing places and playgrounds for them. There was no better way of taking up and cleansing the disused cemeteries, now made the dumping grounds of their respective neighborhoods, than to convert them into gardens or at least into open, paved or asphalted spaces, provided with seats where the wayfarer might stop and rest. No other ground was to be so readily obtained. It seemed an economic measure from whichever standpoint it was viewed. Nevertheless the work of the association was greatly obstructed and it was in the face of much opposition that it succeeded in three hundred and twenty of its undertakings within the next thirteen years while it failed in its offers and attempts in about two hundred cases. And in the end it has succeeded in the conversion of over two hundred such plague centres as have been described as representative burial places in previous papers, into wholesome breathing spaces and recreation grounds for the poor of an over-populated capital. The Metropolitan Board of Works, the London County Council, the city corporation, public vestries and private individuals were enlisted in this good work, which is not yet finished, and the Public Gardens association met its best success in changing the tone of public opinion and in securing such legislation as will permit the readier accomplishment of its purposes without conflicting with any of the vested rights of individuals or corporations, or the recognized rights of consecrated grounds. And it is gratifying to record that the results of its efforts have been deeply appreciated by the class of people for whose benefit they were intended.

* * *

Incidentally the Public Gardens association has proved of economic value to the civic life in other ways than in merely improving the appearance of the city and ameliorating the conditions of the poorer inhabitants. A large part of their work was accomplished in two successive winters out of grants from the Mansion House fund for the employment of the unemployed. In this manner more than eleven thousand pounds have been disbursed among the poorer classes in payment for labor which went directly to their own benefit and to the benefit of their families.

* * *

The legislation secured by the Public Gardens association to enable it to carry out its schemes would serve as a model upon which similar work might be done on this side of the Atlantic, always bearing in mind that conditions are very different here than in London. There is not here the same

legal status given to consecrated ground as such as in England. Nor are there the same inherent rights in rectors, vicars or wardens of churches. But a careful search should be made in this legislation for the governing principles and these principles will be found to be applicable to cases on this side of the water. For example the principle of consecration will answer very well to that sentiment, often a religious sentiment, which leads us to regard the burial place of our dead as entitled to be undisturbed. In the case of the conversion of the London burial grounds care has to be taken to preserve the sacred soil from aught that might be construed as desecration or a profane use. The playing of games is prohibited excepting with the permission of those highest in authority. The improvements were confined to laying out paths, erecting seats, levelling the ground and setting out plants and flowers—and who could grudge this to a burial place? No gravestones are ever destroyed. Only when they stand too thick to permit the laying out of the ground, are they removed. And when so removed they are placed at the side of the enclosure, numbered and scheduled. All in which any living person can claim any interest are left untouched.

* * *

The Burials Acts were not without a wholesome effect upon the newer suburban cemeteries which quickly succeeded to the old churchyards when the latter were closed against new comers. This was seen especially in the introduction of tasteful and elegant designs for the memorials of the dead erected therein. Altogether this later chapter of the history of the London burial places is as pleasant as the earlier chapters were revolting, and is quite worthy of the attention of a number of American cities which we might name, where the condition of ancient burial grounds approaches very nearly that to which Walker called attention in London many years ago. *L. Viajero.*

GARDEN PLANTS—THEIR GEOGRAPHY, LX.
CHENOPODIACEAE.

THE MIRABILIS, AMARANTUS AND COCCOLOBA
ALLIANCE.

Boussingaultia has 10 species from Mexico and tropical America. The "mignonette vine" is most familiar and a tuber or two planted with the taller *Amarantus* makes a fine late summer contrast. Under a south wall, especially if a heater is in the cellar near by, the tubers often endure the winter of the middle states. *B. Lachaumei* is a pink flowered species from Cuba.

Ledenbergia is a monotypic dark foliaged

climber from the head waters of the Amazon and also perhaps from Martinique.

Petiveria alliacea is a low white flowered shrub from the warmer parts of America.

Phytolacca "pokeberry" is esteemed as a spring



BETA CICLA VARIEGATA.

spinach in some parts of the country. In some European gardens it is liked for its showy berries. There are ten species scattered over temperate, sub-tropical and tropical regions. *P. dioica* becomes a soft wooded tree in southern California. It is South American.



SARCOBATUS VERMICULATUS—"GREASE WOOD."
2 feet to 8 feet. *Vick's Magazine.*

Ercilla spicata is a clinging evergreen climber from Peru and Chili.

Eriogonum in 120 species are tomentose native plants, a few of which have made their way to European gardens.

Calligonum is a genus of desert plants from North Africa and Central Asia. Some of the species are used both as food and drink when nothing



BOUSSINGAULTIA BASSELOIDES—Vick.

else can be obtained. *C. Pallasia* is a nearly leafless shrub from the Caspian regions.

Polygonum has 200 species scattered over the earth; they vary a good deal in the color of their flowers and in habit. Two or three of the garden species are really handsome annuals, with woody perennials and a climber or two, useful in very different situations viz: where they can be mown around constantly and kept from spreading; and again in wild places where they have room to spread at will. *P. orientale* and its white variety are East Indian annuals, often found naturalized in waste places. *P. cuspidatum* and *P. sachalinense* are



POLYGONUM CUSPIDATUM.



ANTIGONON LEPTOPUS.

large sub-shrubby white flowered plants useful in rough places and with a strong disposition to spread. *P. Baldschuanicum* is a climber of 10 or 15 feet

from Bucharra. It has pink or white flowers and although introduced several years ago is but little known. There are many low growing kinds.

Rheum "rhubarb" may not strike many people as an ornamental genus. That is a mistake. *R. nobile*, *R. Emodi*, *R. ribes*, *R. palmatum* and some others are handsome plants of use where fine foliage is appreciated. There are 20 species all Asiatic.

Muehlenbeckia has 15 species from the Australasian and Pacific Islands, and from the sub-tropical Andean regions of South America. *M. platyclada* is a familiar plant in greenhouses and grows famously planted out during summer. It is most remarkable for its curious winged growth. *M. adpressa* and one or two others have been known in cultivation.

Coccoloba "seaside grapes" are in 80 species from S. Florida through tropical America.

Antigonon has 3 or 4 species in Mexico and Central America. *A. leptopus* and its white variety are ornamental tender climbers.

Brunnichia cirrhosa is a monotypic greenish pink or white flowered suckering climber found in South Carolina and also in Africa according to some

Podopterus Mexicana is also monotypic—a low growing evergreen shrub with pink flowers probably adapted to parts of California and the south.

Several other plants of the Alliance might be selected for use in gardens especially in the warm regions, but the genera given embrace a good representation of the group. *James MacPherson.*

The floral and landscape work for the Pan-American Exposition at Buffalo has been progressing favorably, though some parts of the season have not been altogether favorable.



POLYGONUM BALDSCHUANICUM.

HENRY SHAW ANNUAL BANQUET, ST. LOUIS, MO.

In accordance with the will of the late Henry Shaw, the eleventh annual banquet to gardeners and florists of St. Louis and vicinity was given at the Mercantile Club, on the evening of November 3d. A large company was present and included employes of the Missouri Botanical Garden—the gift of Mr. Shaw to St. Louis—market gardeners and florists of St. Louis and vicinity and invited guests.

The banquet was served in the fine banquet hall of the Mercantile Club which was finely decorated with flowers and plants for the occasion. At the table of honor, which was beautifully decorated with roses, carnations and chrysanthemums, were seated Dr. Wm. Trelease, director of the garden, who presided; on his right sat Mr. Patrick O'Mara of New York, president elect of the society of American Florists; ex-Governor and Secretary of the Interior, D. R. Francis; Mr. J. C. Birge of St. Louis and former Lieutenant Governor and Secretary of Agriculture, Norman J. Coleman. On his left were Mr. Wm. Scott, former president of the society of American Florists and superintendent of Floriculture, Pan-American Exposition; Mr. J. G. Smith of the United States Department of Agriculture; Prof. J. C. Whitten of the Missouri Agricultural College and Mr. J. J. Beneke, manager of the St. Louis Chrysanthemum and Flower Show. Among others present were A. T. Nelson of Lebanon, Mo.; Major H. G. McPike, Alton, Ill.; Mr. Wallis, Wallisburg, Mo.; Mr. Howard Elliott, General Manager Burlington, R. R., St. Louis; G. A. Atwood, editor *Practical Fruit Grower*, Springfield, Mo.; and many other prominent persons.

On rising to propose the toasts of the evening, Prof. Trelease said Mr. Shaw had a wide purpose in arranging for this annual gathering of men representing the various lines of industry connected with the growth of plants, and his trustees have taken, as it seems to me, a very wise view of the language he used when saying that the banquet was to be given to the gardeners of the institution, and invited florists and market gardeners of St. Louis and vicinity, for his trustees have held that the vicinity of St. Louis was not intended by him to be limited by municipal lines, nor by state lines, but is limited simply by the willingness of gentlemen to come and assist us in making a successful occasion of this banquet. After the gardeners of the Missouri Botanical Garden, Mr. Shaw specifically mentions florists. Now the florists are a very large family and as some of you know there is no better nor more earnest organization than their national society, the Society of American Florists. In proposing the toast to the florists, I take great pleasure in introducing Mr. Patrick O'Mara of New York, who will respond to it.

Mr. O'Mara in responding at length to this toast, among many good things said: It has been well said that institutions make men, but in the beginning men make institutions. We in the trade who keep in touch with developments, comparing the present condition of the florists of the United States with what it was the year that the Society of American Florists was established, can readily realize the vast strides that have been made in the methods of culture in horticulture and in the amount of capital interested; and, above all, in the degree of intelligence that is displayed by the men in the business, which tends to make the business a commercial pursuit rather than what it was in the early days a sort of sporadic enterprise. One thing, perhaps, which the founders of the Society of American Florists probably did not contemplate in the organization of the society was the bringing together of men who work in the craft under different conditions of climate, etc., and thus giving them opportunity to interchange their views.

Prof. Trelease in proposing the next toast said: We always have an occasion like this, men with us who are given to the cultivation of plants for pleasure, or as a means of pleasure. One of our guests this evening is a man who has his own home, where he is known to give a good deal of his time and thought to the cultivation of plants for pleasure. I take pleasure in introducing Mr. Julius C. Birge of this city.

Mr. Birge in part said: The sentiment, Mr. Toastmaster, of the toast to which you have given me the pleasure of responding is a touching one—that of the man with a home. The word home to a man who is not out very often late at night is a very pleasant suggestion, and I do not believe it possible to express its exact meaning in a dictionary; I think its equivalent is not found in every language. What is a home as contemplated by this sentiment? It goes without saying that there's a good woman in it and probably some children. A house and a lot hardly constitute a home. Not even though there be the addition which we often see, of a lawn where the plantain and the dock luxuriate or a few specimens of night shade or stramonium shaded by one or two decrepit and odorous Ailanthus trees. You have seen the lawn, where near the regulation unpainted high board fence where two or three barrels overflowing with ashes, half concealing broken glass and pebbles which do not suggest peace within those walls. The ubiquitous clothesline dangling with laundered underwear affords a weekly change of scenery. A marble palace with frescoed walls does not fully make up the requirements of a home. Neither does a cottage, but a little vase of healthy blooming roses in the window tells that a loving hand has been there. When Ben Butler walked along up that east drive from his home to the Capitol and saw men preparing to cut a fine tree, he acted like a man with a home. Said he: "Are you going to cut that tree?" One man replied: "Yes, Senator, we have been ordered to remove it." "You wait until night," replied Butler, "and I will be responsible to you." Butler, as you know, strode to the senate chamber, introduced a resolution, recited with dramatic effect Morris' poem, "Woodman spare the tree." The tree still stands. Butler was unpopular in New Orleans, but if his shades were in St. Louis there would be less tree butchery and more ideal homes. We appreciate the skill of the landscape gardener, who recognizes that art should be subservient to nature. I was impressed with this skill last winter in visiting the botanical gardens of St. Lucia, Martinique and Demarara, South America, countries where the native tropical growth is as wild and luxuriant as any where on the globe. The skill of the gardener and florist has produced beautiful effects, as would appear natural in the tropics without permitting nature to run wild, yet convenient for study.

I believe that the man with a home such as you would plan, though not a prince of royal blood, nor with a thousand a year, would nevertheless be a king over at least one little spot where nature would smile in blooming flowers and shrubs, where from beneath his own vine and fig tree he could listen to music of the song birds—music as free as air. A man in St. Louis with such a home, if he loves his fellowmen, should have one dominant feeling of thanks which is that a noble benefactor, Henry Shaw, has made it possible for millions of men, women and children in centuries to come, millions who may have no homes, but who find peace in nature's smiles, to breathe the sweet perfume of flowers and groves and study the most beautiful of all inanimate creations, the trees of the forest. "No tears dim the sweet look that nature wears."

Prof. Trelease: I am very often asked, but never on an occasion like this, why Mr. Shaw provided for this annual gathering of florists, gardeners, etc., and, I believe that his

purposes were farther reaching than most of us appreciate today. I think that one of the purposes he intended was that the garden to which he devoted so much of his life, should be a means of education for posterity, and the elevation of horticulture.

We have with us this evening a man who was intimately associated with me in the management of the Missouri Botanical Garden, but who has since that time assumed charge of one of the departments of the Agricultural Department at Washington, and I know in proposing the "man from the garden" you will take much pleasure in listening to his remarks. I will introduce to you Mr. Jared G. Smith of Washington, D. C.

Mr. Smith in part replied as follows: The work that Henry Shaw did, the work that he inaugurated, has taken its course along many lines. The garden itself is an educational institution in that it was intended to educate the minds of the people who visit it. The convocation which we have enjoyed to-night, though partaking of a gastronomic character, is, as Prof. Trelease said, one of the privileges we owe to Mr. Henry Shaw, and one of the means of sending out men into the world prepared to go to work which will count for the betterment of the people of the United States. It is some eleven or twelve years since the garden was established as an educational institution, but even before that time it was an educational institution, in that it contained exhibition of some of the best ideas in horticulture. It is only within the last dozen years that the garden has commenced to send out workers, and some of these have already made for themselves a name, and all of them, or almost all of them, have done good work, one of them stands at the head of plant hybridization in the Department of Agriculture, Mr. Weber. His work in his various experiments and the results therefrom can be directly attributed to Mr. Henry Shaw. After mentioning some of the more important results attained by Mr. Weber, Mr. Smith spoke of Mr. Shaw having given to many the opportunity of doing good work for the improvement of the people. This is attested by the number of men who have studied at the gardens, who occupy good positions.

Prof. Trelease next called upon Mr. William Scott, superintendent of Floriculture at the Pan-American Exposition, who responded in his usual pleasant manner. Mr. Scott said: After spending three hours at the Missouri Botanical Garden, he considered it a noble philanthropy of Mr. Shaw to present this elegant garden to the people of St. Louis and vicinity, and that it is the most splendid garden he knows of anywhere, and thinks it is not surpassed or equalled by any other in the United States. This garden is not only to be appreciated by the young men of this vicinity, but by the whole people of the

United States. Mr. Scott spoke at some length on the conception of the plan of the Pan-American Exposition, selecting the site and other interesting facts about it.

Ex-Governor Francis said: With regard to the World's Fair in St. Louis, I am confident it is as much the desire of our people that the exposition at Buffalo be a success as they are that the World's Fair here shall be, for what the Pan-American Exposition is, will influence the St. Louis Exposition. We trust that Missouri may be creditably represented by a proper exhibit at Buffalo, and I have no doubt it will be. It is proposed to make the exhibit in 1903 equal, if not finer and more magnificent than any the world has ever seen, and we think from the interest manifested thus far by this community and others that it will surpass all others and be the finest the world has seen up to that time. Of course Buffalo is better situated in regard to power or supply of power than St. Louis. By this I mean they can perhaps obtain wonderful results and undoubtedly will do so by the use of electricity; but who can say or will dare to prophecy what vast strides or improvements will be made in this modern wonder—perhaps we may even have the benefit of Niagara's mighty power at St. Louis. Electricity, as you all probably know, will form one of the principal attractions of the Pan-American Exposition, and so it will at the St. Louis Exposition.

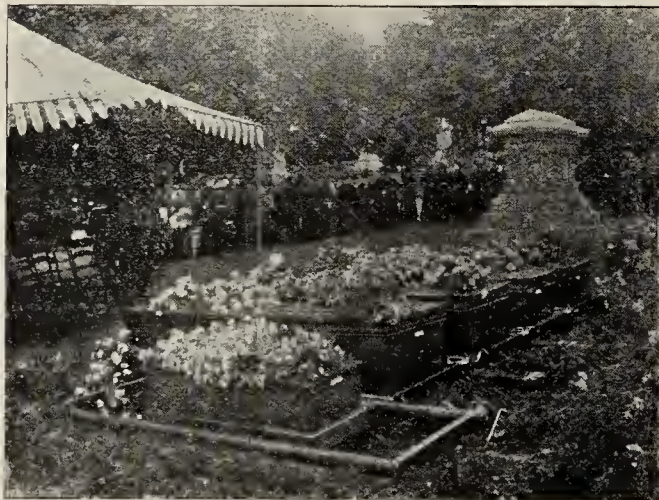
The same attention will undoubtedly be paid at our exposition as has been and will be paid at the Pan-American Exposition, to the slightest detail, and to the end of obtaining the best and most harmonious results in the coloring of the buildings and landscape gardening. Expositions of this character elevate the civic pride and the international feeling permeated among the people. At our Exhibition in 1903 in celebration of the acquisition of this great territory which we inhabit, we shall have as our guests distinguished persons of the world, and it will be as much pleasure to us to have as our guests the members of the Society of American Florists as it will be to have these distinguished people, and I sincerely hope that we may be favored with your company at that time.

Prof. Trelease in declaring the banquet at an end, expressed his desire to thank particularly those to whom the guests owed the greatest part of their pleasure, that of listening to them.

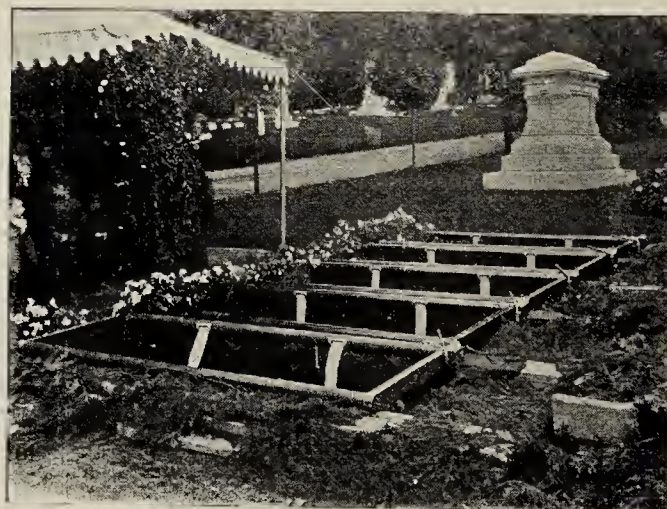
Rudolph J. Mohr.

A MODERN BURIAL.

The illustrations below show a recent modern funeral in Cleveland, O., in which the Bongardner Casket Lowering Device was used, and at which five bodies were lowered simultaneously, emblematic of the manner in which the lives were lost.



BEFORE BURIAL.



AFTER BURIAL.

PARK NOTES.

Mayor Smith of Macon, Ga., recently inaugurated a tree planting scheme to mature on Thanksgiving Day and set the mark at 100 trees. It was a popular move and as the cost was put at a comparatively nominal figure, his 100 mark was largely exceeded. Quite an interest was developed on the question of thus improving the streets.

* * *

The governor of New Hampshire in a recent letter to a gentleman in New York, who had protested against the desecration of scenery in the White Mountains with advertising signs, said that he is greatly interested in this question and that he intends to introduce a bill in the next legislature to prohibit the advertising nuisance.

* * *

The results of the work of the Village Improvement Association of Sag Harbor, L. I., which was organized in 1888, has demonstrated what can be done towards improving conditions in small towns. The cemetery has been transformed, streets improved, old buildings and walls removed, a park created about the soldiers' and sailors' monument and good roads made a leading feature of their activity.

* * *

The tourist in Scotland often overlooks objects of interest, among which very much slighted, is the celebrated beech hedge. This beech hedge is by no means a small object of interest for it stands over 100 feet high. It is the property of the Marquis of Lansdowne, at Meiklour, Perthshire, and was planted in or about the year 1745 by a party of Highlanders encamped there for a few days while on their way to join the pretender, Prince Charlie. This mammoth hedge, which indeed deserves the name of being one of the modern wonders of the world, is a fitting monument to commemorate the pretender's defeat at Culloden, the last battle ever fought on English soil.

* * *

An important improvement is being developed in Warsaw, Poland, of which Mr. W. Arnd of that city, writes as follows to the *Manufacturer's Record*: "The city of Warsaw is at this moment engaged in the work of developing a project to build boulevards along the river Vistula which flows at the foot of the city. The proposed work will cost about 2,000,000 or 3,000,000 rubles. As indemnification to the contractor who undertakes the work the city offers a portion of the ground and territory which may be recovered through encroachment on the river and straightening of its banks. The ground thus recovered is worth, according to the present values, about 6,000,000 roubles. Here is a most valuable opportunity for American capital."

* * *

Of the improvements in Bronx Park, New York City, the propagating houses in the botanical section will probably be finished by the first of January. The houses will be the nursery for the botanical gardens and in them experiments will be made and plants will be raised from seeds which have been obtained by exchange with florists and botanists throughout the world. Through the liberality of friends of the museum, additions are constantly being made to the collection in the greenhouses. Several hundred men have been engaged on the roads through the park. When the system of highways has been completed, a drive of fifty miles over splendid roads will be opened. The route will be as follows: Fifty-ninth street to

Central Park, to West Seventy-second street, to Riverside Drive, to Boulevard Lafayette, to VanCortlandt Park, to Mosholu parkway, to Bronx Park, to Pelham Bay Park and return.

* * *

The matter of providing a more generous entertainment in the way of music in our public parks is now becoming a matter of serious consideration by park authorities. At a recent meeting of the park board of Toledo, O., the matter of illuminating the greenhouse at Walbridge Park and of giving band concerts there was taken up, and it was decided to have a special display and a band concert Thanksgiving night. The members of the board expressed themselves as being desirous of having concerts at the greenhouse as often as twice each week, but the finances of the board will not permit of such a plan being carried out. The board would like, however, to have some public-spirited citizens render some financial aid, as great good is being accomplished by them, especially for the poor of the city. It was decided that the greenhouse at Walbridge Park should be illuminated one evening each week and it was decided that Wednesday evening should be set apart for that purpose.

* * *

Prof. Samuel B. Green, of the department of horticulture and forestry, University of Minnesota, has gone into the financial prospects of the proposed national park in Northern Minnesota, and concludes from careful calculations that under proper forestry regulations the reserve may be made a first-class paying investment in a very few years. He closes by saying: "If the above figures are correct, the proposed park, merely as a financial venture, will take care of itself. As an example in good forestry and a place for recreation for our people it ought to be worth very much. Besides, from the purely economical standpoint, the establishment of this park would have the effect on the surrounding country that the establishment of any great permanent manufacturing concern has and would undoubtedly result in much improvement in the way of cutting timber in this state which so often has left a trail of stagnation behind it. Why not try such a plan as this? Surely the government can well afford to do so and it cannot possibly be any worse than the plan of selling all the timber to the highest bidder, without any regard to the rights of posterity."

* * *

Unless the White uniform charter enacted by the New York legislature for cities of the second class such as Rochester, Syracuse, Albany and Troy, is amended at the coming session, the present Rochester park commission of twenty-one members will pass out of existence at the end of 1901 and the control and management of the parks, boulevards, city squares and street shade trees will revert to the commissioner of public works, who, in addition to his other duties, will manage those affairs, although he will do it through a superintendent of his own selection. The only power now wielded by the park-commission which will not be delegated to the commissioner and his superintendent is that of purchasing land for park purposes. Under the new charter the common council by a three-fourths affirmative vote may direct the purchase of additional park land. The policing of the parks of this city, which was originally under the control of the park commission, passed to that of the commissioner of public safety, by special legislative enactment, last winter. The parks of Rochester, consisting of some 600 acres, have been brought to their present excellent conditions under the commission, and there is a disposition on the part of the people to secure an amendment to the law exempting Rochester from such provisions as may be inimical to the best interests of the park system. Rochester has three large parks and a number of small ones.

CEMETERY NOTES.

The 99th semi-annual meeting of the Boston Catholic cemetery Association was held Nov. 14th. The interments to date in the four cemeteries, have been as follows; Calvary, 60,625; Dorchester, 34,129; Mt. Benedict, 14,793, and New Calvary, 393. Total, 110,120.

* * *

Important improvements have been under way at the Green River cemetery, Greenfield, Mass., the past fall. There is also under consideration the erection of an office building and superintendent's house combined, plans for which have been drawn, at an estimated cost of from \$2,500 to \$3,000.

* * *

Port Washington, L. I., which has been in great need of a new cemetery for some years, has recently secured a tract of 30 acres of available rolling land. It has been laid out on modern lines under expert care and a number of lots have been disposed of since its opening a short time since. It is proposed to make it a beautiful cemetery.

* * *

Last month the mayor of Boston transmitted to the council a communication from Leonard W. Ross, comptroller of Knollwood cemetery, offering to sell to the city of Boston under agreement of perpetual care and maintenance sufficient land beautifully located, dry and well adapted for the purpose to receive the remains on the present basis in Mt. Hope cemetery for somewhat more than 50,000 bodies, for \$175,000. It was also stated that the land is all high, dry, gravelly soil, with a sufficient covering of loam over its entire surface.

* * *

At a meeting of the trustees of the Utica Cemetery Association, Utica, N. Y., held November 13, resolutions were adopted which provided that hereafter all foundations for monuments and headstones be laid by the Utica Cemetery Association; that no white bronze or other metal monuments or headstones be permitted to be erected in the cemetery; and that lot owners desiring to erect a monument or headstone must submit design to the executive committee of the association for their approval, without which the superintendent will not permit the erection of a monument or headstone.

* * *

The oldest cemetery in Minnesota is at Fort Snelling. When the old post that is now deserted, was built, the cemetery was located just outside its walls and the only vestige remaining of the wall that stretched across the southwest side of the fort is the round tower which is an object of interest to every visitor at the post. Recently the government spent considerable money in fencing in the old cemetery, placing marble headstones at many of the graves where pine boards had been used, and so improving the condition of the cemetery as to materially change its appearance. The oldest tombstone there and the oldest in the state is of limestone, and was evidently quarried and cut at the fort. The inscription bears the date, 1826.

* * *

At the annual meeting of the Lakewood Cemetery Association, Minneapolis, Minn., held November 12, the secretary's report showed total burials for the past year 702, lots to the amount of \$24,641 sold and the total receipts \$47,426.70. The

total disbursements were \$49,660, of which \$14,062.65 were for labor and \$21,406.03 for additional land. The total assets are \$479,907.50. The association has at the present time 132 acres of available land for burial purposes and the above sum of \$21,406.09, made for the purchase of land, was all made in Saunders Park addition to the city of Minneapolis, which was considered the best available land for the purpose. In this addition there is a total of 40 acres, 25 acres of which have already been acquired and the balance is expected to be secured during the coming year.

* * *

A writer in the Boston *Herald* describing All-Saints Day in Paris at the cemeteries has the following to say of the cemetery at Mont Parnasse: The cemetery of Mont Parnasse, second in importance to Pere la Chaise, and differing from it only slightly in size and magnificence, presents the same thickly planted rows of small stone chapels, hardly more than a man's height, and with only space enough between for one to thread his way through. Broad cobbled or asphalted avenues intersect the cemetery geometrically to the exclusion of grass plots, and innumerable statues and busts and monuments add to the chaotic vista of dwarfed buildings, so horribly pretentious of architectural effects. Each little tomb or chapel has its altar behind an iron gate and here the family has gathered today to leave its flowers, its bead wreaths, to light its candle and say its prayer.

* * *

Rules established thirty years ago in Holy Trinity Roman Catholic cemetery, near East New York, Brooklyn, has led to peculiar conditions now. The cemetery is owned by the Holy Trinity church corporation, and the then pastor, years ago resolved that there should not be the slightest distinction in the appearance of the graves of rich and poor. It was on this account that he established the rule that no stone monuments should be erected. Galvanized iron monuments are permitted, but they must be plain. Some of these are painted to resemble granite and Italian marble. They are much cheaper than stone and people in moderate circumstances are able to provide them. Probably the most striking feature of this cemetery is the profusion of crucifixes. Every grave, no matter how humble its memorial, is surmounted by a crucifix. The crucifixes are mostly of wood, some five feet high, and the carving of the figure of Christ is generally rather coarse.

* * *

The work of repairs on the old Garden Street cemetery, Cambridge, Mass., has been completed to the satisfaction of all. The oldest stones are all very much alike. The death's head, the cherub, the hour glass and other insignia of death are to be seen on most of them. Now and then there is an appropriate inscription such as "Memento te esse mortalem. Fugit hora." The epitaphs are invariably skillfully cut and are well worth minute inspection on this point alone. The stones of this early period were made in England and Wales, and brought over here by sailing vessels. On one stone, that of John Watson, who died in November, 1678, there is a mournful array of these gloomy insignia. There is the hour-glass, a pick-axe, a coffin, and a death's head besides innumerable flourishes. The coffin is partly chipped, probably by vandals. There has not been much vandalism in the old yard, for there has been nothing to take. The empty places in the sarcophagi where once family crests and coats of arms were placed were made so doubtless by the Revolutionary soldiers, who took the metal for bullets. A stone upon which was inscribed the name of Mary Remington, was found lying at the eastern end of the yard. A diligent search discovered where it belonged and it was replaced.

SELECTED NOTES AND EXTRACTS.

Scotch Heather in America.

In connection with this subject a note on which was given in our last, Mr. Joseph Meehan, in the *Florists' Exchange*, gives his opinion: There is no reason to doubt that the heather is well adapted to the greater part of our country. I have not the authorities by me but am sure it is reported in a semi-wild state in the vicinity of Boston, and also at Egg Harbor City, New Jersey. It has been under my personal observation here for over twenty years and in all that time has stood all kinds of weather in all seasons, uninjured, and it is growing in shallow, stony soil. The plant is not only native of England and Scotland, but of the whole of Northern Europe, as Mr. Kelsey says; and its home is in bleak and barren places. It has been at home in Philadelphia for 30 years, as have been two *Ericas*—*vagans* and *stricta*. All ericaceous plants have fine, hair-like roots, and in common with all plants with roots of similar character delight in light soil. They are well suited in soil containing many small stones, and of a sandy nature. The stones keep the soil open, which is what the roots desire. Such soils are often poor. Because of this it is inferred by many that the plants referred to do not care for better soil, but this is a mistake. The roots are suited in such situations, but the plants will show a marked improvement in growth if a mulching of good soil be given them.

* * *

Hedges of Flowering Shrubs.

For a handsome hedge *The Garden*, of London, advocates the planting of hardy flowering shrubs, about four feet apart and so trained and trimmed that they grow into a compact hedge and yet have enough lateral play to allow them to flower. Such a hedge is not only ornamental but it yields endless material for cutting. It should be allowed to grow quite four feet thick and is best formed with a backbone of stiff woody shrubs, such as Guelder roses, Ribes and Lilac, while between the stiffer shrubs might be some that are weaker, such as Kerria, Rhodotypos and Laycesteria. Plants of rank, rambling growth such as the free roses and doubled flowered Brambles, Aristolochia, Wistaria, Virginia Creeper and the rambling Honey Suckles are not in place in such a hedge, they are more suitable for rough hedge-banks, walls, or for arbor and pergola; the flower hedge wants true shrubs. The

bush honey suckles, such as *Lonicera fragrantissima* and *L. tartarica* are just right, or any woody, twiggy bushes either of moderate growth or such as *Deutzia* and *Snowberry*, shrubs that so often get overgrown in a shrubbery. In the hedge these would do well, as they could easily be watched and thinned, also any of the many true shrubs that flower all the better for reasonable pruning.

* * *

Planting for Fall Effects.

Mr. W. C. Egan writing in *Gardening*, says: We should plant for fall effect as well as for spring and summer. The plantings for both spring and fall effects may be made together, as the flowers of spring may produce the berries of fall. On large estates, where extended views are available, a fine effect of fall coloring may be produced by sumachs alone. The dwarf, smooth *Rhus glabra* is the first to lose its leaves. It colors a deep red, inclined to maroon as it fades, and is not effective at close view. Then comes the stag-horn sumach, *Rhus typhina*, so easily distinguished by the woody appearance of its new growth. This has considerable yellow in its coloring and is pleasing when viewed from any distance. The cut-leaved form of this is especially attractive in its fall coloring and a great improvement at all seasons over the cut-leaved form of *R. glabra* generally grown. We must not forget *Rhus aromatica*, more dwarf than the preceding, good in its coloring and persistent in its foliage.

* * *

The Clematis.

To set out a clematis requires time and patience. The roots must be spread out evenly and care taken to cover each root as though it was the only root it had. Earth must touch the root on all sides, particularly at the terminals. To wind up the roots into a ball or switch and cover them up is murder.

A very important matter is that of providing good, firm trellises for clematises, particularly for the young, brittle-stemmed plants. A bend or switch by wind, if it does not break the stem, very often cracks the outer bark and opens a way to various fungus diseases and perhaps insects.

Clematises are frequently killed by a tiny worm making its way into the stem just below the ground. This has been particularly noticed in *C. paniculata* this last summer. A sure method of destroying this insect, I believe has not been discovered.

For winter see that the soil is well drained, not surface drained, only, but under drained, so as to be aerated; also thatch the plants with straw to prevent the bark from drying out in the sun.

The large flowered varieties are valuable for decorations if grown in pots, particularly the lavender tinted varieties with six to eight petals to the flower, but they are not easily used if cut.

I do not advise laying the clematis down because it is liable to crack the bark and there is no advantage to offset this danger.

Clematis paniculata, white, and *C. coccinea*, scarlet, can be grown on strings very easily for cutting.—*C. B. W.* in *The American Florist*.

* * *

To Destroy Moles.

A correspondent writes to *The Country Gentleman* for a remedy for the depredations of moles in lawns, to which that journal replies as follows: "If you do not find traps effectual, there are several other remedies that have at various times been tried with success. 1. Soak a long strip of brown paper in a mixture of finely ground red pepper and niter; when dry, ignite the strip and thrust it while burning, into the burrow, the opening being closed. The fumes are very destructive to moles. 2. Make small piles of sweet corn, putting arsenic or strychnine into the centre of them and dropping into the burrows. It is advisable if possible to handle these corn baits with a small bladed knife or pinchers that have been buried in the earth for a few hours, and not to touch the baits with the hands, as the mole is quick to scent a trap. It need not be said that it is inadvisable to use poison if there is a dog about the place to whom you don't wish ill."

* * *

Lifting Gladiolus Bulbs.

So long as the leaves of the gladiolus continue green the bulbs are to remain undisturbed in the ground, the green leaves being an evidence that the preparation of next summer's blood is not completed. The completion will be shown by the leaves turning yellow and dying, or, what amounts to the same thing, being killed by frost. In either case, when the leaves are dead, the bulbs are to be dug up, the top cut off about an inch above the bulb, and after drying a few days in the shade the old bulb (which has become worthless) is to be separated from the new one—more than one sometimes—which has formed above it and thrown away. The new bulbs—the ones which formed above the old bulb—are then to be laid away safe from frost until spring.—*The North American Horticulturist*.



ESTABLISHED 1890.

OBJECT: To advance Art-out-of-Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

CONTRIBUTIONS: Subscribers and others will materially assist in disseminating information of peculiar interest to those engaged in landscape gardening, tree planting, park and cemetery development, etc., by sending early information of events that may come under their observation.

DISCUSSIONS of subjects pertinent to these columns by persons practically acquainted with them, are especially desired.

ANNUAL REPORTS of Parks, Cemeteries, Horticultural, Local Improvement and similar societies are solicited.

PHOTOGRAPHS or sketches of specimen trees, new or little known trees and shrubs, landscape effects, entrances, buildings, etc., are solicited.

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ASSOCIATION OF AMERICAN CEMETERY Superintendents: President, Geo. M. Painter, "West Laurel Hill," Philadelphia; Vice-President, Frank Eurich, "Woodward Lawn," Detroit, Mich.; Secretary and Treasurer, H. Wilson Ross, Newton Centre, Mass.

The Fifteenth Annual Convention will be held at Pittsburg, Pa., September, 1901.

THE AMERICAN PARK AND OUT-DOOR ART Association: President, L. E. Holden, Cleveland, O.; Secretary, Warren H. Manning, Tremont Building, Boston, Mass.; Treasurer, O. C. Simonds, Chicago.

The Fifth Annual Convention of the Association will be held at Milwaukee, Wis., June, 1901.

Personal.

Mr. John C. Olmsted, Brookline, Mass., was recently in Cleveland in consultation with the park officials on Edgewater Park improvements.

Illinois State Horticultural Society.

The 45th Annual Convention of the Illinois State Horticultural Society was held in the new agricultural building at the University of Illinois, Champagne, Ill., Dec. 11, 12, 13. An excellent program was provided, for the most part connected with the fruit growing and marketing industry, which is becoming more important year by year. The forestry question was discussed in a paper by Prof. Chas. A. Keffer, University of Tennessee, on "Forestry for Illinois;" and home improvement in a paper by Mrs. Elizabeth Hughes, Dixon, on "Window Gardening." "The Pruning

and Care of Shade and Ornamental Trees" was also a feature of the program. The meeting being held at the University offered an excellent opportunity for an inspection of the fine educational facilities afforded by the state institution in the line of agricultural work generally.

* * *

Michigan State Horticultural Society.

The 30th Annual Meeting of the Michigan State Horticultural Society was held at Grand Rapids, Mich., December 4-6, and a very valuable session resulted. Besides a number of important papers and discussions on fruits and their care, the forestry question was taken up under the charge of Hon. Chas. W. Garfield, president of the Michigan Forestry Commission, who related the status of the question up to date. The following papers were read on the subject: "The Interest of the State in the Problem," Fremont E. Skeels, Harriette; "What Shall Michigan Do to Perpetuate her Forests and Continue her Manufacturing Industries?" John P. Brown, Secretary Indiana Forestry Commission; "The Pine as a Factor in the Re-Forestation of Cut-Over Lands," Prof. V. M. Spalding, Ann Arbor; "Some Important Features of the Fire Problem," Dr. W. J. Beal, Agricultural college.

The program also liberally provided for the subject of Village Improvement and Art Out-of-Doors, on which the following papers were read: "Society Plan of Organizing Village Improvement Associations," Prof. W. W. Tracy, Detroit; "Suggestions for Improvement Society Work," John W. Weston, PARK AND CEMETERY, Chicago; "The Landscape and Its Object," R. M. Streeter, Grand Rapids; "Streets and Gutters," R. J. Coryell, Detroit.

In the evening following this session a stereopticon lecture on the improvement of the homes of factory operatives was given in the Park Congregational church which was largely attended.

A very interesting feature of the meeting was the action upon the will of the late Hon. T. T. Lyon, superintendent of the South Haven Experiment Station, who bequeathed his property to the society under certain conditions which were voted to be complied with.

Ellwanger & Barry, Rochester, N. Y., secured a gold medal diploma on their exhibit of 118 varieties of pears at the Paris Exposition. The jury gave them 20 points, the highest number given for first prize.

A Fertilizer for Shade Trees.

In Bulletin 131 of the Connecticut Agricultural Experiment Station, which is devoted to the protection of shade trees in towns and cities an odorless fertilizer is recommended, where evidences are apparent of lack of nourishment. The amount given is sufficient for an acre:

50 lbs. nitrate soda	\$1 13
100 " acid phosphate75
100 " muriate of potash	2.13
300 " cotton seed meal	4 05

\$3 06

The mixture should be made just before using and sown broadcast upon the

ground under the branches. It is not good practice to sow fertilizers near the trunks of trees, as the benefits are more or less wasted. This fertilizer is also good for the grass as well as the trees.

Cold Frames.

The principal point to be observed in the management of cold frames, whether for wintering vegetable or flowering plants, is to keep the plants dormant, not growing. Beginners are very apt to keep them too warm. Cold frames should be examined very frequently during winter and opened when the outside temperature is below freezing. This ventilation is best given by sliding down the sashes from the back and when the temperature rises above the freezing point they should be taken off altogether. There is far more danger in keeping cold frames too warm than too cold. — *The Minnesota Horticulturist*.

BOOKS, REPORTS, ETC., RECEIVED.

Geology of Osceola and Dickenson counties, Iowa. By T. H. Macbride. From Iowa Geological Survey, Annual Reports, 1899. This pamphlet also contains some interesting matter on forestry and plant life of the region.

ANNUAL REPORT OF THE SOCIETY FOR the Preservation of Scenic and Historic Places and Objects to the Legislature of the State of New York.

This pamphlet of some 90 or more pages is prepared under the requirements of the New York legislature in the act of incorporation of the society. The purposes of the society are "to acquire by purchase, gift, grant, devise or bequest, historical objects or memorable or picturesque places in the state, hold real and personal property in fee or upon such trusts as may be agreed upon between the donors thereof and said corporation, and to improve the same," solely for the public use and benefit. It may also co-operate with other organizations throughout the state for such purposes. The pamphlet is extensively illustrated with half tones and maps and contains particulars of work done or contemplated in connection with the Palisades of the Hudson River, Lake George battlefield, Stony Point battlefield, Watkins Glen, Philipse Manor Hall, Vonkers, Morris Mansion, Frances Tavern, Poe Cottage, Fort George, New York City, and Niagara Falls. The society has been studying of late the diversion of water from the Great Lakes and Niagara river for commercial and drainage canals and for manufacturing purposes, which threatens seriously to impair the grandeur of Niagara Falls; the method of landscape planting in Central Park, New York City, and many other kindred matters.

Trade Literature, Etc., Received.

Burbank's Experiment Farms—Special Rhubarb Circular. Luther Burbank, Santa Rosa, Calif.

Southern California Acclimatizing Association, Santa Barbara, Calif. List of seeds, 1900-1901.

One of the most unique and costly methods of advertising residence property we have seen is that of Mr. Dean Alvord, of Brooklyn, N. Y., in his pamphlets describing and illustrating his "Prospect Park South" suburb of Brooklyn. Certainly the property has been beautifully laid out under expert advice as to landscape and planting and engineering and sanitary requirements.

Salt Lake City and Utah. A fully illustrated 115 page pamphlet on the capital city of Utah and the State, compiled by the *American Journal of Industry*. It gives a glance at the history and describes progress, industries and resources.

Society of American Florists--Department of Plant Registration.

The Conard & Jones Co., West Grove, Pa., register new cannas as follows: "Pennsylvania," orchid flowering canna; color bright scarlet, foliage green; height five feet. An American hybrid. "Betsy Ross," color soft pink, foliage green, height two and one-half feet.

Peter Henderson & Co., New York City, register new, ever-blooming hardy rose, "Pan-American," a cross between American Beauty and Mme. Caroline Testout. Color under glass in winter, soft red, a little lighter than American Beauty. In open ground in summer, deep, satiny, rosy pink. Flower, full double; guard petals cupped; fragrance strong.

H. Weber & Sons, Oakland, Md., register new carnations as follows: "Norway,"

a seedling of Mrs. Fisher; color pure white, flowers two and one-half to three and one-half inches in diameter; fragrant; stem long and strong. "Egypt," color scarlet crimson; flowers uniformly two and one-half to three inches in diameter; fragrant; stems two and one-half to three feet.

A. C. Zvelanek, Grand View, Somerset County, N. J.; registers sweet pea, Miss Florence E. Demer, a white seedling between Zvelanek's Christmas and Emily Henderson; height four feet outdoors, five and one-half feet under glass. A continuous bloomer, especially adapted for winter flowers; stems up to sixteen inches long, usually bearing three flow-

ers each; foliage narrow and of a dark green color. *Wm. J. Stewart, Secy.*

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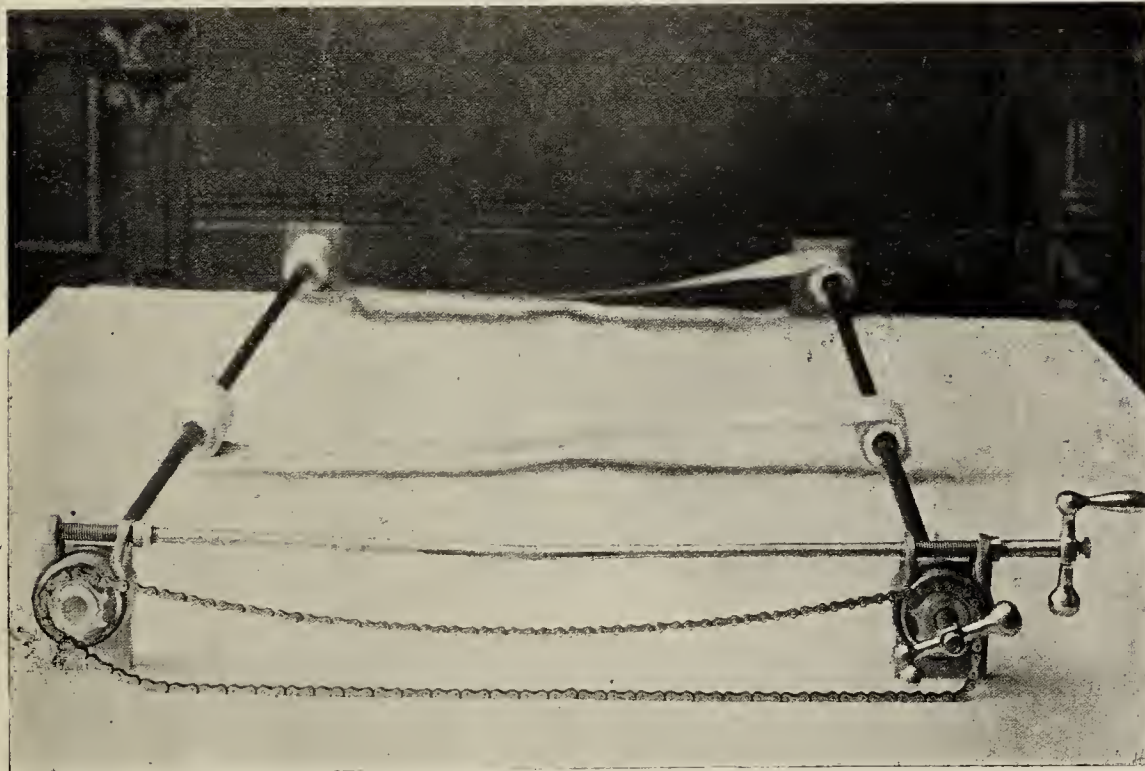
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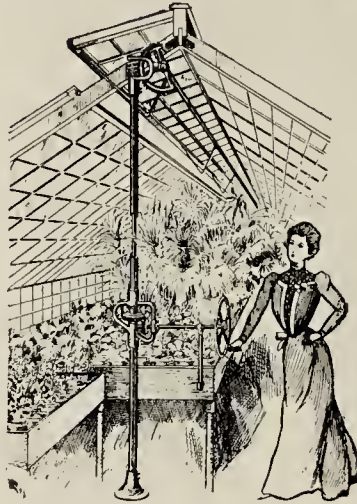
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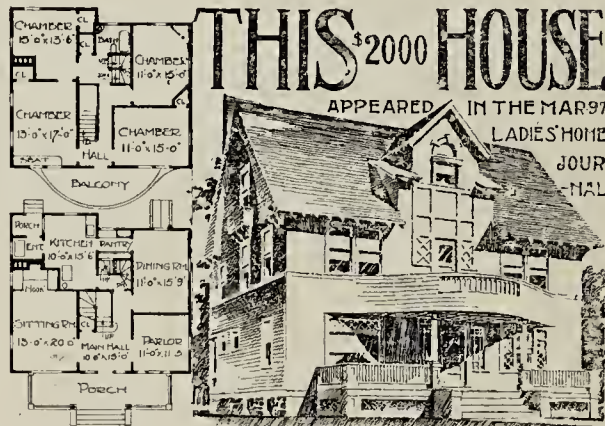
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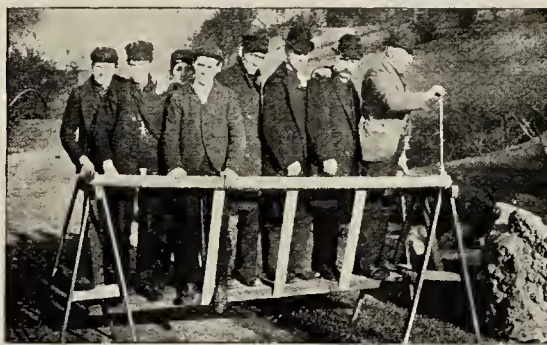
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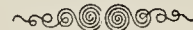


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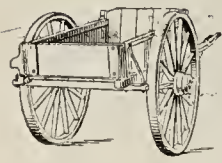
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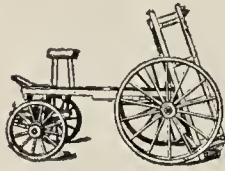
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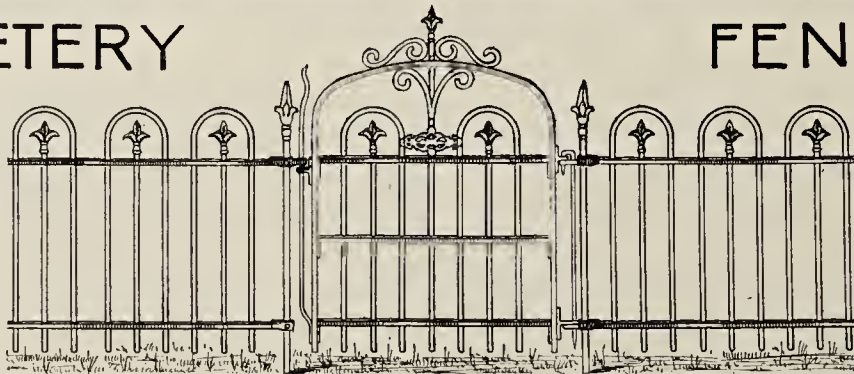
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PARK AND CEMETERY

and Landscape Gardening.

VOL. X. Chicago, January, 1901. NO. 11

CONTENTS.

EDITORIAL.—Boston Honors Frederick Law Olmsted—Government and the National Parks—Care of Street Trees—The Bill Board Nuisance—Progress in Cemetery Work—The Palisades of the Hudson.....	245, 246
*Beech Trees.....	247
Flowering Trees for Ornamental Planting, III.....	248
*The Tharlow Willow.....	251
*Diervilla Præcox.....	251
Street Tree—Protection of Street Trees.....	252
*Railway Station Grounds at Millis, Mass.....	252
*Improvement Associations—Interesting the Public in Improvement Work.....	254
The Park System of Sydney, Australia.....	256
*The George M. Pullman Memorial, Graceland Cemetery, Chicago.....	258
Paths and Principles.....	259
*The Grand Avenue of Pere la Chaise, Paris, France.....	260
H. W. S. Cleveland.....	261
Old English Gardens.....	262
*Garden Plants—Their Geography, LXI.....	263
Correspondence.....	263
Park Notes.....	265
Cemetery Notes.....	266
Selected Notes and Extracts.....	267
Reviews of Books, Reports, Etc.....	268

Illustrated.

BOSTON HONORS MR. OLMSTED The old saying that a "prophet is not without honor, save in his own country," has received a notable rebuke in the action of the Board of Park Commissioners of Boston, Mass., who at a recent meeting passed a resolution to the effect that the parks, hitherto known as Leverett Park and Jamaica Park, shall be jointly called Olmsted Park, in honor of Frederick Law Olmsted, the noted landscape architect. It is unnecessary here to mention the very many important public parks and grounds designed and carried out by Mr. Olmsted, to say nothing of his large private practice, but it is conceded on all sides that, broadly viewing his works and the genius and knowledge that they display, he is the foremost in his profession in the country. It is gratifying to realize that this unprecedented honor to a rapidly rising profession is bestowed upon the honored while yet in active practice, for although in advanced years, Mr. Olmsted, at 76, still devises landscape plans and pictures in co-operation with the other members of the firm of which he is the head.

NATIONAL PARKS The National Park idea has merit and public welfare enough associated with it to make it a strong feature of early twentieth century congressional activity. It is a question that interests the people at large, and every

state possessing natural picturesque forest tracts, should be aided by governmental action to preserve the same for the people, and it has also been suggested that the treeless states should be assisted to create public parks by forest plantings and otherwise. Now is the time to take up just such questions, and present opportunities and possibilities may never again offer themselves under such promising conditions.

CARE OF STREET TREES A recent bulletin of the Connecticut Agricultural Experiment Station on the Protection of Shade Trees in Towns and Cities, most emphatically suggests the advisability of the appointment of a City Forester to whose care the city and city park trees should be committed. The bulletin discusses in detail the many facts in tree culture and care that must be provided for, and this in itself would convince the reader that there is far more in the subject than he had dreamed of. There is a vast difference in the conditions pertaining to the flourishing shade tree in the village and in the town, and even in the former intelligent care is needed to offset the lack of natural conditions of which the tree's present surroundings have deprived it; how much more is such care needed for the trees of our towns and cities? So much special knowledge and intelligence is required for this work that every city and town should provide itself with a man qualified for the work. The City Forester in any important town would find ample opportunity for the effective display of his resources and the returns to the community would far overbalance the salary paid.

THE BILLBOARD NUISANCE Workers in the cause of reducing to a minimum the billboard nuisance with a view of entirely suppressing it where possible, continue active and are receiving generous support from the press, wherever that local power has been led to appreciate the meaning of the crusade. It is, while a work of great importance, likewise one of great difficulty, by reason of its association with private interests. It is, however, attracting universal attention and in many localities steps have been taken whereby a limit has been placed on the abuse. No terms are too expressive in condemnation of the extent to which this class of advertising has been carried. When many years ago some enterprising manufacturer astonished tourists at the Pyramids of Egypt

with a glaring advertising sign, the very audaciousness of the act provoked a quasi commendatory ridicule, but it was never thought that this was to be the forerunner of a system of advertising that should spread over the world defacing and degrading the face of nature in well nigh every available feature that might catch the eye of the passer-by. The limit has been reached and no effort must be spared to suppress it. Congress should be urged to pass a bill prohibiting advertising of any description in and about our national parks and reservations. Ordinances are now in operation and are being passed in many cities and to aid the cause and supply information for active workers, we ask our readers to send to this office copies of ordinances or statutes which they know to have been passed by cities, towns or counties in their locality.

**PROGRESS
IN CEMETERY
WORK**

A retrospect of the progress in cemetery improvement is appropriate at this time. On the question of public sentiment one can very well be surprised at its growth in favor of better care the past few years. Only ten years ago it may be said that to get lot owners interested in the cemetery beyond their own personal interest was a difficult task, but the persistent work of those of progressive spirit has changed this condition until we find few localities of common enlightenment where the desire for better conditions in the local burying ground is not strongly manifest. The work of the Association of American Cemetery Superintendents in promoting higher ideals in cemetery management and improvement has been vastly beneficial, and, in fact, since the organization was effected and a community of interest between such officials established, progress has been marked and rapid. The influence of the large landscape cemeteries is radiating with potent force and bringing other burial places within range of that influence into line for up-to-date improvement. And the understanding of the meaning of these improved conditions is extending farther and farther, and information is constantly coming to hand that a local cemetery here and another there are adopting the methods now in vogue for making the cemetery beautiful in all senses of the word, so far as conditions will permit. But there is much to be done still. The ideal cemeteries may be counted on the hands. There is a broad field to cover and education is yet needed in all directions to impress the mind of the average citizen with the desirability of contributing either of his means or intelligence to further the cause. The work must not be permitted to flag and this new year in a new century must be made to tell as an augury for the future.

**THE
PALISADES OF
THE HUDSON**

It will be a source of gratification to our readers to learn that the prospects for preserving the Palisades of the Hudson river are now as bright as were the probabilities of their utter despoliation a few months back. The joint commission, appointed by the states of New York and New Jersey, which, although serving without pay, have proved an admirable and praiseworthy agent in the work, with resources not often displayed by such bodies. The commission was provided with \$15,000 for its requirements, which instead of squandering in clerk hire, printing bills, office rent, etc., expended the greater part of it on a first payment on the Carpenter quarry, the scene of the most disastrous spoliation of scenery, and where still worse was imminent. Having made good this option as a wedge, the commission secured the co-operation of some wealthy citizens of New York, who have agreed to secure the balance of the amount required—some \$132,500, and so it would appear that the historic and beautiful Palisades of the Hudson are to be preserved to the public for ever. The work of the commission will not end with the purchase of the property, but the effort to obtain funds with which to develop the tract will be continued with a view to elaborate one of the most attractive public parks in the country, to which the natural conditions of the locality contribute to a remarkable degree.

* * *

There is a suggestion conveyed in the above which must not pass without emphasis. It lies in the fact that the comparative ease with which the above results have been so far attained promise satisfactory solutions to similar projects over the country, provided similar or equally effective methods are used. From first to last in the progress of the effort, the end to be attained was the only object sought. There was no side-tracking of either funds or energy, and it goes to show that commissions can be appointed from the intelligent citizens of the country of sufficient patriotism to work for the object to which they were appointed and to do it well. There are many localities of surpassing interest in the country that should be preserved to its citizens, places that should never be exploited by man except for the benefit of the higher requirements of his fellow man. In this work the general government should take the lead, for wherever such natural beauty spots exist, it means so many Meccas for the pleasure seeking traveller. In such work it would be to the actual benefit of the states interested to co-operate, and the task if undertaken without delay will be far easier than if postponed indefinitely.

BEECH TREES.

Of the many varieties of beech in cultivation all may be said to belong to the English *Fagus sylvatica*. Our native kind, *F. ferruginea*, has no varieties that I am aware of. The English and our native beech really comprise nearly all the beeches known. There are two species from Terra del Fuego and one from Chili, the latter hardy in England but none of these are much known in cultivation.

The two types, the English and the American,

when they fall to the ground. The native kind holds its foliage all winter to a less extent. This character of holding its foliage has made its usefulness for wind-breaks apparent, and it is quite common to see it used in situations where its sheltering properties are valuable.

There are several varieties of the European beech in cultivation, the most valued being the blood-leaved, weeping, cut-leaved and fern-leaved. The first of these, the blood-leaved, is a universal favorite because of its deep red leaves in spring.



FAGUS SYLVATICA: VAR. PURPUREA. (Blood leaved Beech.)

though often spoken of in libraries and other works as being very nearly alike, are not in the least like one another. The newest hand in a nursery can tell them apart easily, leaves, growth and wood being quite different. The larger, less shining leaves and less lusty growth characterizes the native species in the summer season. In the fall the leaves turn brown at the time those of most other trees do, and when they fall the very light-colored bark is displayed.

The European beech makes a quite twiggy growth. Its leaves are of a shining green and these remain green very late in the season. When they do decay they rarely fall off at the time, but remain on the tree until the sap rises in the spring,

The leaves are fairly dark as they unfold but as they get toward full growth the color deepens until about six weeks have elapsed when they are almost black. Soon after this the leaves are gradually less dark but till the end of the season there is a purplish copper colored hue which exactly fits many a place in the lawn.

Strangely enough, because the parent is such a twiggy grower, this variety is not at all bushy when young and gives no promise then of the beautiful form it acquires as it gets some age.

The beautiful specimen illustrated, which is growing near Horticultural Hall, Fairmount park, Philadelphia, well represents the tree as usually seen when of that size. And this gives the oppor-

tunity to say that the native beech has a very stiff upright habit of growth, quite unlike this one, which more represents its parent, the European, though even this, the European, does not make the rounded outline of the blood-leaved.

Some confusion exists as to what is the difference between the blood-leaved and the copper beech. Most nurseries make the distinction this way. Blood-leaved or purple beech are raised entirely from a sort known as Rivers' blood-leaved, by grafting. Copper beech are those raised from seed of this beech. These seedlings are rarely pure blood-leaved but are lighter (copper colored) hence the name copper beech. Occasionally a seedling may be of a real dark color but the rule is for them to be somewhat lighter.

The weeping beech is a variety greatly used. Its growth is somewhat of a fantastic nature. The branches have no uniformity about them, but grow irregularly. All droop eventually but some grow at different angles before they take on the downward growth. The remark is sometimes made that it is not pretty. But it is just its irregularity of outline which makes it so desirable, as there are always positions calling for just such a tree.

The fern leaved and the cut leaved beech are quite distinct, though the names are often applied indiscriminately. A fern leaved beech has very much more finely dissected leaves than the other. It is, too, of much more bushy habit of growth. In catalogues the fern leaved is called *aspenifolia*, the cut leaved, *heterophylla*. Another distinction is that the fern leaved is not as rapid a grower, its efforts being more in the way of making numerous shoots. As all these varieties are usually worked on the same stock, either the native or the European, it would be natural to suppose all would transplant alike. Not so, however. The fern-leaved must have a severe pruning to get it to transplant safely. All the kinds need a good pruning at the time of removal but give the fern-leaved a particularly severe one. It is probable this comes from the greater amount of wood it carries than others of the same age.

On many old estates about Philadelphia there are grand old beeches of all kinds. Some of the blood leaved ones must be one hundred years old and these giants when in full display of almost black foliage in the early days of June are wonderfully beautiful.

Joseph Mechan.

Many states are becoming actively interested in tree planting and prospects are good for a large increase in such work this year.

FLOWERING TREES FOR ORNAMENTAL PLANTING —III.

The species of crabs most used in America for ornamental planting are *Pyrus spectabilis*, *Pyrus baccata*, *Pyrus prunifolia*, and *Pyrus coronaria*. *Pyrus arbutifolia* and *Pyrus betulifolia* are also used but not as commonly as the first four species. Of these *Pyrus baccata* is the first to bloom. There are many forms of this species, which comes from Northern and Eastern Asia. One of these is obtainable from the nurseries under the name of *P. Malus floribunda* and is one of the most beautiful of all flowering trees, by which term I should have explained before that I mean trees with conspicuous flowers, as of course all trees except tree ferns, have flowers. I am following the best authorities available to me in giving the name *Pyrus baccata* to the species I am describing. Some botanists reserve that title for the Siberian Crab, others call the Siberian Crab *Pyrus Malus prunifolia*. It is the latter that I am content to agree with, as I make little pretense to botanical skill.

The tree usually sold, then, under the name of *Pyrus malus floribunda*, is much planted by the Japanese, and was introduced to Europe by Siebold about twenty-five years ago. It is a low, spreading tree, perfectly hardy and of rapid growth. The flower-buds are a bright carmine color, but the inner surface of the petals is white. There are other varieties of this tree, some with pure white blossoms. One of them is the much-advertised *Pyrus Parkmanii*. This grows into a symmetrical tree rather more upright in habit of growth than most apples are. Here it does not exceed fifteen feet in height and has pretty semi-double pink blossoms and buds of a deeper pink.

Other flowering apples come from Japan under the names of *Pyrus Kaido* and *P. m. Toringo*. These have variegated flowers and *P. m. Toringo* has pretty yellow fruit.

Pyrus m. spectabilis is the Chinese Crab and sometimes grows 25 feet in height, blooming a little later than the varieties we have been considering. It is offered in several forms. The flowers are very abundantly produced before the leaves are full-grown and are semi-double, white in one kind and delicate pink in another. Perhaps the best variety is River's Crab, which has beautiful fragrant double pink blossoms like white roses. These trees are sometimes quite fastigiate in habit, and therefore do not need as much room in which to develop properly as many other apples require.

Latest of all to bloom is our beautiful native crab, *Pyrus coronaria*. This is sometimes found in the wild form as a stout tree thirty feet in height. The flowers, white or pale pink, measure nearly

two inches in diameter when fully expanded, and do not open until the young foliage is nearly full grown. They have a delightful fragrance and the trees in flower are a charming sight and might be planted to advantage on the margins of copses and woodland. The greenish, waxy fruit is often tinged with red when fully ripe, and is very ornamental as well as pleasantly fragrant. These trees are found south of the Great Lakes and in the Alleghanies. Settlers used to plant them about their homes and use the fruit for preserves.

There are several cultivated varieties. Probably the best of these comes to us from Staunton, Ill., under the name of Bechtel's Flowering Crab. It has very large, beautiful, double pink flowers, very sweet-scented.

Many Siberian Crabs are desirable ornamental trees, beautiful in flower and in fruit, though they are not used so much for æsthetic as for utilitarian purposes.

Pyrus arbutifolia is a very small tree or large shrub, seldom taller than seven or eight feet. It improves under cultivation and has charming white flowers in corymbs, followed by pretty, red berries as large as small cherries. These are astringent, hence the common name of the tree, which is Choke-berry. The foliage colors beautifully in the fall and does not drop until nearly all the forest trees are bare.

The White Beam, *Pyrus Aria*, is not planted in this country as much as in England. It makes quite a large tree and grows rapidly in good soil. It has broad, silvery foliage and is a valuable tree, especially for exposed situations. There are several varieties. *Pyrus Aria Kostii*, according to Mr. Robinson, "is a handsome tree both in foliage and flower. Its leaves are large and silvery and its delicate rose-pink flowers are in broad, flat clusters. It is a Central European tree, perfectly hardy and about ten feet high."

I quote Mr. Robinson, because I have not had any experience with this tree.

Leaving the apples, we come to their near relatives, the Thorns. This is a large group and when they do well they are very ornamental. With me they are not satisfactory, as some of them do not bloom at all and some are badly infected with leaf blight. Two kinds, however, meet all my requirements as valuable and beautiful little trees, perfectly healthy, and flowering profusely every year. One of these is Paul's Double Scarlet Thorn, a variety of the English hawthorn, *Cratægus oxycantha*. As grown here it forms an upright little tree covered in May with very double, deep rose-colored blossoms in clusters, that look like tiny roses. They are not really scarlet as

any one can see by comparing the color of the blossoms with that of a scarlet geranium. Quite near it in the Thorn group is planted the so-called Evergreen Thorn, *Cratægus Pyracantha*. This is perfectly hardy here, and forms a low tree or bush, spreading over the ground, and should be planted on the margin of groups of larger trees. It has rather small narrow evergreen or nearly evergreen foliage. I say nearly evergreen because in severe winters the leaves brown so that the tree loses its appearance entirely. It has pretty clusters of small white flowers in May, succeeded by beautiful orange scarlet berries.

Where one variety of *Cratægus Oxycantha* does well the others may be expected to thrive also and our dealers offer nine or ten different kinds that would probably flourish here, but we have not tried them. About their beauty and desirability for parks and large grounds there can be no doubt. English hawthorns are much used in the public grounds in Washington, where they make very fine specimens.

Besides English Hawthorns there is *Cratægus Azarolus* from the Levant, which is of very spreading growth and sometimes attains the height of twenty feet. This has beautiful fruits as large as hazel-nuts.

Strange to say it is the American Thorns that will not thrive for me. I don't know why. *C. coccinea*, *C. Crus-galli* and *C. Douglasii* will not bloom, though they have grown to quite large size. I often see the two former species and also *Cratægus cordata* and one or two other species in this neighborhood growing wild in our marshes and copses, and flowering profusely in the spring, but they do not thrive on the dry hillside where I have tried to establish them.

Cornus Florida and its variety with pink blossoms are perhaps the most conspicuously beautiful of the trees that flower in May. In our woods and copses Dogwoods are often thin and leggy in habit of growth, and, overshadowed and crowded by other trees, the bloom is sparse. But planted in rich soil and given plenty of room to develop they make beautiful symmetrical trees often twenty feet in height and of umbrella form. When they bloom they seem to have foliage of flowers so completely are they covered with their large blossoms often three inches in diameter.

The variety with pink blossoms was discovered in the Virginia woods about fifteen years ago. When the flower bracts appear they are small and dull red in color but every day they increase in size and gradually change to the delicate pink of the Wild Rose.

Two fine Dogwoods, one with white blossoms,

and one with pink, are planted about fifteen feet apart at Rose Brake. They are, when in flower, the most striking objects in the grove. Again in the fall their bright coloring makes them exceedingly attractive. The foliage of the white variety turns beautiful shades of salmon and light claret while the pink flowered variety changes to a fine deep red. Another peculiarity about these specimen trees is that the pink-flowered variety retains its foliage a week or ten days later than the other. This may be owing to the fact that they came from different localities, one much farther north than the other.

I have often noticed in the spring woods in this neighborhood the beautiful effect of Dogwoods and Redbuds growing together along the margins of open woods and copses. The two trees bloom at the same time and are admirable contrasts. Here, where the Red Cedar is indigenous, it is not uncommon to see them fringing large masses of these evergreens, which form an admirable background for the display of their beauties. On rugged hillsides the combination of huge grey limestone boulders with the dark forms of the cedars in groups here and there, interspersed with Dogwood and Redbud trees garlanded with bloom, is a very beautiful one and one from which landscape gardeners can gain some useful hints. Here at Rose Brake is a natural ledge of limestone crowning a low hill, with many cedars growing as Nature planted them among the rocks, and here I am planting young Dogwoods and Redbuds in front of the cedars, trying to make just such a picture as I have often seen in our woods and I feel sure that, when the trees are grown there will be no more beautiful group on the place.

The Japanese Redbud does not grow so fast here as the native variety, nor does it form a tree at all, but a rather low shrub. It is not so hardy as *Cercis Canadensis* and may do better farther south.

Cornus Mas. is an important little tree for its very early yellow flowers and should be in every collection. As the flowers come before the leaves, are bright yellow and produced in masses that cover the branches, it is a showy object when in bloom. It is also valuable for its bright red fruit the size of a small cherry, which has gained the tree its common name of Canadian Cherry. It sometimes reaches the height of twenty feet. It is a long-lived tree and improves with age. A very showy growth can be made by planting this *Cornel* with *Forsythia* and *Jasminum nudiflorum*.

There are many other interesting plants in this group but they come under the head of shrubs rather than trees.

Cornus alternifolia, however, attains the height of twenty-five feet in rich soil and has cream-colored flowers in large flat cymes. The fruit is bright blue on reddish stalks.

Cornus Kousa from Japan, resembles *Cornus florida* in size of flowers and general habit of growth but is not so handsome when in bloom as our own native plant. I do not know whether it is quite hardy in the north and do not think it possesses any superiority to *Cornus florida*.

Cornus Nuttalli is the western representative of the large-flowered Dogwoods, and is very beautiful where it succeeds, but is said to be a failure in eastern parks. In its native habit it often becomes a large tree 60 feet high, with flowers from four to six inches in diameter.

When the Dogwoods bloom the *Halesias* keep them company with branches hung with myriads of little white bells, which somewhat resemble *Snowdrops*. *Halesia tetraptera* is the showiest form of this tree. It grows to the height of thirty feet, and is, with us, of rather spreading growth with slender branches. When in bloom a group of these trees is a very striking object, but the blossoms drop very soon. They should not be crowded up with other trees, but given plenty of room and a conspicuous position.

Halesia diptera does not attain the same height as *H. tetraptera*, nor is the bloom so showy, but it is an exceedingly graceful little tree. The blossoms are cream white and the green seed vessels are interesting.

Staphylea trifolia is sometimes classed as a shrub but it is usually found in our woods in tree shape, though not over ten or twelve feet in height. It is, under cultivation, an elegant little tree of upright habit of growth, and abundant cream-colored flowers in drooping racemes very freely produced, along the slender branches, giving it an exceedingly delicate and graceful appearance, in company with the light green turnate leaves. The curious bladder seed pods are quite ornamental and are of a lighter green than the leaves. The other *Staphyleas*, *S. colchica* and *S. Bumalda* come from Asia and are true shrubs. *S. Colchica* has flowers with the fragrance of orange blossoms.

Danske Dandridge.

THE THURLOW WEeping WILLOW.

The illustration herewith represents one stem out of five, all one year's growth, from a cutting the size of a lead-pencil planted a year ago last spring. The young tree was damaged by a very severe frost the fall before and it was cut down in the spring.

This last year five stems came up. One grew

over thirteen feet high, two others twelve feet and two ten feet. The aggregate height was fifty-seven feet and one foot from the ground, the aggregate



THE THURLOW WEEPING WILLOW.

circumference of the whole was $24\frac{1}{2}$ inches, making the most remarkable growth the writer ever saw in any tree.

In the fall of 1893 the writer made a first visit to New England and on the grounds of Mr. T. C. Thurlow saw a most beautiful and graceful willow. The main stem was straight as an arrow and the slender branches were drooping. Some trees like Teas mulberry and Kilmarnock and the mountain ash weep like those without hope. Every branch turns earthward. But while this weeps there is something triumphant and victorious about it. It is all the while aspiring heavenward. Mr. Thurlow supposed it to be a Wisconsin weeper as he secured it with a lot of that variety. It is, however, in no way related to them but different in every way. Being so much impressed with it, some cuttings were taken home to western Nebraska where they were planted. They killed back the first winter but went through the second all right. A description was written of it for the Nebraska horticultural report, and the writer named it the Thurlow willow and it was accepted by that gentleman. In the meantime three years of drouth had killed the western planting, but others were set out at Weeping Water in the east-

ern part of the state. Two excessively dry years were hard on them, but they passed through the terrific winter of '98 all right. No willow succeeds on the dry plains of the west unless planted in wet ground or by some stream. But it is certain that this will do well where others will succeed, as far north as central Iowa, and as far west as Lincoln and Topeka, while for the central states it must be a success. These trees are growing in Massachusetts, some of them with drooping thread-like branches 15 feet long. They were of extreme grace and beauty. For roadways where the ground is moist, the effect would be fine. In the west the limbs do not begin to droop as soon as in the east. The best way to propagate is by cutting.

C. S. Harrison.

DIERVILLA PRAECOX.

Flower large in horizontal or slightly pendant trusses; tube rose carmine with a carmine base, the throat marked with a yellow band edged with carmine, the lobes rosy-mauve, half open; height 4 to 5 feet.

This beautiful species was introduced in 1894, its home being Japan. As its name indicates it is early flowering and by far the earliest of our Diervillas. The photograph was taken May 20th, 1900, and shows a three-year-old plant. I imported the plant shown in the illustration from the well-known nurseryman, V. Lemoine in the fall of 1897. It was at that time only a spring cutting but has shown a surprisingly vigorous growth and went through the memorable winter of '98-'99 without the least injury, thus proving that it is perfectly



DIERVILLA PRAECOX.

hardy in these parts. It is very floriferous and showy and its large, strong foliage makes it a desirable shrub even when not in flower.

James Fensen.

STREET TREES.

Trees have a sanitary effect upon cities. They serve to equalize the temperature, reducing it in warm weather, and raising it during cold. They cool the lower stratum of air during warm periods. They purify by utilizing certain gases noxious to man and setting free other elements beneficial to him.

Obliterating the forests and covering the earth's surface with stone, brick, tin, etc., disturbs the natural forces in a manner detrimental to human life. The existence in a city of arboreous vegetation is of greater value than that of herbs or shrubs by reason of the much greater leaf surface exposed than occurs with the latter.

Trees in health and performing their normal functions while exposed to the light, take carbon dioxide from the air. The carbon becomes fixed as the woody fibre, and oxygen is set free. To man, oxygen is a beneficial part of the air he breathes. Carbon, a waste product of man is injurious to him. Therefore it may be said:

1. Trees purify the atmosphere.

Transpiration is a normal function of vegetation. Moisture from the soil is taken up by the roots and distributed in the tree. In the process of conduction and assimilation of food, incident to growth, moisture is liberated in the form of vapor. Vaporization cools as is illustrated by ether. Consequently, it may be concluded that:

2. Trees act as a refrigerant.

Nutritious soil, in a mechanical condition favorable to tree growth and provided with a suitable source of moisture, enables a growing tree to transpire more freely (within certain limits,) the higher the atmospheric temperature rises. Following this condition we may say:

3. The refrigerant power of growing trees tends to increase with the rising of atmospheric temperature.

The moisture taken up by the warm atmosphere during evaporation causes a diffusion in the air of a medium which prevents the escape of heat from the earth, consequently:

4. Trees prevent solar irradiation from the earth.

By their shade, trees protect the earth from the direct rays of the sun. This tends to prevent the earth from reflecting heat and rapid drying, and to prolong the period during which surface water is evaporated.

During all seasons, trees maintain a mean temperature of 54 F.

If the atmospheric temperature is 67 F. or above, the temperature of the tree is the lower, but if below 67 that of the tree is the higher. It follows that:

5. Trees are equalizers of temperature and humidity.

Contrasting the above statements concerning trees, are the following concerning conditions peculiar to urban life and man. It is hoped that together they will present sufficient evidence to clearly demonstrate the truth of the abstract statement occasionally made that trees are of a sanitary value to city folk.

The mean normal temperature of man when in health is 98.6 F. A part of the heat generated by the body is converted into force. Some is lost by evaporation, radiation, and transmission to other bodies. Should the surrounding temperature be unduly increased, that of the body adjusts itself by added expenditure; should it be less, added heat is generated by the body.

An inherent constitutional power of man adjusts the temperature of the body so that whatever the atmospheric temperature may be:

1. The mean temperature of the healthy body is 98.6. The extremes of variation in temperature of a healthy person are from 97.25 to 99.50.

If the air is dry a person may endure for very brief periods, a temperature of 200 and even more. But if under such circumstances a rapid evaporation and radiation is impeded the temperature of the body would rise and threaten, or actually cause death. Any rise of temperature above the normal in man involves danger to human life. Therefore:

2. Abnormally high temperature in the human body is dangerous.

3. Sometimes it is dangerous to have the loss of heat from the body impeded.

In addition to direct solar heat there are numerous sources which contribute to the rise of temperature. Besides that from the human body the principal are fires from dwellings and factories. Hence:

4. In the summer artificial heat tends to raise the atmospheric temperature to an unwholesome degree in cities.

During warm weather the putrefaction of vegetables and animal matter, and liquids is rapid and their gases when in contact with the blood tends to create heat. Eating, drinking and breathing are the means of their entrance into the body.

Death is one of the serious results of excessive heat, other and potent, though usually less serious results are visited upon the human being. They are sunstroke, abdominal affections, emaciation, devitalization and various chronic diseases. Therefore:

(4) A warm (i. e., above 60 F.) temperature causes a rapid decomposition of certain matter, the gases of which when introduced into the blood generate heat.

(5) Excessive and prolonged heat causes devitalization, sickness and death.

From the above it is evident that trees have a wholesome influence upon the residents of cities by purifying and cooling the atmosphere and affording shade.

Emil Mische.

* * *

Protection of Street Trees.

Bulletin No. 131 of the Connecticut Agricultural Experiment station is mainly a report of a sub-committee, which was adopted by the general committee appointed by the citizens of New Haven, Conn., to study and confer regarding the unsatisfactory condition of the street trees in that city. The work was carried out chiefly by the station staff, under direction of Mr. W. E. Britton, horticulturist, hence it was appropriate that the station should present the results to those interested.

Speaking of the varieties of trees suitable for street planting the following are advised: Elm, Sugar Maple, Red Maple, Norway Maple, Pin Oak, Tulip tree and Sycamore. Varieties of the Oak and Linden, under proper care and conditions, are also suggested for trial.

The work of the committee is summarized in the following recommendations, from which suggestions may be gathered applicable to city and city square trees practically, throughout the country.

1. The rigid enforcement of those city ordinances which forbid the bruising, injuring, or destruction of trees, and the fastening of animals to trees in such a way as to injure them.

2. That all trees standing within reach of horses in the street be protected by frames or wire netting, so that they cannot be mutilated.

3. That when limbs are removed from trees, greater care be exercised to cut them smoothly, close to and even with the trunk and without tearing the trunk bark. The exposed wood should be painted with coal tar.

4. That the stringing of electric wires be done only under the supervision of the board of public works, and that this supervision be paid for by the company doing the work.

5. That when trees are killed by gas leakage from the mains, the owners of the mains be required to pay to the city the cost of the removal of the trees killed and of planting new trees in their places.

6. That the land under trees in the city parks be annually dressed with lime and with odorless fertilizer of the composition named, at a cost of from \$11 to \$12 per acre.

7. That on new streets, when the building line is far enough from the street line, it is desirable to plant just in front of the property line, rather than just back of the curb.

8. That the elm trees on the green and other interior

parks of the city be sprayed regularly for a few years and thereafter as seems necessary, in the way prescribed. For this purpose the city should buy a spraying outfit of approved construction, such as has been described, costing about \$500.

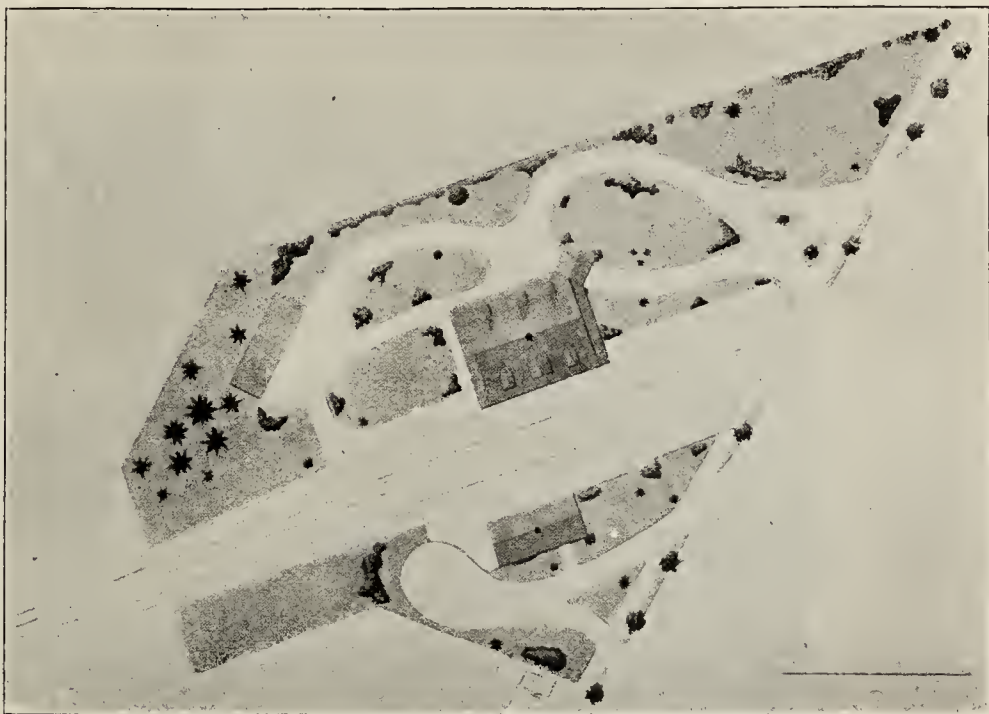
9. That in winter systematic search be made in all belfries and towers of public buildings and that the elm leaf-beetles, which winter in great numbers in such places, be gathered up and destroyed.

10. We also recommend the permanent employment of a City Forester, who should have charge of the trees in all respects.

11. That, in case such an officer be employed, the city have a nursery of from three to five acres at Springside Farm, where trees suitable for planting on the streets and interior parks can be grown.

MILLIS, MASS., STATION GROUNDS.

The Millis, Mass., railway station grounds, developed a few years ago from designs by Edward P. Adams, landscape architect, Boston, Mass., and under his supervision presents some features not usual but nevertheless very desirable. Persons in carriages alight under cover and there is also a convenient horse shed. The freight house is on the opposite side of the tracks from the passenger station while the driveways are laid out in graceful curves and adapted to every contingency. The design as a whole is appropriate and attractive. An excellent feature connected with this station is its library and reading room in the second story. This is well equipped and is worthy of be-



RAILROAD STATION GROUNDS AT MILLIS, MASS.

ing adopted in many country railway stations. A number of prominent railroads of the country are actively engaged in improving their station grounds, but the work is only in its infancy, for the field is very large.

IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

INTERESTING THE PUBLIC IN IMPROVEMENT WORK.

In devoting our space this month to suggestions regarding the best methods of interesting the public in the work of improving every-day surroundings, we feel that some practical good should result. Not that there is anything new or novel in the special means recommended, for it has been successfully tried in numerous instances, but because there are many new organizations that may not be familiar with it.

We believe that there is no better method than the "illustrated talk." When subjects, speakers and slides are selected with discretion to meet local conditions and necessities, the result is invariably satisfactory. Slides showing actual changes wrought by means of planting, such as the two shown in the illustrations given in this department last month, can not fail to impress all who see them, especially if accompanied by intelligent explanations and clear, practical suggestions.

When money is not available for securing a professional to give such talks, it is quite possible to compile an address from the writings of others to fit almost any series of lantern slides, or someone

at a distance may be engaged to write a lecture to be read in connection with slides that may be available.

Every improvement society should secure good negatives of as many "horrible examples" in their own town or community as possible, as well as others of good features of planting in their own vicinity as a stock to be drawn upon for effective lantern slides as they are needed.

Views of simple, home planting similar in character to the accompanying illustrations make good slides. With them it is easy to show the advantage of a preliminary plan in the placing of even a few plants in a small garden. If, as in the case these views represent, some one crowds a little house right up against your lawn, with its inquisitive windows overlooking your grounds, your verandas and your movements; this example clearly shows how one indefatigable gardener (a woman) raised a series of charming screens as shield and buckler against inquiring eyes, while at the same time improving her own outlook as well as making pleasant shade for her neighbor's windows. By mingling a little kindly tact with her gardening every one concerned escaped with feelings intact, the moral atmosphere remaining as serene as that of the garden was peaceful. It would, indeed, be an unusual and thoroughly undesirable neighbor who would object to the invasion of air delicious with the rare fragrance of blossoming honeysuckles, or to the velvety faces of hundreds of clematis blooms



"AS SHIELD AND BUCKLER."

First shrub at the right (as you face the picture): Tartarian Honeysuckle; low, large-leaved herbaceous plants to the left of the Bush Honeysuckle: *Funkia grandiflora alba* and *F. variegata undulata*; vine on frame before the first window at the right: *Clematis Jackmanni*; next herbaceous plant that is very noticeable is a large fern, (*Asplenium*); the bare fence back of the fern was formerly concealed by a well-grown *Lonicera Halleana* which was killed to the ground by the extraordinarily severe winter of 1897-1898, but is making good new growth; large shrub in front of middle window: *Philadelphus coronaria* in full flower; vine (looks very like a shrub) in front of third window from the right: Minnesota Honeysuckle, also in blossom.



2. A LITTLE LAWN WITH MASSED BORDERS.

First tree in background at the right (facing the page) is a worthless apple sprout left to fill up until a fine young flowering crab is sufficiently grown to permit cutting out the apple; next tree in the background (showing light in the illustration) is a summer pear in the fruit garden beyond the ornamental border; next prominent tree is an old peach, of excellent variety and bearing record, which occupies the middle of this view and shows dark in the picture; on either side of the stem of the peach glimpses of the fruit and vegetable garden are seen, the poultry netting supports for a long double row of sweet peas also shows slightly; to the left of the peach a large and old snowball (*Viburnum sterile*) shows in a rather confused mass with large trees that stand far beyond it, most of them being outside of the grounds; then comes shrubs and vines and plants too mixed up in the photograph to be defined; next to the left, near the house, vines on a tall stump: *Clematis Jackmanni*, *C. paniculata* and *Akebia quinata*, sometimes supplemented by climbing *Nasturtiums* or *Dolichos lab-lab* (*Hyacinth bean*) because there are really two tree trunks with a space of about four feet between them to be filled and draped; next plant prominent in the illustration is the feathery-looking *Eulalia gracillima univittata*; and lastly, at the point of the border nearest the house: a clump of French cannas, variety *Souv. d'Antoine Crozy*. Turning back from this point and looking along the lower plants visible near the front of the border, there are a number of such low-growing roses as *Agrippina*, *Heimosa* and *Clothilde Soupert* and a group of double and single Japanese *Anemones*; back of these are some Hybrid Remontant roses, a *Hydrangea paniculata grandiflora* and a big plant of Burbank's orchid canna. In front of all of these plants of medium height are *Hypericum Moserianum*, and such tender bedding plants as rose, white and crimson eyed *Vincas*, the new *ageratum*, *Stella Gurney*, and climbing *nasturtiums* among the vines. Beyond the large *Canna* there is a spreading bush of the hardy June rose (*Madame Plantier*) white, and around it several plants of *Salvia splendens* that grew to almost shrub-like size and proportions and made a gorgeous fall display. Across the opening into the fruit garden, to the right of the peach tree, stands a large shrub of *Spirea Van Houttei*; in front of it and a little to the right an immense plant of *Cyperus alternifolius* shows quite distinctly, and along the front of this side of the border a rather deceptively even and regular looking line of dwarf *nasturtiums* finishes the border against the grass, leaving a crowd of pretty things, out of bloom at the time, in an indistinguishable mass beyond, although a few blades from a large and effective clump of *Eulalia Japonica variegata* peep into the edge of the picture.

peeping in at his windows. The fact that some one else cultivates and prunes, waters and trains such vines, does not detract from satisfaction in their sweetness and their beauty. If, in addition, the owner of such floral wealth is fairly generous with cut flowers, objections to this flowery armor are not likely to be made.

Almost any community furnishes similar examples of the sweetness and light afforded by growing plants, and all such should be made to yield fruit in the shape of lantern slides for use in bringing home a full realization of the good results of Improvement association work.

NOTES.

The Old York Historical and Improvement Society of York, N. H., has voted to give \$100.00 towards a proposed drinking fountain for the village and has appropriated the same amount for

beautifying the village streets by planting trees, shrubs and vines.

* * *

The ladies of the Park Improvement Association of La Salle, Ill., are meeting with some difficulty in interesting the women of that city in their work. Their society was formed for the express purpose of making a city park. The ground has been secured, some drinking fountains have been donated, the city is doing a certain part of the preliminary work and the ladies intend to step in and add the necessary beauty when the right time comes. There seems, however, to be no general plan or design for the work, which would appear to be a great mistake.

* * *

One or two features of the practices followed by the South Deerfield (Mass.) Improvement society, as given by its president, Mr. George W.

Wood, are unusual and suggestive. The society was incorporated in '96; its aim is to beautify the village; it has built good sidewalks and made a strip of lawn outside of them, both of which it maintains; gives prizes for the best collection of flowers in three varieties; interests the public in its work by each member "showing his neighbor how *his* neighbor keeps up his lawn;" has set out 75 street trees this year; and *hires a ball ground* for the use and pleasure of the town boys. Is not this last feature a "new departure" and one worthy the consideration of other organizations?



A NICE EFFECT.

This shows a part of the border next to the house seen in the preceding illustration, but from a different point of view. The former shows the lawn and borders as seen *from* the street; the latter gives a glimpse looking from near the peach tree *towards* the street. Indeed, some drooping foliage of a Cinnamon vine seen in the extreme left hand upper corner of the picture are a part of the vine drapery on a branch of the tree. On the right is seen the same tall Burbank Canna standing among blossoming Salvias; beyond, a part of the vine screen near the house suggests to some extent its bulk and importance in the decorative scheme; near the veranda, the almost perfectly symmetrical plant of that valuable hardy grass, *Eulalia gracillima*, shows to good advantage; and outlined against it, some of the flowers of the invaluable fall-flowering white *Anemone Japonica* are plainly visible, as are also a few stray sprays of *Vinca rosea* and *alba* and of *Ageratum*. The large shade trees next to the street are soft or Silver Maples and part of a beautiful little Siberian Maple standing in a group of hardy Japanese maples near the gate, is also seen.

* * *

The Rev. Chas. J. Bethune, vice-president of the London (Ontario, Canada) Horticultural Society, reports that their society, although only organized in January last, has already given two very successful flower shows, several lectures, and has distributed among members shrubs, bulbs, etc., all for the purpose of cultivating and encouraging a taste for better surroundings, and to lead them to pay more attention to their lawns and gardens as well as to develop an interest through these means

in public streets and in parks. He says that the residential streets of London are broad, and have a double row of handsome trees on each side, with a wide lawn in front of each house, and that no fences are permitted, a single low rail with posts being the most that is allowed. He justly adds that "little more is required to make these streets as handsome as any in North America." F. C. S.

PUBLIC PARKS AND RECREATION GROUNDS, SYDNEY, NEW SOUTH WALES, AUSTRALIA.

By the courtesy of the Under Secretary for Lands, of New South Wales, Australia, we are enabled to give the following on the control and management of the Public Parks and Recreation Grounds of the City of Sydney. These public grounds are not all controlled by the same Trustees nor administered under the same Act of Parliament. There are, principally, three classes:

First. Areas which are retained under the direct control of the Government and managed by its salaried officers.

Second. Areas which have been placed for purposes of management under Honorary Trustees.

Third. Areas which have been placed under the control of the Municipal Council of the city of Sydney.

In the first class are included the Government Domain, the Botanic Gardens, and the Centennial Park. These are under the supervision of the Director of the Botanic Gardens—a salaried officer of the Chief Secretary's Department.

The Domain and Botanic Gardens are administered under the Crown Lands Act of 1884, and the Regulations governing it are made in pursuance of Section 106 of that Act 48 Vic. No. 18. The Centennial Park, which adjoins the City on its Eastern boundary is administered under the Centenary Celebration Act of 1888, by the Chief Minister.

The principal Grounds under the control of Honorary Trustees (Individuals) are Hyde Park, Cook Park, Phillip Park, and Rushcutter Bay Park.

The first named (Hyde Park) is considered to be the most important of City Parks, and its administration, together with Cook and Phillip Parks, comes under the Public Parks Act of 1884, which is administered by the Secretary for Lands. The By-laws for the management of these Parks are made by the Trustees under that Act, subject to the approval of His Excellency the Governor and the Executive Council of New South Wales.

The areas of which the Municipal Council of Sydney are Trustees as appointed by His Excellency the Governor are Moore Park (or Sydney Common), Wynyard Park, Prince Alfred Park, Belmore Park,

and other minor areas. The Municipal Council are invested with all the powers given by the Public Parks Act for the control of these areas.

In addition to the areas referred to within the foregoing there is the Sydney Cricket Ground, an area of 12 acres upon which the sum of \$500,000 has in a period of 20 years been expended in improvements. These improvements consist of an oval or enclosure suitable for contests in the game of Cricket, Football, Baseball, and Lawn Tennis, and other athletics—and Pavilions and other buildings for the accommodation of spectators. This ground is under the control of the Honorary Trustees, of whom two, the President of the N. S. W. Cricket Association, and the Under Secretary of the N. S. W. Department of Lands are *ex officio* Trustees. In the surrounding Suburban areas, Parks and Recreation Grounds have also been established, and placed under the control of either the local Municipal Council or individual Trustees as may be deemed fit by His Excellency the Governor with the advice of the Executive Council, on the recommendation of the Secretary for Lands.

There are also on the Suburban boundaries of Sydney two Parks which are more national than local in their character and purpose. These are the National Park of about 36,000 acres at Port Hacking 15 miles South of the City, and Kuringgai Chase containing an area of about 35,300 acres 10 miles to the North-west, and including some of the inlets of the Hawkesbury River. These areas are under the control of Honorary Trustees, the National Park being administered by the Chief Secretary (by special arrangement) under the Public Parks Act, and the Kuringgai Chase being administered by the Secretary for Lands under the Crown Lands Act of 1884.

Deeds of Grant have in some cases been issued, but it has in later years been found more convenient to vest the control by gazettal of appointment of Trustees by His Excellency the Governor as may from time to time be necessary, and to have By-laws and Regulations conferring necessary powers on such Trustees put into force. For the better regulation and control of such Trusts, the Public Trusts Act of 1897 has been enacted and is now in force.

Dedications of Public Parks and Recreation Grounds may be wholly or partially revoked and the Trusts annulled for any of the reasons stated in Section 105 of the Crown Lands Act of 1884, and the lands thereupon become vested in Her Majesty the Queen, to be dealt with as His Excellency the Governor with the advice of the Executive Council may think fit.

By Section 104 of the Crown Lands Act of 1884 a proposed dedication of Crown Lands for

Public Parks must remain before Parliament for one month without disallowance before it can be gazetted, and a similar provision exists as regards a proposed revocation of any such dedication under Section 105 of the same Act.

The Parks of the City of Sydney, except Rushcutter Bay Park (which was partly resumed and partly reclaimed from Rushcutter Bay) are areas which have been held in the hands of the Government for such purposes, but in any case where the necessity for a Park arises, private lands may be acquired for the purpose under the "Lands for Public Purposes Acquisition Act" of 1880 and the Public Works Act of 1888. The condition precedent in this is, that the Parliament of New South Wales shall have appropriated funds to acquire such lands, and His Excellency the Governor with the advice of the Executive Council may then issue a proclamation resuming the required land. Upon issue of that proclamation the land becomes vested in some Minister or Officer as Constructing Authority on behalf of Her Majesty, and the former owner's interests are converted into a claim for compensation, which is paid upon a satisfactory proof of title being afforded to the Government, after appraisal if necessary.

A sum of money for the maintenance and improvement of Public Parks is voted annually by Parliament, and then distributed in the form of subsidies by the Secretary for Lands. In some cases annual amounts are voted specially for maintenance of the Parks out of State funds; Hyde, Phillip and Cook Parks are maintained in this way, and also the National Park; but, in the latter case, the Trustees have power to derive revenues by leases for coal mining and other purposes. In the case of suburban and country parks, it is held that there should also be local contributions for their maintenance.

In addition to the parks and recreation grounds more permanently established by proclamation or dedication, there are also areas in more sparsely settled localities, temporarily reserved, and placed under temporary trustees under the Public Trusts Act, Section 1. These are cases where the conditions may be likely to change, and the areas be required for other purposes; or where it may be found that other areas will be more suitable.

It will be understood, from the foregoing, that, although the Government may, except in a few special cases, delegate the management to trustees, yet there is a supreme control still retained; and which may be exercised to the extent of annulling the Trust and placing the land again under the direct control of the Government if deemed expedient in the public interest.

THE GEORGE M. PULLMAN MEMORIAL, GRACELAND CEMETERY, CHICAGO.

The George M. Pullman Memorial, Graceland cemetery, Chicago, was erected from designs of Mr. S. S. Beman, archi-

esplanade is fifty feet and its width is twenty-four feet. The total height of the column from grade is forty feet. The shaft is a monolith two and one-half feet in diameter and twenty-seven feet long, exclusive of base and capital, weighing some 50,000 pounds



THE GEORGE M. PULLMAN MEMORIAL, GRACELAND CEMETERY, CHICAGO.

tect. The ruling feature is a Grecian Corinthian column which is set in the centre of an elevated esplanade, rising three steps above the lawn level. At each side to the right and left of the column are circular granite seats. The extreme length of the

The memorial is located in the centre of a lot measuring 138 by 85 feet, and fronts on two avenues. The entire monument is built of Hallowell granite. George S. Bodwell, contractor. The illustration is by courtesy of *The Inland Architect*, Chicago.

PATHS AND PRINCIPLES.

The elementary principles of Art and of the various arts have been so long taught, so widely learned, and have been the subjects of so various writings and so many text books, that any further rehearsing of them might seem to be superfluous.

Yet the work of all kinds that is turned out shows ignorance far more pervading than knowledge in spite of all the teachings and writings of those who know and those who do not. The things that are constructed or destroyed in empirical attempts or blind gropings, or in mere unguided whim, vastly outnumber the works of those who know the truth, or even of those who seek it with a single mind. Take for instance; Architecture. Flagrant instances of ignorance or disregard of its primary principles meet us at every street corner; and a book setting forth these primary principles has lately been published which has been found to fill a long felt want, not merely for the tyro, but for the experienced practitioner, to whom it is so commended in a preface by Mr. Russell Sturgis. If this kind of writing is necessary in so widely practised an art as Architecture, still more is it in Landscape Gardening. That it is necessary, the schemes that are constantly seen complacently committed to paper or to the surface of the earth show plainly enough, and they must serve as apology for printed remarks on the rudimentary rules for making roads and paths.

What is said here applies to Naturalistic gardening only. Roads and walks in the various phases of architectural or formal gardening are treated in a different spirit. They are often used mainly or entirely for their values as lines, or for the sake of balance or symmetry, or for some such purely aesthetic reason. In naturalistic gardening on the other hand, lines of travel are made almost entirely for utilitarian reasons, and in proportion as these reasons are not obvious, they lose their aesthetic value. The indefinite curves and contrary flexures of roads that follow the natural surface of the ground are beautiful in a way that is quite their own; but, so soon as they appear to be made for their own sake, they become inane and wearisome. When a strip of macadam demonstrates itself as leading to somewhere and for some special reason, we can abandon ourselves to all the pleasure that comes from its association with human uses (and especially with its uses by particular human beings), its grace of curve, its obvious aptness to the ground, and its unity with the lawn, foliage, and buildings that surround it, and that it displays and connects. When it does not, the power of these things to give pleasure disappears with the sense of their utility.

Then let it be repeated, that roads and paths are not beautiful until useful, and are likely to be beautiful in proportion as their usefulness is apparent. They should not be inserted to make elegant lines for the plan and make it look workman like and impressive to those who know no better; they should not be made to provide work for the engineer nor the pavior, nor to increase the Landscape Architect's commission, nor to make his employer think that something is really being done. They should not be straight, unless there is no reason for their being curved. When they ought to be straight, the reasons will usually be clear from the situation of the points to be connected, and the grades of the ground. Compound curves should be avoided when possible, and segments of circles (except in rounding off corners) are generally the least desirable of all curves. The general course will depend on the contours of the ground, and the easiest grades that they will allow, but the precise curves can only be settled by the aesthetic sense of the designer, and cannot be reduced to rule. The fixing of grades should not be left to the surveyor, for he will probably reduce them to one or more inclined planes, easy to calculate, but more or less awkward in appearance, and at variance with the spirit of naturalistic gardening, and advancing through uneven slopes with ruthless cuts and fills which might have been avoided, or adapted to existing surfaces, or to which existing surfaces might have been adapted. Grades of even inclination look well enough on short curves, but the longer the curve, the less likely are they to look well. Different grades should merge into one another by inclines as suave and gradual as possible.

Some of these niceties are imperceptible except to those who wish to perceive them; they may seem finicking and unpractical to the experienced roadbuilder. But let the experienced roadbuilder, like other experienced people, beware of falling into the snare of belief that his experience has taught him all there is to be known, and nothing that ought to be unlearned. Such details as I have spoken of may seem beneath the attention of those who can think on a large scale. But, let any who despise this kind of thinking, whether for the results it produces or its value as a mental training, remember the attention that must have been given by Dorus and Palladio to such apparently slight and arbitrary matters as the exact proportions of echinus and taenia; and reflect that the settling of these things for the imitation of all their successors required no less genius than the determining the exact outline of the dome of Saint Peter's.

H. A. Coparu.

PARK AND CEMETERY.

THE GRAND AVENUE OF PERE LACHAISE, PARIS, FRANCE, WITH ITS MONUMENTS AND CHARACTERISTIC FEATURES.

No picture can give a more accurate idea of a French cemetery than this illustration of the principal avenue of the Pere Lachaise. As you see, it is a veritable city of the dead, with pavements, laid out avenues as you find them in Paris where much ground is left for squares. Do not think that beyond, where you see trees, the cemetery is laid out any differently. Trees grow in the avenues, but no avenues are wider, if as wide, as this one which from the principal entrance leads up to an elevation, and all the avenues are macadamized as

chased. Ground is measured by the inch inside of the walls of Paris.

It is evident that the law in almost every case is violated, but the law says that tombs should not be more than a meter high. In case of war, of a siege; government is not responsible for the destruction of tombs more than a meter high. During the Franco-Prussian war, great losses were sustained by individuals who had monuments at the Pere Lachaise, for bomb shells fell like rain in that part of the locality. Pere Lachaise lies on elevated ground. This cemetery suffered also with the commune.

Under the chapels and tombs compartments are



THE GRAND AVENUE, PERE LACHAISE, PARIS.

we find them in Paris, in the city of the living.

Among the peculiar architectural designs for cemeteries, the chapel is the most popular. On the left of the picture you see a whole row of them built on certain widths of ground. One reason for the regularity of French graveyards is that no one can purchase more than two concessions of lots. The large monuments are built on two concessions, "Une concession a perpetuite" means that the ground about a meter wide and one and a half long, belongs to purchaser for all time. In ordinary graveyards a concession costs \$100. I do not think the cost is more in an important one like Pere Lachaise or Mont-martre; but all the desirable places are taken, and in some graveyards, those which can not be extended, concessions can no longer be pur-

built for the remains of each member of the family. In a double concession two compartments are built side by side. I think as many as five compartments may be built one on top of the other.

Catholics prefer chapels to any other style of monument, for they are the most convenient for prayer. Catholics pray for the dead. In each chapel there is an altar ornamented like the altar of a church. There are steps in front on which to kneel, and also praying chairs. These interiors of chapels are generally visible from the outside through an iron grated door.

It is the funeral gewgaws that spoil the appearance of a French graveyard quite as much as the regular planning of avenues, allies and lanes. The bead wreaths and those of yellow immortelles are

an abomination to an eye who is accustomed to the simple grandeur of an American cemetery.

On the right of the picture are two Egyptian monuments. A life-size statue of an Egyptian woman stretching her arms on the great stone which towers above, is the picture of immortality—which guards the door of the tomb.

Next to it is a tomb at the head of which is an obelisk. There is not so much marble used as you would imagine for monuments and tombs, the French prefer a gray building stone.

The first monument on the right, somewhat hidden by trees is where Paul Baudry is buried. Paul Baudry was a painter whose reputation principally lies in having done the frescoes of the Grand Opera. He was ten years doing them. They are considered fine, but they do not compare with the ancient frescoes of Italy. The monument is composed of stone and bronze, a favorite modern combination. Life-size flying glory is in the act of putting the crown of immortality on the bust of the artist which stands on a pedestal. The statue of his widow stands, weeps and mourns. This is all bronze, while the foundation of the monument is of stone.

Just above the second plot of grass, on an elevation, in the center of the avenue stands Bartholome's monument to Death. It is done in white marble and all the figures are life-size. It is most effective. It took three years to erect this monument in Pere Lachaise, but it is the greatest monument erected to the dead in the world, and the Biblical conception with the resurrection represented above is most impressive.—*E. B.*

H. W. S. CLEVELAND.

The death of Mr. H. W. S. Cleveland, which occurred at Hinsdale, Ill., on Dec. 6, drops from the scene of earthly labor a worker whose efforts will long survive him to give pleasure and comfort to generations to come. He attained to the front rank of his chosen profession, that of landscape gardening, and he has left the impress of his genius on more than one important section of this country. Moreover, he was a man that endeared himself to his fellow man and drew to himself not only respect but a warm regard for his personality and a sincere appreciation of his many remarkable qualities.

Horace William Shaler Cleveland was born in Lancaster, Mass., in 1814 and was descended from two of the oldest families in the east, the Clevelands and the Higginsons. His father, Captain Richard Cleveland, was one of the most daring and successful of the early American navigators and one of the men who took an important part in John

Jacob Astor's attempt to establish a great shipping point at Astoria, Oregon, in the early years of the nineteenth century. Mr. Cleveland was educated at Lancaster, receiving there his first instruction in landscape gardening, and he began practising his profession at Salem, Mass., in partnership with Robert Morris Copeland. For ten years he resided at Danvers, Mass., and subsequently at Tarrytown, N. Y., whence he repaired to Prospect Park, Brooklyn, where he was associated with Frederick Law Olmsted. In March, 1869, he removed to Chicago, and in partnership with Mr. Wm. M. R. French, now director of the Art Institute, Chicago, he continued the practice of his profession. From first to last this practice extended over many parts of the country. He took an important part in the designing and development of Prospect Park, Brooklyn, Rogers Williams Park, Providence, R. I., and Jekyl Island, off the coast of North Carolina. He was intimately connected with the laying out of the parks of Minneapolis, St. Paul and Duluth; Washington Park and Drexel Boulevard, Chicago; Omaha, Neb.; Brookside, Indianapolis; the Capitol grounds at Topeka, Kans., and Madison, Wis.; Sleepy Hollow cemetery, Concord, Mass., and many other places of note.

Mr. Cleveland's great ability and good taste was also displayed in his writings, in which he possessed a simple but forcible style, which has been not inaptly compared with that of Daniel Defoe. He published a number of works. He was for many years corresponding secretary of the New Jersey Horticultural Society and an honorary member of the Massachusetts Horticultural Society and the American Park and Outdoor Art Association, besides being associated with many such organizations.

He was one of the foremost men of his profession in the country, and his works live after him. For many years he was one of the well-known figures in Chicago, quiet and unostentatious though he was. His death, after several years of failing strength and health, occurred at the home of his son in Hinsdale, Ill., on December 6 last and he was buried in Lakewood cemetery, Minneapolis, Minn., on Dec. 10.

It may truly be said in the case of this landscape gardener, and in the true sense of this oft-mistaken term, that his works live after him. This great and prosperous country owes a large debt of gratitude to the comparatively few pioneers in the profession, who, by their genius and sturdy persistence, have left such an example and such an inheritance, and among these must be included H. W. S. Cleveland.

ON ENGLISH GARDENS.*

As with English architecture the chief interest centres about the simpler work, the homely quality of which directly appeals to one, so the smaller and less pretentious English gardens seem in every way most perfect. There one finds no question of the rival claims of formal and informal school, of Italian, French, or English styles, but merely a natural common-sense adaptation of means to an end—a direct meeting of needs. In the great Italian and French gardens one feels the presence of a complete and studied scheme, and also of a conscious effort for effect. As exponents of the art and science of landscape-gardening French and Italian examples are distinctly superior to the English; but for mere lovable beauty, fitting the needs of true country lovers, nothing can touch the English garden.

In the many periods of English gardening the influence of foreign styles and fashions has been felt, and has to a certain extent, modified the planning and planting of grounds, but except in those places which have attempted grandeur one finds no purely scholastic work. The earliest work of which we have any perfect knowledge is that which was influenced by the Italian Renaissance. When Jones and Wren introduced the balance of Classic planning and the detail of Classic work, the gardens developed on similar lines. This period gave us the formal terrace, the walled gardens, the bowling-greens, clipped hedges, and the intelligent use of architectural accessories which mark the majority of the good English gardens. The general character of this work remained practically unchanged for a couple of centuries. With the beginning of this century, when taste in architecture and art was distinctly declining towards its final depth in the thirties, there came, first, a carelessness for the beauty of the old gardens which resulted in neglect, and then the period when under the guidance of Brown, the imitation of nature and the making of pictures was the aim everywhere. This resulted not only in the destruction of many fine gardens, but in a general perversion of taste which it has taken many years to counteract.

The reaction from Brown's hopeless endeavor to imitate nature and to avoid everything pertaining to formality was very quick, and yet it is indicative of the English temper that it was not a violent swing of the pendulum to the other extreme. Kemp, writing between fifty and sixty, laid down rules, or rather suggested principles, which seem thoroughly sound and sensible. He urged the necessity for formal treatment in and about the house, and yet valued the freer and more natural possibilities which were unaffected by the immediate proximity of architecture. He deprecated the imitation of nature and made a strong plea for retaining "art," by which he meant anything of a formal or studied nature. Simplicity, convenience, seclusion, are among his chief aims, and it is characteristic of the Englishman that in enumerating the things which

require consideration when planning the grounds, he names economy first. By this he would include not merely making the plan on such a scale that the owner can afford to lay it out, but considering also the cost of maintenance, and, still further, arranging the place so that the maintenance can be done with economy. This is a matter of great importance, and to its just consideration is due to a large extent the number and beauty of the English gardens. As a rule work is not laid out or undertaken which cannot be easily executed and maintained without taxing the resources of the owner.

With the English, gardening is so old an art that the cost of maintaining can be as readily estimated beforehand as can the cost of execution. Tradition, habit, social custom, have all combined to fix the lines on which work shall be conducted, and thus to make a standard of "form," used in the athletic sense, for the maintenance of the service of the house, the stable, and the grounds. If a man can afford but three servants his house is arranged on the basis of what three servants can do thoroughly well, and he will not have a larger house unless he can afford to have his service adequate. His stable will be regulated with equal care. He will have only such horses and carriages as can be kept in first-rate condition. Applying these same principles to the garden, collecting and making use of the cumulative experience of many generations of gardeners, he lays out his grounds with clear foresight as to its maintenance. Nothing is to be slovenly, nothing neglected. The results amply justify this course. The thoroughness of the English garden is the very root of its charm. The garden, whether large or small shows care in every part, and not only care, but generally the loving care of the man who is really fond of his garden as a whole and of his plants individually. One cannot go through a garden with the owner or his gardener without feeling that to them the garden is as intimate as the house.

The whole attitude of mind of the Englishman is the desire to satisfy a need rather than to supply a luxury, and, therefore, this is generally found to be the chief motive in the laying-out of his garden. The great majority of English gardens have developed in direct response to practical needs, and if one studies these needs, and sees how they have been met, the history of nine-tenths of the English gardens is given.

The needs of the house are approaches and courts, or yards. The main approach is for the convenience of the family and their guests; it is not considered as a portion of the grounds especially desirable as an outlook. The chief living rooms are where aspect and outlook are most favorable, so that the entrance-hall is naturally given the less desirable aspect. On this account, if for no other, the immediate approach to the house is not so capable as other places of being made liveable. Considerations of utility are, therefore, paramount. If it is a carriage-entrance, a short drive and a convenient turn are things sought. This has resulted in a number of types of which the most familiar

*A paper by R. Clipston Sturgis, F. A. I. A., read before the Thirty-fourth Annual Convention of the A. I. A.

are the simple in and out on different lines, and the straight drive finishing in a circle. Both these lend themselves readily to a formal treatment, and trees planted regularly, hedges, or walls give an element of style to the simplest of plans. The kitchen approach is even more utilitarian, the chief object being to keep it separate from the master's approach and screened from view. The most direct approach, the simplest of turns, privacy obtained by walls, fences, hedges; or, in the case of basement offices, by sinking the road below the general grade: these are essentials.

The formal planning of the early seventeenth century which had developed the H. and E. plans suggested enclosing, partially or wholly, the two approaches. It reproduced in more regular form the early forecourt and the base-court. The former name is still generally in use, the latter is generally referred to as kitchen-court. The forecourt became at once an interesting feature of the plan, but never lost its true status. It was always the approach and never a place to idle or take pleasure in. Its beauties are such as can be readily apprehended at a glance. One finds none of those hidden nooks and unsuspected beauties which are incidental to the garden. A simple piece of green-sward, a few trees, possibly statuary or vases such as will tell at a comparative distance and can be comprehended in a glance, such are the general features of forecourts. Sometimes, but rarely, one finds paved forecourts, but this is unusual, and the English are more apt to reduce their pavement or gravel to the smallest dimensions rather than increase it unnecessarily.

(To be Continued).

GARDEN PLANTS — THEIR GEOGRAPHY, LXI.—PODOSTEMALES. THE TRISTICHA, PODOSTEMON AND HYDROSTACHYS ALLIANCE.

This is a singular small alliance of fresh water river weeds, of no importance to the landscape, perhaps never in cultivation and only inserted here for the sake of completeness. There are 4 tribes, 21 genera and 116 species in the group, which is sometimes called "*Multi-ovulata aquatica*"—presumably intended to be descriptive.

They are found in many parts of the tropical and warm regions growing on stones by the sides of rivers, rapids and waterfalls. They seem to have rarely been collected from the Malayan islands or Oceanica, but in India several, and in the drier parts of Africa a few have been found, which leads one to wonder whether they can survive the dry seasons, which must often leave them stranded. Sixteen of the

twenty-one genera are peculiar to fluvial tropical America, where fish, cattle and even mankind have been reported to feed upon some of them.

Podostemon is in 20 species in India, Madagascar, and Brazil. *P. ceratophyllus* is not uncommon in North America. I suppose it might grow in a shallow pond with a gravelled bottom, through which suitable water could be run by means of a runway or piping. The plants attach themselves to stones by means of disk-like growths in the manner of Algæ which some kinds resemble. Others are more like mosses in habit, but with inconspicuous axillary or terminal, bracted flowers.

I have never seen them in botanic gardens and don't know if success would attend the removal of stones and plants to an aquarium of live water.

The group is a possible survival of generations which may have been abundant during the deluge or deluges.

James MacPherson.

CORRESPONDENCE.

Rhododendrons.

Mr. McPherson's queries in reference to Rhododendrons are of such a nature that an intelligent answer will take up more room than is available in "PARK AND CEMETERY", but I may try with a few words to bring light into this matter.

That Rhododendrons are sensitive to heavy or limy soil is conceded. The difference in climate, considering that temperature will fall as low in either instances between the Atlantic and Prairie state, is great. New England and Canada have on one side the Atlantic ocean and on the other the Alleghanies, the great lakes and the Waschish mountains, each in their way influencing the climatic conditions in these localities. How different it is with us in the Prairie states! Where does our protection come in? Where are the mountains, the forests and the great lakes to protect us from north and west. Or where is the ocean to moisten our dry atmosphere. Did Mr. McPherson ever feel our burning, scalding winds in midsummer, not very much unlike a Sirocco of Northern Africa and Southern Europe, or did he cross our prairie, where a stiff north-wester whistled across them with the temperature 10 to 20 below zero and not a flurry of snow on the ground? Such exposure indeed is very trying to man and beast as well as friends of the vegetable kingdom.

Thus we find that Rhododendron and many other plants have been planted by nature, close to the borders on these great prairies but no further. As Mr. McPherson says: *R. nudiflorum* is found in Southern Illinois. Here we have a hilly country, once covered with dense forests, this luxurious vegetation encouraged by the beneficent Ohio valley. Then again on account of the more southern latitude the climate is considerably milder than in the Northern part of the state. But after the forest became extinct, I would rather predict the Rhododendron to disappear with them. Rhododendron *nudiflorum* was found in the low forest lands of Calumet lake Southeast of Chicago up to 1887, as recorded by the Academy



Hydrostachys verruculosa. (After Lindley.)

of Science. Here again the Rhododendron on the border of the great Prairie, and the finding it here is not more surprising than the thousands of acres covered with luxuriant peach orchards on the east shore of Lake Michigan. Try this on the west or Illinois side. Other damaging influence are the sudden changes in temperature and late frost in spring.

James Jensen.

* * *

A Drainage Problem.

F. R. Pa.: At one corner of our cemetery about two feet below the surface is a vein, two feet thick, of what seems to be between a clay and a quicksand, which prevents the surface water from sinking away. Below this in some places is a thin vein of gravel and below this a real quicksand. I want to underdrain it with tile placed five or six feet deep and covered with gravel to the depth of one foot. Now will the water find its way down through the upper vein of clay (or quicksand) to the tile or should the gravel reach to top of clay?

I think the drains proposed placed five or six feet below the surface (preferably six feet) will dry up the land. I assume, of course, that the drains will have a free outlet. The water would gradually soak through the clay and quicksand, but the cutting of a ditch through this layer for the purpose of laying the drain will necessarily mix the different layers and greatly assist drainage. The character of the ground will gradually improve after the drain pipes have been put in. It is not necessary that the gravel should reach to the top of the clay. If, however, the surface of the ground is of such shape as to form a basin, it might be well to place a catch basin at the lowest point so as to remove surplus water from excessive storms quickly, and it would also prevent the forming of a temporary pond from the melting snow when the ground is frozen.

O. C. Simonds.

* * *

Monuments in Cemeteries.

I have refrained replying earlier to the communication, which appears on page 216 of the November issue, of your valuable paper. Hoping that some person else might take part in the discussion. In the first place I must give a most emphatic denial to the statement that my previous letter gives an erroneous idea of the work of our convention. Your correspondent, to my mind does not refute, by one iota, my contention, that Artistic Monumental work, suitably located, does not detract from the park like appearance, desirable in a modern Cemetery. A visit to any of our most prominent cemeteries, such as Spring Grove, Swan Point, West Laurel Hill and many others will amply sustain my remarks. Cemeteries can be park-like consistent with the fact that they are *cemeteries*. Your correspondent need be under no apprehensions as to the cemetery at present under my care becoming a "stone yard," so long as the Rules laid down for its guidance are enforced. Indeed many visitors call it a park.

The illustration, plate 1 on page 216 showing as it does, several grave markers, and a *monument*, strengthens my position. None of the stone work shown detracts from the beauty of that picture. But if trees had been planted on the lawn, even at every 100 feet, what would have become of the vista. The scene would indeed be changed and not present a very park like appearance.

The following which I have taken the liberty of culling from THE MONUMENTAL NEWS, for last November, about covers all that can be well said upon the subject, and so fully expresses my ideas, as to render unnecessary any more correspondence on my part.

"In our landscape cemeteries, while they demand a better class of monumental work, something to harmonize from an artistic standpoint with the art now exercised in the landscape effects, the result is not to detract from the monument, but rather to frame it and attract to its lines and proportions the attention which good work will invariably attract. In the growing taste of the American people the time has gone past when, in the larger communities, anything but really artistic work will be permitted in the modern cemeteries. There must be an artistic relation between the landscape and the memorial monument and there must also be variety in design. It is impossible to believe that old time designs, and those frequently duplicated, will ever again be permitted to be erected in the cemetery as it is being developed to-day. The art displayed in the landscape work, unrivalled in certain examples anywhere in the world, has not been developed to be marred by inappropriate monuments and it is therefore well to dwell upon the idea, that the details of landscape work, its planting and foliage schemes will serve to add grace and dignity to the monument appropriately designed for the situation it is intended to occupy."

These remarks I think most cemetery men will agree with me "Covers the bill," and if the excellent advice given is followed, there will be little likelihood of any of our park like Cemeteries, becoming Stone Yards. *Bellett Lawson.*

* * *

A Correction.

We are advised that in the printed report of the proceedings of the last convention of the Association of American Cemetery Superintendents held in Cleveland in September last, several errors crept into the stenographer's transcript of Mr. W. N. Rudd's extemporaneous remarks, which, naturally, he would like to see corrected. The word *water* has been used instead of *mortar* in the 1st, 4th and 5th lines from the top of page 40 in the printed volume; on the 2d line from bottom of page 40 the word *knack* is misspelled; and in the 2d line from bottom of page 39, *sections* should read *cements*.

NOTES.

A bill has been framed for presentation to Congress providing for a national park in New Mexico, including the reservation in which are the ruins of the homes and cities of the Cliff Dwellers. There should be no dissentient voice to the protecting by government of these remains. They are of both historic and scientific import.

* * *

J. R. Johnson, president of the Rock Falls, Ill., Mfg. Co. has designed a trolley electric funeral train to be used over the electric line to traverse Reckford, Ill., and adjacent towns. A trolley hearse in jet black with heavy plate glass through which the coffin may be seen, will head the train. The coffin will rest on a bier that will be a car fixture, and the motorman will be completely shut off from the interior of the hearse and will reach his seat from the outside of the car. The next car will be in black and gold, arranged in compartments. The front section will be for flowers and these will be visible through windows of heavy plate. Back of this the rest of the car will be curtained off and partitioned after the effect of closed carriages. They will contain the chief mourners, the minister and the pallbearers. The compartment for the mourners will be so constructed as to give them them the greatest privacy. Following this will be trail cars for those attending the funeral.

PARK NOTES.

The common councils of Mishawaka and South Bend, Ind., have appointed committees to act in concert looking to the construction of a street or boulevard, 100 feet wide, to skirt the St. Joseph River between the two cities. This will connect the parks of the two cities and will be a notable improvement.

* * *

The improvements at Audubon Park, New Orleans, under the general direction of Mr. Olmsted of Boston, are being carried along as rapidly as the financial conditions warrant. The people are becoming greatly interested in this beautiful park and the commissioners are receiving many tokens of this interest. Preparations have been made for additions to the permanent planting, and the children's playground will be ready for them by spring. Prospects appear to be favorable to a consummation of the plans for the final development of the park.

* * *

The city park, Denver, Colo., has been the recipient of many donations from remote states. Mrs. Lowe of Boston, some months ago sent a large collection of plants, shrubs and seeds to form the nucleus of the Lowe arboretum, to which she will contribute further from time to time. The mayor of Elyria, O., has signified his desire to establish a grove of nut trees and other plants to form an Elyria tract and has sent a donation to commence operations. They are desirous of getting squirrels into the park and the nut grove will provide food in due time.

* * *

Evansville, Ind., is maturing matters in the direction of establishing a park system. A triangular piece of ground on the Ohio river, known as Sunset Park, has been enlarged by additions, which will make a strip 1000 feet by 300 feet, which by judicious planting will make a delightful breathing spot. The authorities are being urged to purchase 220 acres adjoining the 40 acres recently deeded to the city for park purposes by Mr. Geo. L. Mesker. The land is situated west of the city and is admirably adapted for park purposes. It is well wooded, rugged in aspect and of easy access to West End citizens and will be to all citizens when car line is extended.

* * *

The quarterly meeting of the New York State Reservation Commission, having in charge the care of the Niagara Falls reservation was held last month. Perhaps the most important action at this meeting was the adopting of a resolution to recommend to the state legislature that the state engineer be directed to make a survey and report on the cost of a roadway to extend from Lake Ontario to the State Reservation. Such a roadway, extending over fifteen miles along the river would not be surpassed in scenic splendor by any drive in the world. A resolution was also adopted to appoint an American commission to act with the Canadian commission in forming some plan to stop the divergence of the waters at this point from the fact that the beauty of the falls is thus affected.

* * *

In the forthcoming report of the St. Louis, Mo., park commissioners, the superintendent enthusiastically advocates the laying out of playgrounds in downtown parks and squares, provided with swings, sandpiles, bicycle and toy-wagon paths and various other permanent accommodations for pastime that would appeal to children under 12 years of age. The report will also contain a chapter drawing attention to the rapid

death of the old forest trees in all the parks, deploring that there is no preventative or remedy. About 700 dead trees will have to be cut down this year. In the last year 5,000 young trees were planted and 150,000 flowering plants were grown. About one-half of the young trees prosper. The death of the forest trees is ascribed to a lack of moisture in the soil. In a natural forest the leaves lie on the ground and retain the moisture; in parks the leaves are removed, and this, with the packing of the soil, prevents the distribution of moisture and air to the roots of the trees.

* * *

A strong movement has started in St. Louis, Mo., to establish public bathing conveniences and Water Commissioner Flad has perfected plans for the work. It is contemplated to provide for open air bathing in summer and skating in winter. The project will require \$75,000. As outlined the plans call for separate out-of-door pools for women and men, between which will be the great fountain rising from a dam, along the center of which will be a row of trees. The pools will cover eight acres and will range in depth from two to nine feet. The bottom in the shallows will be of sand and Meramec gravel and in the deep places of "puddle." Along the west side of both pools will be the frame bathhouses and fronting on the fountain a large reception hall built after clubhouse models. This building will cost \$20,000. The plans for the grounds have been drawn by Landscape Gardener M. G. Kern. They call for a drive round the whole park with a feature of cypress tree ornamentation, especially along the river front.

* * *

An appropriate and attractive fountain has been designed by Mr. Charles Mulligan, sculptor, Art Institute, Chicago, which the West Park commissioners of that city propose to erect in a children's playground which they are arranging to provide between Humboldt and Douglas parks. The motive of the design is children in patriotic celebration. In the center is a granite column eight feet high with the figures of four children on top. One is that of a boy waving the American flag and surrounded by the figures of three other children shooting off Roman candles. At night the lights are so arranged that the water spouting from the candles assumes the color of fire. At the children's feet are to be a lot of used fire-works flung carelessly down and still smoking, this effect being secured by combinations of lights and spray. At the base of the fountain the column is surrounded by a frieze in bronze, upon which is sketched in relief the figures of a number of children engaged in all manner of Fourth of July fun.

* * *

At the sixteenth annual meeting of the Public Park Association of Providence, R. I., important action was taken relative to increasing park facilities. The following resolution was also unanimously passed, which is suggestive as to possibilities of like associations. "Resolved, that the president and treasurer, together with Mr. Alfred Stone and Joseph D. Fitts, be requested to prepare a report exhibiting the desirability of a system of parks and playgrounds in every ward of the city, and a system of parkways extending around the city; also considering the various tracts of land which, by virtue of accessibility, natural desirability and attractiveness, or which by their particular appropriateness for any reason whatever should be acquired by the city of Providence and surrounding municipalities, with a view to future improvement, together with such suggestions as seem to them desirable with a view to the systematic establishment of a comprehensive park system and an equipment of public pleasure grounds fitting the city of Providence."

CEMETERY NOTES.

The Franklin, Mass., Cemetery Association did considerable improvement on their grounds the past fall. Included in the work was the raising of the grade on a section of about 100,000 square feet which was used for interments 100 years ago. About 800 feet of Milford granite wall, 3 feet high, was also erected on the cemetery boundary.

* * *

It is encouraging in regard to cemetery improvement to note the following in the mayor's inaugural address to the city fathers of Nashua, N. H. He said: "We have only to visit the cemeteries of the city to see how great an improvement has been made since they were placed in the hands of a board of trustees, thus showing the good results which may be obtained when improvements are continued along the same lines year by year in charge of competent men with less expense and better results."

* * *

The board of managers of Oak Ridge cemetery, Springfield, Ill., in which the Lincoln monument and tomb are located, have issued an appeal to lot-owners and others interested, for donations to augment the perpetual care and improvement fund. The cemetery has recently been the recipient of bequests of \$2,000 and \$200 for this purpose. The present progress in permanent improvement is of such a character that it is to the interest of all interested to contribute to this fund.

* * *

At the annual meeting of the Aspen Grove cemetery, Burlington, Iowa, held January 2, important business was transacted. A resolution was discussed on an amendment to the by-laws to provide a permanent fund for the maintenance of the cemetery and an improvement committee was appointed to have general supervision and control of all improvements in the cemetery. A large amount of improvement work has been carried out during the past year. The office of sexton was abolished and the holder of the office for years past, Mr. Fred Leicht, was appointed superintendent.

* * *

Oakridge cemetery, Marshall, Mich., is a rapidly improving cemetery, being remodeled as far as possible on the lawn plan. It now covers 55 acres including a recent purchase of 17 acres, which has been improved and laid out for purchase, and a part of which is under perpetual care. Connection has been made with the city water supply. About 100 lots in the cemetery are under perpetual care and efforts are constantly made to increase the list. At a recent meeting of the board of control a fine lot was donated to the soldiers for a burial place and upon which a monument is to be erected. The financial condition is excellent, a good working balance being on hand.

* * *

The Princeton, Ind., Lodge No. 64 of Oddfellows have opened a new public cemetery, which is owned and controlled by the lodge and which will be conducted on the lawn plan. The ground is admirably adapted for cemetery purposes and is high and rolling. It has been laid out by Miles S. Sanders, C. E., and great care has been taken in all the preliminary work and drainage has been provided for. The planting will be established as rapidly as possible and it is intended to use as much native material as is adapted to the work, and southern Indiana is very rich in trees and shrubs. For the present the board of trustees will supervise the work, employing a sexton on the grounds.

Mr. Wm. Stone, superintendent of Pine Grove cemetery, Lynn, Mass., and whose efforts to create enthusiasm among his townspeople in landscape effects and plant life are well known is working on another attraction for Pine Grove. "Rocky Pond Hole," known to citizens of 40 years ago, and not far from the famous "Horse Pasture Spring," is to be transformed into a pond of beauty. It is 250 feet long by 120 feet wide, and in the middle a small island is to be formed, which will be connected with the mainland by a rustic bridge. Mr. Stone's ambition is to create a sentiment favorable to providing an endowment for a public garden in Lynn, and he should be successful.

* * *

The annual meeting of the Riverside Cemetery Association, Cleveland, O., was held Dec. 10. The financial statement for the year ending Nov. 30, showed receipts of \$22,450.28. The year began with \$19,460.88 and the treasurer received during the year, \$22,470.88, and interest on deposits, \$700.77. The balance in the treasury November 30, 1900, was \$33,833.77. Personal accounts outstanding amount to \$12,710.88, making the total of the assets \$46,544.63. Land sales for the year amounted to \$15,948.50. The association has no liabilities. An addition of land was made to the cemetery and improved and this has largely added to the attractiveness of the grounds. The event of last year was the visit of the Association of American Cemetery Superintendents, during their convention held in Cleveland, and their entertainment by Secretary J. C. Dix and his associates.

* * *

A dread of premature burial has so haunted the mind of Mr. John Pursel of Williamsport, Pa., that he has had constructed in Grand View cemetery a vault from his own designs calculated to prevent such a catastrophe. It is a side hill vault, having a stone face wall in which are five entrances, side by side, to as many separate crypts or recesses, intended for the five members of the family. These crypts are of cast iron large enough to easily receive a large coffin and run back nine feet into the hill. From the back of each is a pipe which leads into a main pipe, which finally protrudes like a chimney, through the top. It is arranged to keep each crypt well ventilated yet free from dirt. A sewer pipe is also provided for drainage. The heads or entrances from the outside are so constructed that by the turning of a combination knob on the inside, exit from the tomb in case of premature burial would be a simple act.

* * *

The annual report of the Oakland Cemetery, St. Paul, Minn., was held Nov. 26th last. The net receipts for the year, including the income of the perpetual care funds, were \$25,189.29, an increase over the previous year of \$4,384.25. Among the receipts were sales of lots, \$9,165; single graves, \$1,489; interment fees, \$2,037.00; greenhouse sales, \$5,222.80. The net expenditures were \$21,067.22, an increase over the preceding year of \$1,253.70. Among the expenditures were: Pay rolls, \$13,605.25; greenhouse seed, stock, etc., \$481.38; fuel, \$953.74; materials for foundations, etc., \$130.65. The permanent care fund amounted to \$92,493.58, and the working fund to \$11,226.89. By a transfer of these funds deemed advisable the permanent care fund is now \$100,000. A very substantial increase was shown in the greenhouse receipts. Owing to the unusual rainfall in the fall contemplated improvements were unavoidably postponed. There were 148 foundations built for monuments and markers, and 27 monuments and 120 markers erected, respectively. The total number of interments in the cemetery up to Oct. 31, 1900, were 13,846, including 336 during the year closed.

SELECTED NOTES AND EXTRACTS.

Vines and Old Trees.

In the rambling dooryards of the farm-houses of the land there is often to be seen a patriarchal apple tree, or a number of them, for, a century ago, our ancestors had to be utilitarians, and the apple trees not only furnished them with shade, but with fruit and flowers. But these old trees that have for so many years held aloft their yearly burden of fragrance and fruition are in the decadence, and every season there are less of them; it is, however, a pretty fashion when one breaks off, or has to be cut, to let it form its own monument, by leaving the stump, and if possible, a small section of branch, and planting with some fresh earth a clematis or Virginia creeper at the foot, and placing a pretty bird house on top. Especially as it is not always convenient to have it dug out by the roots and as it often leaves a space where one would prefer to have something growing. — *Vick's Magazine*.

* * *

Hardy Flowers for Cutting.

While there is an abundance of flowering perennials for general purposes, it frequently occurs that for something particular, the available plants are not numerous nor easily thought of.

In this connection, an inquiry reveals the fact that early summer pink or white flowers suitable for cutting do not make a large list.

The following desirable hardy plants are mentioned for the purpose, and our readers may doubtless recall a few additional which may be suggested for the benefit of others:

Achillea Millefolium rubra.	Lilium candidum.
Achillea Ptarmica plena,	Lilium speciosum album.
"The Pearl."	Lilium var. roseum.
Armeria maritima.	Paeonies.
Armeria plantaginea.	Pentstemon Digitals.
Dicentra spectabilis.	Perennial Phlox.
Gypsophila paniculata.	Physostegia denticulata.
Hesperis matronalis.	Physostegia Virginica.
Heuchera sanguinea alba.	Pyrethrum roseum.
Iris Florentina.	Spiraea filipendula fl. pl.
Iris laevigata.	Spiraea Ulmaria alba pl.
Liatris spicata.	Spiraea venusta.

—*Meehan's Monthly*.

* * *

Sowing Annuals in the Open Ground.

S. W. F. writing in *The Garden* of London, on the subject of sowing the seed of annuals in the open ground in preference to raising the plants in warmth says: Far finer plants, of many varieties which are almost invariably propagated by heat, are obtainable by

the former method. The slight postponement of the blooming season is more than counterbalanced by increased vigor and floriferousness. One is continually being struck by the unusual dimensions attained by annuals that have sprung from self-sown seed. A single self-sown seedling of blue cornflower was with me developed into a bushy plant 4 feet high and three feet through starred with dozens of flowers. Shirley Poppies, arising in the same promiscuous manner, have assumed equally fine proportions, as have other self-grown annuals. During the past summer I came across, in the garden of a farm cottage, two of the best beds of Godetias I have ever seen and found on enquiry that they were self-sown seedlings that had been discovered in a neighboring garden and transplanted, 18 inches apart, while yet young. The reason of the phenomenal strength possessed by such seedlings is naturally due to the fact that they spring from solitary seeds and thus are hampered by no compeers engaged in rapaciously extracting from the surrounding soil the identical nutriment that they themselves are in search of, a fact that is a practical sermon on the evils attendant on sowing too thickly. However quickly the seedlings are thinned out, sufficient time has elapsed for those removed to have abstracted from the soil valuable properties that would have aided in promoting the increased vigor of those selected to remain. It has been said that no one should thin out his own seedlings. It is not in human nature to destroy without a pang dozens or hundreds of lives that owe their being to the act of the sower—"if this and that and another are spared they will not be too thick!"—but the alien hand is presumed not to be troubled with such scruples. Again, it is not in human nature to sow thinly enough and for this there are many reasons. Some of the seed may fail to germinate; some seedlings may wither as soon as they appear, some may be destroyed by slug, mole or mouse, and yet the remnant left may be sufficient to secure, ultimately the desired effect. But Nature is not troubled with these misgivings, and, as a consequence, the wind-borne seed fall to earth to fashion, as the months roll by, a plant that will dwarf those members of its race that man has sedulously nurtured from their earliest days

Susceptibility of Trees to Lightning.

The overseers of nine forestry stations in the dukedom of Lippe, in Germany, have made an examination of trees struck by lightning throughout an area of 45,000 acres, in order to ascertain for the German government the susceptibility of various trees to lightning and its effects and occurrence in general. As a result of their observations it was found the oak tree was by far the most liable to lightning, in spite of the fact that they were not as frequent as other trees in the forest. The percentages of the various species were given as follows: Beech, 70 per cent.; oak, 11; pines, 13 and firs, 6. During the several years through which the observations were made 276 trees were struck by lightning, and of these 159, or 58 per cent. were oaks; 59 or 21 per cent. firs; 21 or 8 per cent., beeches, and 20 or 7 per cent. pines, the other varieties damaged being still less in number.—*Exchange*.

* * *

Transplanting Large Trees.

Is it safe and desirable to move large trees? Will they recover from the transplanting, giving the desired effect in the end as quickly as would smaller ones? Many experienced persons will deny there is much benefit, if any. But does it not rest largely with the manner in which the trees are handled? Get practically all the roots—especially the young feeding roots; pack the soil firmly around them as rapidly as it is filled in the holes; see that this soil is good, with the holes ample size; have the branches thinned out, not all stumped in, to correspond with the loss of support in root disturbance and a few broken roots and the effects from transplanting should be slight. The moving of trees in winter, carrying frozen balls of earth, is frequently unreasonable. There is a limit to the size ball that can be handled, and, in the case of the very large trees, it is reached before the ends of the roots are found and the most valuable portions of root are lost. The secret of successful transplanting is, then, harm the tree as little as possible, giving it new conditions as nearly similar to what is previously enjoyed, if possible. Large trees should be held firmly in position, if necessary, by guy wires. Good planting usually renders swaying impossible. But the trunks should not be buried as an aid to a firm position. By such action, the roots are removed further from the source of air and water, both of which are necessities.—*S. Mendelssohn Meehan in Florists' Exchange*.



ESTABLISHED 1890.

OBJECT: To advance Art-out-of-Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

CONTRIBUTIONS: Subscribers and others will materially assist in disseminating information of peculiar interest to those engaged in landscape gardening, tree planting, park and cemetery development, etc., by sending early information of events that may come under their observation.

DISCUSSIONS of subjects pertinent to these columns by persons practically acquainted with them, are especially desired.

ANNUAL REPORTS of Parks, Cemeteries, Horticultural, Local Improvement and similar societies are solicited.

PHOTOGRAPHS or sketches of specimen trees, new or little known trees and shrubs, landscape effects, entrances, buildings, etc., are solicited.

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ASSOCIATION OF AMERICAN CEMETERY Superintendents: President, Geo. M. Painter, "West Laurel Hill," Philadelphia; Vice-President, Frank Eurich, "Woodward Lawn," Detroit, Mich.; Secretary and Treasurer, H. Wilson Ross, Newton Centre, Mass.

The Fifteenth Annual Convention will be held at Pittsburg, Pa., September, 1901.

THE AMERICAN PARK AND OUT-DOOR ART Association: President, L. E. Holden, Cleveland, O.; Secretary, Warren H. Manning, Tremont Building, Boston, Mass.; Treasurer, O. C. Simonds, Chicago.

The Fifth Annual Convention of the Association will be held at Milwaukee, Wis., June, 1901.

Personal.

The commissioner of parks, for the Borough of the Bronx, New York, has appointed Peter Gecks superintendent of parks for that borough at a salary of \$3,000 per annum.

Mr. Edward B. Boltou, landscape architect, New York City, has been engaged to make plans for a considerable addition to the Hillside cemetery, Middletown, N. Y. The plans are now in course of preparation and will be ready for construction work in the spring.

We have to thank Mr. E. R. Roberts, superintendent of parks, Tacoma, Washington, for a unique calendar. It is a most appropriate souvenir. A photographic view in Point Defiance park is mounted on wood which is decorated with a burnt-in design and is furnished with a calendar. In the centre is a bunch, loosely mounted, of Washington Fir cones and smaller cones are used to appropriately complete the design.

Mr. C. M. Loring, Minneapolis, Minn., late president of the American Park and Outdoor Art Association, has been elected president of the Minnesota State Forestry Association.

Mr. John G. Barker is now in South Bend, Ind., superintending some park work, and awaiting the opening of spring for further operations.

Superintendent Judson of St. Agnes cemetery, Albany, N. Y., has had an annoying experience with his mail matter for some months past; a number of letters containing remittances having failed to reach him. This condition of affairs was brought to his attention by those remitting. The matter was becoming serious and investigations and decoys were started, finally resulting in the arrest of the local letter carrier, who was detected passing a marked bill.

Among the newspapers giving publicity to the paper read by Rev. Geo. F. Houck on "The Sunday Funeral," at Cleveland, O., at the convention of the Association of American Cemetery Superintendents, is the *Mankato* (Minn.) *Daily Review*. It also published a communication from the Episcopal clergyman of that place, the Rev. Geo. H. Davis, endorsing the views presented.

Obituary.

Mr. Geo. H. Scott, superintendent of Elmwood cemetery, Chicago, died at his home in River Grove, Ill., on Dec. 28, aged 59 years. He had been sick with pneumonia for a week. Mr. Scott was born in Roxburghshire, Scotland. He was a well-known active member of the Association of American Cemetery Superintendents and a life-long member of the St. Andrews society. For fifteen years Mr. Scott was superintendent of Rosehill cemetery. He leaves a widow and seven children to mourn his loss.

Mr. George W. Bechel, a trustee and superintendent of Riverside cemetery, Defiance, O., died Nov. 2, 1900, in the 63d year of his age. He was born in Canton, O., June 13, 1838, but had made his home in Defiance since quite a young man, becoming prominent in municipal affairs and a highly respected citizen. He was a member of the Association of American Cemetery Superintendents. His funeral was largely attended, the final ceremonies being conducted by the Scottish Rite Masons from Toledo.

Mr. D. J. Wilhelm of Defiance, O., also connected with the above cemetery as trustee, died suddenly in December last.

Mr. John C. Wise, a member of the board of trustees and treasurer of the Mankato, Minn., cemetery association, died in November last. He was one of the original incorporators of the cemetery association in 1869. Charles E. Wise, a son of the deceased, was unanimously elected by the board to succeed his father in both offices.

Mr. John T. Mellor, a well-known citizen of Jersey City, N. J., and for many years superintendent of the Jersey City Cemetery, died at his home in Hackensack, in January, in his 81st year. He had been a member of the Association of American Cemetery Superintendents since 1888. He leaves three sons and two daughters.

The Board of Managers of Oak Ridge Cemetery, Springfield, Ill., recently passed resolutions on the death of Obed Lewis, who had served as an active member of the board since the year 1864. He was 88 years of age.

BOOKS, REPORTS, ETC., RECEIVED.

Report on Forestry in Sweden by General C. C. Andrews, U. S. Minister at Stockholm, 1869-77. New and revised edition. Washington, Government Printing Office, 1900.

Connecticut Agricultural Experiment Station, New Haven, Conn. Bulletin 131. The Protection of Shade Trees in Towns and Cities. This is one of the most practical and comprehensive discussions of the question of care and protection of street trees yet issued and should be in the hands of every city official in the country charged with the care of the public trees. A summary of the conclusions in the way of recommendations is given on another page.

Rules and Regulations, Los Gatos Cemetery Association, Los Gatos, Calif. These rules are quite comprehensive and are based on the lawn plan of cemetery. Copies will be sent to applicants.

"Saratoga Sunshine," facts about the Foot-hill region of the Santa Cruz mountains and the warm belt of the Santa Clara valley, Calif. An illustrated pamphlet published by the Saratoga Improvement Association, Saratoga, Santa Clara Co., Calif., 1900. Copies can be obtained by addressing the association.

Public Advertising, Report by Frederick Law Olmsted, Jr., to the American Park and Outdoor Art Association, read at the annual convention held in Chicago, June 5-7, 1900.

Hampstead Heath Protection Society, London, England. First, second and third annual reports, and a report by William Robinson. This society was formed to protect and maintain Hampstead Heath, London, one of the historic spots in the vicinity of London, which together with its landscape beauties should be preserved. The society is meeting with marked success.

Hubbard Park, Meriden, Conn. A beautifully illustrated pamphlet, descriptive of Hubbard Park, a gift to the city by Mr. Walter Hubbard, to whom we are indebted for the copy to hand.

A Short Account of the Big Trees of California. Prepared in the Division of Forestry. Gifford Pinchot, Forester. U. S. Department of Agriculture, Washington, D. C. Illustrated with many half-tones and large map.

The Annual Report of the Board of Regents of the Smithsonian Institute for the year ending June 30, 1898, contains the regular reports of operations, expenditures and conditions of the institution and a valuable appendix containing a selection of miscellaneous memoirs of great interest to those engaged in the promotion of knowledge. Those contained in the present volume have no immediate bearing on botany and landscape development, with the exception of an article on "The Economic Status of Insects as a Class," by L. O. Howard.

From Burton H. Dorman, Bridgeport, Conn., "Souvenir" of that city, being a collection in pamphlet form of photographs giving the prominent features of interest.

A general outline of the plans and purposes of the Pan-American Exposition, to be held in Buffalo May 1 to November 1, 1901. Profusely illustrated. This booklet gives a large amount of information concerning this coming exhibition, which promises to be a good second to the World's Fair of 1893.

Rules and Regulations of the Los Gatos Cemetery Association, Los Gatos, Calif. A useful feature and one that should be imitated in this little pamphlet is the topical index, by which any object mentioned can be at once located.

Vol. XI. Proceedings and Journal of the Agricultural and Horticultural Society of India. For January — March, 1900.

A PRIMER OF FORESTRY. PART I.—The Forest. By Gifford Pinchot, Forester. Bulletin No. 24. U. S. Department of Agriculture. 2d Edition.

The important question of Forestry is at last assuming the position in the mind of the government, as one might say, that it should have occupied years ago. It is a happy conclusion, however, with which we can console ourselves that once taken hold of, the subject will be pursued until some practical results are obtained. In line with this view comes from the government printing office the first part of "A Primer of Forestry," a work of clearly an educational tendency and profusely illustrated to ensure a complete understanding of the text. It deals with the units of the forest, with its character as a whole and with its enemies. In the words of the author, "it may be said to sketch the foundation of the practice of forestry and of forest policy." Under the following heads it deals with the question: The Life of a Tree; Trees in the Forest; The Life of a Forest, and Enemies of the Forest.

Trade Literature, Etc., Received.

New Creations in Fruits and Flowers for 1900. Twentieth Century Fruits. From Burbank's Experiment Farms, Luther Burbank, Santa Clara, Calif.

Lists and prices of tree and shrub seeds, forest collected seedlings, ferns, etc., collected and sold by J. H. H. Boyd, Gage, Sequatchie Co., Tenn.

Kelsey's Hardy American Plants and Carolina Mountain Flowers. Wholesale list. Harlan P. Kelsey, Boston, Mass. Also cultural directions for "sang" or ginseng.

How Trees are Raised. An illustrated booklet on trees and landscape gardening. Thomas Meehan & Sons, Germantown, Philadelphia.

Lord & Burnham Co., New York City, have issued a neat calendar; a few words specify their leading specialties, in greenhouse and conservatory building.

Dreer's 1901 Garden Calendar—Seeds, Bulbs, Plants, etc. Henry A. Dreer, Philadelphia, Pa.

The Storrs & Harrison Co., Painesville, O., Spring of 1901. Seeds, Bulbs, Plants, etc.

R. and J. Farquhar, Boston, Mass., Seeds, Bulbs, Plants, etc.

The beautiful floral calendar annually issued by Ludwig Moller, Deutsche Gartner-Zeitung, has come to hand. This year it is Pelargoniums in variety.

Society of American Florists—Department of Plant Registration.

Gustav Obermeyer, Parkersburg, W. Va., registers new canna, "West Virginia," a seedling of Queen Charlotte, color of Gloriosa with narrower yellow band. Full spike and very dwarf.

Peter Henderson & Co., New York, register New Lilliputian Canna, Little Gem. Flowers orange scarlet, each petal lightly edged with yellow. Very dwarf

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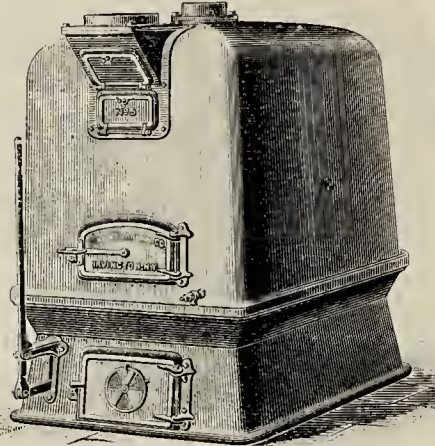
GOOD BOOKS.

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- Grasses and Clovers. Illustrated. 25c.
- Spraying for Profit. A practical hand book of the best methods. 20c.
- Quarter Acre Possibilities. Nutter. Illustrates how to improve the home surroundings in an artistic manner. \$1.
- Landscape Gardening. Waugh. A treatise on general principles of out-door art. 150 pages. Illustrated. 50c.
- The Water Garden. Tricker. Describes all operations from growing plants in tubs to the largest water garden. Illustrated. \$2.
- How to Plan the Home Grounds. Parsons. Sets forth basic principles for beautifying home and other grounds. Practical. Illustrated. 240 pages. \$1.
- Landscape Gardening. Maynard. Plain descriptions of trees, shrubs and plants recommended, with principles and methods of treatment to secure effective results in beautifying homes and surroundings. 350 pages. Illustrated. \$1.50.
- Landscape Gardening. Parsons. Suggestions for Lawns, Parks, Trees, Shrubs, Flowers and Foliage, Ponds and Lakes. 300 pages. Illustrated. \$3.00.
- The Maintenance of Macadamized Roads. Codrington. Materials, construction, maintenance. Consumption of materials, sweeping and scraping, drainage, watering. Cost, etc., \$3.00.
- Familiar Trees and Their Leaves. Matthews. Over 200 trees described under leaf characteristics and peculiarities. \$1.75.
- Art Out-of-Doors. Mrs. Schnyler Van Rensselaer. Hints on good taste in gardening. Full of valuable suggestions for the landscape gardener and home builder. \$1.50.
- The Century Book of Gardening. A comprehensive work for every lover of the garden. Edited by E. T. Cook, London. This splendid work is designed especially to help the home gardener, and provides information on every subject covered by that distinction. It is beyond this a work very wide in its possible applications. Most beautifully illustrated, containing pictorial examples of every kind of garden and garden plant, taken from some of the grandest gardens in the world. A work affording at once instruction and pleasure. Price, \$7.50.
- The Nursery Book. By J. H. Bailey. Tells how to propagate 2,000 varieties. 300 pages. Cloth. \$1.
- Ornamental Gardening for Americans. Long. A treatise on beautifying Homes, Rural Districts, Towns and Cemeteries. Illustrated. \$2.00.
- The Garden. Howe. The garden as considered in literature by certain polite writers, \$1.00.
- Municipal Public Works. An Elementary Manual of Municipal Engineering. By Ernest McCullough. C. E. This work treats of street and road making, drainage and sewerage, water supply, lighting and fire departments and other important matters connected with municipal work, and is authoritative in its directions and conclusions. 153 pages. Price, 50 cents.
- Cyclopedia of American Horticulture. Vols. 1 and 2 already issued. By Prof. L. H. Bailey. A monumental work of acknowledged

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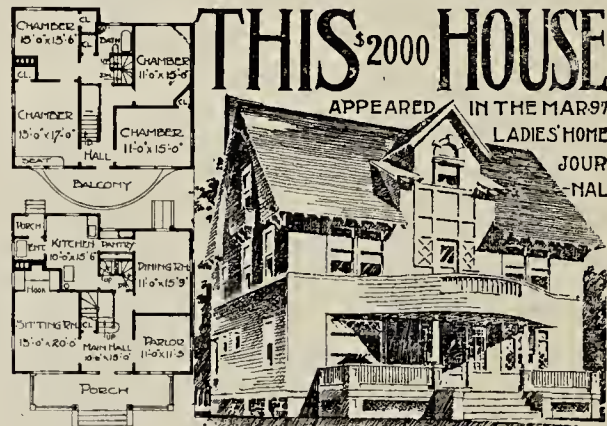
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CONTENTS.

EDITORIAL—Proposed Appalachian Park—Cemetery Improvements—Park Finances—Perpetual Care—The Bill-Board Nuisance—Progress of Outdoor Improvement.....	269, 270
Seasonable Suggestions.....	271
Notes and Comments in the Forest.....	272
*Improvement Associations.....	273
*The Viburnums.....	275
*Entrance and Office Building, Bloomington Cemetery, Bloomington, Ill.....	277
Plant Nomenclature.....	278
Newnham Park, England.....	278
*A Home Planting.....	279
*Public Meetings in the Manchester, England, Parks.....	279
Old English Gardens.....	280
*Garden Plants—Their Geography, LXII.....	282
*Correspondence.....	284
Park Notes.....	285
Cemetery Notes.....	286
Selected Notes and Extracts.....	287
Reviews of Books, Reports, Etc.....	288

*Illustrated.

PROPOSED APPALACHIAN PARK Good progress is being made on the project to create a national park in the southern Appalachian region of western North Carolina and other states, a measure noted in previous issues. There are few sections in the country more favorably located to invite government aid in securing them to the people, and there are few more abundantly furnished with natural beauty and exhilarating climatic conditions. The proposed area embraces a portion of the states of Virginia, North Carolina, South Carolina, Georgia, Alabama and Tennessee, and it is located about the head waters of the Ohio, Tennessee, Savannah, Yadkin and Roanoke rivers. It is largely covered with hardwood timber of the choicest description and is within a day's journey of the majority of American citizens. The report of the Secretary of Agriculture is very favorable to its being set apart as a national forest reserve, which will not militate at all, under proper regulations, against the park idea, but will assure its care and culture under government direction. The President recommends the report of the Secretary of Agriculture to Congress and we may hope that the bill before Congress carrying appropriation for the purchase of the necessary acreage will before long be passed. The widespread intelligent interest in the project demands prompt attention by both branches of Congress.

CEMETERY IMPROVEMENTS There are two striking features calling for improvement, in our rural cemeteries especially, which this time of year serves to emphasize and which it would be well to consider at this opening of a new century. They are poor approaches and barrenness of aspect. It is hard to credit a community with due and proper respect for its departed, when appearances of the burial ground only indicate the desire to secure space in which to deposit the remains. Oftentimes scarce a bush or a single tree is to be observed. Cold and cheerless in winter, garish and sun-dried in summer. No rustling of leaves, no waving of branch or garland of flowers in the summer breeze. It is needless to continue the picture but it may be suggested that this could not be said if a sprinkling of decorative bushes were appropriately placed or a few trees advantageously disposed to create a diversity of scene. Let every community to whom this appeals see to it that a scheme is at once set on foot to change such distressing conditions. Then as to approaches, a country funeral in the fall, winter and spring seasons is more or less a dismal performance on account of the roads. At least the roads surrounding the cemetery should be maintained in good travelling condition. The expense need not be great, and were they needed for commercial purposes a remedy would soon be found. And the improvement association could readily make this a prominent feature of their program to the intense satisfaction of all concerned. A few loads of gravel intelligently used with some thought to drainage will make a good beginning on the cemetery approaches and may be continued as rapidly as funds and labor can be secured.

PARK FINANCES One of the serious menaces to the welfare of city parks is the control of their finances by the city fathers, whose conclusions on the subject of appropriations for such purposes are frequently dictated by influences not by any means related to park ethics and often by capriciousness. While there must, in the public interest, always be provided some regulations governing the action of the park officials or commissioners, there should be also certain sources of income assured to the parks. Parks are such an essential to public welfare that their maintenance and care should not be dependent on political or even economical uncer-

tainties, because a lapse in their care from whatever cause, means increased expenditures to regain lost ground, while the cost of their maintenance is such a small tax per capita that no diversion of that tax to other channels should be considered.

PERPETUAL CARE At various intervals in the past attention has been drawn to the necessity of care in regulating values in connection with the perpetual care of lots, so that endowments of sufficient amount should be required of lot-owners, in order to effectually provide for such care. In the reports coming to notice now-a-days the subject is frequently touched upon and in certain cases not without anxiety. The value of money with high-class securities is gradually decreasing and where but a few years ago six per cent. could be obtained there is today no certainty of securing over $3\frac{1}{2}$ per cent. This on an endowment fund for a certain sized lot of \$100 does not provide a very large income to ensure the maintenance and care promised under the deed, and in the event of being insufficient clouds the procedure. This question is an important one and one that requires the careful consideration of proprietors and trustees. What perpetual care means must be clearly defined, and the proposition so thoroughly understood, that the cause may not be subjected to a set-back now that it is making such excellent progress in public sentiment.

THE BILL-BOARD NUISANCE Illinois deserves some congratulations on the persistent manner in which many of the citizens have prosecuted the campaign against the advertising bill-board defacement of our cities and landscapes. The rigorous denunciation of this method of advertising, so derogatory of all aesthetic principles, which was made at the convention of the American Park and Out-door Art Association in Chicago last June, was another stimulating influence and was followed by the passage of an ordinance by the city council, which, however, was found inadequate for the purpose intended. More deliberate judgment being formed in the meantime, a better ordinance, though somewhat restricted in its scope, has recently been passed, which provides that all signboards and billboards more than three feet square now within 200 feet of any park, parkway or boulevard, are declared a nuisance and shall be torn down and that such boards be prohibited in future. Thirty days were given for the work and severe penalties are provided after that time. Outside the city one of the most energetic factors in the warfare is the Quincy Park and Boulevard Association, Quincy, Ill., which has recently secured the passage of an ordinance in that city prohibiting the affixing of advertising matter of any

kind to electric light, telephone, telegraph and electric street car poles, trees and tree boxes. This association is actively engaged in the crusade and is pushing the work to extend its influence into the country districts and is laying plans so to broaden the scope of the movement as to enlist in the cause both county, state and the federal government itself. It is a work worthy of the active co-operation of patriotic citizens.

PROGRESS OF OUT-DOOR IMPROVEMENT The growth of public interest in the improvement of the external conditions of life over our large domain is remarkable, to say the least, and that it has all come about in the last quarter of the century, and to be more exact, in a really practical way, in the last decade, is actually surprising. Some of the states have made great progress looking to the various interests connected with the proposition, such as initiatory steps for forest preservation and culture, the setting aside and securing possession of beauty spots, historical and picturesque; the passage of laws looking to the organization of art commissions for the embellishment of their cities and many other similar steps having in view, in the main, out-door improvement. And the movement as a whole is engaging public attention throughout the country. As might be expected it is especially marked in the New England states, where the increase in park areas, the reserve parking of beautiful and picturesque localities, the growth and improvement of private estates, the increasing number of improvement societies, and the passage of laws to promote and encourage improvement is a bright augury at the beginning of this twentieth century for the immediate future. Among the noted recent efforts is that of New Hampshire where the institution of an Old Home Week Association, which was originated in 1899 by Governor Rollins has had a marked benefit on the rural sections of the state. The Secretary of the Board of Agriculture was made secretary of the association and the duties of the two offices were combined in promoting the movement throughout the state. In 1889 about sixty Old Home meetings were held, which increased to 72 in 1900. One of the principal results of this movement has been in awakening interest in the towns and the purchase of many abandoned estates by former residents of New Hampshire. These have largely been improved as summer residences and the promotion of a love for landscape beauty and art materially aided. The preservation and cultivation of the forests is also receiving active attention with the probability that an appreciation of the benefits to be derived will give the stamp of permanency to every effort.

SEASONABLE SUGGESTIONS.

The English yew makes a beautiful hedge and it is not such a slow grower as many imagine. Young plants of about two feet, set out in early spring, rarely fail to grow.

Sow seeds of verbenas in March, indoors, to have nice healthy plants for bedding out two months later. The colors of seedlings cannot be guaranteed but the plants are stronger and better than those from cuttings.

Cut down *Hydrangea paniculata grandiflora* as much as you wish before it starts to grow. It is benefited by a hard pruning, larger flower heads resulting.

Crape Myrtles are greatly admired as much because of their midsummer blooming as for their lovely flowers. From Philadelphia southward they are hardy. These plants can be increased by hardwood cuttings, made and planted out in spring.

English hawthorn and varieties are often attacked by borers, which must be looked after. Our native species are exempt so far as known.

Tea, China, Bourbon and all ever-blooming monthly roses should be cut down to within six inches of the past season's growth to have them do their best. Unlike June roses, a good pruning back helps them.

Gladiolus bulbs set in beds of rhododendrons or other evergreens, are not out of place. Set wherever they may be, it is best to get them in early as soon as the ground is fit. A planting three weeks later gives a late crop.

Those who do not possess the *Verbena* shrub, *Caryopteris*, should have it. Its blue flowers come in early fall, when hardly a tree or shrub is in flower.

Plant Japanese irises early and give them a quiet wet place. As with our wild iris, *versicolor*, evidently they are at home in swamps. Not a great many such beauties as these could be set in such a place.

Seeds of banana should be started indoors in February or March, that strong plants may be had by the time warm weather arrives. The same of cannas. All leaf plants are greatly helped by greenhouse stimulating before planting out.

When late plantings of vines are expected it pays to plant a lot in pots, to be ready at any period of the season.

Spring is a good time to divide paeonies where an increase is desired, but such divided plants fail to flower satisfactorily until after a year's growth.

There is sterling value in the Crimson Rambler rose, but not much can be said for Yellow Ramb-

ler. The bud is slightly yellow, but this is lost on opening, the flower being white then.

In cemeteries where flower-beds are still permitted, if lot-owners would have level beds and level graves instead of mounded ones, there would be not nearly the trouble in keeping plants from drying out there now is.

The Scotch heather as well as several of the ericas, is quite hardy in the Middle States, and probably even further north. As it will grow in barren places as well as in better ones, there seems room for its more extensive use.

Just what is to be planted needs to be well thought out this month. Keep in mind the early development of the buds of willows and larch. Planted before growth starts there is no trouble with them. Left later they are very apt to die.

Keep in mind that spring is the time and the only proper time, for the planting of magnolias. They rarely live transplanted at any other time, unless from pots. Add the *Fraseri* to your collection if you have it not. The flowers are delicately scented.

For use under trees it has to be some surface rooting plant which can catch the moisture from dews, light rains, etc., as the trees take all the moisture lower down. English ivy, periwinkle, *Veronica officinalis* and evergreen honeysuckle among evergreens, and Virginia creeper, trumpet vine, *Ampelopsis Veitchii* and the like, among deciduous things, are what are wanted.

Nearly all shrubs root readily from hard wood cuttings. Cut the shoots of the past season into nine inch lengths, tie in bundles and place in a cool cellar till spring. Set out-doors in rows as early in spring as possible. Set them deep enough to permit of but about two eyes being above ground.

Though the scarlet clematis, *coccinea*, is but an herbaceous plant, it is a neat, pretty vine, and when rambling over brush, as sweet peas are often permitted to do, it forms a most attractive object.

March is quite early enough to strike cuttings of coleus to have plants for bedding out. The young tops from a few old plants give a start and then later on the tops of those recently rooted. Of the two much used sorts, *Verschaffelti* and *Queen Victoria*, the former holds its foliage better when the cool nights of late fall come.

In Laurel Hill cemetery, Philadelphia, English holly, *Magnolia grandiflora*, Cedar of Lebanon and other nice things are quite hardy, the protection of the place by abundant other trees, monuments, etc., being just what these plants require.

Sweet peas dislike the heat of summer, both

the tops and the roots. It is not always possible to suit the tops save by planting where some tall object will break the afternoon sun, but if the seeds are set deep, say four inches, and then the ground be mulched in summer, it serves the roots as well as it is possible to. Sow the seeds even before winter is over, if possible to do so.

Unless Pawlownias have well-developed heads, it is much better to cut them almost to the ground when planting them. They then rarely fail to grow and usually make a strong young shoot many feet high by fall.

The big tree of California, *Sequoia gigantea*, is hardier than many suppose. Cold has never hurt it in Pennsylvania to my knowledge. The trouble with it has come from the attack of a fungus, which destroyed the foliage. Bordeaux mixture seems to have settled that.

To destroy a tree and not have it sucker from the root, as some trees are apt to do, there is no better way than to cut it down in spring just as the leaves have fully expanded. The sap in the tree has been expended and no more perfected by the new leaves. Poison vines are best cut down then than at any other time.

For bordering lawns supported by a low wall nasturtiums, Barclayana vine or some other not too rampant a growing vine fits nicely. The overhanging shoots take away much of the artificial appearance of the lawn which such a wall gives it.

India rubber plants which are too tall may have their tops cut off and rooted in sand, in a greenhouse, in summer, or even in a sheltered position outside. Another way is to take a plant out of pot, plant it on its side and layer the top, doing this in early summer. By fall the layer will be rooted and can be cut off and potted.

Joseph Meehan.

NOTES AND COMMENTS IN THE FOREST.

A few years ago when wandering through cut-over forest lands in middle Wisconsin my attention was called to the young sproutings springing up everywhere. I was much surprised to find a majority of them to be poplars, where formerly oak had dominated. The question at once arose in my mind: Are the forests of the future to contain soft-wooded trees?

Again this past fall I noticed in spots along the forest covered shores of Lake Michigan, north of Chicago, that a majority of the sproutings were Lindens. Here again the old trees were mostly oaks, with a sprinkling of hard maple, hickory and iron wood. The sproutings were most plentiful in those places where the leaves had been permitted

to lie and rot, thus forming a layer of vegetable mold. This again would facilitate a ready trap for the flying seeds and once caught were soon washed down into the fertile mold. From those who know this preferable home of the basswood, I may say, that these patches of young sproutings are found on the high lands now occupied by the oak.

Thoughtfully I compared notes with those from Wisconsin and again asked myself the question: Are the forests of the future going to be soft woods?

Forests have disappeared since the dawn of life and new ones of entirely different character have succeeded them. Thus the earth was once covered with a luxuriant growth encouraged by the moist atmosphere then prevailing to supply us later or when needed with fuel in the form of coal. As time passed and the submerged lands gradually rose above the water and the atmosphere getting drier the hardwood forests commenced to form themselves. But as civilization spreads over the surface of the earth these forests are gradually disappearing, partly through thoughtlessness but largely because we need them in our modern homes, as we need the vacated lands for food. Can it be possible that our present oak forests now disappearing are to be replaced by less valuable and useful timber?

If this be true it remains with the forester to alter conditions and hence our forests of the future will largely be the product of the forester, supplying the demands of mankind.

It is well known that soft-wooded trees are of faster growth than the hardwood varieties and if allowed to grow side by side will soon kill out the latter.

From time beyond history written by men the forests of Denmark have changed several times; those of more recent date containing only oaks. But then the red beech—*Fagus sylvatica*—appeared and woe to the oak. Wholesale they were slaughtered in battle with the more rapidly growing rival and today but a scattering one is left to tell the tale. The beech not only had the advantage in growing faster but its dense foliage soon took away the much-needed light from the oak, and its destruction was thus hastened. Beech makes poor lumber and outside of the carriage or wagon shop it is very little used, except for firewood; the consequence is that all building material has to be imported. But thanks to modern forestry the next generation will enjoy cutting their own lumber with which to build their homes.

James Jensen.

IMPROVEMENT ASSOCIATIONS.

Conducted by
Frances Copley Seavey.

Leave the World a pleasanter place than you found it.

A WOMAN'S WORK.

We take pleasure in devoting our space this month to a brief mention of the methods of Miss Mira Lloyd Dock, of Harrisburg, Pa., whose enviable reputation as a speaker on Forestry, Village Improvement and kindred topics is well known. Only a suggestion of the scope of her

popularity and success as a public speaker. Thoroughness is her watchword and she attributes her success to the careful preparation that lies back of each address. This includes every phase of the subject in hand both for the talk and for the slides with which it is to be illustrated. No amount of research is too great for the one, and no difficulty in securing proper negatives for the other, too troublesome to be overcome. For instance, it is incidentally learned that preparatory work for a lecture on Forestry given last fall in a region frequently devastated by forest fires, included a careful study of root symbiosis (the action of fungi on the roots of forest trees) which enabled her to give a clear summary, even in what was



WELL MANAGED RIVER ROAD.

ideas can be given in such limited space, still an inkling of their character and breadth must encourage Improvement Societies, and impress individuals with the dignity of such effort.

Miss Dock is fortunate in possessing a knowledge of Botany which forms a basis for her Forestry and Improvement lectures. Indeed, Botany is her first love and her Club lectures the natural outgrowth of her scientific work. To quote her own words: "I would rather have a class of four, in plant physiology, than talk to an Opera House full of people." It is fortunate for the public, however, that she has turned her attention to Forestry and Improvement lines, for her energy in getting at the foundation of existing evils, in conjunction with her scientific attainments make her work unique and invaluable. That these facts are generally recognized is attested by her

accounted a popular lecture, of the root—speaking both figuratively and literally—of the difficulties to be met and overcome by those who listened to the address. Again, in speaking of a lecture on "Improvement Societies at Home and Abroad" given under the auspices of the Board of Trade of the city of Harrisburg, Pa., in December, 1900, Miss Dock mentions "the immense amount of careful study back of it, the miles and miles of walking and measuring" as well as of "garbage and topographic work." The key note of her labors, and this also indicates the structural skeleton that underlies her conception of what constitutes correct methods in Improvement work, is given in the same letter (and I trust that she will forgive these quotations from personal letters,) for she follows up the former phrase by saying: "In my mind the basis of all work of this character

PARK AND CEMETERY.

is topographic study, then actualities, then possibilities based on the achievements of others." So, there you have it in a nutshell the pith of the subject from one of the highest authorities in this or in any other country.

Any mention of this noted woman's part in the



"HAVING A JOLLY GOOD TIME."—SHOOTING THE CHUTE, INDEPENDENCE, IA.

improvement movement would be incomplete without some allusion to her strong belief in, and reliance on, the spirit of co-operation that she considers especially marked among workers along these lines. This opinion, steadily adhered to and quietly but persistently maintained, is positively inspiring. She says: "All efforts to do my best would avail but little were not city and park officials and scientific workers so unstintedly kind and helpful." She contends that "this tremendous help is extended to all workers in civics." And there are those who are ready to subscribe to the statement, the writer included.

Miss Dock has somewhere said that: "The movement which in its simpler form is known as the Village Improvement Spirit, is one that is confined to no one portion of our country, though certain parts are far in advance."

And she has succinctly defined this spirit or movement as being divided into four distinct forms of development, viz., "The National, as in the great Western Reserves; the State, as shown in Forestry legislation and the protection of remarkable natural scenery such as Niagara Falls; the Municipal, in

our Park systems; and the local or individual, in the preservation of Pine Knoll at Sheffield, Mass., or of celebrated trees, as the Waverly Oaks, near Boston." She further says that: "All of these forms are based upon the fundamental idea that the earth is an heritage, and that we, as tenants, leave our mark either as Caretakers or as Destroyers."

As we can only hope to faintly suggest the ideas and methods of this successful improvement worker, we may as well conclude with a quotation from her address before the National Federation of Women's Clubs at its Biennial held at Milwaukee in 1900.

"In improvement work the time has come to drop piecemeal work and concentrate on some vital points for education, legislation and enforcement.

1st. Household Waste, its removal and sanitary disposal.

2nd. Good roads and streets, pathways along rural roads, tree planting in care of qualified persons, protecting beautiful places, and placing seats by roadsides.

3rd. Agitation looking to legislation prohibiting dumping on the shores of any stream, the prevention of the use of small streams as sewers, the



A COMMON SIGHT ANYWHERE.
This village is most romantic in its location.

encouragement of constructing swimming baths on streams (even small ones) and public walks along their banks."

A few examples of the lessons Miss Dock strives to fix in the minds of her auditors by means of lantern slides made from negatives that have

usually been made under her direction, are given. The prints supplied to be chosen from for this purpose furnish such an embarrassment of riches that the difficulty has been to omit enough to leave room for any other matter in this month's issue of

PARK AND CEMETERY AND LANDSCAPE GARDENING. Those shown may be said to have been chosen at random, though each was made with a view to pointing a moral even more than adorning a tale.
F. C. S.



WILD THORNS ON RIVER SHORE.—Likely to be destroyed.



THE VIBURNUMS IN THE SOUTH.

VIBURNUM OPULUS, the garden Snow-ball of America, the Guernsey Rose of England, needs no description. It is a denizen of all old-time gardens, and as well, is still a favored flowering shrub of all new and choice plant collections. The large, light-as-snow, pure white balls of blossoms cover the bush somewhat in advance of the leaves. They have the occupancy all to themselves, unobscured by leaves. So well do the flowers improve this favor of nature that the big white snow-balls cover the bush, in dazzling white, from top to bottom. They bloom at Easter-tide or first of May, according to climate. In New Orleans the snow-ball blooms freely in March, sometimes in February.

The new Japanese Snow-ball, or *Viburnum Plicatum* is a decided improvement upon this old standard sort. The foliage is most beautifully waved, crinkled and scalloped around the edges. The large, fluffy, soft, white balls of blossom are fuller of flowrets, and each flowret is of more substance, more nicely fluted and crimped than the *Viburnum Opulus*, or Cranberry tree. This latter is the name the early botanics gave the shrub in its natural state with its flat cymes surrounded

with large white ray-flowers. Arboretums are sadly deficient in plants that fail to have *Viburnum Opulus* and *Plicatum*.

There are others of this class that are of distinguished appearance. *Viburnum Pubescens* and *Viburnum Acerifolium* naturally are shrubs of low growth and neat form. They both have abundant white flowers and brilliant autumnal foliage. Both of these *Viburnums* grow to neat tree size in New Orleans. Many flowering shrubs grow to the size of fruit or shade trees in the Mississippi Delta.

Viburnum Dentatum and *Viburnum Molle* are particularly showy. They are large, bold shrubs, with sharply cut leaves, and full clusters of lovely white flowers succeeded by dark blue seed berries. All berry bearing plants are desirable, as they preserve their attractions long after their bloom-time has passed and gone. *Dentatum* blooms fully ten days ahead of *Molle*, therefore the two go well together.

The parks in New Orleans have very handsome specimens of *Viburnum Lentago* and *Viburnum Prunifolium*. These two are the largest of them all. They frequently grow twenty feet high, with beautifully formed crowns, the branches spreading evenly around. *Viburnum Lentago* is known as the Black Ham, the fruit ripening after frost and it is very palatable. The snowy-white flowers of this native tree are showy and beautiful. The haws or fruit, each with one seed, hang on bright red

stems. Few trees are handsomer for parks than this *Viburnum* with cut parsley-like foliage, and smooth ash-colored bark.

Viburnum Molle is the soft arrow-wood of Kentucky. It has blue oily fruit succeeding the flowers.

Viburnum Dentatum is the hard Arrow-wood



FLOWERS OF VIBURNUM PRUNIFOLIUM.

the Indians used for arrows. *Viburnum Lantanoides* is known as the Hobble-Bush on account of the straggling branches which bend, or hobble over, taking root at the ends, making loops. The botanical name is from resemblance to the *Lantana* or Mayfaring-tree of Europe. It can be pruned and trained into tree form, not allowing the lateral branches to hobble and take root. The leaves are large, round—ovate, heart-shaped at base, sharply pointed at the apex, closely serrate and pinnately richly veined. The white flower cymes are very showy, and are followed by beautiful scarlet seed-berries. This fruit is not edible, but quite ornamental.

Viburnum Nudum is the White-Rod native to our forests from New England to Florida.

Viburnum Pauciflorum is one of our hardiest trees, growing far north on mountain sides.

Viburnum Cassinoides is much adapted in New Orleans as a park tree, and also in private gardens. It is a distinguished beauty among flowering trees. The rich green foliage is glossy in varnished brightness and the creamy-white flowers are produced in the greatest abundance. In northern parts the foliage is leathery and of rather a dull green, but in the south is of a lively hue. The flowers are in flat, pedunculate, five-rayed cymes, four or five inches in diameter.

The blooms are succeeded by conspicuous seed-berries, which are first pale green, then bright carmine and finally blue black; green, red and

blue-black berries will frequently be seen in the same clusters.

Audubon Park, New Orleans is rich in *Viburnum Suspensum*, which is evergreen, bright and shining foliage and white flowers.

Viburnum Tinus, the popular *Lauristinus* is a tub plant, not much used except as a cool green house flowering shrub.

This extensive genus of flowering and berry-bearing ornamental trees are natives of Europe, Asia and North America, but not found in the tropics. They are more ornamental in America than elsewhere. The temperate climate suits them, and one kind or another may safely be planted in gardens and parks anywhere from the Great Lakes to the Gulf of Mexico.

Our native trees, particularly the flowering, fine foliaged, and berry-bearing trees are now being preserved with special care in arboretums and parks. Among them all none exceed the



FRUIT OF VIBURNUM PRUNIFOLIUM.

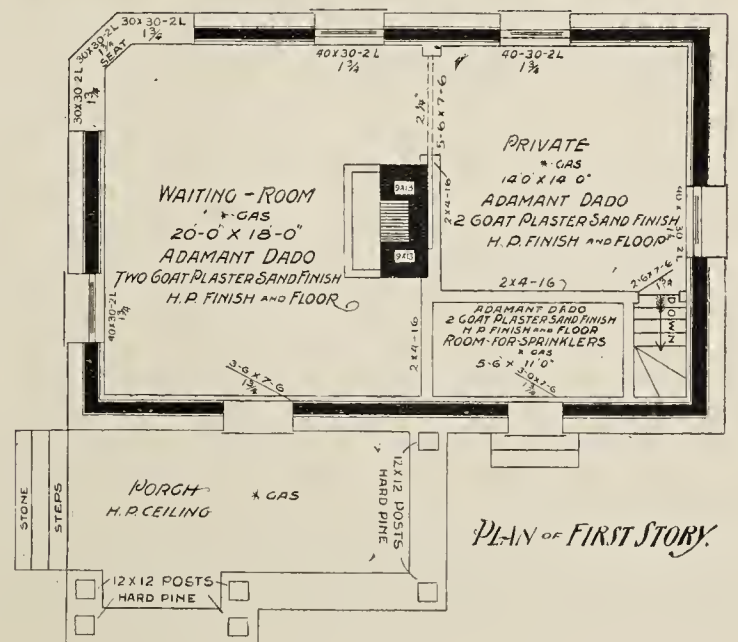
showy, neat and comely *Viburnums*. None are more worthy of culture. *G. T. Drennan.*

The Canadian Horticulturists are rapidly assimilating American ideas in connection with the development of their resources and possibilities, and we know very little of the progress they are making. The question is now being agitated of sending out from the several headquarters of the Dominion Department of Agriculture expert lecturers to speak before the Horticultural societies on floriculture and fruit culture. The work is not yet recognized by the department, but strong efforts are to be made to induce the authorities to give a helping hand to the societies. The Canadians are bending every effort to create a large fruit export trade and the experimental stages promise good results.

ENTRANCE AND OFFICE BUILDING, BLOOMINGTON CEMETERY, BLOOMINGTON, ILL.



The illustration herewith graphically displays the new cemetery building of the Bloomington Cemetery Association, Bloomington, Ill. The dimensions are given on the plan. It is constructed of boulders brought from Chillicothe, Ill., which were broken into suitable sizes by the cemetery labor at odd times. Portland cement was used in laying the boulders, which are backed up by bricks laid in Louisville cement. The building was erected in charge of Mr. Arthur J. Graves, superintendent, and its total cost was \$1,375, including freight and cemetery labor. The small room in the rear of the office, and which has an entrance from outside is designed for the storage of sprinkling cans belonging to patrons of the cemetery. The cost of the structure compares favorably with both brick or frame buildings of like design.



PLANT NOMENCLATURE.

Plant nomenclature may give gardeners and nurserymen a cause for confusion. In their bewilderment it is not entirely unreasonable that botanists should be made the mark to whom to direct their complaints. *Halesia* instances a case.

That genus has had a peculiarly interesting recent history. Of that very large family *Styracaceæ* only three genera are hardy in the Northern United States,—*Halesia*, *Styrax* and *Pterostyrax*. The latter is indigenous to China and Japan and the first two are native in the United States. The genus *Halesia* is composed of three species of shrubs or small trees that are native to the south eastern United States. It was found by Mark Catesby during his American tour and in his "Natural History of Carolina" (1731) there appears a colored figure of this plant which was there named *Halesia tetraptera*. In 1760 John Ellis collected seed of this species and another—the latter he discovered in 1761 under the specific name of *diptera*. It happens, however, that about two years before Catesby named and procured the species called by him *tetraptera*, Linnæus had given the same plant the name of *carolinum*. According to the rules of nomenclature the old and well known name of *tetraptera* must therefore give way in favor of the still older though comparatively unknown name of *carolinum*. But the generic name is also involved. Several years before Linnæus gave to the plant in question the generic name, *Halesia*, P. Browne described a tree native to Jamaica and named it *Halesia*. This genus was found to be the same as that described two years prior (1753) by Linnæus as *Guettarda*, a plant native of Java. Therefore Browne's name was made a synonym of Linnæus. In the rulings by the American scientists the same generic name cannot be used twice. Therefore since we have *Halesia* recorded as a synonym it cannot be used for another and the plant popularly known today as *Halesia* had to be altered. This error was noted by Dr. N. L. Britton, then of Columbia University, who proposed renaming it in honor of Dr. Chas. Mohr, the botanist of the Geological survey of Alabama. He overlooked the fact that *Mohria* was the name of a low fern, cultivated in greenhouses. Apprised of his error, two weeks later he altered (see *Garden and Forest*, 6, 463, 1893) it to *Mohrodendron*. In the meantime Prof. E. L. Green (of the Univ. of California) found the discrepancy of the name *Halesia* and proposed the name of *Carlomohria*, but this name was not published until after Dr. Britton corrected his name *Mohria* and as a result the latter's name stands. The singular part is that of a plant having three new names within a fortnight.—*E. M.*

NEWNHAM PARK, ENGLAND.

Through the kindness of a friend who recently visited Newnham Park, Oxford, England, I am indebted for a few notes concerning the grounds, and also for a copy of some lines to the memory of Walter Clark, which appear below. Newnham Park has been known for years as the home of the Harcourts, a family, many members of which have been prominent figures in England for years. The park itself is famed for its natural beauty, and, indeed, to many gardeners of England the "glades of Newnham" has a familiar sound.

The Thames, also the Cherwell river, is in close proximity to it; while the rare old elms it contains as well as those of Oxford itself, are worth a long journey to see.

Near a grotto, the sides of which, as well as those of the path leading to it, were overgrown with mosses and lovely ferns, my friend suddenly found himself face to face with a stone, "To the memory of Walter Clark." The lines on it he had copied and sent to me and it is with much pleasure I send them for the pleasure of the readers of *PARK AND CEMETERY*. It is to be presumed Walter Clark was at one time gardener at the park, though of this I am not informed.

"To the memory of Walter Clark, florist, who died suddenly here where the following inscription on a stone is placed in the grotto in Newnham Park Gardens, by Mr. Whitehead."

On him whose very soul was here,
Whose duteous, careful, constant toil
Has varied with the varying years,
To make this gay profusion smile.
Whose harmless life in silent flow,
Within these circling shades has passed.
What happier death could heaven bestow,
Than in these shades to breathe his last.
'Twas here he fell; nor far removed
Has earth received him in her breast,
Still fast beneath the scenes he lov'd
In holy ground his reliques rest.
Each clambering woodbine, flaunting rose,
Which 'round yon bower he taught to wave,
With every fragrant briar that blows,
Shall lend a wreath to bind his grave.
Each village matron, village maid,
Shall with chaste fingers, chaplets tie,
Due honors to the rural dead,
And emblems of mortality.
Each village swain that passes by
A sigh shall to his memory give,
For sure his death demands a sigh,
Whose life instructs them how to live.
If spirits walk as fabling age
Relates to childhood's wond'ring ear,
Full oft does fancy dare presage,
Shall Walter's faithful shade be here;
Athwart yon glade at night's pale noon
Full oft shall glide with busy feet,
And by the glimmerings of the moon
Revisit each beloved retreat.

—*Joseph Meehan.*

A HOME PLANTING.

The accompanying illustration shows a bit of local improvement carried out by Mr. Robert Ridgway, of Brookland, D. C., the planting of which he describes as follows:

"The hedge consists of Japan honeysuckle (evergreen); and after ten years experience with it my admiration of this plant for that purpose increases. I consider it in all respects far superior to any bush hedge; more quickly grown, more easily kept in order, *never* attacked by any insect, even when other plants on my place, including the coral honeysuckle, have been literally devoured by them; never showing gaps, and beautiful in winter as well as in summer. It is trained on "chicken" netting, the cedar posts connected and bound together at tops by double wire cable.

"The tall trees are pines, covered with various



A HOME PLANTING, BROOKLAND, D. C.

woody vines, all native, most numerous and attractive among which is the beautiful evergreen cross-vine, *Bignonia capreolata*. Other vines are the American *Wistaria*, *A. frutescens*, climbing *Hydrangea*, *Decumaria barbara*, "Bitter Sweet," *Celastrus Scandens*, and several species of *smilax*, etc.

PUBLIC MEETINGS IN THE MANCHESTER, ENGLAND, PARKS.

The English people are known to have always been very jealous of what they conceive to be their rights, and the following incident of how certain classes of citizens secured the right of public meetings in the park known as Boggart Hole Clough, Manchester, a view in which was given in our last November issue, may be of interest. We are indebted to Mr. Norbury Williams, one of the Citizens Auditors of Manchester, for photographs and descriptions of the incident:

In Manchester, the Socialists had for some years been in the habit of speaking at street corners and in other similar public places, and part of the park known as "Boggart Hole Clough" forming a natural amphitheatre, they began to hold meetings there. These were attended by large numbers of people, and caused dissatisfaction to some of the members of the Park Committee of the Corporation, who interpreting the By-Laws prohibitory to the holding of such meetings, the Socialists were accordingly warned to desist. They resented the prohibition and stoutly insisted on what they deemed their rights. The chairman of the Park Committee ordered a prosecution, and this committee afterwards confirmed his action. This occurred in the summer of 1896.

Numbers of those attending or speaking at the meetings were brought before the magistrates and fined, some paying the fines. The first to resist and to elect to go to jail for a month was Mr. Leonard Hall, while in the following week Mr. Frederick Brocklehurst, B. A., followed his example and served a month in prison. The latter gentleman is now a prominent member of the Manchester City Council.

Afterwards Mr. Bruce Glasier, a prominent Glasgow Socialist, Mr. Keir Hardie, a Socialist, ex-M. P. and a number of ladies were summoned, as well as several local men who volunteered to assert their rights. The crisis came when the Magistrates were confronted with Mrs. Pankhurst, wife of Dr. R. M. Pankhurst, a well known barrister and Socialist. In the dock she demanded that no favor should be extended to her, but that she should be sent to jail like the others. Popular indignation had risen to a high pitch. The weekly attendance at the meetings had so increased that the Co-operation Committee applied to the local Government Board in London for new By-Laws and the weekly prosecutions were abandoned. The result was that one of the new laws made the meetings permissible after application had been made to and received from the committee, the sale of literature and the making of money collections were prohibited.

When Messrs. Hall and Brocklehurst were released from jail they were received by acclamation by crowds of citizens, and one of the first results of the renewing collisions between the Corporation and the people was a municipal contest for a seat

in the City Council between the chairman of the committee and Mr. Brocklehurst, the ex-prisoner,



A PUBLIC MEETING IN BOGGART HOLE CLOUGH,
MANCHESTER, ENGLAND.

Mr. Brocklehurst was elected and the right of meeting in the park was considered to be thus amply vindicated.

OLD ENGLISH GARDENS.*

(Continued from last issue.)

The kitchen-court is entirely for the use of tradespeople, and for the accommodation of kitchen service. It may sometimes serve as a drying-yard, though this is generally separate. It is, therefore, paved or gravelled throughout, to be dry underfoot, and to allow the free handling of wagons. This is the noisy and disagreeable part of the establishment, and it is considered essential that it should be removed as far as possible from the main house, and as much shut off. Service is brought to much greater perfection in England, so that distances which to a housekeeper here would seem impossible are deliberately planned for, that offices and service yards may be out of sight, smell, and hearing. Generally the kitchen-court is shut off by part of the house itself, or, if this is not possible, it is screened by high walls. The drying-ground is generally more open and sunny, and not infrequently clothes are dried on the ground instead of hung on lines, so that the drying ground may be a pleasant piece of turf, not unsightly even when covered with the white linen. Thus in meeting the needs of approaches to the house the two courts are developed.

Before taking up in detail the needs which decide the character of the grounds more removed from the house, it will be well to point out that the English invariably carry into their grounds the same desire for privacy and separation which is noticeable in the house. One has already remarked the careful separation of the kitchen and offices from the master's quarters; one will find similar separation between other parts of the household and between individual rooms. The nurseries are apart, the master's own rooms are apart,

the guest rooms are apart, and finally, except in suites of rooms used only for entertainment, the individual rooms are well divided from each other. This same principle underlies the garden plan. The place is considered as an out-door house. The grounds are divided up according to their use, and each portion has its well-established boundaries.

In a place of even an acre or two the first consideration is what can be got from the land in the way of actual return, and the space for a kitchen-garden is almost the first consideration. The demands of pleasure may march side by side with it, but it is very rare to find a man laying out his place with no thought of anything but beauty and pleasure. One may therefore be justified in considering the kitchen-garden as the most prominent necessity after the approaches. This garden must be near the house and near the kitchen and the gardener's house, and yet not too evident. It is never, however, treated as an unsightly part of the establishment, and indeed there are many kitchen-gardens which are quite delightful spots in which to ramble. A garden at Wells has dwarf espalier apples bordering its paths, beautiful fruit trees on its fine old walls, standard roses marking the lines of some of its paths, and the flowers and fruit helped rather than hurt by the peas and beans, the splendid blue-green of the cabbage tribe, and the rich brown of the turned-over soil. As the kitchen-garden is to be an apartment by itself, as it were, it is bounded, and at the same time protected, by walls. Large gardens would be subdivided, and one might find separate gardens for herbs, for small fruits, for roots and for the more quick growing crops such as beans and peas. The necessary water is made use of as an interesting feature. Water which has lain in the sun is better than cold well-water or water just from the town mains, so one generally finds a good-sized basin making an interesting pool in the garden. A proper place for tools creates a garden-house, frequently quite a delightful feature, and the greenhouse, hot-beds, cold frames, bins for leaves, and all such accessories of garden-work are made to lend interest to the kitchen-garden and give it the air of order which is characteristic of all English work. The desire to make the most of every scrap of ground induces the utmost care in getting all that is possible out of smallest compass. The walls, as well as the ground, must yield their increase, and all must be in compact form. This has produced the many forms of dwarf trees which add interest to the garden, and the careful rotation of crops, and following of crops in the same season which increase the appearance of care and thoroughness.

Flowers are so interwoven with the kitchen-garden, part of which is generally occupied by the varieties which are more useful for cutting than for their beauty out-of-doors, as to lead one to the consideration of the flower-garden as the next need to be satisfied. The flowers one might divide under three heads: roses, perennials, annuals. This is, of course, a very primitive division, but those three are represented in every English garden; and the three, as befits their different

*A paper by R. Clipston Sturgis, F. A. I. A., read before the Thirty-fourth Annual Convention of the A. I. A.

characteristics, are generally separated, and one has the rose-garden, the perennial bed, or borders, and the parterre of annuals. Roses are the special pride of the English gardener, and with climbers, standard and low-budded roses, and all the varieties of briars, almost anything can be done with the rose-garden. Like other parts of the place, it is enclosed with walls or hedge. The perennials being, like the roses, permanent occupants of the ground, are placed in deep rich beds, and for convenience, both of tending and picking, are frequently in long narrow borders against the walls. This gives the tall-growing plants the support and protection of the wall, and leaves room for the various smaller varieties in the edge. Such a long border, with perhaps a hedged walk or a bowling-green running the length of it, is a familiar and most charming feature. The annuals are in small beds often bordered with dwarf box, so that the regular outline of the beds may be pleasing even when the beds themselves are empty. To reach the gardens and to enjoy them when there, one finds pleasant walks, some shady, perhaps completely embowered, others sunny, for use on cold days; also seats and garden-houses.

In laying out all this there is generally a double aim, first to give, by occasional long vistas, a sense of size, and second, by screened enclosures and half concealed exits, a sense of privacy, and a stimulus to the imagination for what lies beyond. In the most interesting gardens the element of the unexpected is always present, and the fact that it cannot be a surprise to the owner does not really detract from its value; for every visitor it is a source of delight, new pleasures still unfolding until the last surprise of the round is in finding one's self back again at the starting-place.

Architectural laws demand a certain amount of level space immediately about the house, and various spots require level ground farther afield. The bowling-green, croquet-ground and lawn-tennis courts have formed at one time or another necessary parts in the layout of even a small place. These flat pieces of the splendid turf which is so common in England are among the most beautiful features of the English garden. Here, again, the love for retirement suggests enclosing walls or hedges, so that the court, or the green, is really a great out-of-door room, with garden-seats and benches about, or perhaps, in the more stately ones, busts on plinths, in Italian fashion, set against the sombre green of the yew hedge. Again, one sees that this feature is produced in direct response to a need.

Level ground cannot always be obtained naturally, and the need of it has developed the terraces which abound in the hilly districts. These may be the mere formal treatment of the platform on which the house securely rests, or they may form the various divisions of the hillside garden; or, again, surrounding a sunken garden, they may give the pleasant walk, and that most delightful of all views which one gets of a small garden—the view looking down. All of the features hitherto considered may be worked out on a ground-work of terraces, and these possibilities as well as their charms are endless.

Sedding well said that however much we were refined and cultivated there was always an underlying savagery which at times demanded satisfaction. One must tire of the sure mark of man's hand and long for nature unrestrained—the wide seaboard and the rude forest. So one finds in almost every English place of any size some wilderness, some copse, or coombe, which shall be left free and wild as, at the least, a reminder of nature quite free. But the transition from the cultivated aspect of nature to its wilder form must be gradual; one does not want to open the garden gate in the wall and be in the forest. Between the two one finds the pasture lands, rolling, sheep-cropped fields bordered, not with the masonry wall or the clipped hedge, but with the wild hedgerow, thick with thorn and holly and punctuated with the upstanding elms. From the pastures to the copse and the woodland the transition is easy.

Thus, the English garden has its forecourt and base-court; its gardens for fruit, vegetables and flowers; its places for sport and recreation, and to guard and protect all these from searching winds and prying eyes, the boundaries, the divisions, the walls and the hedges. The walls, especially those near the house, are always in close touch with the house itself—stone with the stone house, brick with the brick one, and, in their ornament, balustrades, gateways, posts, coping and finials, echoing the character of the house. As one goes farther from the house, the walls are less architectural and more purely utilitarian; the boundary wall of the place, or the north or east wall of the garden may be ten or twelve feet high, for it is to serve as a real protection; others may be but two or three feet high, mere boundaries to mark a line. The hedge is, perhaps, the commonest bound of all, and this varies from the rough pasture hedge row, to the clipped yew, or holly, or box. The fancy clipping of hedges and individual trees was an importation from Holland, and at one time was very popular. There are many examples of topiary work in the older gardens, but to-day clipped work is rather more sober and, on the whole, more in keeping with the common sense beauty of the English garden.

Shrubs are rarely seen as individual show-plants, but are generally massed and placed with some special end in view beyond and apart from their mere beauty. They will serve to screen the office or the kitchen-yard or to make a wind-break for more delicate things growing on the borders of the lawn. Trees also are used very cautiously as individual specimens. Occasionally a great plane-tree or an ilex stands in lonely grandeur at the edge of the lawn, but as a rule the trees are planted in groups to serve definite purposes. Sometimes to shut out an undesirable view, sometimes to form a vista towards a pleasant scene. Again, a group of elms at the end of the place may simply serve as a background—a great drop-scene which finishes the view and leaves one in doubt as to how much more there may be beyond. Many a small place of two or three acres gives an impression at once of seclusion and of size, because the great trees prevent one's seeing what lies beyond. The

larger places will, of course, have their copse and woodland, but even here the mark of axe shows that thoroughness and care, and that eye to profit which prevades everything; for dead wood is cleared out, the spindling trees are felled, the brushwood is cut and tied in faggots; everywhere there are the signs of an old industry, a well-worked country, where everything must be turned to account.

When one wanders through English gardens with all their delight one cannot but feel convinced that common-sense and thrift are the roots on which the beauty has grown and thriven.

GARDEN PLANTS — THEIR GEOGRAPHY — LXII. — ASARALES.

THE NEPENTHES, RAFFLESIA AND ARISTOLOCHIA ALLIANCE.

This also is a small group of plants containing four tribes which seem to have little in common, 13 genera and 283 species, many of which are quite the most remarkable plants in the world. They can only be represented in Northern gardens by a few species of two genera. All the rest are tropical or sub-tropical.

The Nepentheæ, of which we illustrate an example, is founded on a single genus of 31 species and a large number of natural and hybrid varieties, natives of tropical Asia, Malaisia and Australasia, and of Madagascar and the Seychelles. They are very singular and are known as "the pitcher plants." What are passed over as flowers by the heedless are leaf appendages. The individual flowers are small and produced in a dense terminal raceme. Their relationship is by no means obvious. Brown pointed out analogies to the Aristolochias, and the structure of their wood is said to confirm their homogeneity. Adolph Brongniart considered them near to the Rafflesieæ or such of them as he knew. Modern systematists seem to agree with these views and with superior advantages now term the group "*Multiovulatæ terrestris*." They are found growing on shelving, boggy ground, but gardeners often suspend them in the manner of epiphytes for the sake of better displaying their curiously-formed pitchers, which vary in color from green to chocolate red variously mottled and marked.

The Rafflesieæ and Hydnoeæ contain between them some of the most extraordinary parasites in existence. They have never been brought into cultivation for in Malaisia they grow on the over-ground stems or roots of *Cissus*, upon the roots of *Cistus* in Mediterranean countries, upon roots of *Cotyledons* and succulent *Euphorbias* in South Africa, and upon the branches of leguminous plants in tropical America. It seems hopeless to present a written picture of *Rafflesia Arnoldi*. The



NEPENTHES STENOPHYLLA.—*Gardener's Chronicle*.

bud appears on the stem of a vine, first like an excrescence, then swells out to the appearance of a trimmed purple cabbage. The plant is a huge five parted flower often three feet across, with a basin-like process in the centre of and above the huge calyx lobes or flaps. A single bloom of *narcissus poeticus* laid flat gives a faint idea of the structure. After two or three days of expansion partial decomposition sets in and it smells abominably.

The bowl-like processes contain the dioecious organs necessary to fertilization, and the lobes of the full-grown flower in size and curvature not unlike the mould-board of a plough, seem as though hewn from the vitals of a mammoth; they curve gracefully outward, then downward from the central ring to the circumference; and the wonderful flower never has a stem but a foster one and never a leaf. Such



ASARUM CANADENSE.

is my recollection of the wax models at Kew.

Hydnora Africana is another queer wonder. It is similar in aspect and growth to the fleshy, scaly, over-swollen spathe of an Aroid; it springs through the ground in the same manner and has the vile odor of the "skunk cabbage," but with never a leaf. The Kaffirs roast it, eat it and enjoy it, more it is said than American soldiers did canned roast beef, but then in spite of the similar smell it may be better. There are about 27 known surviving species of these two strange tribes.

The *Aristolochiæ* affords the only examples of the group adapted to northern gardens.

Asarum "wild ginger" has 13 species in Europe, temperate Asia and North America. About four of the American species and the common *A. Europæum* are in gardens, and I fancy here and there a few Asiatic kinds, some of which have white-veined leaves. *A. Virginicum*, too, shows some variety of spotted foliage reminding one of cyclamen. *A. arifolium* has rather striking shield-shaped leaves. I have seen it north but in the shade, and with the protection of a frame in winter.

Aristolochia has 200 species widely dispersed over most warm temperate, sub-tropical and tropical regions. *A. sipho* "Dutchman's pipe" is one of the most hardy and familiar. They are large climbers, low creepers or trailers, with a few

climbers are evergreen or deciduous, according to the character of the seasons, and some of them such as a *A. Gigas*, *A. Goldieana* and others have enormous flowers measuring two feet long by a



ARISTOLOCHIA SIPHO.—*Gardening.*

foot broad. These flowers have often a creamy ground variously mottled and veined with chocolate brown or tawny red. Several do well at the north when plunged during summer. A good group may be formed of the hardy kinds using *A. sipho* as a central climber, with the lower kinds and the various *Asarums* in matted beds around it.

James MacPherson.

"Two qualities," says Andre, "usually distinguish professional from amateur productions—simplicity and breadth of treatment." Remember this, and you will have a steady guide post, warning you away from the pitfalls into which you are most likely to step. If your garden has not simplicity and breadth of effect, it is certain to be bad as a work of art. But if it has both, it is pretty sure to be good; for breadth means unity, as simplicity means harmony of effect. Unity, harmony and variety are the three essential qualities; and Nature may be relied upon to give you variety enough, no matter how broadly and simply you do your own part of the work.—*Mrs. Schuyler Van Rensselaer in Art Out-of-Doors.*

* * *

"It seemed to my friend that the creation of a landscape garden offered to the proper muse the most magnificent of opportunities. Here indeed was the fairest field for the display of the imagination, in the endless combining of forms of novel beauty.—*Poe.*



ARISTOLOCHIA CLYPEATA.—*Gardener's Chronicle.*

shrubby representatives in the tropics, and several are herbs. Along the Mexican boundary there are narrow-leaved pubescent species. The tropical

CORRESPONDENCE.

Rhododendron Environments.

I fully expected if Mr. Jensen wrote, that he would bring out plain and interesting facts, and he has. For instance he tells us that *R. nudiflorum* was found in "low forest" lands at Calumet Lake up to a few years ago; a fact which I, and scores of others no doubt have overlooked. Many botanics copying after each other in a matter where independent observation is of far more value than in nomenclature, mention the species as growing in "swamps" without a word of the woodland at all.

Now I have fancied the Azalea section has a tendency to



THE RHODODENDRON WALK, KEW GARDENS, ENGLAND.

seek more and more moist ground as it extends northward, and if the hypothesis can be sustained it has an important bearing on practice. At the south and through Virginia and Maryland to Central New Jersey, the species has seemed to me more common in dry woodland than wet, but rarely or never in the fields or the fence rows exposed to "siroccos."

But from Central Jersey northward it becomes common in moist or even boggy woodland. *R. viscosa*, and *R. Rhodora* too are found in boggy, more open, ground in company with *Clethras* and the like, but less overgrown with trees and often quite wet in summer.

I have fancied the partiality for wetter ground at the north extends to *R. maximum* also, but I know that no rule can be formulated which depends upon the observation of any one man. The area to be covered is too wide. I have noticed when passing over the southern Alleghanies to the Ohio valley that maximum grows on dry hill sides, while in the Delaware valley it hugs the streams and the slopes are more moist, and in Morris Co., N. J., and northward I have been credibly informed that it grows in bogs.

If these conditions could be generalized it would be re-

markable and show a rare adaptability. Many facts could be given as to the high dry exposed ground many species occupy within and near the tropics, where the warm air has a greater capacity for moisture. It is a well recognized fact I think, although scarcely a formulated one, that *Ericales* generally dislike "siroccos," and the species subject to such influences are commonly wiry, narrow-leaved affairs, and maritime at that. But on the prairies as Mr. Jensen points out, plants are alternately swept by desert air in summer, which often shows from 85 degrees to 100 degrees Fah. or more, with the moisture sucked out of it; and in the winter by blizzardly north-westers at 10 to 20 degrees Fah. below zero, with all the moisture frozen solid. I am very glad I did not urge anybody to plant *Ericales* on the prairies.

We have "sirocco" snaps at the East too, especially during June, which often passes with scarcely a shower. I only remember one wet June in 25 years. The influence of the great deserts is remarkable and I have never been able to understand how they happened to belt around the tropics of Cancer and Capricorn anyhow.

It is a fact all too little measured and known, that a few degrees more or less of dryness in the air means the difference between health and disease, or life and death to a multitude of plants: Heaths, Conifers, Orchids, Ferns if too little, and succulents generally if too much, especially at the wrong time.

Yet we find people cheerfully sending plants and seeds all over the country without the remotest idea of their climatological

requirements, while Nature's prescience is absolute and certain. Thus we had "multicantes" but no silk, oranges growing from one winter to the next, or the next, sugar dependent on Dingleyism, and such an infinity of fruits and flowers sent where they never should be, that nothing but the most cheerful kind of American Mark Tapleyism, permits certain men to live and move and have their being.

And the Arboretum men and Experimental men, where are they with their facts? I can rarely find anything new even in a state library. Do they just exist to collate others experience, mail it to a few, and twist it out of all semblance of sanity, like tea culture, and crude petroleum?

I enclose you this, a view of a portion of the Rhododendron walk at Kew, the construction of which I think I have heard was begun by George III. setting the Middlesex Militia to work upon it, and so converting their swords to pruning hooks. It will be noticed what a small figure the "walk" cuts, although walks are necessary in their damp climate.

I hope we may often and often have such suggestive correspondence as that from Mr. Jensen.

TRENTON, N. J.

James MacPherson.

PARK NOTES.

The Nebraska Park and Forest Association expend some \$10,000 this year in planting trees.

* * *

A bill has been prepared for the New Jersey legislature to create a Hudson County Park Commission, said commission having authority to establish large public parks in appropriate parts of the county. The sum of \$1,000,000 is to be asked with which to inaugurate the work.

* * *

An effort has been under way by Secretary Long of the Navy, to induce the city of New York to surrender the north end of Blackwell's Island for a naval park and drill ground for the sailors and marines of the Brooklyn Navy Yard. It is not desired to purchase the land but to secure the use of it.

* * *

Westchester county, New York, proposes to have additional park facilities and prominent citizens have organized the Rye Beach County Park Association for the purpose of arousing active interest in the park idea. It is intended to purchase 121 acres on Long Island Sound and to have it laid out by competent landscape architects. A bill has been drawn up for presentation to the legislature to issue bonds for carrying out the project.

* * *

The Supreme Court of Ohio has rendered a decision in relation to the board of park commissioners which declares that the act of the legislature by which they were appointed a year ago is unconstitutional. Chief Justice Shanch in giving the decision, said: "The declaring of the law to be unconstitutional will not invalidate past acts of the board, as under a well-established principle the acts of an officer holding his office illegally are valid because they were performed in good faith and the officer was in fact the acting official for the public."

* * *

By the will of the late Miss Anna H. Marr, of Providence, R. I., the bulk of her estate, valued in all at \$250,000, was left to the city of Providence for the care and maintenance of Rogers Williams Park. It was expected that a sum of something like \$200,000 would be secured by the city. The will, however, was contested by a niece and the case was carried to the Supreme court. In the meantime a compromise has been effected whereby a sum of \$25,000 has been accepted by contestant and it is now expected that \$192,000 will be put in trust of the city of Providence for Rogers Williams park. This will be a material addition to the maintenance fund.

* * *

Lincoln Park, Chicago, is under the ban of the press of the city by reason of its serious condition financially and physically. The disgraceful political conditions under which it has been managed are responsible for present status. The present board began the year 1900 with funds amounting to \$282,746.59, and an appropriation of \$267,000 for maintenance purposes during 1901, and yet at the present time it is publicly stated that the treasury is practically barren of resources, without enough money to defray actual running expenses for the balance of the year. Deterioration is evident on all sides and to palliate conditions a great reduction of expenses has been ordered. The assets for 1900 were \$166,547.53, liabilities \$217,209.82, showing a deficit of \$50,662.29. No improvements of consequence were made last year except as were provided by

special assessments and the funds remaining for current expenses this year are quite inadequate.

* * *

The annual report of the board of park commissioners of Cambridge, Mass., is always an interesting document. That for 1900 bears out the assertion. It discusses the many problems of improvement under way and as such are largely connected with beach and river improvement they are important works involving high professional direction and control. The esplanade has been the principal work of the past year. An extension of the bathing beach at Captain's Island was also carried out and the report of the public baths gives the number of bathers as over 60,000. The accommodations are as yet limited. The commissioners employed a tree inspector last season who made a systematic examination and report upon the trees of every street in the city. It was found there were 2,200 trees requiring immediate attention and 2,900 requiring some sort of attention. To effect proper care an increase in appropriation is demanded. The report of the superintendent on the question of trees presents some suggestive reading. Until the past year very little attention was given to street trees even in so important a center of landscape art as Cambridge.

* * *

The report of the South Park commissioners of Chicago for 1899 shows a large amount of park work in the way of maintenance and improvement in their control. The total area of territory embraced within the limits of the South Parks and Boulevards is 1500.81 acres. Of this the total area of actual parks in this system 1,181.33 acres; length of boulevards, 17.28 miles; the acreage of improved parks is 771.99; total length of improved drives, 41.75 miles. The work of the year was largely confined to the continuation of the improvement of Jackson park on the plans designed after the World's Fair. The total number of trees and shrubs planted during the year ending Nov. 30, 1900, was 90,300. At the latter date there remained in the park nursery 184,181 trees and shrubs. The South parks are particularly well provided with facilities for athletic sports and outdoor pastimes and a large amount is annually expended to keep the grounds and buildings in proper condition. The financial statement shows: Receipts for the year, including a balance of \$81,366.68, were \$786,162.88. The expenditures during the year left a cash balance carried to account of ensuing year of \$99,597.34.

* * *

The Hartford, Conn., *Post* contained a very interesting article on Keney Park, Hartford, from the pen of Mr. G. A. Parker, superintendent. It is only five years since the property comprising the park was secured and from the nature of the several tracts comprising it the improvements have not been markedly apparent until the past year. In fact Keney Park differs in its constitution, so to speak, from most parks, being a natural park developed on lines to retain its naturalness. The report of Olmsted Bros. on this property more clearly defines its status: "It will be possible to make Keney Park markedly different from other parks by giving it a general and all-pervading tone of ruralty, naturalness and seclusion. If this fundamental motive of design is successfully carried out, Keney park will possess a most rare and valuable characteristic, and one which will distinguish it, not only from other parks of the city but also from almost every municipal park of the country. Everything should tend to make the visitor unconsciously feel that he has escaped from the artificialities of city life into a fortunately preserved stretch of wild pastures and natural woodland." The work of improvement is progressing on these lines.

CEMETERY NOTES.

Miss Hester Ann Neely, a wealthy resident of Anderson, Ind., has ordered a monument to cost \$10,000 to be erected over the graves of her parents in Mt. Pleasant cemetery, a burial ground near Anderson that has been practically abandoned.

* * *

Some of the lot owners of Calvary cemetery, St. Louis, Mo., have complained concerning the removal of the metal and other temporary decorations deposited by them on the graves. After a day or two these have been removed, hence the trouble. The rules of the cemetery prohibit such devices and the complainants have been referred to said rules.

* * *

The trustees of Mt. Auburn Cemetery, Cambridge, Mass., in their 69th annual report, dwell upon the subject of cremation, which, they say, is growing in favor since the first cremation which took place in April last. From April 18 to the close of the year 50 bodies have thus been disposed of. The total number of interments in the cemetery is 33,412.

* * *

Under the will of the late Josiah Converse, the Stafford Springs Cemetery association, Stafford Springs, Conn., receives a bequest of \$1,000 in cash and several acres of land adjoining the cemetery on the north. Mr. Converse, who was one of the wealthiest men in the town, gave the land which is now used for a cemetery and it has the reputation of being one of the finest rural cemeteries in the state.

* * *

Congressman Norton recently introduced a bill before Congress providing for the purchase of the confederate cemetery on Johnson's Island, Sandusky bay, O. During the civil war the government leased 40 acres of land on the island for a prison for Confederate soldiers. Out of the 10,000 prisoners, 220 died and there are now 206 graves on the island. The burials were made on private grounds and the bill calls for an appropriation of not more than \$2,500 to purchase the five-acre plot.

* * *

The annual meeting of Homewood Cemetery, Pittsburg, Pa., was held January 11. The total receipts from all sources were \$87,254.39 which included the sale of 161½ lots realizing \$69,439.05. The Permanent Improvement Fund is now \$84,973.76. There was expended by lot owners for improvements, \$43,013.15. The amount expended in labor was \$9,023.62 and for expenses including salaries, \$6,748.23. In 1900 823 interments were made bringing the total in the cemetery to 9,974. Rosendale valley cement is used in the cemetery. It has proved good for underground work.

* * *

Graceland Cemetery, New Castle, Pa., the new cemetery chartered and organized last fall consists of some 100 acres of land admirably adapted for cemetery purposes. Some \$20,000 was provided for immediate improvements, such as receiving tomb, entrance, etc., and one feature of the charter provides that \$40,000 shall be set aside from the amounts realized from sale of lots, to be funded for permanent maintenance. The site embraces some fine scenic outlooks and a wooded section will be reserved for a park to which the public will at all times have access under proper restrictions.

* * *

A long looked for addition to Harmony Grove Cemetery, Salem, Mass., is now a matter of the near future—a memorial chapel. By the will of Mrs. Nancy Colwell Blake, a sum

approximately \$20,000 has been bequeathed to the trustees for the purpose of erecting a memorial chapel to her deceased son, George Harrison Blake. The conditions of the bequest are acceptable to the trustees and work will be begun as soon as funds are available. A sum of \$3,000 for the endowment of her lot in the cemetery is also bequeathed. The chapel is to be called "The Blake Memorial Chapel."

* * *

The annual report of Swan Point cemetery, Providence, R. I., gives an interesting account of the progress of work in that cemetery the past year. At the meeting it was voted to build a receiving tomb and afterwards at the discretion of the directors, a chapel and office, providing also space for a crematory and its adjuncts. The president, in the course of complimentary references to the work of Superintendent Timothy McCarthy, and his brother who died last year, said: "In the care of the cemetery the superintendent was assisted by his brother, M. Joseph McCarthy, who performed the duties of his office for 24 years until removed by death on the 2d of April, 1900. He served the cemetery with such cheerfulness and consideration for all with whom he came in contact that he won the affection of the proprietors and the confidence of the directors, and enabled the superintendent to devote his time to the work in the field without any anxiety as to those which devolved upon his brother. To both of them, each in his own sphere, the proprietors are indebted for a loving service which money cannot purchase and for which it does not pay, but which is appreciated by all who have been brought in contact with them." The total assets of the corporation are \$418,278.26, with liabilities \$1600.28. The receipts for the year were \$86,657.66; expenditures, \$86,465.91. The perpetual care and bequest fund is now \$296,068.15, and the permanent fund, \$65,051.47.

* * *

The elaborate report of Mr. A. D. Smith, superintendent of Mountain View Cemetery, Oakland, Calif., of which he has favored us with a copy contains much interesting information and suggestions of value. The closing of the burial grounds of San Francisco has naturally diverted attention to adjacent cemeteries and Mountain View has added to its list of proprietors thereby. During the past year a considerable amount of land was prepared for sale and many improvements made. The sewerage system is now connected with the city drainage, so that only storm water needs to be provided for. Marked success has attended the system of caring for the improved sections. A certain employee is held responsible for a section as to care and appearance. Each man writes his own record in the appearance of the section of which he has sole charge, and there is no dividing responsibility. Each section is provided with a roomy tool chest and a full complement of tools and implements of every kind and for every purpose. The system has resulted very favorably both in regard to care both of sections and tools. A new barn or storehouse, 40 ft. by 60 ft., 14 feet high at eaves and 25 feet at peak, built of redwood and Oregon piue was erected and completed by the cemetery employees and at a saving of several hundred dollars below the lowest bids obtained. The employees are now all neatly uniformed. A telephone system has been carried through the grounds and has been found of great convenience. The Finance Committee's report shows that the perpetual care fund was increased during the year ending December 31, 1900, \$16,774.25 and the perpetual guaranty fund, \$2,535.61. The total trust funds now amount to \$150,260.61. Some 71 monuments and headstones were erected during the year. The F. M. Smith mausoleum, now in course of construction, will be a marked monumental feature of the grounds. The total burials now amount to 20,025.

SELECTED NOTES AND EXTRACTS.

The Movement of Sap.

At a recent meeting of the Horticultural Society of New York, Dr. D. T. MacDougal explains, in relation to the movement of sap, the modern conception of what causes the flow from the root upwards. After alluding to the older theories, some of which "were so beautiful that they really ought to have been true," he proceeded to explain the present belief that the upward lift of water in the plant was produced by the chemical attraction of the leaf cell contents for water, which in turn was evaporated by the sun shining on the leaf. It was osmosis. Root pressure was an obsolete idea. Ninety-eight per cent of the sun's energy was used in thus lifting water, and only two per cent in food elaboration. The pull thus excited amounted to 50 atmospheres. As to figures representing the value of water raised, an average beech tree in leaf drew up 800 lbs. of water each day; an oak tree used up 240,000 lbs. of water in a single season.—*American Gardening.*

* * *

Destroying the Tussock Moth Caterpillar and Bag-worm.

If persons would only realize the advantages and ease with which many obnoxious insects may be prevented from spreading, the troubles in summer would be greatly reduced. The Bag-worm—so called because it lives in its "bag," or cocoon, even during its ravages of a tree—dies in the autumn; but the female first deposits a large number of eggs right in her cocoon, which is afterward her grave. These bags are easily detected in winter, hanging mostly from the upper branches of evergreen trees (the *Arbor-vitæ* seems a favorite), and may be picked or cut off and burned. When one knows the immense number of eggs which would thus be destroyed, the value of doing it is readily seen. The Tussock Moth acts in precisely the same manner as regards the deposit of eggs in her white cocoon, and the work of destruction would be the same. These silky, white cocoons may be found flat against the trunks of trees, under old boards, and around rubbish of all kinds. They are most easily found in early winter.—*Meehan's Monthly.*

* * *

Berry Bearing Trees and Shrubs.

In Spring and Summer, when there are

many trees and shrubs in flower, those displaying bright-colored berries are but little sought for. But in late Fall, when hardly a tree or shrub is in blossom, the case is reversed, and then it is we have to rely on the berries to give the attraction the flowers afforded earlier. My purpose now is to name such subjects as display their berries as the very last thing in Autumn, omitting those whose display is over. In the vicinity of Philadelphia those I am about to name were in full display in December, in spite of some severe freezings, and in January, when these notes were written, quite a number of the plants were in fair display. The list is as follows: *Cornus florida* and varieties, *Rhotinia villosa*, *Pyrus americana*, *Pyrus Toringo*, *Berberis Thunbergii*, *Callicarpa purpurea*, *Cratægus cordata*, *Cotoneaster* in variety, *Cratægus pyracantha*, *Elæagnus umbellata*, *Euonymus* in variety, particularly *Sieboldianus*, *Prinos verticiliatus*, *Cyrus arbutifolia* and varieties, *Rhamnus caroliniensis*, *Rosa rugosa*, *R. villosa*, *R. carolina* and *R. lucida*, *Symphoricarpus vulgaris* and *S. racemosus*, *Lycium chinense*, *Celastrus scandens* and other species. These occur to me as I write, and doubtless there are others, but, as already stated, I do not include those whose display is past, such, for instance, as the English hawthorn and varieties, and our own lovely species, *Cratægus coccinea*. Though all the plants enumerated in the list may be relied on, there are a few particularly desirable ones, of which I would like to say a few more words. *Rhotinia villosa* is not a common shrub. I say shrub, as it makes a bush shape, though growing to a tree size, almost. Besides the abundant bright red berries of Fall, there are the clusters of white flowers in Spring, which are of great beauty. *Elæagnus umbellata* is not well known. Its wood is a good deal like that of the better-known *E. long pipes*, but it ripens its berries the last thing in October. They are of a light salmon color, and often are so thickly set along the stem as to cause the branches to bend toward the ground. *Cratægus cordata* is a native, and of the many species I am familiar with, this both flowers and ripens its fruit the last. The beautiful clusters of scarlet fruit are in perfection in early November. The various cotoneasters, such favorites in Europe, are rarely seen here. Why, I

do not know. *C. obtusa*, *C. Simonsii* and *C. Wheeleri*, which I have tried, are quite hardy, and doubtless *C. microphylla* and other old favorites would be also. The same may be said of the grand old *pyracantha* thorn, *Cratægus pyracantha*. The large orange-red berries beautify it well into Winter, and cold does not hurt it. By planting a selection from the list given, these would be an attraction on the lawn when positively not a flower could be had on the tree or shrub.—*Joseph Meehan, in Florists Exchange.*

* * *

Sowing Seeds.

One of the remarkable things about seed sowing shown in the extract in the last issue from "*The Garden*" is that people persist in sowing so thick! It is much better to mark beds with an adjustable marker at the distances required for the full development of the species, and then on those marks press stations with the bottom of a three inch pot, in which 2 or 3 or more seeds can be dropped, covered, and marked with a plain label. This will permit hoeing even before the seedlings appear, and the thinning will be a bagatelle.

J. MacP.

* * *

Birds.

The bulletins on birds and mammals published by the Biological survey at Washington correct widely prevalent errors as to the economic status of species that affect agricultural interests, and demonstrate the inefficiency and wastefulness of bounty laws. In the case of hawks and owls the division has shown, by the examination of the stomach contents of about 3000 of these universally hated and persecuted birds, that only six out of 73 kinds inhabiting the United States are injurious and three of these are so rare they need hardly be considered leaving only three to be taken into account as enemies of agriculture. The others prey upon mice, insects and other vermin, and rank among the farmers' best friends.

Since its establishment, in 1885, the division has examined the stomach contents of nearly 15,000 birds belonging to 200 species and sub-species, and has published information on the food habits of 140 kinds, mainly hawks, owls, crows, jays, blackbirds, sparrows, thrushes, flycatchers, swallows, wrens, shrikes, woodpeckers, horned larks and cedar-birds.—*Ainsley's.*



ESTABLISHED 1890.

OBJECT: To advance Art-out-of-Doors, with special reference to the improvement of parks, cemeteries, home grounds and the promotion of the interests of Town and Village Improvement Associations, etc.

CONTRIBUTIONS: Subscribers and others will materially assist in disseminating information of peculiar interest to those engaged in landscape gardening, tree planting, park and cemetery development, etc., by sending early information of events that may come under their observation.

DISCUSSIONS of subjects pertinent to these columns by persons practically acquainted with them, are especially desired.

ANNUAL REPORTS of Parks, Cemeteries, Horticultural, Local Improvement and similar societies are solicited.

PHOTOGRAPHS or sketches of specimen trees, new or little known trees and shrubs, landscape effects, entrances, buildings, etc., are solicited.

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ASSOCIATION OF AMERICAN CEMETERY
Superintendents: President, Geo. M. Palnter, "West Laurel Hill," Philadelphia; Vice-President, Frank Eurich, "Woodward Lawn," Detroit, Mich.; Secretary and Treasurer, H. Wilson Ross, Newton Centre, Mass.

The Fifteenth Annual Convention will be held at Pittsburg, Pa., September, 1901.

THE AMERICAN PARK AND OUT-DOOR ART
Association: President, L. E. Holden, Cleveland, O.; Secretary, Warren H. Manning, Tremont Building, Boston, Mass.; Treasurer, O. C. Simonds, Chicago.

The Fifth Annual Convention of the Association will be held at Milwaukee, Wis., June, 1901.

Personal.

We were favored with a cordial visit last month from Mr. Torajiro Watase, of Tokyo, Japan, who has been spending some weeks in this country visiting our parks and cemeteries, and investigating agricultural and horticultural interests. Mr. Watase occupies a prominent position in these interests in Japan. He is a member of the Higher Imperial Industrial Council, director of the Tokyo Plant & Seed Co., editor of the "Japan Agriculturist," Counselor of the Central Agricultural and Commercial Association of Japan and a member of the Tokyo City Council.

At a special meeting of the board of Park Commissioners of Hartford, Conn., held the latter part of January, Mr. W. O. Burr, was elected to succeed the late Charles Dudley Warner.

Mr. Charles E. Gardner, secretary and treasurer, Forest Park Cemetery, Troy, N. Y. sends a sample of a voucher de-

signed by him. It is very complete in detail and would appear to cover the ground for which a voucher is adapted. Mr. Gardner will send a copy to anyone desiring it.

Obituary.

Andrew H. Ward, the agricultural Chemist of Boston, and an occasional contributor to these columns, died on January 5.

John Henry Farrell, president of *The Times-Union* company of Albany, N. Y., a man of affairs and a trustee of St. Agnes Cemetery of that city, died on the evening of February 2, at his home, after a short illness. He was but 62 years of age, but his life had been one of remarkable energy and crowned with success, and his disposition and character endeared him to a large constituency. Appropriate resolutions were passed by the trustees of St. Agnes cemetery.

William H. Barlow, president of Dale Cemetery, Sing Sing, N. Y., died in New York City, of heart trouble and grip, on January 12. He was a member of the Association of American Cemetery superintendents, and keenly alive to its interests. He had been in business in Sing Sing for 60 years, and was its oldest merchant. He leaves four sons and two daughters, and is mourned by a large circle.

The Hon. S. P. V. Arnold, secretary of the "Pleasure Driveway and Park District" of Springfield, Illinois, died on February 1. Springfield having recently awoke to the necessity of parks, and one of the most active and earnest workers in the cause was Mr. Arnold, who in the prime of life has been called away. He was a man of broad views, who has left behind an honorable record and his death is sincerely mourned. Appropriate resolutions have been passed by the public organizations with which he had relations.

At the recent awards of contracts for trees and shrubs for the Pittsburg Parks, the principal successful bidders were Thomas Meehan & Sons, Philadelphia, and Ellwanger & Barry of Rochester, N. Y. The lion's share of the awards fell to the lot of Thomas Meehan & Sons.

The Plant World Co., Washington, D. C., now includes within its covers the *Asa Gray Bulletin*, that publication having ceased individual publication on the concluding issue of its last volume. Its final number was a memorial of its late editor Mr. Thomas A. Williams, who unexpectedly died on Dec. 23. The same high tone of botanic information will be continued under the new regime.

Apropos of the illustration of the Blood Leaved Beech given in our last issue, the beautiful century seed catalogue of J. M. Thorburn & Co., of New York, contains a fine half-tone of a Copper beech growing on the lawn of the "Linders" at Norton, Conn.

The approach of spring suggests house-cleaning, and a neglected matter in the cemetery is that of the tombstones and monuments. After the winter with its rain and frost, very few monuments come out looking their best. Stains of one kind and another, sap spots and iron rust greet the eye to a greater or less extent everywhere, and it would be an

excellent plan for the sexton or superintendent to supply the men with some reliable material to aid in the work of cleaning up. It would go very far at a comparatively low cost to improve the appearance of the grounds. Among such materials that have received unqualified endorsement by monument dealers and others over the country is Randall's Iron Solvent, for which E. C. Willison of 110 Boylston st., Boston, is the sole agent. From opinions expressed it is a most excellent stain eradicator and it would be a good investment by cemetery people to make an experiment on their own account to remove the blemishes that so frequently mar the monumental work of a cemetery.

BOOKS, REPORTS, ETC., RECEIVED.

Booklet of views of the Parks of Los Angeles, Cal. E. V. Mendenhall, Los Angeles, Publisher, price 25 cents. A very interesting collection of half-tone views of park scenery.

University of Maine, College of Agriculture, Orono. Bulletin No. 70. Oats as Grain and Fodder. Also circular containing particulars concerning short winter courses in Agricultural practice.

Annual reports of Allegheny Cemetery, for years ending May 1 1898, 1899, 1900. A handsomely gotten up pamphlet, copiously illustrated with half-tones and printed in colors. A very presentable souvenir to lot owners and others.

Annual report of the Park Commissioners of the city of Taunton, Mass., for the year ending November 30, 1900. Illustrated with half tones.

Montana College of Agriculture—Agricultural Experiment Station, Bozeman, Montana. Bulletin 22, miscellaneous matter, by E. V. Wilcox, Ph. D. Bulletin 23, Injurious Fruit Insects and Insecticides. Bulletin 24, Sixth Annual Report of Officials and Instructors. Bulletin 25, Paris-green and London Purple in Montana.

U. S. Dept. of Agriculture, Duty of water in the Gallatin Valley, Montana. By Samuel Fortier, C. E., Prof. of Irrigation Engineering, Montana College of Agriculture.

Report of the Forester for 1900, by Gifford Pinchot. An interesting summary of the work of this department for the year showing promising future results of a national character.

Forest Home Cemetery, Chicago, Ill., Illustrated descriptive pamphlets of that cemetery.

Trade Literature, Etc., Received.

W. F. Bassett & Son, Hammononton, N. J. Trade list of American plants and shrubs.

Pinehurst Nurseries, Pinehurst, N. C. Seeds of Conifers, Trees, Shrubs and Perennials collected in the altitudes of Arizona.

William Elliott & Sons. Seed annual for 1901. Flower and vegetable seeds.

Thorburn's Seeds. Thorburn's Century 1901. J. M. Thorburn & Co., one hundredth annual catalogue, Cortlandt street, New York. Beautifully illustrated with half-tones.

