



CITY OF SOMERVILLE

MASSACHUSETTS

ANNUAL REPORTS

1920



SOMERVILLE PRESS PRINT

1921

REPORT OF THE CITY AUDITOR.

OFFICE OF THE CITY AUDITOR,
January 26, 1921.

To the Honorable, the Mayor, and the Board of Aldermen of
the City of Somerville.

Gentlemen:— In accordance with the requirements of Section 3 of Ordinance Number 44, I herewith submit a report of the expenditures and receipts during the year 1920, showing in detail the appropriations and expenditures, and the receipts from each source of income, also a statement of the funded debt and temporary loans together with a balance sheet showing the assets and liabilities at the close of the financial year.

Respectfully submitted,

HOWARD E. WEMYSS,

City Auditor.

BALANCE SHEET. — Continued.

Non-Revenue Accounts.

Cash in Banks and Offices		Unexpended Balances:	
	\$71,708 70	Appropriations	\$71,708 70

Municipal Indebtedness.

Net Bonded Debt	\$1,148,000 00	Loans Within Statutory Debt Limit:	
		City Bonds	\$318,000 00
		Municipal Bonds	23,000 00
		Sewer Bonds	219,000 00
		Highway Bonds	271,000 00
		Bridge Bonds	29,000 00
		Public Building Bonds	254,000 00
		Emergency Loan Bonds	10,000 00
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			\$1,124,000 00

Loans Outside Statutory Debt Limit:

Sewer Bonds	\$15,000 00
Met. Park Assessment Bonds	9,000 00
	<hr/>
	24,000 00
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	\$1,148,000 00

Trust Funds.

Investments:		Trust Funds:	
Cash and Securities	\$27,096 24	School Funds	\$5,000 00
		Library Funds	20,414 58
		Poor Funds	1,681 66
			<hr/>
	\$27,096 24		\$27,096 24

CASH STATEMENT, DECEMBER 31, 1920.

REVENUE.

Receipts.

General:—

Taxes	\$2,622,110 44
Corporation, Bank and Income Taxes	275,070 41
Licenses and Permits	9,656 50
Fines and Forfeits	4,012 84
County of Middlesex, Dog Licenses	2,180 85
Comm. of Mass. Vocational Schools	9,112 24
Comm. of Mass. Americanization	602 30
Smith-Hughes Fund	2,220 09
State in lieu of taxes	93 66
Excise Tax	64 09

\$2,925,123 42

Special Assessments 64,441 24

Departmental:—

General Government	\$7,692 75
Protection of Persons and Property	1,718 52
Health and Sanitation	26,018 07
Highways	5,673 14
Charities	38,864 04
Schools	7,245 73
Soldiers' Benefits	26,421 75
Libraries	2,343 61
Baths and Bathhouses	932 40
Miscellaneous	596 78

117,506 79

Water Department Accounts	258,339 42
Interest on deposits, taxes etc.	23,046 42
Temporary Loans	1,883,000 00
Premiums on Loans	90 50
Refunds	1,836 56

Total receipts \$5,273,384 35

Balance at beginning of period 163,241 54

\$5,436,625 89

CASH STATEMENT, DECEMBER 31, 1920. — Continued.

Payments.

Appropriations	\$2,705,047 87	
Temporary Loans	1,785,000 00	
State Taxes and Assessments	502,618 80	
County Tax	107,532 49	
Trust Funds Income	3,386 37	
Tax Titles	4,105 17	
Real Estate Liens	10 32	
Advance to Poor Department	50 00	
Refunds	1,337 14	
Tellers' Overs and Shorts	16 83	
	<hr/>	
Total Payments		\$5,109,104 99
Transfer to Non-Revenue		104,313 17
Balance on hand		223,207 73
		<hr/>
		\$5,436,625 89

NON-REVENUE.

Receipts.

Extreme Emergency, Bills Receivable	\$12 43	
Redemption of Tax Titles	2,938 64	
Funded Debt Loan	50,000 00	
Refunds	1,358 34	
	<hr/>	
Total Receipts		\$54,309 41
Transfer from Revenue		104,313 17
Balance at beginning of period		37,554 23
		<hr/>
		\$196,176 81

Payments.

Appropriations	\$121,529 47	
Redemption of Tax Titles	2,938 64	
	<hr/>	
Total Payments		\$124,468 11
Balance on hand		71,708 70
		<hr/>
		\$196,176 81

Summary.

Total Revenue Receipts	\$5,273,384 35	
Total Non-Revenue Receipts	54,309 41	
	<hr/>	
Total balance at beginning of period		\$5,327,693 76
		200,795 77
		<hr/>
Total Revenue Payments	\$5,528,489 53	
Total Non-Revenue Payments	\$5,109,104 99	
		124,468 11
		<hr/>
Total balance on hand		\$5,233,573 10
		294,916 43
		<hr/>
		\$5,528,489 53

DEPARTMENTAL BILLS

Departmental Accounts, Pledged to Revenue.	Balance Jan. 1, 1920	Committed 1920	Total to Collect	Collected and Abated	Uncollected
Police Department	\$125 72	\$163 62	\$289 34	\$171 03	\$118 31
Maintenance Police Buildings . . . . .	.....	1,000 00	1,000 00	1,000 00	.....
Fire Department . . . . .	.....	5 00	5 00	5 00	.....
Health Department	319 43	509 60	829 03	269 43	559 60
Contagious Hospital	4,375 41	8,532 30	12,907 71	9,539 35	3,368 36
Inspection of Milk	23 50	245 00	268 50	245 50	23 00
Sanitary Department	920 00	2,381 20	3,301 20	2,924 00	377 20
Maintenance Sanitary Buildings . . . . .	.....	14 56	14 56	14 56	.....
Highway Maintenance	1,107 47	5,677 76	6,785 23	6,433 46	351 77
Sidewalks Construction . . . . .	.....	129 53	129 53	.....	129 53
Maintenance Highway Buildings . . . . .	.....	240 00	240 00	240 00	.....
Poor Department — Miscellaneous	13,397 53	28,776 31	42,173 84	29,206 42	12,967 42
Poor Department — City Home	376 75	8,102 16	8,478 91	4,663 77	3,815 14
School Contingent	502 31	9,175 76	9,678 07	6,629 00	3,049 07
Maintenance School Buildings	95 00	740 55	835 55	785 40	50 15
Outlay Accounts, Pledged to Appropriations.	\$21,243 12	\$65,693 35	\$86,936 47	\$62,126 92	\$24,809 55
Extreme Emergency	\$46 36	.....	\$46 36	\$46 36	.....

WATER DEPARTMENT ACCOUNTS (REVENUE).

	Commitments	Abatements	Collections (Net)	Balance
Metered Rates	\$216,246 33	\$339 83	\$188,986 71	\$26,919 79
Annual Rates	40,229 50	751 99	39,477 51	.....
Additional Rates	1,230 63	291 76	938 87	.....
Service Assessments	1,905 10	.....	1,905 10	.....
Maintenance Bills	4,797 65	359 29	4,438 36	.....
	<u>\$264,409 21</u>	<u>\$1,742 87</u>	<u>\$235,746 55</u>	<u>\$26,919 79</u>
Receipts . . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Metered Rates Last Quarter, 1920 . . . . .	. . . . .	. . . . .	. . . . .	\$235,746 55
Water Revenue, 1920 . . . . .	. . . . .	. . . . .	. . . . .	<u>26,919 79</u>
				<u>\$262,666 34</u>

Metered Rates Last Quarter, 1919.

Uncollected January 1, 1920 . . . . .	. . . . .	. . . . .	. . . . .	\$22,528 96
Abated . . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Collected . . . . .	. . . . .	. . . . .	\$11 64	. . . . .
			<u>22,517 32</u>	
				<u>\$22,528 96</u>

STATEMENT OF ESTIMATED REVENUE.

	Estimate	Receipts	Excess	Deficit
Taxes from State:				
Corporation	\$43,000 00	\$39,963 42		\$3,036 58
National Bank	5,500 00	6,405 65	905 65	
Street Railway	11,000 00	10,651 54		348 46
Licenses and Permits:				
Milk	350 00	342 50		7 50
Health	100 00	68 00		32 00
City Clerk	3,900 00	4,122 50	222 50	
Executive Department	750 00	910 00	160 00	
Pedlars' License Commission	650 00	765 00	115 00	
Electrical Department	1,250 00	1,737 00	487 00	
Building Department	1,200 00	1,099 50		100 50
Miscellaneous		612 00	612 00	
Fines and Forfeits:				
Court	2,000 00	3,724 84	1,724 84	
Departmental Penalties	50 00	288 00	238 00	
Grants and Gifts:				
County, Dog Licenses	2,150 00	2,180 85	30 85	
State, Industrial School	9,000 00	9,112 24	112 24	
State, Americanization		602 30	602 30	
Special Excise Tax	300 00	377 51	77 51	
Special Assessments:				
Street Sprinkling	44,500 00	44,405 64		94 36
Street Betterments	7,500 00	8,577 00	1,077 00	
Sidewalks	5,000 00	4,629 29		370 71
General Government:				
Treasury Department	5,300 00	6,146 24	846 24	
City Clerk's Department	900 00	1,535 92	635 92	
Protection of Persons and Property:				
Police Department	450 00	182 68		267 32
Rent of Court Room	1,000 00	1,000 00		
Fire Department	50 00	5 00		45 00
Sealer of Weights and Measures	500 00	530 84	30 84	

STATEMENT OF ESTIMATED REVENUE.

	Estimate	Receipts	Excess	Deficit
Health and Sanitation:				
Health Department	700 00	269 43	.....	430 57
Contagious Hospital	7,000 00	8,955 08	1,955 08	.....
Inspection of Milk and Vinegar	300 00	295 80	.....	4 20
Sanitary Department	15,500 00	16,483 20	983 20	.....
Highways:				
Highway Maintenance	\$2,700 00	\$5,433 14	\$2,733 14	.....
Highway Buildings	240 00	240 00	.....	.....
Charities:				
City Home	9,000 00	9,916 33	916 33	.....
Poor Department, Miscellaneous	23,000 00	28,947 71	5,947 71	.....
Soldiers' Benefits:				
State Aid	12,000 00	10,586 00	.....	1,414 00
Military Aid	450 00	720 75	270 75	.....
Soldiers' Burials	600 00	120 00	.....	480 00
Education:				
School Contingent	4,000 00	6,462 23	2,462 23	.....
School Buildings	500 00	783 50	283 50	.....
Libraries:				
Library Department	1,850 00	2,343 61	493 61	.....
Recreation and Unclassified:				
Electrolysis	500 00	500 00	.....	.....
Bathroom	600 00	538 35	.....	61 65
Shower Baths	300 00	394 05	94 05	.....
Miscellaneous . . . . .	.....	118 81	118 81	.....
Public Service Enterprises:				
Water Department	250,000 00	262,666 34	12,666 34	.....

Interest:									
Bank Deposits	.	.	.	.	.	7,000 00	10,771 10	3,771 10	.....
Deferred Taxes	.	.	.	.	.	10,000 00	10,972 75	972 75	.....
Deferred Assessments	.	.	.	.	.	200 00	158 71	.....	41 29
Totals	.	.	.	.	.	\$492,840 00	\$527,652 35	\$41,546 49	\$6,734 14
Estimate	.	.	.	.	.				\$492,840 00
Actual	.	.	.	.	.				527,652 35
Excess	.	.	.	.	.				\$34,812 35

STATEMENT OF APPROPRIATIONS, 1920 (REVENUE).

	Appropriation Trans. from	Appropriation Trans. to	Receipts and Service Trans.	Total Credit	Expenditures	Balance to Excess and Deficiency
General Government						
Board of Aldermen	\$1,300 00	.....	.....	\$1,300 00	\$1,257 11	\$42 89
Clerk of Committees	3,000 00	.....	.....	3,000 00	2,951 40	48 60
Executive Department	7,825 00	.....	.....	7,825 00	7,540 77	284 23
Auditing Department	6,210 00	.....	.....	6,210 00	6,208 17	1 83
Treasurer's Department	20,985 00	.....	\$107 66	21,092 66	20,967 54	125 12
Assessors' Department	18,306 00	\$850 00	.....	19,156 00	19,094 55	11 45
Pedlers' License Commission	50 00	.....	.....	50 00	32 03	17 97
Board of License Commissioners	700 00	.....	.....	700 00	550 20	149 80
Certification of Notes and Bonds	300 00	.....	.....	300 00	283 16	16 84
City Clerk's Department	10,550 00	.....	1,611 45	12,161 45	12,074 60	86 85
Registration City Laborers	415 00	.....	.....	415 00	410 50	4 50
Law Department	3,000 00	.....	.....	3,000 00	2,926 87	73 13
City Messenger's Department	2,845 00	50 00	.....	2,895 00	2,893 47	1 53
Engineering Department	15,835 00	880 00	24 00	16,739 00	16,735 86	3 14
Commissioner of Public Buildings	8,140 00	.....	.....	8,340 00	8,338 95	1 05
Maintenance Municipal Buildings	11,413 00	.....	14 09	11,837 09	11,829 83	7 26
City Planning Board	100 00	.....	.....	100 00	18 20	81 80
Election Expenses, City Clerk	2,060 00	.....	.....	2,060 00	1,512 24	547 76
Election Expenses, Registrars of Voters	3,300 90	.....	.....	3,300 00	5,749 15	5 85
Pay of Election Officers	3,864 00	55 00	.....	4,079 00	4,078 00	1 00
Maintenance Polling Places	426 00	.....	.....	1,126 00	1,124 96	1 04

STATEMENT OF APPROPRIATIONS, 1920 (REVENUE).

	Appropriation	Appropriation Trans. from	Appropriation Trans. to	Receipts and Service Trans.	Total Credit	Expenditures	Balance to Excess and Deficiency
Protection of Persons and Property.							
Police Department	\$186,990 00	3,000 00	.....	.....	183,990 00	183,974 40	15 60
Maintenance Police Buildings	4,389 00	.....	.....	.....	4,389 00	4,289 12	99 88
Fire Department	216,437 00	.....	50 00	1,928 43	218,415 43	218,404 27	11 16
Maintenance Fire Buildings	10,628 00	260 00	.....	.....	10,368 00	10,318 94	49 06
Weights and Measures	2,245 00	.....	55 00	.....	2,300 00	2,295 54	4 46
Electrical Department	19,069 00	545 00	.....	451 31	18,975 31	18,820 94	154 37
Maintenance Electrical Department Building	1,457 00	.....	.....	.....	1,457 00	1,280 56	176 44
Suppression of Moths	5,000 00	97 58	.....	.....	4,902 42	4,902 42	.....
Care of Trees	3,275 00	.....	97 58	.....	3,372 58	3,372 34	..... 24
Health and Sanitation.							
Health Department	17,180 00	.....	950 00	.....	18,130 00	18,127 34	2 66
Vital Statistics	1,300 00	.....	.....	.....	1,300 00	1,220 36	79 64
Contagious Hospital	24,415 00	1,310 00	.....	184 29	23,289 29	23,100 73	188 56
Maintenance Contagious Hospital	4,510 00	.....	.....	.....	4,510 00	4,204 05	305 95
Inspection Animals and Provisions	2,135 00	.....	.....	.....	2,135 00	2,131 73	3 27
Inspection Milk and Vinegar	5,655 00	.....	350 00	.....	6,005 00	5,999 91	5 09
Inspection School Children	1,700 00	.....	10 00	.....	1,710 00	1,709 41	59
School Nurses' Salaries	1,900 00	.....	.....	.....	1,900 00	1,749 97	150 03
Sewers Maintenance	24,825 00	1,390 00	.....	79 79	23,514 79	23,514 26	53
Maintenance Sewer Buildings	772 00	.....	.....	.....	772 00	642 78	129 22
Sanitary Department	173,397 00	.....	4,450 00	.....	177,847 00	177,846 99	01

STATEMENT OF APPROPRIATIONS, 1920 (REVENUE).

	Appropriation	Appropriation	Appropriation	Receipts and	Total	Expenditures	Balance to
	Trans, from	Trans, to	Service Trans.	Trans.	Credit		Excess and
							Deficiency
Maintenance Sanitary Build- ings	1,000 00	200 00	.....	.....	800 00	753 61	46 39
Street Cleaning	28,700 00	100 00	.....	.....	28,600 00	28,597 14	2 86
Highways.							
Highway Maintenance	\$65,538 00	515 00	28,659 29	.....	94,712 29	94,691 05	21 24
Sidewalks Maintenance	8,000 00	100 00	384 96	.....	8,484 96	8,484 91	05
Street Sprinkling	43,300 00	30 00	.....	.....	43,330 00	43,328 52	1 48
Street Lighting	72,075 00	.....	.....	.....	72,075 00	72,075 00	.....
Maintenance Highway Build- ings	1,290 00	.....	49 69	.....	1,339 69	1,038 28	301 41
Charities and Soldiers' Bene- fits.							
Poor Department — Miscel- laneous	\$79,460 00	1,500 00	.....	.....	78,249 50	77,456 57	792 93
Poor Department — City Home	17,215 00	.....	53 00	.....	17,318 00	17,308 29	9 71
Maintenance City Home Buildings	4,140 00	.....	.....	.....	4,140 00	3,486 51	653 49
Soldiers' Benefits — General Administration	1,388 00	.....	.....	.....	1,388 00	1,351 41	36 59
Military Aid	900 00	.....	30 00	.....	1,345 00	1,341 50	3 50
State Aid	12,000 00	415 00	38 00	.....	11,623 00	10,624 00	999 00
Soldiers' Relief	22,000 00	.....	71 00	.....	22,071 00	21,908 06	162 94
Soldiers' Burials	600 00	.....	.....	.....	600 00	120 00	480 00
Education and Libraries							
School Contingent	\$47,837 00	.....	15 75	.....	47,852 75	47,222 79	629 96
School Teachers' Salaries	680,000 00	3,155 00	.....	.....	676,845 00	676,417 97	427 03
School Janitors' Services	57,220 00	.....	13 72	.....	57,233 72	56,971 28	262 44
Fuel and Light	48,425 00	.....	4,342 37	.....	54,392 37	54,384 71	7 66
Buildings and Grounds	45,607 00	.....	586 60	.....	47,723 60	47,664 60	59 00

STATEMENT OF APPROPRIATIONS, 1920 (REVENUE).

	Appropriation	Appropriation Trans. from	Appropriation Trans. to	Receipts and Service Trans.	Total Credit	Expenditures	Balance to Excess and Deficiency
Central Library	27,217 00	.....	.....	476 36	27,693 36	27,684 99	8 37
Maintenance Central Library	5,774 00	.....	220 00	.....	5,994 00	5,989 23	4 77
West Somerville Branch Library	7,894 00	.....	.....	194 47	8,088 47	8,088 37	10
Maintenance West Somerville Branch Library	2,663 00	.....	.....	.....	2,663 00	2,450 81	212 19
East Somerville Branch Library	4,756 00	.....	.....	41 02	4,797 02	4,792 03	4 99
Maintenance East Somerville Branch Library	1,993 00	200 00	.....	.....	1,793 00	1,634 16	158 84
Union Square Branch Library	4,971 00	.....	.....	.....	4,971 00	4,970 60	40
Maintenance Union Square Branch Library	2,113 00	220 00	.....	.....	1,893 00	1,754 38	138 62
Recreation and Unclassified							
Parks Maintenance	\$10,500 00	.....	800 00	.....	11,300 00	11,299 89	11
Maintenance Park Buildings	1,314 00	.....	325 00	.....	1,639 00	1,490 24	148 76
Playgrounds Maintenance	5,160 00	.....	.....	150 13	5,310 13	5,309 82	31
Recreation and Playground Commission	5,000 00	.....	.....	.....	5,000 00	5,000 00	.....
Maintenance Bathhouse	2,563 00	200 00	.....	.....	2,363 00	2,361 24	1 76
Celebrations	3,500 00	.....	.....	.....	3,500 00	803 52	2,696 48
Memorial Day	425 00	.....	.....	.....	425 00	413 61	11 39
Municipal Documents	1,860 00	.....	.....	.....	1,860 00	1,756 01	103 99
Maintenance Bandstand	150 00	.....	.....	15 00	165 00	162 09	2 91
Contingent Fund	10,000 00	.....	.....	.....	10,000 00	.....	10,000 00
Workmen's Compensation	5,000 00	1,140 00	.....	18 00	3,878 00	3,780 83	97 17
Pensions	25,000 00	200 00	.....	.....	24,800 00	24,729 83	70 17
Damage to persons and Personal Property	5,000 00	.....	.....	.....	5,000 00	2,003 25	2,996 75

STATEMENT OF APPROPRIATIONS, 1920 (REVENUE).

	Appropriation	Appropriation Trans. from	Appropriation Trans. to	Receipts and Service Trans.	Total Credit	Expenditures	Balance to Excess and Deficiency
Municipal Indebtedness							
Interest	*\$114,140 00		2,909 50	510 42	117,559 92	109,870 34	† 7,689 58
Reduction of Funded Debt	209,368 00			132 00	209,500 00	209,500 00	.....
Water Works							
Water Maintenance	\$62,500 00		3,400 00	5,594 79	71,494 79	71,339 92	154 87
Water Works Extension	12,000 00			.....	6,200 00	6,051 40	148 60
Maintenance Water Buildings	1,277 00	5,800 00		.....	1,152 00	986 64	165 36
Interest on Water Bonds	80 00	125 00		.....	80 00	80 00	.....
Reduction of Water Debt	2,000 00			.....	2,000 00	2,000 00	.....
Metropolitan Water Assessment . . . . .				.....	129,390 50	127,505 74	1,884 76
	129,900 00	509 50					
Total Appropriations	\$2,728,716 00	\$20,472 08	\$23,697 08	\$46,067 09	\$2,778,008 09	\$2,743,518 76	\$34,489 33

* Including balance of \$1,215.00 from 1919.

† Reserved for 1921, \$7,689 58.

STATEMENT OF APPROPRIATIONS, 1920 (REVENUE).

Other Accounts.	Income of Trust Funds:—	Balance from 1919	Receipts	Total Credit	Expenditures	Balance to 1921
School:—						
S. Newton Cutler	.	\$493 11	\$214 50	\$707 61	\$186 18	\$521 43
Smith-Hughes	.	1,342 85	2,220 09	3,562 94	2,139 85	1,423 09
Library:—						
S. Newton Cutler	.	15	42 88	43 03	28 41	14 62
Martha R. Hunt, Art	.	312 89	97 50	410 39	233 80	176 59
Martha R. Hunt, Book	.	3 55	495 29	498 84	469 25	29 59
Hunt Fund for Expenses	.	202 77	.....	202 77	.....	202 77
Isaac Pitman, Art	.	192 42	171 32	363 74	310 21	53 53
Isaac Pitman, Poetry	.	31 37	42 82	74 19	18 67	55 52
Frances A. Wilder	.	2 48	4 50	6 98	.....	6 98
Poor:—						
Olive C. Cummings	.	132 02	75 05	207 07	.....	207 07
Temporary Loans	1,785,000 00	1,785,000 00	.....
State Taxes and Assessments	502,618 80	502,618 80	.....
County Tax	107,532 49	107,532 49	.....
Advance to Poor Department	50 00	50 00	.....
Tax Titles	4,105 17	4,105 17	.....
Real Estate Liens	10 32	10 32	.....
Tellers' Overs and Shorts	16 83	16 83	.....
Refunds:—						
Taxes	1,068 51	1,068 51	.....
Special Assessments	167 03	167 03	.....
Water	87 55	87 55	.....
National Bank Tax	14 05	14 05	.....
Total Other Accounts	.	\$2,713 61	\$3,363 95	\$2,406,748 31	\$2,404,057 12	\$2,691 19
Revenue Totals	5,184,756 40	5,147,575 88	37,180 52

STATEMENT OF APPROPRIATIONS, 1920 (NON-REVENUE).

	Balance from 1919	Appropriation	Appropriation Transfer from	Appropriation	Receipts and Service Trans.	Total Credit	Expenditures	Balance to 1921
Protection of Persons and Personal Property.								
Electrical Department, Underground Wires	\$3,263 93	.....	.....	.....	.....	\$3,263 93	.....	\$3,263 93
Extreme Emergency, Health and Safety	4,766 18	.....	.....	.....	\$166 81	4,932 99	\$3,947 63	985 36
Fire Department, Additional Apparatus . . . . .	.....	\$21,300 00	.....	.....	.....	21,300 00	.....	21,300 00
Sewers Construction	684 75	4,100 00	.....	.....	288 22	5,072 97	5,072 35	62
Highways.								
New Streets . . . . .	.....	28,000 00	.....	\$1,650 00	.....	29,650 00	29,609 00	41 00
Pavement	19,646 00	50,000 00	.....	.....	.....	69,646 00	36,109 64	33,536 36
Sidewalks Construction	21	15,000 00	\$1,650 00	.....	.....	13,350 21	9,962 20	3,388 01
Reconstruction and Resurfacing . . . . .	.....	40,000 00	100 00	.....	.....	39,900 00	39,899 74	26
Schools.								
Bennett School Addition	166 71	.....	.....	.....	.....	166 71	.....	166 71

STATEMENT OF APPROPRIATIONS, 1920 (NON-REVENUE).

	Balance from 1919	Appropriation	Appropriation Transfer from	Appropriation Transfers to	Receipts and Service Trans.	Total Credit	Expenditures	Balance to 1921
New School Building, East Somerville	1,046 70	.....	.....	.....	.....	1,046 70	.....	1,046 70
Schoolhouses, Sprinkler Systems	3,539 88	.....	.....	.....	.....	3,539 88	.....	3,539 88
Boys' Industrial School Addition, No. 2	353 35	.....	.....	.....	.....	353 35	.....	353 35
Cummins School Re-pairs . . . . .	.....	.....	.....	1,926 66	1,358 34	3,285 00	3,285 00	.....
Recreation. Field House, Somerville Field	3,538 41	.....	.....	.....	.....	3,538 41	.....	3,538 41
Unclassified. Building Public Buildings	548 11	.....	.....	.....	.....	548 11	.....	548 11
Total Appropriation Accounts	\$37,554 23	\$158,400 00	\$1,750 00	\$3,576 66	\$1,813 37	\$199,594 26	\$127,885 56	\$71,708 70
Other Accounts Redemption Tax Liens . . . . .	.....	.....	.....	.....	2,938 64	2,938 64	2,938 64	.....
Non-Revenue Totals	\$37,554 23	\$158,400 00	\$1,750 00	\$3,576 66	\$4,752 01	\$202,532 90	\$130,824 20	\$71,708 70

CITY AUDITOR.

COMMONWEALTH OF MASSACHUSETTS.

Payments.

State Tax	\$245,420 00	
Special State Tax	11,569 80	
State Highway Tax	481 56	
Non-Resident Bank Tax	3,820 61	
Metropolitan Sewer Assessment	89,939 26	
Metropolitan Park Assessment	57,509 59	
Wellington Bridge Assessment	1,977 40	
Wellington Bridge Special Assessment	1,543 30	
Grade Crossings Assessment	9,171 80	
Charles River Basin Assessment	9,693 89	
Alewife Brook Assessment	1,140 65	
Abatement of Smoke Assessment	400 75	
Fire Prevention Assessment	1,290 82	
Soldiers' Exemption Assessment	304 37	
Poll Taxes, Chap. 283, Acts 1919	68,355 00	
Refund National Bank Tax 1919	14 05	
Total		\$502,632 85

Receipts.

State Aid	\$25,901 48	
Military Aid	225 00	
Soldiers' Burials	295 27	
Income Tax, 1920	154,770 23	
Income Tax, 1919	52,590 00	
Income Tax, 1918	2,394 00	
Income Tax, 1917	1,995 00	
Mothers' Aid	13,699 56	
General Aid to Poor	6,136 36	
Tuition State Wards	1,466 12	
Smith-Hughes Fund	2,220 09	
Corporation Taxes, Domestic	39,963 42	
Corporation Taxes, Foreign	6,286 52	
Street Railway Tax	10,651 54	
National Bank Tax	6,419 70	
In Lieu of Taxes	93 66	
Contagious Diseases	3,127 12	
Total		\$328,235 07

COUNTY OF MIDDLESEX.

County Tax	\$107,532 49
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STATEMENT OF REVENUE AND EXPENSES.

Revenue.

Total amount as per assessors' commitments		\$2,715,691 05
Less State Taxes	\$261,291 97	
Poll Taxes, for State	71,415 00	
County Tax	107,532 49	
Overlay	17,079 78	
		<u>457,319 24</u>
Amount raised for municipal purposes		\$2,258,371 81
Other Revenue:		
Commonwealth of Massachusetts,		
Income Tax, 1917, Excess	\$1,995 00	
Income Tax, 1918, Excess	2,394 00	
Income Tax, 1919, Excess	46,175 00	
Income Tax, 1920	136,692 65	
Revenue from Taxes, Supplementary War-		
rants	1,372 08	
Reserve Fund, Surplus from Overlay	5,151 66	
Foreign Corporation, Excise Tax	50,000 00	
Estimated Revenue	\$492,840 00	
Excess	34,812 35	
		<u>527,652 35</u>
Transfer from Excess and Deficiency	20,000 00	
		<u>791,432 74</u>
Total		\$3,049,804 55

Expenses.

General Appropriations	\$2,703,826 25	
Outlay Appropriations	110,326 66	
Metropolitan and Other Assessments	172,971 83	
		<u>2,987,124 74</u>
Excess of Revenue		\$62,679 81

TEMPORARY LOANS, 1920.

Taken By	Nos.	Issued	Due	Rate	Amount	Paid
Grafton Co.	748 @ 754	Feb. 2, 1920	Nov. 17, 1920	4 99%	\$100,000 00	Nov. 17, 1920
Somerville National Bank	755 @ 759	Feb. 18, 1920	Nov. 3, 1920	5 20	50,000 00	Nov. 3, 1920
Old Colony Trust Company	760 @ 765	Feb. 18, 1920	Nov. 3, 1920	5 20	100,000 00	Nov. 3, 1920
National Security Bank	766 @ 773	Feb. 18, 1920	Nov. 3, 1920	5 20	50,000 00	Nov. 3, 1920
Somerville Trust Company	774 @ 778	Feb. 18, 1920	Nov. 3, 1920	5 20	50,000 00	Nov. 3, 1920
Highland Trust Company	779 @ 783	Feb. 18, 1920	Nov. 3, 1920	5 20	50,000 00	Nov. 3, 1920
Old Colony Trust Company	784 @ 788	Mar. 9, 1920	Nov. 17, 1920	5 80	100,000 00	Nov. 17, 1920
Old Colony Trust Company	789 @ 793	Mar. 9, 1920	Nov. 17, 1920	5 85	50,000 00	Nov. 17, 1920
Harris, Forbes & Co.	794	Mar. 12, 1920	June 15, 1920	5 00	20,000 00	June 15, 1920
Harris, Forbes & Co.	795	Mar. 12, 1920	June 15, 1920	5 00	8,000 00	June 15, 1920
Harris, Forbes & Co.	796 @ 797	Mar. 19, 1920	Nov. 17, 1920	5 75	30,000 00	Nov. 17, 1920
*Curtis & Sanger	C-78 @ C82	Mar. 15, 1920	Mar. 15, 1921	5 25	50,000 00	Nov. 17, 1920
Old Colony Trust Company	798 @ 799	April 15, 1920	Oct. 21, 1920	5 65	100,000 00	Oct. 21, 1920
Harris, Forbes & Co.	800	April 14, 1920	Sept. 17, 1920	5 60	50,000 00	Sept. 17, 1920
F. S. Moseley & Co.	801 @ 803	April 14, 1920	Dec. 15, 1920	5 65	50,000 00	Dec. 15, 1920
*Old Colony Trust Company	C-83 @ C86	May 1, 1920	May 1, 1921	5 50	100,000 00	Dec. 15, 1920
*Old Colony Trust Company	C-87	May 10, 1920	May 10, 1921	5 50	25,000 00	Nov. 3, 1920
Solomon Bros. & Hutzler	804 @ 807	May 14, 1920	Nov. 3, 1920	5 85	100,000 00	Nov. 3, 1920
Solomon Bros. & Hutzler	808 @ 811	May 14, 1920	Dec. 15, 1920	5 85	100,000 00	Dec. 15, 1920
Harris, Forbes & Co.	812 @ 813	June 4, 1920	Nov. 30, 1920	6 10	50,000 00	Nov. 30, 1920
Harris, Forbes & Co.	814 @ 815	June 4, 1920	Dec. 20, 1920	6 10	50,000 00	Dec. 20, 1920
Old Colony Trust Company	816 @ 817	June 4, 1920	Nov. 23, 1920	6 10	50,000 00	Nov. 23, 1920
Old Colony Trust Company	818 @ 820	July 1, 1920	Oct. 14, 1920	6 05	100,000 00	Oct. 14, 1920
*Old Colony Trust Company	C-88 @ C97	Sept. 1, 1920	Sept. 1, 1921	6 00	50,000 00	Oct. 14, 1920
Blodgett & Co.	821 @ 822	Sept. 1, 1920	Mar. 15, 1921	6 00	50,000 00	Oct. 14, 1920

Old Colony Trust Company	823 @ 824	Sept. 10, 1920	Jan. 31, 1921	6 00	125,000 00
F. S. Moseley & Co.	825 @ 833	Sept. 27, 1920	April 14, 1921	5 99	100,000 00
Estabrook & Co.	834 @ 841	Oct. 8, 1920	Feb. 10, 1921	5 90	75,000 00
Estabrook & Co.	842 @ 846	Oct. 8, 1920	June 15, 1921	5 90	50,000 00
Total amount of 1920 loans					<u>\$1,883,000 00</u>
Outstanding January 1, 1920					<u>527,000 00</u>
Payments 1920					<u>\$2,410,000 00</u>
Outstanding December 31, 1920					<u>1,785,000 00</u>
					<u>\$625,000 00</u>

* Coupon Notes, Interest Payable Semi-Annually.

FUNDED DEBT.

The total funded debt of the city January 1, 1920, was \$1,309,500. The debt was increased by one new loan of \$50,000. Debt reductions on account of maturities were \$211,500, making the total funded city debt December 31, 1920, \$1,148,000. Final payment was made on Water Loan Bonds and the debt on account of city water works is extinguished.

Classified Debt January 1, 1920.

City Loan	\$397,500 00	
Municipal Loan	31,000 00	
Sewer Loan	239,000 00	
Public Building Loan	278,000 00	
Highway Loan	289,000 00	
Bridge Loan	30,000 00	
Emergency Loan	15,000 00	
	<hr/>	
Total within limit		\$1,279,500 00
Sewer Loan	\$18,000 00	
Metropolitan Park Loan	10,000 00	
Water Loan	2,000 00	
	<hr/>	
Total outside limit		30,000 00
		<hr/>
Total Funded Debt		\$1,309,500 00

Loan Increasing the Debt.

Permanent Pavement (Highway Loan)	\$50,000 00
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Debt reductions by maturities were as follows:—

City Loan	\$79,500 00	
Municipal Loan	8,000 00	
Sewer Loan	20,000 00	
Public Building Loan	24,000 00	
Highway Loan	68,000 00	
Bridge Loan	1,000 00	
Emergency Loan	5,000 00	
	<hr/>	
Total inside limit		\$205,500 00
Sewer Loan	\$3,000 00	
Metropolitan Park Loan,	1,000 00	
Water Loan	2,000 00	
	<hr/>	
Total outside limit		\$6,000 00
		<hr/>
Total Reduction		\$211,500 00

Classified Debt December 31, 1920.

City Bonds, 3½%	\$33,000 00	
City Bonds, 4%	255,000 00	
City Bonds, 4¼%	30,000 00	
Municipal Bonds, 4½%	23,000 00	
Sewer Bonds, 3½%	62,000 00	
Sewer Bonds, 4%	134,000 00	
Sewer Bonds, 4¼%	23,000 00	
Public Building Bonds, 4%	179,000 00	
Public Building Bonds, 4½%	75,000 00	
Highway Bonds, 4½%	40,000 00	
Highway Bonds, 4%	127,000 00	
Highway Bonds, 3½%	54,000 00	
Highway Bonds, 5%	50,000 00	
Bridge Bonds, 3½%	29,000 00	
Emergency Bonds, 4½%	10,000 00	
Total inside debt limit		\$1,124,000 00
Sewer Bonds, 4%	\$15,000 00	
Metropolitan Park Bonds, 3½%	9,000 00	
Total outside debt limit		24,000 00
Total Funded Debt		\$1,148,000 00

The debt per capita was reduced from \$14.08 on January 1, 1920, to \$12.34 on December 31, 1920.

FUNDED DEBT, DECEMBER 31, 1920.

Mature	City Loan	Municipal Loan	Sewer Loan	Public Building		Highway Loan	Lowell Street Bridge		Sewer Loan 1895 Chap. 357, 1902 Chap. 325,	Metropolitan Park Assessment Loan	Emergency Loan	Total Maturities By Years
				Loan	Loan		Loan	Loan				
1921.....	\$68,500	\$8,000	\$20,000	\$24,000	\$64,000	\$1,000	\$1,000	\$3,000	\$1,000	\$5,000	\$194,500	
1922.....	52,500	8,000	20,000	19,000	55,000	1,000	1,000	3,000	1,000	5,000	164,500	
1923.....	41,500	7,000	18,000	18,000	36,000	1,000	1,000	3,000	1,000		125,500	
1924.....	25,500		17,000	18,000	36,000	1,000	1,000	3,000	1,000		101,500	
1925.....	23,000		17,000	18,000	25,000	1,000	1,000	3,000	1,000		88,000	
1926.....	19,000		15,000	18,000	20,000	1,000	1,000		1,000		74,000	
1927.....	19,000		14,000	17,000	12,000	1,000	1,000		1,000		64,000	
1928.....	17,000		12,000	16,000	9,000	1,000	1,000		1,000		56,000	
1929.....	16,000		11,000	16,000	9,000	1,000	1,000		1,000		54,000	
1930.....	15,000		10,000	16,000	5,000	1,000	1,000				47,000	
1931.....	12,000		10,000	15,000		1,000	1,000				38,000	
1932.....	9,000		8,000	15,000		1,000	1,000				33,000	
1933.....			8,000	14,000		1,000	1,000				23,000	
1934.....			8,000	14,000		1,000	1,000				23,000	
1935.....			7,000	8,000		1,000	1,000				16,000	
1936.....			6,000	4,000		1,000	1,000				11,000	
1937.....			6,000	4,000		1,000	1,000				11,000	
1938.....			4,000			1,000	1,000				5,000	
1939.....			3,000			1,000	1,000				4,000	
1940.....			2,000			1,000	1,000				3,000	
1941.....			1,000			1,000	1,000				2,000	
1942.....			1,000			1,000	1,000				2,000	
1943.....			1,000			1,000	1,000				2,000	
1944.....						1,000	1,000				1,000	
1945.....						1,000	1,000				1,000	
1946.....						1,000	1,000				1,000	
1947.....						1,000	1,000				1,000	
1948.....						1,000	1,000				1,000	
1949.....						1,000	1,000				1,000	
	\$318,000	\$23,000	\$219,000	\$254,000	\$271,000	\$29,000	\$15,000	\$9,000	\$10,000	\$1,148,000		

MATURITIES ON FUNDED DEBT, 1921.

Class of Loan	Jan. 1, 1921	April 1, 1921	July 1, 1921	Oct. 1, 1921	Total
City	\$9,000 00	\$34,000 00	\$23,500 00	\$2,000 00	\$68,500 00
Municipal . . . . .	.....	.....	8,000 00	.....	8,000 00
Sewer	3,000 00	10,000 00	10,000 00	.....	23,000 00
Public Buildings	6,000 00	5,000 00	13,000 00	.....	24,000 00
Highway	16,000 00	43,000 00	5,000 00	.....	64,000 00
Bridge . . . . .	.....	1,000 00	.....	.....	1,000 00
Metropolitan Park . . . . .	.....	.....	1,000 00	.....	1,000 00
Extreme Emergency . . . . .	.....	.....	5,000 00	.....	5,000 00
Total	\$34,000 00	\$93,000 00	\$65,500 00	\$2,000 00	\$194,500 00

INTEREST REQUIREMENTS ON FUNDED DEBT, 1921.

Class of Loan	Jan. 1, 1921	April 1, 1921	July 1, 1921	Oct. 1, 1921	Total
City	\$3,137 50	\$3,177 50	\$2,957 50	\$2,495 00	\$11,767 50
Municipal	517 50	.....	517 50	.....	1,035 00
Sewer	1,490 00	3,063 75	1,435 00	2,867 50	8,856 25
Public Buildings	3,907 50	1,360 00	3,787 50	1,260 00	10,315 00
Highway	1,295 00	4,340 00	1,015 00	3,445 00	10,095 00
Bridge . . . . .	.....	507 50	.....	490 00	997 50
Metropolitan Park	157 50	.....	157 50	.....	315 00
Extreme Emergency	212 50	.....	212 50	.....	425 00
Total	\$10,717 50	\$12,448 75	\$10,082 50	\$10,557 50	\$43,806 25

MATURITIES ON FUNDED DEBT (SIX YEARS).

Class of Loan	1916	1917	1918	1919	1920	1921	Total
City	\$131,500 00	\$118,500 00	\$105,500 00	\$92,500 00	\$79,500 00	\$68,500 00	\$596,000 00
Municipal	10,000 00	10,000 00	8,000 00	8,000 00	8,000 00	8,000 00	52,000 00
Sewer	20,000 00	22,000 00	23,000 00	23,000 00	23,000 00	23,000 00	134,000 00
Public Buildings	8,000 00	19,000 00	24,000 00	24,000 00	24,000 00	24,000 00	123,000 00
Highway	36,000 00	56,000 00	79,000 00	78,000 00	68,000 00	64,000 00	381,000 00
Bridge	1,000 00	1,000 00	1,000 00	1,000 00	1,000 00	1,000 00	6,000 00
Metropolitan Park	1,000 00	1,000 00	1,000 00	1,000 00	1,000 00	1,000 00	6,000 00
Water	5,000 00	5,000 00	5,000 00	4,000 00	2,000 00	.....	21,000 00
Extreme Emergency	.....	.....	5,000 00	5,000 00	5,000 00	5,000 00	20,000 00
Total	\$212,500 00	\$232,500 00	\$251,500 00	\$236,500 00	\$211,500 00	\$194,500 00	\$1,339,000 00

INTEREST REQUIREMENTS ON FUNDED DEBT (SIX YEARS)

Class of Loan	1916	1917	1918	1919	1920	1921	Total
City	\$31,768 75	\$26,606 25	\$22,143 75	\$18,162 50	\$14,757 50	\$11,767 50	\$125,206 25
Municipal	3,015 00	2,565 00	2,115 00	1,755 00	1,395 00	1,035 00	11,880 00
Sewer	12,708 75	12,306 25	11,533 75	10,641 25	9,748 75	8,856 25	65,795 00
Public Buildings	7,240 00	9,980 00	13,270 00	12,285 00	11,300 00	10,315 00	64,390 00
Highway	9,747 50	13,822 50	14,325 00	12,162 50	11,457 50	10,095 00	71,610 00
Bridge	1,172 50	1,137 50	1,102 50	1,067 50	1,032 50	997 50	6,510 00
Metropolitan Park	490 00	455 00	420 00	385 00	350 00	315 00	2,415 00
Water	840 00	640 00	440 00	240 00	80 00	.....	2,240 00
Extreme Emergency	.....	.....	1,062 50	850 00	637 50	425 00	2,975 00
Total	\$66,982 50	\$67,512 50	\$66,412 50	\$57,548 75	\$50,758 75	\$43,806 25	\$353,021 25

BORROWING CAPACITY DECEMBER 31, 1920.

Valuation, 1918	\$84,639,280 00	
Supplementary	24,700 00	
	<hr/>	\$84,663,980 00
Valuation, 1919	\$87,353,424 00	
Supplementary	39,300 00	
	<hr/>	87,392,724 00
Valuation, 1920	\$83,910,855 60	
Supplementary	17,700 00	
	<hr/>	83,928,555 60
		<hr/>
		\$255,985,259 60
Abatements, 1918	\$377,189 00	
Abatements, 1919	331,375 00	
Abatements, 1920	389,950 00	
	<hr/>	1,098,514 00
		<hr/>
		\$254,886,745 60
Average valuation for three years		\$84,962,248 53
Two and one-half per cent.		2,124,056 21
Present debt within limit		1,124,000 00
		<hr/>
Borrowing capacity December 31, 1920		\$1,000,056 21
Maturities:—		
January 1, 1921	\$34,000 00	
April 1, 1921	93,000 00	
July 1, 1921	\$65,500 00	
Less outside limit	4,000 00	
	<hr/>	61,500 00
October 1, 1921	2,000 00	
	<hr/>	
Maturities in 1921 within limit		\$190,500 00
		<hr/>
		\$1,190,556 21
Total maturities on funded debt, 1921		\$194,500 00

ABATEMENTS SPECIAL ASSESSMENTS PRIOR YEARS.

Charges:		
Street Sprinkling, 1919		\$69 49
Credit:		
Excess and Deficiency		\$69 49

REFUNDS TAXES, CHAPTER 49, ACTS 1918.

Charges:		
Taxes 1918 Refunded		\$2 31
Credit:		
Excess and Deficiency		\$2 31

WATER CHARGES 1919 REFUNDED OR ABATED

Charges:		
Metered		\$23 64
Credit:		
Excess and Deficiency		\$23 64

TELLERS' OVERS AND SHORTS.

Charges:		
Shortages		\$16 83
Credit:		
Excess and Deficiency		\$16 83

STATE INCOME TAX, 1917.

Charges:		
To Revenue 1920		\$1,995 00
Credit:		
Cash from Commonwealth		\$1,995 00

STATE INCOME TAX, 1918.

Charges:		
To Revenue 1920		\$2,394 00
Credit:		
Cash from Commonwealth		\$2,394 00

STATE INCOME TAX, 1919.

Charges:			
Balance due from Commonwealth	\$6,415 00		
To Revenue 1920	46,175 00		
		<hr/>	\$52,590 00
Credit:			
Cash from Commonwealth			\$52,590 00

STATE INCOME TAX, 1920.

Charges:			
Estimate Account General School Fund	\$75,250 00		
Estimate Account General Purposes	61,442 65		
		<hr/>	\$136,692 65
Credit:			
Cash from Commonwealth			154,770 23
			<hr/>
Balance to 1921 account			\$18,077 58

TAX TITLES.

Charges:			
Balance from 1919 account		\$2,079 29	
Titles purchased, 1919 taxes		3,955 17	
Land Court Fees		150 00	
		<u> </u>	\$6,184 46
Credit:			
Cash		\$96 78	
Transferred to Real Estate Liens		171 20	
		<u> </u>	267 98
Balance to 1921 account			<u>\$5,916 48</u>

REAL ESTATE LIENS.

Charges:			
Transfer from Tax Titles account		\$171 20	
Taxes, 1919		10 32	
		<u> </u>	
Balance to 1921 account			\$181 52

GRADE CROSSINGS ADVANCES.

Debit:			
Balance from 1919 account			\$427 30

TAILINGS.

Credit:			
Balance from 1919 account			\$291 65

PREMIUMS ON BONDS.

Credit:			
Balance from 1919 account		\$132 00	
Premium, Loan of April 1, 1920		90 50	
		<u> </u>	\$222 50
Charges:			
Transfer to General Appropriations			132 00
Balance to 1921 account			<u>\$90 50</u>

ACCRUED INTEREST ON BONDS.

Credit:			
Cash, Loan of April 1, 1920		\$437 50	
Cash, Temporary Loan		72 92	
		<u> </u>	\$510 42
Charges:			
Transfer to General Appropriations			\$510 42

REVENUE FROM TAXES, SUPPLEMENTARY WARRANTS.

Credit:			
Balance from 1919 account		\$1,403 94	
Supplementary Warrant, No. 3, 1919		34 00	
Supplementary Warrants 1920, Polls Nos. 6 and 7		1,270 00	
Supplementary Warrant 1920, Personal No. 1		546 93	
Charged to Commonwealth account Abated Polls		57 00	
		<u> </u>	<u>\$3,311 87</u>

Charges:

Abatements	\$161 54	
Credit to Commonwealth Account		
Polls	762 00	
To Revenue 1920	1,372 08	
		<u>2,295 62</u>
Balance to 1921 account		\$1,016 25

REDEMPTION OF TAX TITLES.

Credit:

Cash Received	\$2,938 64
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Charges:

Titles redeemed, cash paid	\$2,938 64
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OVERLAY ACCOUNTS.

Overlay, 1917.

Credit:

Balance from 1919 account	\$947 80
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Charges:

Abatements	\$70 40	
Transferred to Reserve Fund	59 20	
		<u>129 60</u>

Balance to 1921 account	\$818 20
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Overlay, 1918.

Credit:

Balance from 1919 account	\$985 92	
Recommitment Taxes	4 00	
		<u>\$989 92</u>

Charges:

Abatements	\$384 16	
Transferred to Reserve Fund	252 56	
		<u>636 72</u>

Balance to 1921 account	\$353 20
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Overlay, 1919.

Credit:

Balance from 1919 account	\$2,955 89	
Recommitment Taxes	2 00	
Transferred from Reserve Fund	1,000 00	
		<u>\$3,957 89</u>

Charges:

Abatements	4,053 52
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Debit Balance to 1921 account	\$95 63
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Overlay, 1920.

Credit:

Taxes, 1920	\$17,079 78	
Charged to Commonwealth Account		
Polls	3,888 00	
		<u>\$20,967 78</u>

Charges:

Abatements	19,148 47
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Balance to 1921 account	\$1,819 31
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Brought forward	\$2,900,167 44
Pool and billiards	326 00
Sunday	570 00
Innholders and Victuallers	98 00
Pedlers	765 00
All other	262 50
Permits:—	
Marriage	1,294 00
Buildings	1,099 50
Garages	492 00
Electrical	1,737 00
All other	90 00
Fines and Forfeits.	
Court Fines	3,724 84
Departmental Penalties	288 00
Grants and Gifts.	
From State, — Vocational Schools	9,112 24
Smith-Hughes Fund	2,220 09
Americanization	602 30
From County, — Dog Licenses	2,180 85
All Other General Revenue.	
State, In Lieu of Taxes	93 66
Total General Revenue	\$2,925,123 42
Commercial Revenue — Special Assessments.	
For Expenses:—	
Street Sprinkling, 1920	\$37,029 06
Street Sprinkling, 1919	6,509 45
Moths, 1919	234 00
For Outlays:—	
Sidewalks, 1920	559 94
Sidewalks, 1919	3,984 20
Street Betterments, 1920	2,855 00
Street Betterments, 1919 and 1918	13,269 59
Total Commercial Revenue — Special Assessments	\$64,441 21
Commercial Revenue — Departmental.	
General Government.	
Treasurer and Collector	6,146 24
Assessors	2 50
City Clerk	1,535 92
Engineering	7 42
Other	67
Carried forward	\$7,692 75
	\$2,989,564 66

Brought forward	\$7,692 75	\$2,989,564 66
Protection of Persons and Property.		
Police Department:—		
Service of Officers	175 27	
Cloth	7 41	
Rent of Court Room	1,000 00	
Fire Department	5 00	
Sealer of Weights and Measures	530 84	
Health and Sanitation.		
Contagious Hospital	8,955 08	
Health Department	269 43	
Inspection	295 80	
Sanitary Department:—		
Garbage	16,083 20	
Incinerator	400 00	
Sanitary Buildings	14 56	
Highways.		
Labor and Materials	5,433 14	
Rent of Tenements	240 00	
Charities.		
Almshouse:—		
Sale of produce, etc.	5,317 31	
Board	4,599 02	
Outside Relief:—		
Individuals	495 10	
Cities and Towns	8,616 69	
State	6,136 36	
Mothers' Aid:—		
State	13,699 56	
Soldiers' Benefits.		
State Aid	25,901 48	
Military Aid	225 00	
Soldiers' Burials	295 27	
Education.		
Tuition State Wards	1,466 12	
Other Tuition	4,923 66	
Sale of Books and Supplies	50 72	
Rent High School Hall	625 00	
Miscellaneous, School Buildings	160 60	
All other	19 63	
Libraries.		
Fines, etc.	2,343 61	
Recreation.		
Bathhouse	538 35	
Shower Baths	394 05	
Unclassified.		
Electrolysis	500 00	
Miscellaneous	96 78	
Total Commercial Revenue — De-		
partmental		\$117,506 79
Carried forward		\$3,107,071 45

Brought forward

Commercial Revenue — Public Service Enterprises.

Brought forward \$3,107,071 45

Water Department:—

Sale of Water:—

Metered, 1920	189,027 02
Metered, 1919	22,517 32
Annual	39,512 75
Additional	938 87
Service Assessments	1,905 10
Maintenance Bills	4,438 36

Total Commercial Revenue — Public Service Enterprises	\$258,339 42
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Commercial Revenue — Interest.

Deposits	10,771 10
Taxes	10,972 75
Special Assessments	158 71
Trust Funds:—	
School	214 50
Library	854 31
Poor Department	75 05

Total Commercial Revenue — Interest	\$23,046 42
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Municipal Indebtedness.

Temporary Loans:—

Anticipation of Revenue	1,883,000 00
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General Loans:—

Highway	50,000 00
Premiums on Loans	90 50

Total Municipal Indebtedness	\$1,933 090 50
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Agency, Trust and Investment.

Redemption of Tax Titles	\$2,938 64
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Refunds.

Soldiers' Benefits	139 00
General Appropriations	1,411 71
Outlay Appropriations	1,370 77
Miscellaneous	285 85

Total Refunds	\$3,207 33
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Total Receipts	\$5,327,693 76
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EXPENDITURES.
GENERAL GOVERNMENT.

	Expenses	Outlays
Board of Aldermen Expenses.		
Books, postage and supplies	\$62 89	
Printing and advertising .	168 75	
Binding	8 50	
Auto hire, etc.	6 00	
Refreshments	775 77	
Badges	88 20	
Short-hand reporter	137 20	
All other	9 80	
	\$1,257 11	
Clerk of Committees Department.		
Salaries and Wages:—		
Clerk	\$2,100 00	
Assistant Clerk	700 00	
Other Expenses:—		
Books, postage and sup- plies	40 55	
Telephone	89 35	
All other	21 50	
	2,951 40	
Executive Department.		
Salaries and Wages:—		
Mayor	\$4,000 00	
Secretary	1,500 00	
Clerks	1,041 25	
Other Expenses:—		
Books, postage and sup- plies	210 99	
Printing and advertising	42 50	
Inaugural expenses	200 30	
Telephone	141 40	
Auto hire	12 00	
Contingent expenses	382 28	
All other	10 05	
	7,540 77	
Auditing Department.		
Salaries and Wages:—		
Auditor	\$3,100 00	
Clerks	2,276 17	
Other Expenses:—		
Books, postage and sup- plies	65 15	
Printing and advertising	635 70	
Binding	52 00	
Telephone	42 56	
Numbering machine	16 00	
All other	20 59	
	6,208 17	
Carried forward	\$17,957 45	

	Expenses	Outlays
Brought forward . . .	\$17,957 45	
Treasury Department.		
Salaries and Wages:—		
Treasurer and Collector	\$4,000 00	
Deputy Collector	2,000 00	
Cashiers	2,549 40	
Clerks	7,726 04	
Other Expenses:—		
Books, postage and supplies	2,497 21	
Printing and advertising	1,090 39	
Telephone	145 03	
Bonds	241 00	
Carfares	32 40	
Convention expenses	139 77	
New typewriters	154 75	
All other	283 89	
	<hr/>	20,859 88
Assessors' Department.		
Salaries and Wages:—		
Chairman	\$2,800 00	
Assessors	4,800 00	
Assistant Assessors	1,800 00	
Clerks (Office)	6,807 08	
Clerks (Street)	500 00	
Other Expenses:—		
Books, postage and supplies	929 66	
Printing and advertising	1,282 32	
Carfares, auto hire etc.	41 90	
Telephone	39 01	
All other	94 58	
	<hr/>	19,094 55
Board of License Commissioners.		
Salaries and Wages:—		
Inspector	\$160 00	
Clerk	200 00	
Other Expenses:—		
Postage and supplies	97 95	
Printing	52 25	
Carfares	40 00	
	<hr/>	550 20
Pedlers' License Commission.		
Books, postage and supplies	\$32 03	
	<hr/>	32 03
Certification of Notes and Bonds.		
Certifying	\$280 00	
Postage	3 16	
	<hr/>	283 16
City Clerk's Department.		
Salaries and Wages:—		
City Clerk	\$4,000 00	
Assistant City Clerk	2,100 00	
Clerks	3,654 20	
	<hr/>	
Carried forward	\$9,754 20	\$58,777 27

		Expenses	Outlays
Brought forward	\$9,754 20	\$58,777 27	
Other Expenses:—			
Books, postage and sup- plies	338 46		
Printing and advertising	108 60		
Binding	31 00		
Telephone	165 14		
Badges	13 25		
All other	52 50		
	<hr/>	10,463 15	
Registration City Laborers.			
Salaries and Wages:—			
Registration Clerk	\$400 00		
Other Expenses:—			
Books and postage	5 00		
Printing	5 50		
	<hr/>	410 50	
Law Department.			
Salaries and Wages:—			
City Solicitor	\$2,700 00		
Other Expenses:—			
Books, postage and sup- plies	15 75		
Recording deeds	4 25		
Clerical hire	156 00		
Witness fees, etc.	4 75		
Telephone	20 00		
All other	26 12		
	<hr/>	2,926 87	
City Messenger's Department.			
Salaries and Wages:—			
Messenger	\$2,200 00		
Other Expenses:—			
Auto maintenance	651 01		
Telephone	23 46		
Carfares	19 00		
	<hr/>	2,893 47	
Engineering Department.			
Salaries and Wages:—			
City Engineer	\$4,000 00		
Assistants	7,544 68		
Clerks	1,099 00		
Other Expenses:—			
Books, printing, postage, supplies, etc.	83 40		
Telephone	107 15		
Auto maintenance	2,001 39		
Instruments and equip- ment	13 64		
Carfares	248 60		
New auto	1,500 00		
Use of auto	105 00		
All other	9 00		
	<hr/>	16,711 86	
Carried forward		<hr/>	\$92,183 12

	Expenses	Outlays
Brought forward		\$92,183 12
Public Buildings Department, Commis- sioner of Public Buildings.		
Salaries and Wages:—		
Commissioner	\$3,100 00	
Inspector of Plumbing	1,900 00	
Clerks	1,986 23	
Other Expenses:—		
Books, postage and sup- plies	208 34	
Printing and advertising	34 75	
Telephone	178 01	
Auto maintenance	757 27	
All other	24 65	
	<hr/>	8,189 25
Maintenance Municipal Buildings, City Hall and City Hall Annex.		
Salaries and Wages:—		
Janitors	\$5,024 28	
Labor	752 32	
Other Expenses:—		
Fuel and light	3,577 97	
Furniture and furnish- ings	1,036 27	
Janitors' supplies	323 88	
Repairs to buildings	334 19	
Heating apparatus and equipment	265 83	
Plumbing and supplies	76 15	
Hardware and materials	194 71	
Ice	226 29	
All other	3 85	
	<hr/>	11,815 74
City Planning Board.		
Clerical hire	\$10 00	
Books, postage and supplies	8 20	
	<hr/>	18 20
Election Expenses, City Clerk.		
Salaries and Wages:—		
Clerks	\$600 00	
Other Expenses:—		
Equipment and supplies	99 44	
Printing and advertising	462 51	
Carfares and auto hire	157 63	
Ballot boxes and repairs	40 00	
Refreshments	151 30	
All other	1 36	
	<hr/>	1,512 24
Election Expenses, Registrars of Voters.		
Salaries and Wages:—		
Registrars	\$1,989 50	
Clerks	583 97	
Clerical hire	1,000 00	
	<hr/>	
Carried forward	\$3,573 47	\$113,718 55

		Expenses	Outlays
Brought forward	\$3,573 47	\$113,718 55	
Other Expenses:—			
Stationery and Postage	126 70		
Printing and advertising	1,907 52		
Refreshments	25 77		
Car hire	38 25		
Registers	77 00		
All other	44		
	<hr/>	5,749 15	
Election Expenses, Pay of Election Officers.			
Salaries and Wages:—			
Wardens and clerks	\$1,360 00		
Inspectors	2,718 00		
	<hr/>	4,078 00	
Public Buildings Department, Maintenance Polling Places.			
Labor	\$308 30		
Teaming	127 25		
Rent	52 50		
Lumber	280 97		
Hardware and materials	55 16		
Fuel and light	33 73		
Repairs to buildings	247 05		
All other	20 00		
	<hr/>	1,124 96	

PROTECTION OF PERSONS AND PROPERTY.

		Expenses	Outlays
Extreme Emergency, Health and Safety.			
Salaries and Wages:—			
Clerk	\$167 37		
Investigator	3 50		
Other Expenses:—			
Telephone	4 38		
Emergency hospital	3,600 00		
State Guard	18 00		
	<hr/>		\$3,793 25
Police Department.			
Salaries and Wages:—			
Chief	\$3,000 00		
Captains and Lieutenants	13,712 14		
Sergeants and Inspectors	12,282 60		
Patrolmen	142,868 99		
Special police	345 17		
Matrons	991 52		
Other employees	4,947 75		
Horses and Care of Same:—			
Hay, grain and straw	273 62		
Shoeing	59 25		
All other	11 25		
	<hr/>		
Carried forward	\$178,492 29	\$124,670 66	\$3,793 25

		Expenses	Outlays
Brought forward	\$178,492 29	\$124,670 66	\$3,793 25
Equipment and Repairs:—			
Motor cycle and auto maintenance	2,170 83		
New Motor equipment	1,517 00		
Equipment for men	663 39		
All other	25 59		
Other Expenses:—			
Books, printing, postage and supplies	251 87		
Care of prisoners	62 09		
Telephone	288 60		
Laundry	61 75		
Bedding	33 00		
Travel and disbursements	195 94		
Convention Expenses	104 76		
All other	107 29		
		183,974 40	
Public Buildings Department, Maintenance Police Buildings.			
Salaries and Wages:—			
Janitors	\$1,934 42		
Labor	87 40		
Maintenance of Buildings:—			
Fuel and light	1,554 37		
Janitors' supplies	105 05		
Furniture and furnishings	178 42		
Repairs to buildings	138 53		
Heating apparatus and equipment	168 33		
Plumbing and supplies	58 29		
Hardware and materials	19 15		
All other	45 16		
		4,289 12	
Fire Department.			
Salaries and Wages:—			
Chief Engineer	\$3,000 00		
Assistant Engineers	4,900 00		
Firemen	188,235 94		
Callmen	1,425 87		
Temporary and Emergency men	1,428 00		
Horses and Care of Same:—			
Horses	575 00		
Hay, grain and straw	5,077 48		
Shoeing	1,157 55		
Medicine and veterinary	78 91		
Harnesses, etc.	42 45		
Horse hire	372 50		
Equipment and Repairs:—			
Apparatus and equipment	3,244 75		
New car for District Chief	2,214 53		
Carried forward	\$211,752 98	\$312,934 18	\$3,793 25

		Expenses	Outlays
Brought forward	\$211,752 98	\$312,934 18	\$3,793 25
Hose	653 75		
Equipment for men	125 57		
Power	9 91		
Hardware, tools, etc.	209 98		
All other	2 00		
Other Expenses:—			
Books, printing, postage and supplies	104 92		
Telephone	500 53		
Janitors' supplies	279 58		
Furnishings	554 95		
Laundry work	335 51		
All other	270 66		
Supplies:—			
Grease and oil	309 92		
Gasoline	860 29		
Fuel	4 50		
Ice	136 82		
Soda and acid	149 27		
All other	214 70		
		216,475 84	
Public Buildings Department, Maintenance Fire Buildings.			
Salaries and Wages:—			
Labor	\$425 28		
Other Expenses:—			
Fuel and light	7,545 52		
Furniture and furnishings	584 57		
Janitors' supplies	34 30		
Repairs to buildings	219 45		
Heating apparatus and equipment	302 14		
Plumbing and supplies	322 59		
Lumber and materials	351 53		
Putting in concrete floor	522 45		
All other	11 11		
		10,318 94	
Weights and Measures Department.			
Salaries and Wages:—			
Sealer	\$1,600 00		
Labor	65 00		
Other Expenses:—			
Books, postage and sup- plies	30 51		
Printing and advertising	14 50		
Equipment and supplies	54 75		
Telephone	29 07		
Auto maintenance	501 71		
		2,295 54	
Electrical Department.			
Salaries and Wages:—			
Commissioner	\$2,600 00		
Carried forward	\$2,600 00	\$542,024 50	\$3,793 25

		Expenses	Outlays
Brought forward	\$2,600 00	\$542,024 50	\$3,793 25
Clerk	994 33		
Labor	13,074 90		
Other Expenses:—			
Fire Alarm System	321 48		
Police Signal System	452 30		
Auto maintenance	599 16		
Telephone	148 59		
Books, printing, postage and supplies	164 29		
All other	14 58		
	<hr/>	18,369 63	
Public Buildings Department, Maintenance Electrical Department Building.			
Labor	\$753 00		
Fuel	400 12		
Light	104 41		
Furniture and furnishings	15 75		
Heating apparatus and equipment	7 28		
	<hr/>	1,280 56	
Suppression of Moths.			
Labor	\$3,633 93		
Books, printing, postage and supplies	16 00		
Hired teams and trucks	245 08		
Hardware, tools and equip- ment	620 51		
Insecticides	337 30		
Other materials and sup- plies	49 60		
	<hr/>	4,902 42	
Care of Trees.			
Labor	2,742 47		
Teams and trucks	462 94		
Equipment, hardware and tools	76 01		
Lumber and materials	43 01		
Use of steam roller	31 50		
All other	16 41		
	<hr/>	3,372 34	

HEALTH AND SANITATION.

Health Department.

General Administration:—

Agent	\$1,600 00		
Clerks	2,641 83		
Medical Inspector and Bacteriologist	2,500 00		
	<hr/>		
Carried forward	\$6,741 83	\$569,949 45	\$3,793 25

		Expenses	Outlays
Brought forward . . .	\$6,741 83	\$569,949 45	\$3,793 25
Acting Medical Inspector . . .	179 85		
Acting Bacteriologist . . .	89 93		
Health Nurses . . .	2,100 00		
Books, printing, and postage . . .	405 62		
Carfares, etc.	287 15		
Telephone	267 44		
All other	76 59		
Quarantine and Contagious Diseases:—			
Board and Treatment:—			
Cities and towns	519 50		
Other Institutions	576 80		
Tuberculosis:—			
Board and Treatment:—			
Cities and towns	1,011 18		
State	3,069 10		
Other Institutions	242 50		
Groceries and provisions	1,261 54		
Other Expenses:—			
Equipment and supplies	122 61		
Auto maintenance	886 47		
Burying dead animals	102 33		
All other	186 90		
		18,127 34	

City Clerk's Department, Vital Statistics.

Canvassing and reporting births	\$728 00		
Reporting deaths	149 50		
Printing and advertising	126 25		
Books and supplies	148 11		
Binding	19 50		
All other	49 00		
		1,220 36	

Contagious Hospital.

Salaries and Wages:—			
Matron	\$1,200 00		
Nurses and other help	10,005 91		
Other Expenses:—			
Drugs and medicines	246 02		
Medical attendance	128 00		
Bedding, dry goods and clothing	388 26		
Groceries and provisions	9,096 02		
Equipment and supplies	1,602 40		
Telephone	77 51		
Electric power	129 39		
All other	42 93		
		22,916 44	
Carried forward		\$612,213 59	\$3,793 25

	Expenses	Outlays
Brought forward	\$612,213 59	\$3,793 25
Public Buildings Department, Maintenance Contagious Hospital.		
Salaries and Wages:—		
Janitor and labor	\$544 96	
Other Expenses:—		
Fuel	1,766 59	
Light	677 76	
Janitors' supplies	40 20	
Furniture and furnishings	611 87	
Repairs to buildings	315 90	
Heating apparatus and equipment	129 62	
Plumbing and supplies	56 74	
Hardware and materials	53 66	
All other	6 75	
	4,204 05	
Inspection of Animals and Provisions.		
Salaries and Wages:—		
Inspector	\$2,100 00	
Other Expenses:—		
Telephone	31 73	
	2,131 73	
Inspection of Milk and Vinegar.		
Salaries and Wages:—		
Inspector	\$2,300 85	
Milk Collector	1,500 00	
Other Expenses:—		
Books, printing and postage	115 08	
Auto maintenance	815 85	
New auto	950 00	
Equipment and supplies	236 48	
Telephone	38 86	
All other	42 79	
	5,999 91	
Inspection of School Children.		
Salaries and Wages:—		
Inspectors	\$1,583 26	
Other Expenses:—		
Books, printing and supplies	28 25	
Carfares	97 90	
	1,709 41	
School Nurses' Salaries.		
Salaries and Wages:—		
Nurses	\$1,749 97	
	1,749 97	
Sewers Construction.		
Salaries and Wages:—		
Inspector	\$74 02	
Labor	2,407 62	
Other Expenses:—		
Carried forward	\$2,481 64	\$628,008 66
		\$3,793 25

		Expenses	Outlays
Brought forward . . .	\$2,481 64	\$628,008 66	\$3,793 25
Teaming	625 60		
Pipe and fittings	54 61		
Brick and cement	13 25		
Castings	608 76		
Contract work	1,000 27		
			4,784 13

Engineering Department, Sewers Maintenance.

Salaries and Wages:—

Inspector	\$1,048 30
Labor	13,756 29

Other Expenses:—

Teaming	7,859 75
Tools and equipment	290 71
Pipe and fittings	23 26
Castings	40 40
Other materials and supplies	18 32
Care of Medford Street pump	96 77
Telephone	53 05
Repairs storm drain	237 89
All other	41 33

23,466 07

Less service transfers for materials furnished other departments

31 60

23,434 47

Public Building Department, Maintenance Sewer Buildings.

Salaries and Wages:—

Labor	\$361 49
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Other Expenses:—

Fuel	69 97
Light	29 96
Repairs to buildings	8 50
Plumbing	27 59
Lumber and materials	145 27

642 78

Sanitary Department.

General Administration:

Superintendent	\$2,300 00
Bookkeeper	300 00
Books, printing and supplies	90 07
Telephone	53 46
Auto maintenance	807 80
All other	7 85

Carried forward \$3,559 18 \$652,085 91 \$8,577 38

		Expenses	Outlays
Brought forward	\$3,559 18	\$652,085 91	\$8,577 38
Ashes, Rubbish and Garbage:—			
Labor	109,653 65		
Hired teams and trucks	50,615 17		
Equipment and repairs	940 19		
Rent of dump	300 00		
Materials and supplies	61 64		
Stable Expenses:—			
Hay, grain and straw	11,724 69		
Shoeing	404 84		
Veterinary and medicine	273 74		
Stable equipment	313 89		
	<hr/>	177,846 99	
Public Buildings Department, Maintenance Sanitary Buildings.			
Labor	\$92 18		
Fuel	114 46		
Light	240 31		
Repairs to buildings	262 25		
Lumber and materials	42 81		
Plumbing and supplies	1 60		
	<hr/>	753 61	
Street Cleaning.			
Labor	\$23,965 13		
Hired teams and trucks	4,479 23		
Equipment	117 78		
Printing	35 00		
	<hr/>	28,597 14	

HIGHWAYS

Highway Maintenance.			
General Administration:—			
Superintendent	\$3,100 00		
Bookkeeper and clerk	2,711 47		
Books, printing, postage and supplies	64 43		
Telephone	240 81		
Maintenance Superintendent's auto	723 61		
All other	45 95		
General:—			
Labor	51,509 37		
Hired teams	117 00		
Tools, equipment and repairs	1,462 13		
Autos and supplies	1,855 63		
New auto for foreman	857 00		
Broken stone, gravel, etc.	2,157 14		
Edgestones, bricks and cement	728 80		
Lumber	250 78		
Tarvia and road oil	2,146 02		
Fuel	927 92		
Oil and waste	492 14		
	<hr/>	<hr/>	
Carried forward	\$69,390 20	\$859,283 65	\$8,577 38

		Expenses	Outlays
Brought forward . . .	\$69,390 20	\$859,283 65	\$8,577 38
Hardware, paint and varnish	483 45		
Other materials and supplies	139 69		
Horses	1,225 00		
Hay, grain and straw	11,499 62		
Shoeing	349 25		
Veterinary and medicine	197 81		
Harnesses and horse clothing	392 07		
All other	40 86		
Other Expenses:—			
Signs	313 32		
Taxes, City of Waltham	281 20		
	<hr/>		
	84,312 47		
Less service transfers for teaming and use of equipment in other departments	18,280 71		
	<hr/>		
		66,031 76	
Highways Construction, New Streets.			
Labor	\$1,361 25		
Contracts	21,517 64		
Edgestone and circles	5,234 50		
Tarvia	754 58		
Other materials	1 90		
Advertising, recording, etc.	111 90		
Hired teams	551 37		
Use of roller	30 00		
All other	45 86		
	<hr/>		
			29,609 00
Highways Construction, Permanent Pavement.			
Labor	\$209 18		
Contracts	35,184 04		
Paving blocks	477 50		
Crushed stone, brick and cement	134 98		
Other materials	3 00		
Hired teams and trucks	50 40		
Use of mixer	4 50		
Use of equipment	8 04		
All other	38 00		
	<hr/>		
			36,109 64
Highway Reconstruction and Resurfacing.			
Labor	\$11,859 59		
Hired teams and trucks	2,461 05		
Use of roller	1,250 77		
Tools and equipment	742 04		
Tarvia	8,085 85		
Brick, stone, cement	15,390 61		
Other materials	106 80		
All other	3 03		
	<hr/>		
			39,899 74
Carried forward		<hr/>	<hr/>
		\$925,315 41	\$114,195 76

	Expenses	Outlays
Brought forward	\$925,315 41	\$114,195 76
Sidewalks Construction.		
Labor	\$1,499 65	
Hired teams and trucks	246 17	
Contracts	6,526 53	
Stone, brick and cement	967 84	
Edgestone	606 90	
Other materials	22 30	
Equipment	56 31	
Use of mixer	21 00	
All other	15 50	
	<hr/>	9,962 20
Sidewalks Maintenance.		
Labor	\$5,207 48	
Equipment	58 47	
Hired teams and trucks	795 40	
Use of mixer	45 00	
Stone, brick and cement	1,931 74	
Other materials and supplies	61 86	
	<hr/>	8,099 95
Street Sprinkling.		
Labor	\$5,594 63	
Hired teams and trucks	3,284 19	
Equipment and repairs	4,121 04	
Oil and other dust layers	23,987 70	
Maintenance water posts and hydrants	198 00	
Use steam roller	5 25	
Use car sprinkler	6,115 69	
Hardware and materials	21 70	
All other	32	
	<hr/>	43,328 52
Street Lighting.		
Contract:		
Electricity	\$72,045 27	
Spot lights	29 73	
	<hr/>	72,075 00
Public Buildings Department, Maintenance Highway Buildings.		
Labor	\$42 81	
Fuel	412 95	
Light	213 46	
Hardware and materials	6 75	
Lumber	183 29	
Plumbing and supplies	128 68	
All other	65	
	<hr/>	988 59
Carried forward	<hr/>	<hr/>
	\$1,049,807 47	\$124,157 96

CHARITIES.

	Expenses	Outlays
Brought forward	\$1,049,807 47	\$124,157 96
Poor Department.		
Advance for immediate aid	\$50 00	
	<hr/>	50 00
Poor Department, Miscellaneous.		
General Administration:—		
Agent	\$1,800 00	
Clerks	2,093 34	
Books, printing, postage and supplies	111 34	
Telephone	119 95	
All other	52 80	
Outside Relief:—		
City Physician	2,000 92	
Auto maintenance	125 00	
Board and care	3,719 41	
Cash	14,265 96	
Cash allowance	1,472 17	
Groceries and provisions	2,407 25	
Coal and wood	1,710 72	
Dry goods and clothing	13 50	
Medicine and medical at- tendance	210 13	
Ambulance hire	15 00	
Nursing	64 00	
State Institutions	167 63	
Contagious Hospital	184 29	
Somerville Hospital	7,779 29	
Other Institutions	1,455 03	
Burials	370 00	
Relief by Other Cities and Towns:—		
Cities	2,349 28	
Towns	6 00	
Mothers' Aid:—		
By city	30,432 00	
Other cities and towns	4,242 06	
	<hr/>	77,167 07
Poor Department, City Home.		
Salaries and Wages:—		
Warden and Matron	\$2,000 00	
Bookkeeper	100 00	
Domestic labor	2,389 74	
Farm labor	2,685 05	
Other Expenses:—		
Auto maintenance	296 31	
Groceries and provisions	5,390 83	
Clothing	212 79	
Medicine and hospital goods	117 26	
Household furnishings and supplies	748 96	
Farm equipment and sup- plies	562 84	
	<hr/>	
Carried forward	\$14,503 78	\$1,127,024 54
		\$124,157 96

		Expenses	Outlays
Brought forward . . .	\$14,503 78	\$1,127,024 54	\$124,157 96
Live stock and care . . .	449 36		
Garbage	377 00		
Hay, grain and feed . . .	1,218 94		
Horse shoeing	83 80		
Harnesses and horse clothing	2 90		
Seeds and fertilizer . . .	139 64		
Books, printing and sta- tionery	28 50		
Telephone	57 66		
Power	59 81		
Ice	111 58		
Disinfectant and sprayer .	31 50		
All other	190 82		
	<hr/>	17,255 29	

Public Buildings Department, Maintenance City Home Buildings.

Labor	\$92 68		
Fuel	1,228 39		
Light	553 13		
Furniture and furnishings .	445 47		
Repairs to buildings . . .	902 20		
Heating apparatus and equipment	164 51		
Plumbing and supplies . .	80 26		
Hardware and materials . .	14 35		
All other	5 52		
	<hr/>	3,486 51	

SOLDIERS' BENEFITS

Soldiers' Benefits, General Administration.

Salaries and Wages:—			
Agent	\$290 32		
Clerk	994 33		
Other Expenses:—	66 76		
	<hr/>	1,351 41	

Soldiers' Relief.

Cash as per pay rolls . . .	\$21,750 00		
Medicine and medical at- tendance	87 06		
	<hr/>	21,837 06	

Military Aid.

Cash as per pay rolls . . .	\$1,311 50		
	<hr/>	1,311 50	

State Aid.

Cash as per pay rolls . . .	\$10,586 00		
	<hr/>	10,586 00	

Carried forward	<hr/>	\$1,182,852 31	\$124,157 96
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	Expenses	Outlays
Brought forward	\$1,182,852 31	\$124,157 96
Soldiers' Burials.		
Burials	\$120 00	
	<u>120 00</u>	

EDUCATION.**School Contingent.**

Salaries and Wages:—

Superintendent	\$5,000 00
Assistant Superintendent	3,124 73
Clerks	4,626 17
Truant Officers	2,812 80
Other employees	256 94

General Expenses:—

Stationery, postage and office supplies	413 91
Telephones	1,125 31
Automobile maintenance	233 78
Travel	454 97
Mimeograph	65 00
All other	298 68

Textbooks and Supplies:—

Text and reference books	8,165 12
Maps	78 70
Stationery and supplies	12,722 72
Equipment and repairs	3,377 35

Other Expenses:—

Tuition	620 26
Support of truants	1,026 43
Diplomas and graduation	519 11
Printing and advertising	1,214 79
Catering	115 17
Power	766 45
Binding	176 65
All other	12 00

47,207 04

School Teachers' Salaries.

Day Schools	\$666,925 22
Evening Schools	9,492 75

676,417 97

Maintenance School Buildings, Janitors' Salaries.

Janitors' Salaries	\$56,957 56
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56,957 56

Maintenance School Buildings, Fuel and Light.

Labor	\$403 64
Fuel	35,339 05
Light	14,299 65

50,042 34

Carried forward	\$2,013,597 22	\$124,157 96
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	Expenses	Outlays
Brought forward	\$2,013,597 22	\$124,157 96
Maintenance School Buildings, Buildings and Grounds.		
Labor	\$8,748 60	
Furniture and furnishings	5,452 21	
Janitors' supplies	2,500 24	
Laundry	37 07	
Repairs to buildings	7,630 14	
Heating apparatus and equipment	8,383 48	
Plumbing	3,352 70	
Glass, hardware and paint	2,770 32	
Lumber	1,463 10	
Other materials and sup- plies	283 78	
Care of grounds	686 00	
Flags and flag poles	359 51	
Auto maintenance	529 89	
Power	321 61	
Insurance	3,119 62	
Use of Y. M. C. A. Gymnasi- um	500 00	
Use of Amory	150 00	
Armorer	50 00	
All other	889 43	
	<hr/>	
	47,227 70	
Cummings School Repairs.		
Repairing fire damage	\$3,285 00	
	<hr/>	
		3,285 00

SCHOOL TRUST FUNDS.

S. Newton Cutler Fund.		
Books	\$186 18	
	<hr/>	
		186 18
Smith-Hughes Fund.		
School teachers' salaries	\$2,139 85	
	<hr/>	
		2,139 85

LIBRARIES

Central Library.		
Salaries and Wages:—		
Librarian	\$3,000 00	
Assistants	14,840 66	
Other Expenses:—		
Books	5,125 51	
Periodicals	689 81	
Music	34 23	
Binding	1,523 67	
Pictures	2 00	
	<hr/>	
Carried forward	\$25,215 88	\$2,063,150 95
		\$127,442 96

		Expenses	Outlays
Brought forward . . .	\$25,215 88	\$2,063,150 95	\$127,442 96
Postage and office supplies	747 95		
Printing and advertising	549 50		
Telephone	170 43		
Catalogue cards	100 00		
Express	136 17		
Convention expenses	47 75		
Mimeograph	107 80		
All other	133 15		
		<u>27,208 63</u>	

Public Buildings Department, Maintenance Central Library.

Janitors	\$2,903 89		
Labor	153 11		
Fuel	1,050 59		
Light	1,437 70		
Furniture and furnishings	97 80		
Janitors' supplies	96 26		
Repairs to buildings	155 99		
Plumbing	71 55		
Hardware and materials	17 76		
All other	4 58		
		<u>5,989 23</u>	

West Somerville Branch Library.

Salaries and Wages:—			
Assistants	\$4,733 13		
Other Expenses:—			
Books	1,685 14		
Periodicals	371 36		
Music	3 15		
Binding	680 23		
Postage and office supplies	126 19		
Printing and advertising	44 00		
Telephone	36 38		
Express	202 67		
All other	11 65		
		<u>7,893 90</u>	

Public Buildings Department, Maintenance West Somerville Branch Library.

Janitor	\$1,339 00		
Labor	16 88		
Fuel	400 33		
Light	504 90		
Repairs to buildings	116 61		
Plumbing	17 23		
Hardware and material	1 73		
All other	54 13		
		<u>2,450 81</u>	

Carried forward		\$2,106,693 52	\$127,442 96
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	Expenses	Outlays
Brought forward	\$2,106,693 52	\$127,442 96
East Somerville Branch Library.		
Salaries and Wages:—		
Assistants	\$3,034 54	
Other Expenses:—		
Books	834 33	
Periodicals	166 52	
Binding	335 96	
Postage and office supplies	76 71	
Printing and advertising	32 50	
Telephone	34 28	
Express	202 67	
All other	33 50	
	<hr/>	
	4,751 01	
Public Buildings Department, Maintenance East Somerville Branch Library.		
Janitor	\$1,068 91	
Labor	17 68	
Fuel	263 68	
Light	271 01	
Furniture and furnishings	1 60	
Repairs to buildings	2 50	
Hardware and Materials	3 78	
All other	5 00	
	<hr/>	
	1,634 16	
Union Square Branch Library.		
Salaries and Wages:—		
Assistants	\$3,116 55	
Other Expenses:—		
Books	922 39	
Periodicals	156 98	
Binding	429 65	
Postage and office supplies	80 01	
Printing and advertising	23 90	
Telephone	33 96	
Express	203 16	
All other	4 00	
	<hr/>	
	4,970 60	
Public Buildings Department, Maintenance Union Square Branch Library.		
Janitor	\$1,067 92	
Labor	18 82	
Fuel	323 95	
Light	312 82	
Furniture and furnishings	2 50	
Janitors' supplies	1 65	
Heating apparatus and equipment	5 39	
Plumbing	3 00	
Hardware and materials	13 58	
All other	4 75	
	<hr/>	
	1,754 38	
Carried forward	<hr/> <hr/> \$2,119,803 67	\$127,442 96

	Expenses	Outlays
Brought forward	\$2,119,803 67	\$127,442 96

PUBLIC LIBRARY TRUST FUNDS.

S. Newton Cutler Fund.

Books	\$28 41	
	<hr/>	28 41

Martha R. Hunt, Art Fund.

Books	\$165 00	
Art cabinet	68 80	
	<hr/>	233 80

Martha R. Hunt, Book Fund.

Books	\$469 25	
	<hr/>	469 25

Isaac Pitman, Art Fund.

Books	\$269 08	
Pictures	41 13	
	<hr/>	310 21

Isaac Pitman, Poetry Fund.

Books	\$18 67	
	<hr/>	18 67

RECREATION.

Engineering Department, Parks Maintenance.

Labor	\$8,908 70	
Teaming	968 67	
Tools and equipment	210 12	
Materials and supplies	223 35	
Trees, shrubs and plants	417 42	
Repairs	371 54	
Flags and flag poles	112 75	
Care of bubblers and fountains	87 34	
	<hr/>	11,299 89

Public Buildings Department, Maintenance Park Buildings.

Labor	\$417 48	
Fuel	141 41	
Light	464 13	
Repairs to buildings	4 05	
Repairs to water heater	117 17	
Plumbing	102 10	
Hardware and materials	16 15	
Laundry and janitors' supplies	222 25	
All other	5 50	
	<hr/>	1,490 24

Carried forward	\$2,133,654 14	\$127,442 96
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	Expenses	Outlays
Brought forward	\$2,133,654 14	\$127,442 96

**Engineering Department, Playgrounds
Maintenance.**

Labor	\$3,602 86	
Teaming	430 52	
Apparatus	221 81	
Tools and equipments	56 28	
Materials and supplies	200 79	
Repairs to fountains, fences, etc.	647 43	
	<hr/>	5,159 69

Recreation and Playground Commission.

Salaries and Wages:—

Supervisors	\$1,289 89
Instructors	1,246 30
Social worker	1,162 80
Other helpers	319 50

Other Expenses:—

Equipment and supplies	276 47
Plowing, harrowing, etc.	244 63
Use of auto	299 35
Civic social centre	45 94
All other	115 12
	<hr/>

5,000 00

Public Buildings Department, Maintenance Bathhouse.

Salaries and Wages:—

Attendants	\$919 67
Labor	6 06

Other Expenses:—

Bathing suits	476 68
Towels	49 16
Repairs to buildings	40 00
Equipment and supplies	53 89
Sand	550 00
Telephone	35 90
Laundry	226 11
Hardware and materials	3 42
All other	35
	<hr/>

2,361 24

Celebrations.

Music	\$10 00
Decorating	208 03
Signs	18 00
Union Square Monument	300 11
Election returns	253 88
All other	13 50
	<hr/>

803 52

Carried forward	<hr/>	<hr/>	\$2,146,978 59	\$127,442 96
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UNCLASSIFIED

	Expenses	Outlays
Brought forward	\$2,146,978 59	\$127,442 96
Memorial Day.		
Music and catering	\$263 30	
Flowers and flags	95 54	
Speeches	30 00	
All other	24 77	
	<hr/>	413 61
Public Buildings Department, Maintenance Bandstand.		
Labor	\$55 28	
Lighting	16 25	
Teaming	48 75	
Lumber and hardware	26 81	
	<hr/>	147 09
Municipal Documents.		
Printing:		
Annual reports	\$1,574 83	
Municipal registers	122 50	
Postage	6 18	
All other	52 50	
	<hr/>	1,756 01
Workmen's Compensation.		
Compensation for injuries	\$3,597 83	
Medical attendance	161 00	
Postage and supplies	4 00	
	<hr/>	3,762 83
Pensions.		
Janitors	\$1,818 19	
Police	9,549 00	
Fire	4,009 42	
Weights and Measures	812 50	
Health	750 00	
Poor	850 00	
Laborers:—		
Highway	4,384 06	
Sanitary	867 16	
Water	1,689 50	
	<hr/>	24,729 83
Damage to Persons and Personal Property.		
Settlement of claims	\$2,002 00	
Repairs	1 25	
	<hr/>	2,003 25

MUNICIPAL INDEBTEDNESS.

Interest.

Temporary loans:—

Anticipation of Revenue	\$59,118 67
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General Loans:—

Sewer	9,748 75
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Carried forward	<hr/>	<hr/>	<hr/>
	\$68,867 42	\$2,179,791 21	\$127,442 96

		Expenses	Outlays
Brought forward . . .	\$68,867 42	\$2,179,791 21	\$127,442 96
Highway	11,020 00		
Municipal	1,395 00		
City	14,757 50		
Bridge	1,032 50		
Metropolitan Park	350 00		
Public Buildings	11,300 00		
Emergency	637 50		
	<hr/>	109,359 92	

Reduction of Funded Debt.

General Loans:—			
Sewer	\$23,000 00		
Highway	67,868 00		
Municipal	8,000 00		
City	79,500 00		
Bridge	1,000 00		
Metropolitan Park	1,000 00		
Public Buildings	24,000 00		
Emergency	5,000 00		
	<hr/>	209,368 00	

WATER WORKS.

Water Maintenance.

Administration:—			
Commissioner	\$3,100 00		
Clerks	6,596 40		
Books, printing, postage and supplies	1,661 53		
Telephone	266 37		
All other	100 86		
General:—			
Labor	38,774 74		
Pipe and fittings	3,056 31		
Meters and fittings	4,459 47		
Hydrants and fittings	1,042 60		
Tools	1,274 26		
Autos, trucks and sup- plies	4,836 89		
Horses and equipment	391 38		
Power	22 01		
Miscellaneous supplies	137 94		
Street repairs	203 96		
Fountains	36 23		
All other	43 85		
	<hr/>		
Less service transfers for teaming	66,004 80		
	259 67		
	<hr/>	65,745 13	
Carried forward		\$2,564,264 26	\$127,442 96

	Expenses	Outlays
Brought forward . . .	\$2,564,264 26	\$127,442 96
Water Works Extension.		
Labor	\$1,551 25	
Teaming	137 00	
Tools and equipment	44 00	
Pipe and fittings	2,530 25	
Meters and fittings	1,689 34	
Hydrants and fittings	99 56	
	<hr/>	
	6,051 40	
Public Buildings Department, Maintenance Water Buildings.		
Fuel	\$619 03	
Light	313 87	
Repairs to buildings	50	
Heating apparatus and equipment	53 24	
	<hr/>	
	986 64	
Interest.		
Water Loans	\$80 00	
	<hr/>	
	80 00	
Reduction of Water Debt.		
Water Bonds	\$2,000 00	
	<hr/>	
	2,000 00	
Metropolitan Water Assessment.		
Assessment	\$127,505 74	
	<hr/>	
	127,505 74	

OTHER ACCOUNTS.**Temporary Loans.**

Loans in anticipation of revenue	\$1,785,000 00	
	<hr/>	
		1,785,000 00

Tax Titles.

Taxes 1919	\$3,955 17	
Land court fees	150 00	
	<hr/>	
		4,105 17

Real Estate Liens.

Taxes 1919 on property taken by city	\$10 32	
	<hr/>	
		10 32

State Taxes.

State	\$245,420 00	
Special State	11,569 80	
Non-Resident Bank	3,820 61	
Poll Taxes, Chap. 283, Acts 1919	68,355 00	
	<hr/>	
		329,165 41

Carried forward	\$4,819,168 94	\$127,442 96
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	Expenses	Outlays
Brought forward	\$4,819,168 94	\$127,442 96
Metropolitan and Other Assessments.		
Metropolitan Park	\$57,509 59	
Metropolitan Sewer	89,939 26	
Wellington Bridge	3,520 70	
Grade Crossings	9,171 80	
State Highway	481 56	
Charles River Basin	9,693 89	
Alewife Brook	1,140 65	
Abatement of Smoke	400 75	
Prevention of Fire	1,290 82	
Soldiers' Exemption	304 37	
	<hr/>	
	173,453 39	
County of Middlesex.		
County Tax, 1920	\$107,532 49	
	<hr/>	
	107,532 49	
Cash Refunds.		
Taxes	\$1,068 51	
Street Sprinkling Assess- ment	167 03	
Water Rates	87 55	
National Bank Tax 1919	14 05	
	<hr/>	
	1,337 14	
Tellers' Overs and Shorts.		
Cash shortage	\$16 83	
	<hr/>	
	16 83	

PRIVATE TRUST.

Redemption of Tax Titles.		
Tax titles redeemed	\$2,938 64	
	<hr/>	
	2,938 64	
Totals	<hr/>	<hr/>
	\$5,104,447 43	\$127,442 96
*Appropriation Refunds	1,682 71	
	<hr/>	<hr/>
Total Cash Payments	\$5,106,130 14	\$127,442 96
		<hr/>
		\$5,233,573 10

* Expenditures as shown in all accounts are net.

SCHEDULE OF PUBLIC PROPERTY.

School Buildings	Land and Buildings	Personal	Totals
Prescott	\$72,200 00	\$3,000 00	\$75,200 00
East Somerville Junior High	62,000 00	2,000 00	64,000 00
Hanscom	66,500 00	4,000 00	70,500 00
Davis	53,500 00	17,500 00	71,000 00
Clark Bennett	54,500 00	3,500 00	58,000 00
Knapp	53,000 00	5,500 00	58,500 00
Baxter	39,200 00	1,500 00	40,700 00
Perry	47,000 00	1,500 00	48,500 00
Bell and Southern Junior High	137,000 00	10,000 00	147,000 00
Prospect Hill	18,000 00	2,000 00	20,000 00
Pope	83,600 00	5,000 00	88,600 00
Cummings	15,400 00	1,500 00	16,900 00
Edgerly	43,000 00	5,000 00	48,000 00
*High	396,000 00	30,000 00	426,000 00
Glines	96,400 00	5,000 00	101,400 00
Forster	64,000 00	8,000 00	112,000 00
Forster (Annex)	40,000 00	.....	.....
†Proctor	44,000 00	.....	44,000 00
Bingham	77,000 00	5,000 00	82,000 00
Morse	54,000 00	5,000 00	59,000 00
Carr	58,600 00	4,500 00	68,100 00
Girls' Industrial School	4,000 00	1,000 00	.....
Durell	21,400 00	1,500 00	22,900 00
Burns	44,000 00	3,000 00	47,000 00
Brown	78,000 00	2,600 00	80,600 00
Highland	66,600 00	5,000 00	71,600 00
Lowe	51,000 00	2,000 00	53,000 00
Hodgkins	98,700 00	5,000 00	103,700 00
‡West Somerville Junior High	80,000 00	4,000 00	84,000 00
Lincoln	19,800 00	1,000 00	20,800 00
Cutler	98,700 00	10,000 00	108,700 00
Total	\$2,137,100 00	\$154,600 00	\$2,291,700 00

*Land included in Central Hill Park.

†Building and fixtures. Land owned by State.

‡Land included in Holland Street Ledge.

Fire Buildings.	Land and Buildings	Personal	Totals
New fire alarm building	\$27,500 00	*\$103,000 00	\$178,200 00
Central	47,700 00	.....	.....
Engine Two	37,000 00	15,000 00	52,000 00
Engine Six	29,000 00	20,000 00	49,000 00
Hose Five	23,500 00	8,000 00	31,500 00
Ladder One	60,000 00	15,500 00	75,500 00
Hose Eight	11,200 00	7,700 00	18,900 00
Ladder Two	19,700 00	15,000 00	34,700 00
Engine Four	19,500 00	7,000 00	26,500 00
Total	\$275,100 00	\$191,200 00	\$466,300 00

*Includes Electrical Department equipment.

Libraries.			
†Central	\$137,500 00	\$100,000 00	\$237,500 00
East Somerville Branch	24,400 00	.....	24,400 00
West Somerville Branch	30,000 00	6,000 00	36,000 00
Total	\$191,900 00	\$106,000 00	\$297,900 00

Miscellaneous Buildings.			
Highway (stables, etc.)	\$55,000 00	\$30,000 00	\$85,000 00
Sewer	6,700 00	500 00	7,200 00
Contagious and Tuberculo- sis Hospital	45,900 00	9,000 00	54,900 00
City Home	93,100 00	17,000 00	110,100 00
Police	69,500 00	8,000 00	77,500 00
†City Hall	57,200 00	149,000 00	206,200 00
†City Hall Annex	68,200 00	12,500 00	80,700 00
Parks:—			
Broadway	3,100 00	.....	3,100 00
Lincoln	3,000 00	500 00	3,500 00
Bathhouse	5,000 00	.....	5,000 00
Polling Booths	1,800 00	.....	1,800 00
Sanitary	21,000 00	19,200 00	40,200 00
Water	49,000 00	6,500 00	55,500 00
Total	\$478,500 00	\$252,200 00	\$730,700 00

†Land included in Central Hill Park.

Parks and Playgrounds.	Land and Buildings	Personal	Totals
Broadway	\$421,200 00	.....	\$421,200 00
Central Hill	472,000 00	.....	472,000 00
Lincoln	84,500 00	3,500 00	88,000 00
Prospect Hill	69,800 00	1,500 00	71,300 00
Tufts	109,000 00	.....	109,000 00
Paul Revere	1,000 00	.....	1,000 00
Belmont Street	5,100 00	.....	5,100 00
City Field	70,900 00	.....	70,900 00
Glen Street	17,300 00	.....	17,300 00
Kent Street	12,000 00	.....	12,000 00
Poplar Street	5,500 00	.....	5,500 00
Beacon Street	3,000 00	.....	3,000 00
Webster Avenue	3,000 00	.....	3,000 00
Mason Street	4,200 00	.....	4,200 00
Somerville Field	40,000 00	20,000 00	60,000 00
Total	\$1,318,500 00	\$25,000 00	\$1,343,500 00

Miscellaneous Land.

Ledge, Holland Street	\$54,500 00	.....	\$54,500 00
Somerville Avenue	300 00	.....	300 00
Putnam	400 00	.....	400 00
Murdock Street	600 00	.....	600 00
Lowell Street	100 00	.....	100 00
Spencer Avenue	100 00	.....	100 00
Weston Avenue	2,100 00	.....	2,100 00
Endicott Avenue	600 00	.....	600 00
Powder House Boulevard	400 00	.....	400 00
Waltham Gravel Land	10,000 00	.....	10,000 00
Total	\$69,100 00	.....	\$69,100 00

SUMMARY.

	Land and Buildings	Personal	Totals
School Buildings	\$2,137,100 00	\$154,600 00	\$2,291,700 00
Fire Buildings	275,100 00	191,200 00	466,300 00
Libraries	191,900 00	106,000 00	297,900 00
Miscellaneous Buildings	478,500 00	252,200 00	730,700 00
Parks and Playgrounds	1,318,500 00	25,000 00	1,343,500 00
Miscellaneous Land	69,100 00	.....	69,100 00
Total	\$4,470,200 00	\$729,000 00	\$5,199,200 00
Sewers (cost)			1,356,538 00
Water Works (cost)			1,079,248 19
Total value public property			\$7,634,986 19

REPORT OF THE TREASURER AND COLLECTOR OF TAXES.

Somerville, Mass.,
January 27, 1921.

To the Honorable, the Mayor and the Board of Aldermen of the
City of Somerville:

Gentlemen:—

I herewith present the annual report of the City Treasurer and Collector of Taxes for the year 1920. The following items seem of particular interest:

The assessor's warrants for 1920 amounted to . . .	\$2,762,547 57
The assessor's warrants for 1919 amounted to . . .	2,344,297 37
The assessor's warrants for 1918 amounted to . . .	2,053,862 53

showing an increase for 1920 over 1919 of \$418,250 20, the increase for 1920 over 1918 being \$708,685 04.

The valuation as fixed by the Board of Assessors to establish the tax rate was \$3,442,568.40 less than in 1919. The real estate valuation increased \$3,455,000. The valuation of personal estate, including non-resident bank shares, decreased \$6,897,568.40. The decrease in the personal valuations was on account of the provisions of Part 2 Chapter 355, General Acts of 1919 affecting foreign corporations. If the personal valuations had been the same as in 1919 there would have been a saving of \$2.00 or more per thousand in the tax rate.

Respectfully submitted,

JOSEPH S. PIKE,

City Treasurer and Collector of Taxes.

CONDENSED CASH STATEMENT.

Receipts		Payments	
Revenue . . .	\$5,273,384 35		\$5,109,104 99
Non-Revenue . . .	54,309 41		124,468 11
	<hr/>		<hr/>
	\$5,327,693 76		\$5,233,573 10
Cash Balance January 1, 1920 . . .	200,795 77	Cash balance December 31, 1920 . . .	294,916 43
	<hr/>		<hr/>
	\$5,528,489 53		\$5,528,489 53
	<hr/>		<hr/>

DETAILED CASH STATEMENT.

Receipts.

Balance from 1919			\$200,795 77
Revenue			
Taxes, 1917	\$63 20		
1918	260 56		
1919	322,195 84		
1920	2,299,590 84		
Excise, 1920	64 09		
	<hr/>	\$2,622,174 53	
Street Sprinkling, 1919	6,509 45		
1920	37,029 06		
	<hr/>	43,538 51	
Moth Assessments, 1919		234 00	
Highway, 1918	936 24		
1919	12,333 35		
1920	2,855 00		
	<hr/>	16,124 59	
Sidewalk, 1919	3,984 20		
1920	599 94		
	<hr/>	4,544 14	
Metered Water Charges, 1919		22,517 32	
Water: Sales, 1920	229,478 64		
Maintenance	4,438 36		
Service Assessments	1,905 10		
	<hr/>	235,822 10	
Tax Titles		96 78	
Temporary Loans		1,883,000 00	
Departmental Deposits		25,316 87	
Departmental Accounts		59,025 15	
Commonwealth of Massachusetts:—			
Corporation Taxes:			
Business	26,191 62		
Public Service, etc.	13,771 80		
Bank	6,419 70		
Street Railway	10,651 54		
	<hr/>	57,034 66	
Carried forward		\$4,979,428 65	\$200,795 77

Brought forward		\$4,979,428 65	\$200,795 77
Foreign Corporation		6,286 52	
Income Tax, 1917	1,995 00		
1918	2,394 00		
1919	52,590 00		
1920	154,770 23		
		<hr/>	
		211,749 23	
Vocational Schools		9,112 24	
Americanization Work		602 30	
Soldiers' Benefits		26,473 75	
In lieu of taxes		93 66	
County of Middlesex:			
Dog licenses		2,180 85	
Courts, County	164 50		
Police	3,545 84		
Probation Officer	14 50		
		<hr/>	
		3,724 84	
Departmental Penalties:			
Callmen, Fire Dept.	117 00		
School Dept.	171 00		
		<hr/>	
		288 00	
Licenses and Permits		9,656 50	
Interest: On taxes	10,964 33		
Assessments	158 71		
Tax Titles	8 42		
Bank Accounts:			
Treasurer	10,763 65		
City Clerk	7 45		
		<hr/>	
		21,902 56	
Treasury Department:			
Costs: Taxes	5,433 21		
Assessments	18 40		
Tax Titles	8 45		
Tax lien certificates	624 00		
Redemption tax liens	24 00		
Collecting bank tax	38 18		
		<hr/>	
		6,146 24	
Edison Electric Illuminating Co., electrolysis		500 00	
General Expenses, refunds		1,040 29	
Trust Funds, Income:			
School, S. Newton Cutler	214 50		
Smith-Hughes	2,220 09		
		<hr/>	
		2,434 59	
Library, S. Newton Cutler	42 88		
Hunt, Art	97 50		
Hunt, Books	495 29		
Pitman, Art	171 32		
Pitman, Poetry	42 82		
Wilder, Children's	4 50		
		<hr/>	
		854 31	
Poor, Olive C. Cummings		75 05	
Premium on Bonds		90 50	
Accrued Interest		510 42	
Excess and Deficiency		233 85	
		<hr/>	
		\$5,273,384 35	
Carried forward		\$5,273,384 35	\$200,795 77

Brought forward		\$5,273,384 35	\$200,795 77
Non-Revenue			
Funded Debt, Highway Loan bonds	50,000 00		
Outlay Appropriations, re- funds and offsets	1,370 77		
Redemption of Tax Liens . .	2,938 64	54,309 41	5,327,693 76
		<hr/>	<hr/>
			\$5,528,489 53

PAYMENTS.

Revenue			
Advances, Poor Department .		\$50 00	
Taxes, 1917, refunds	\$4 00		
1918, refunds	8 00		
1919, refunds	72 90		
1920, refunds	981 30		
Refunds under chap. 49, Acts 1918	2 31		
		<hr/>	1,068 51
Street Sprinkling, 1919, refund	42 95		
1920, refund	124 08		
		<hr/>	167 03
Water Charges:			
Previous year, refunds . .	12 00		
Current year, Refunds . .	75 55		
		<hr/>	87 55
Refund, Bank tax, 1919		14 05	
Real Estate Liens		10 32	
Tax Titles		4,105 17	
Temporary Loans		1,785,000 00	
Commonwealth of Massachu- setts: .			
State Tax	245,420 00		
Special State Tax	11,569 80		
Assessments	173,149 02		
Metropolitan Water assess- ments	127,505 74		
Civilian War Poll Taxes . .	68,355 00		
Soldiers' Exemptions . . .	304 37		
Bank Tax, non-resident . .	3,820 61		
		<hr/>	630,124 54
County of Middlesex, county tax		107,532 49	
General Expenses		2,256,091 79	
Interest: Temporary Loans . .	59,191 59		
Funded Debt	50,758 75		
		<hr/>	109,950 34
Reduction of Funded Debt . .		211,500 00	
Trust Funds:			
School, S. Newton Cutler . .	186 18		
Smith-Hughes	2,139 85		
		<hr/>	<hr/>
Carried forward		\$5,105,701 79	

Brought forward		\$5,105,701 79	
Library, S. Newton Cutler	28 41		
Hunt, Art	233 80		
Hunt, Books	469 25		
Pitman, Art	310 21		
Pitman, Poetry	18 67		
		<u>3,386 37</u>	
Teller's Shorts and Overs		16 83	
			<u>\$5,109,104 99</u>
Non-Revenue			
Outlay Appropriations		121,529 47	
Redemption of Tax Liens		2,938 64	
			<u>124,468 11</u>
			<u>\$5,233,573 10</u>
Cash in office		2,255 18	
Deposits in banks		292,661 25	
			<u>294,916 43</u>
			<u>\$5,528,489 53</u>
Revenue			
General Expenses		220,224 89	
Trust Funds (Public)		2,691 19	
Sundry Persons		291 65	
			<u>223,207 73</u>
Non-Revenue			
Outlay Appropriations		71,708 70	
			<u>\$294,916 43</u>

BALANCES, DECEMBER 31, 1920.

Cash		\$294,916 43	
Cash Advances, Poor Dept		100 00	
Taxes, 1917	\$818 20		
1918	353 20		
1919	1,309 09		
1920	399,641 97		
1920 Excise	313 42		
		<u>402,435 88</u>	
Street Sprinkling, 1920		7,500 66	
Overlay and Abatement, 1917			\$818 20
1918			353 20
1919		95 63	
1920			1,351 31
Supplementary assessments			986 25
Highway Assts., 1919	\$1,632 93		
1920	5,722 00		
		<u>7,354 93</u>	
Carried forward		\$712,403 53	\$3,508 96

TREASURER AND COLLECTOR OF TAXES.

73

Brought forward		\$712,403 53	\$3,508 96
Sidewalk Assts., 1919	1,074 85		
1920	4,069 35		
	<hr/>	5,144 20	
Metered Water Charges, 1920		26,919 79	
Commonwealth of Massachu-			
setts:			
Soldiers' Benefits, 1920		11,426 75	
Poll Taxes			375 00
Income Tax, 1920			18,077 58
Foreign Corporation Tax		43,713 48	
Grade Crossings		427 30	
Real Estate Liens		181 52	
Tax Titles		5,916 48	
Temporary Loans			625,000 00
Funded Debt			1,148,000 00
Net Funded Debt		1,148,000 00	
Interest (Reserved on account			
of 1920 loans)			7,689 58
Trust Funds, Income:			
Poor, Olive C. Cummings	207 07		
School, S. Newton Cutler	521 43		
Smith-Hughes	1,423 09		
Library, S. N. Cutler	14 62		
Hunt, Art	176 59		
Hunt, Books	29 59		
Pitman, Art	53 53		
Pitman, Poetry	55 52		
Wilder, Children's	6 98		
Hunt, Art (prin-			
cipal)	202 77		
	<hr/>		2,691 19
Premium on bonds			90 50
Reserve Fund			8,246 53
Trust Funds, School	5,000 00		
Library	20,414 58		
Poor	1,681 66		
	<hr/>		27,096 24
Trust Funds, Investment:			
School	5,000 00		
Library	20,414 58		
Poor	1,681 66		
	<hr/>	27,096 24	
Sundry Persons			291 65
Excess and Deficiency			68,453 36
Outlay Appropriations			71,708 70
		<hr/>	<hr/>
		\$1,981,229 29	\$1,981,229 29

The assessor's warrant for the tax levy, assessed upon polls and property April 1, 1920, including non-resident bank shares, amounted to \$2,760,998.13, and the tax rate established was \$30.90 on each \$1,000 of valuation, as follows:

Real estate	\$76,752,500 00	
Personal estate	7,088,200 00	
Resident bank shares	70,155 60	
	<hr/>	
Total valuation	\$83,910,855 60	
At rate of \$30.90		\$2,592,845 44
Polls, 23,805 at \$5.00		119,025 00
Non-resident bank shares to be paid to the state (valuation \$123,644.40)		3,820 61
Street Sprinkling		44,662 08
		<hr/>
		\$2,760,353 13
Additional Assessments:		
Personal estate, valuation \$17,700 at \$30.90	\$546 93	
Polls, 254 at \$5.00	1,270 00	
Excise Taxes	377 51	
	<hr/>	
		2,194 44
		<hr/>
Total commitments by assessors		\$2,762,547 57
		<hr/> <hr/>

TAXES.

	1917	1918	1919	1920	Excise 1920	Total
Balance Dec. 31, 1919	\$947 80	\$985 92	\$327,503 09	\$2,715,691 05	\$377 51	\$329,436 81
Committed, 1920 . . . . .	.....	.....	34 00	1,816 93	.....	2,716,102 56
Supplementary . . . . .	.....	.....	.....	981 30	.....	1,816 93
Refunds	4 00	8 00	72 90	.....	.....	1,066 20
Recharged . . . . .	.....	4 00	2 00	.....	.....	6 00
Total charges	\$951 80	\$997 92	\$327,611 99	\$2,718,489 28	\$377 51	\$3,048,428 50
Collected	63 20	260 56	322,195 84	2,299,590 84	64 09	2,622,174 53
Abated	70 40	384 16	4,107 06	19,256 47	.....	23,818 09
Total credits	\$133 60	\$644 72	\$326,302 90	\$2,318,847 31	\$64 09	\$2,645,992 62
Balance Dec. 31, 1920	818 20	353 20	1,309 09	399,641 97	313 42	402,435 88
Refund taxes under Chap. 49, Acts 1918 . . . . .	.....	2 31	.....	.....	.....	.....

STREET SPRINKLING AND MOTH ASSESSMENTS.

	Sprinkling 1919	Sprinkling 1920	Moths 1919	Total
Balance Dec. 31, 1919	\$6,535 99	.....	\$234 00	\$6,769 99
Committed, 1920 . . . . .	.....	\$44,662 08	.....	44,662 08
Refunds	42 95	124 08	.....	167 03
	<hr/>	<hr/>	<hr/>	<hr/>
Total	\$6,578 94	\$44,786 16	\$234 00	\$51,599 10
Collected	6,509 45	37,029 06	234 00	43,772 51
Abated	69 49	256 44	.....	325 93
	<hr/>	<hr/>	<hr/>	<hr/>
Total credits	\$6,578 94	\$37,285 50	\$234 00	\$44,098 44
Balance Dec. 31, 1920 . . . . .	.....	7,500 66	.....	7,500 66

OVERLAY AND ABATEMENT.

	1917	1918	1919	1920	Total
Balance to credit Dec. 31, 1919	\$947 80	\$985 92	\$2,955 89		\$4,889 61
Assessed in Taxes				\$17,079 78	17,079 78
Taxes recharged		4 00	2 00		6 00
Credited by Commonwealth				3,420 00	3,420 00
Transferred from Reserve Fund			1,000 00		1,000 00
Total credits	\$947 80	\$989 92	\$3,957 89	\$20,499 78	\$26,395 39
Abatements	70 40	384 16	4,053 52	19,148 47	23,656 55
Transferred to Reserve Fund	59 20	252 56			311 76
Total charges	129 60	636 72	4,053 52	19,148 47	23,968 31
Credit charges, Bal. Dec. 31, 1920	818 20	353 20		1,351 31	2,427 08
Debit charges, Bal. Dec. 31, 1920			95 63		2,522 71
					95 63

RESERVE SUPPLEMENTARY ASSESSMENTS.

	1919	1920	Total
Balance to credit December 31, 1919	\$1,403 94		\$1,403 94
Supplementary Assessments, 1920	34 00	\$1,816 93	1,850 93
Credited by Commonwealth		27 00	27 00
Total credits	1,437 94	1,843 93	3,281 87
Abatements	53 54	108 00	161 54
Transferred to Revenue	1,372 08		1,372 08
Credited to Commonwealth		762 00	762 00
Total charges	1,425 62	870 00	2,295 62
Balance December 31, 1920	12 32	973 93	986 25

BETTERMENT ASSESSMENTS.

	Highway 1918	Highway 1919	Highway 1920	Sidewalk 1919	Sidewalk 1920	Total
Balance Dec. 31, 1919	.	.	.	\$5,059 05		\$19,961 57
Committed	\$936 24	\$13,966 28	\$8,577 00		\$4,629 29	13,206 29
Collected	936 24	13,966 28	8,577 00	5,059 05	4,629 29	33,167 86
Balance Dec. 31, 1920	936 24	12,333 35	2,855 00	3,984 20	599 94	20,668 73
		1,632 93	5,722 00	1,074 85	4,069 35	12,499 13

WATER DEPARTMENT ACCOUNTS.

	Metered 1919	Metered 1920	Annual	Additional	Maintenance	Service Ass'ts	Total
Committed	\$22,528 96	\$216,246 33	\$40,229 50	\$1,230 63	\$4,797 65	\$1,905 10	\$286,938 17
Refunds		40 31	35 24				75 55
Collected	\$22,528 96	\$216,286 64	\$40,264 74	\$1,230 63	\$4,797 65	\$1,905 10	\$287,013 72
Abated	22,517 32	189,027 02	39,512 75	938 87	4,488 36	1,905 10	258,339 42
	11 64	339 83	751 99	291 76	359 29		1,754 51
Balance to 1921	\$22,528 96	\$189,366 85	\$40,264 74	\$1,230 63	\$4,797 65	\$1,905 10	\$260,093 93
		26,919 79					26,919 79

DEPARTMENTAL ACCOUNTS FOR COLLECTION AND DEPOSITS.

	Balance Jan. 1, 1920	Committed	Abated	Collected	Balance Dec. 31, 1920	Deposits
Assessors . . . . .	.....	.....	.....	.....	.....	\$2 50
Clerk of Committees . . . . .	.....	.....	.....	.....	.....	67
City Engineer . . . . .	.....	.....	.....	.....	.....	7 42
City Clerk . . . . .	.....	.....	.....	.....	.....	1,535 92
Police Department	\$125 72	\$163 62	.....	\$171 03	\$118 31	11 65
Police Buildings . . . . .	.....	1,000 00	.....	1,000 00	.....	.....
Fire Department . . . . .	.....	5 00	.....	5 00	.....	.....
Weights and Measures . . . . .	.....	.....	.....	.....	.....	530 84
Health Department	319 43	509 60	.....	269 43	559 60	.....
Contagious Hospital	4,375 41	8,532 30	\$584 27	8,955 08	3,368 36	.....
Inspection of Milk and Vinegar	23 50	245 00	14 50	231 00	23 00	64 80
Sanitary Department	920 00	2,381 20	865 00	2,059 00	377 20	14,424 20
Sanitary Buildings . . . . .	.....	14 56	.....	14 56	.....	.....
Highway Maintenance	1,107 47	5,677 76	1,000 32	5,433 14	351 77	.....
Highway Buildings . . . . .	.....	240 00	.....	240 00	.....	.....
Sidewalks Construction . . . . .	.....	129 53	.....	.....	129 53	.....
Poor, Misc. (Commonwealth)	10,270 11	21,024 95	226 00	19,835 92	11,233 14	.....
Poor, Miscellaneous	3,137 27	7,751 36	32 71	9,111 79	1,744 13	.....
Poor, City Home	376 75	8,102 16	84 75	4,579 02	3,815 14	.....
School Department	502 31	9,175 76	239 22	6,389 78	3,049 07	5,337 31
School Buildings . . . . .	.....	835 55	55 00	730 40	50 15	72 45
Libraries . . . . .	.....	.....	.....	.....	.....	53 10
Bathhouse . . . . .	.....	.....	.....	.....	.....	2,343 61
Shower Baths . . . . .	.....	.....	.....	.....	.....	538 35
						394 05
Non-Revenue	\$21,157 97	\$65,788 35	\$3,101 77	\$59,025 15	\$24,819 40	\$25,316 87
Extreme Emergency	46 36	.....	33 93	12 43	.....	.....

TEMPORARY LOANS.
In Anticipation of Revenue.

Balance from 1919	\$527,000 00	
Borrowed by authority of the Board of Aldermen on city notes as follows:		
Nos. 748-754 289 days — 4.99%	\$100,000 00	
755-783 259 " — 5.20	300,000 00	
784-787 253 " — 5.80	100,000 00	
788-793 253 " — 5.85	50,000 00	
794-795 95 " — 5	28,000 00	
796-797 243 " — 5.75	30,000 00	
798-799 189 " — 5.65	100,000 00	
800 156 " — 5.60	50,000 00	
801-803 245 " — 5.65	50,000 00	
804-807 173 " — 5.85	100,000 00	
808-811 215 " — 5.85	100,000 00	
812-813 179 " — 6.1	50,000 00	
814-815 199 " — 6.1	50,000 00	
816-817 172 " — 6.1	50,000 00	
818-820 105 " — 6.05	100,000 00	
821-822 195 " — 6	50,000 00	
823-824 143 " — 6	125,000 00	
825-833 199 " — 5.99	100,000 00	
834-841 125 " — 5.90	75,000 00	
842-846 250 " — 5.90	50,000 00	
On coupon notes, interest to follow semi-annually, as follows:		
Nos. 78-82 — 1 yr. 5¼%	50,000 00	
83-86 — 1 yr. 5½%	100,000 00	
87 — 1 yr. 5½%	25,000 00	
88-97 — 1 yr. 6%	50,000 00	1,883,000 00
Paid notes maturing 1920		\$2,410,000 00
		1,785,000 00
Maturing in 1921		625,000 00
Discount paid was	\$53,226 59	
6 mos. int. on coupon notes 78-82 — 83-87	\$4,750 00	
Less accrued int. 78-82	72 92	
		4,677 08
Int. due in 1921 on coupon notes 78-82 — 83-87 — 88-97		7,750 00
		\$65,653 67
\$1,658,000 discounted notes average 204.6 days, average rate 5.636.		

The funded debt December 31, 1920, was \$1,148,000.00, classified as follows:

City Loan Bonds at 3½ per cent	\$33,000 00
City Loan Bonds at 4 per cent	255,000 00
City Loan Bonds at 4¼ per cent	30,000 00
Carried forward	\$318,000 00

Brought forward	\$318,000 00
Sewer Loan Bonds at 3½ per cent	62,000 00
Sewer Loan Bonds at 4 per cent	149,000 00
Sewer Loan Bonds at 4¼ per cent	23,000 00
Met. Park Asst. Loan Bonds at 3½ per cent	9,000 00
Lowell St. Bridge Loan Bonds at 3½ per cent	29,000 00
Municipal Loan Bonds at 4½ per cent	23,000 00
Highway Loan Bonds at 3½ per cent	54,000 00
Highway Loan Bonds at 4 per cent	127,000 00
Highway Loan Bonds at 4½ per cent	40,000 00
Highway Loan Bonds at 5 per cent	50,000 00
Public Bldg. Loan Bonds at 4 per cent	179,000 00
Public Bldg. Loan Bonds at 4½ per cent	75,000 00
Emergency Loan Bonds at 4¼ per cent	10,000 00
	\$1,148,000 00

Funded debt within the limit fixed by law :

City Loan	\$318,000 00	
Municipal Loan	23,000 00	
Highway Loan	271,000 00	
Public Bldg. Loan	254,000 00	
Sewer Loan	219,000 00	
Lowell St. Bridge Loan	29,000 00	
Emergency Loan	10,000 00	
	\$1,124,000 00	

Funded debt beyond the limit fixed by law :

Sewer Loan (Chap. 357, Acts 1895)	\$15,000 00	
Met. Park Asst. Loan (Chap. 325, Acts of 1902)	9,000 00	
	24,000 00	
		\$1,148,000 00

BONDS DUE IN 1921.

	January	April	July	October	Total
Emergency			\$5,000		\$5,000
Park			1,000		1,000
Bridge		\$1,000			1,000
Sewer	\$3,000	10,000	10,000		23,000
City	9,000	34,000	23,500	\$2,000	68,500
Municipal			8,000		8,000
Highway	16,000	43,000	5,000		64,000
Building	6,000	5,000	13,000		24,000
	\$34,000	\$93,000	\$65,500	\$2,000	\$194,500

BOND INTEREST DUE IN 1921.

	January	April	July	October	Total
Emergency	\$212 50	.....	\$212 50	.....	\$425 00
Park	157 50	.....	157 50	.....	315 00
Bridge . . . . .	.....	\$507 50	.....	\$490 00	997 50
Sewer	1,490 00	3,063 75	1,435 00	2,867 50	8,856 25
City	3,137 50	3,177 50	2,957 50	2,495 00	11,767 50
Municipal	517 50	.....	517 50	.....	1,035 00
Highway	1,295 00	4,340 00	1,015 00	3,445 00	10,095 00
Building	3,907 50	1,360 00	3,787 50	1,260 00	10,315 00
	<u>\$10,717 50</u>	<u>\$12,448 75</u>	<u>\$10,082 50</u>	<u>\$10,557 50</u>	<u>\$43,806 25</u>

BONDS OUTSTANDING JANUARY 1, 1921, WITH INTEREST TO MATURITY.

	Bonds	Interest
Emergency Loan Bonds	\$10,000 00	\$637 50
Metropolitan Park Loan Bonds	9,000 00	1,575 00
Bridge Loan Bonds	29,000 00	14,717 50
Sewer Loan Bonds	234,000 00	65,341 25
City Loan Bonds	318,000 00	53,107 50
Municipal Loan Bonds	23,000 00	2,025 00
Highway Loan Bonds	271,000 00	35,895 00
Pub. Bldg. Loan Bonds	254,000 00	76,880 00
	<u>\$1,148,000 00</u>	<u>\$250,178 75</u>

OUTSTANDING BONDS, DECEMBER 31, 1920.

	City	Sewer	Sewer Outside	Park	Bridge	Municipal	Highway	Pub. Bldgs.	Emergency	Total Due
1921	\$68,500	\$20,000	\$3,000	\$1,000	\$1,000	\$8,000	\$64,000	\$24,000	\$5,000	\$194,500
1922	52,500	20,000	3,000	1,000	1,000	8,000	55,000	19,000	5,000	164,500
1923	41,500	18,000	3,000	1,000	1,000	7,000	36,000	18,000	.....	125,500
1934	25,500	17,000	3,000	1,000	1,000	.....	36,000	18,000	.....	101,500
1925	23,000	17,000	3,000	1,000	1,000	.....	25,000	18,000	.....	88,000
1926	19,000	15,000	.....	1,000	1,000	.....	20,000	18,000	.....	74,000
1927	19,000	14,000	.....	1,000	1,000	.....	12,000	17,000	.....	64,000
1928	17,000	12,000	.....	1,000	1,000	.....	9,000	16,000	.....	56,000
1929	16,000	11,000	.....	1,000	1,000	.....	9,000	16,000	.....	54,000
1930	15,000	10,000	.....	.....	1,000	.....	5,000	16,000	.....	47,000
1931	12,000	10,000	.....	.....	1,000	.....	.....	15,000	.....	38,000
1932	9,000	8,000	.....	.....	1,000	.....	.....	15,000	.....	33,000
1933	.....	8,000	.....	.....	1,000	.....	.....	14,000	.....	23,000
1934	.....	8,000	.....	.....	1,000	.....	.....	14,000	.....	23,000
1935	.....	7,000	.....	.....	1,000	.....	.....	8,000	.....	16,000
1936	.....	6,000	.....	.....	1,000	.....	.....	4,000	.....	11,000
1937	.....	6,000	.....	.....	1,000	.....	.....	4,000	.....	11,000
1938	.....	4,000	.....	.....	1,000	.....	.....	.....	.....	5,000
1939	.....	3,000	.....	.....	1,000	.....	.....	.....	.....	4,000
1940	.....	2,000	.....	.....	1,000	.....	.....	.....	.....	3,000
1941	.....	1,000	.....	.....	1,000	.....	.....	.....	.....	2,000
1942	.....	1,000	.....	.....	1,000	.....	.....	.....	.....	2,000
1943	.....	1,000	.....	.....	1,000	.....	.....	.....	.....	2,000
1944	.....	.....	.....	.....	1,000	.....	.....	.....	.....	1,000
1945	.....	.....	.....	.....	1,000	.....	.....	.....	.....	1,000
1946	.....	.....	.....	.....	1,000	.....	.....	.....	.....	1,000
1947	.....	.....	.....	.....	1,000	.....	.....	.....	.....	1,000
1948	.....	.....	.....	.....	1,000	.....	.....	.....	.....	1,000
1949	.....	.....	.....	.....	1,000	.....	.....	.....	.....	1,000
	\$318,000	\$219,000	\$15,000	\$9,000	\$29,000	\$23,000	\$271,000	\$254,000	\$10,000	\$1,148,000

Yearly Bond Maturities with Interest.

Date Due	Principal	Interest	Total
1921.....	\$194,500 00	\$43,806 25	\$238,306 25
1922.....	164,500 00	36,356 25	200,856 25
1923.....	125,500 00	30,221 25	155,721 25
1924.....	101,500 00	25,356 25	126,856 25
1925.....	88,000 00	21,518 75	109,518 75
1926.....	74,000 00	18,203 75	92,203 75
1927.....	64,000 00	15,316 25	79,316 25
1928.....	56,000 00	12,813 75	68,813 75
1929.....	54,000 00	10,531 25	64,531 25
1930.....	47,000 00	8,416 25	55,416 25
1931.....	38,000 00	6,688 75	44,688 75
1932.....	33,000 00	5,246 25	38,246 25
1933.....	23,000 00	3,978 75	26,978 75
1934.....	23,000 00	3,051 25	26,051 25
1935.....	16,000 00	2,223 75	18,223 75
1936.....	11,000 00	1,673 75	12,673 75
1937.....	11,000 00	1,221 25	12,221 25
1938.....	5,000 00	808 75	5,808 75
1939.....	4,000 00	636 25	4,636 25
1940.....	3,000 00	501 25	3,501 25
1941.....	2,000 00	403 75	2,403 75
1942.....	2,000 00	326 25	2,326 25
1943.....	2,000 00	248 75	2,248 75
1944.....	1,000 00	192 50	1,192 50
1945.....	1,000 00	157 50	1,157 50
1946.....	1,000 00	122 50	1,122 50
1947.....	1,000 00	87 50	1,087 50
1948.....	1,000 00	52 50	1,052 50
1949.....	1,000 00	17 50	1,017 50
	<u>\$1,148,000 00</u>	<u>\$250,178 75</u>	<u>\$1,398,178 75</u>

BORROWING CAPACITY, DECEMBER 31, 1920.

Valuation, 1918	.	.	.	.	\$84,639,280 00	
Supplementary	.	.	.	.	24,700 00	
						\$84,663,980 00
Valuation, 1919	.	.	.	.	87,353,424 00	
Supplementary	.	.	.	.	39,300 00	
						87,392,724 00
Valuation, 1920	.	.	.	.	83,910,855 60	
Supplementary	.	.	.	.	17,700 00	
						83,928,555 60
Total	.	.	.	.		\$255,985,259 60
Abatements, 1918	.	.	.	.	\$377,189 00	
" 1919	.	.	.	.	331,375 00	
" 1920	.	.	.	.	389,950 00	
						<u>1,098,514 00</u>
Brought forward	.	.	.	.		\$254,886,745 60

Brought forward				\$254,886,745 60
Average three years one-third				84,962,248 53
2½ per cent				2,124,056 21
Funded Debt December 31, 1920		\$1,148,000 00		
Outside limit fixed by law				
Sewer loan, 1895, Chap. 357	\$15,000 00			
Metro. Park loan, Chap. 325, 1902	9,000 00	\$24,000 00		\$1,124,000 00
Borrowing capacity, December 31, 1920				\$1,000,056 21
Maturities:				
January 1, 1921		\$34,000 00		
April 1, 1921		\$93,000 00		
July 1, 1921	\$65,500 00			
Less outside limit	4,000 00			
		61,500 00		
October 1, 1921		2,000 00		
				\$190,500 00
				\$1,190,556 21
Maturities within the limit, 1921		\$190,500 00		
Maturities outside the limit, 1921		4,000 00		
Total maturities, 1921		\$194,500 00		

MEMORANDUM OF PAYMENTS ON ACCOUNT OF DEBT, 1920.

	Principal	Interest	Total
Bonds, General City Debt	\$209,500 00	\$50,678 75	\$260,178 75
Bonds, Water	2,000 00	80 00	2,080 00
Temporary Loans .....	.....	59,118 67	59,118 67
Grade Crossings	8,280 00	891 80	9,171 80
On account of Metro. Dist. Debt:			
Sewers	21,961 36	31,419 72	53,381 08
Park	3,952 61	14,649 08	18,601 69
Wellington Bridge	1,265 00	278 30	1,543 30
Charles River Basin	320 51	3,705 67	4,026 18
Alewife Brook	818 39	322 26	1,140 65
Water	14,787 26	74,903 80	89,691 06
	\$262,885 13	\$236,048 05	\$498,933 18
Somerville's proportion for debt requirements:			
In State Tax	\$27,324 93	\$34,025 17	\$61,350 10
In County Tax	4,812 91	3,112 49	7,925 40
	\$295,022 97	\$273,185 71	\$568,208 68

GRADE CROSSING DEBT.

(Carried by Commonwealth).

Decreases entered		\$120,097 10
Paid Commonwealth	\$126,432 41	
Deduct interest included in above	21,475 31	104,957 10
		<u>\$15,140 00</u>

Payable	Principal	Interest
Nov. 15, 1921	\$7,380 00	\$576 60
1922	4,380 00	294 40
1923	3,380 00	127 20
	<u>\$15,140 00</u>	<u>\$998 20</u>

TREASURY DEPARTMENT, 1920.

Appropriated in budget		\$20,985 00
Salaries:		
Treasurer and Collector	\$4,000 00	
Deputy Collector	2,000 00	
Cashiers	2,549 40	
Clerks	7,726 04	
Stationery, postage and books	2,465 22	
Printing and Advertising	699 08	
Telephone	145 03	
Tracing tax-payers	78 50	
Bonds	241 00	
Convention expenses	139 77	
Typewriter	154 75	
Advertising and recording tax sales	426 31	
Sundries	234 78	
	<u>\$20,859 88</u>	
Balance	125 12	\$20,985 00

**REPORT OF THE SCHOOL COMMITTEE.
CITY OF SOMERVILLE.**

School Committee Rooms, December 28, 1920.

Ordered, that the annual report of the Superintendent be adopted as the annual report of the Board of School Committee, it being understood that such adoption does not commit the Board to the opinions or recommendations made therein; that it be incorporated in the reports of the City Officers; and that 1,000 copies be printed separately.

CHARLES S. CLARK,

Secretary of School Board.

SCHOOL COMMITTEE, 1920.

HERBERT CHOLERTON Chairman
 WILLIAM M. MORRISON Vice-Chairman

Members.

EX-OFFICIIS.

CHARLES W. ELDRIDGE, Mayor, 47 Highland road.
 RICHARD L. RICE, President Board of Aldermen, 296½ Broadway.

WARD ONE.

FRANCIS J. FITZPATRICK, 76 Broadway.
 WILLIAM T. MCCARTHY, 38 Pearl street.

WARD TWO.

DANIEL H. BRADLEY, 19 Concord avenue.
 CHRISTOPHER J. MULDOON, 88 Concord avenue.

WARD THREE.

CHARLES W. BOYER, 104 Summer street.
 OSCAR W. CODDING, 59 Vinal avenue.

WARD FOUR.

FRANK M. HAWES, 257 School street.
 EDWARD I. TRIPP, 21 Wigglesworth street.

WARD FIVE.

HARRY M. STOODLEY, 283 Highland avenue.
 MISS MINNIE S. TURNER, 64 Hudson street.

WARD SIX.

WALTER I. CHAPMAN, 18-A Central street.
 WILLIAM M. MORRISON, 97 Rogers avenue.

WARD SEVEN.

HERBERT CHOLERTON, 94 College avenue.
 PAUL O. CURTIS, 41 Mason street.

Superintendent of Schools.

CHARLES S. CLARK.

Office: City Hall Annex, Highland avenue.

Residence: 75 Munroe street.

The Superintendent's office will be open on school days from 8 to 5; Saturdays, 8 to 10. His office hour is 4 o'clock on school days, and 8:30 on Saturdays.

*Assistant Superintendent of Schools.

JOSEPH A. EWART.

Residence: 11 Bigelow street.

Office hour: 4 o'clock on school days, and 8:30 on Saturdays.

Superintendent's office force:—

Mary A. Clark, 42 Highland avenue.

Mildred A. Merrill, 26 Cambria street.

H. Madeline Kodad, 104 Sharon street, West Medford.

Marion E. Marshall, 30 Gilman street.

*Resigned November 1, 1920.

Board Meetings.

January 26.	April 26.	September 27.	December 24.
February 23.	May 31.	October 25.	December 31.
March 29.	June 28.	November 29.	

8:15 o'clock.

STANDING COMMITTEES, 1920.

Note. — The member first named is chairman.

District I. — McCarthy, Fitzpatrick, Muldoon.

PRESCOTT, HANSCOM, BENNETT.

District II. — Muldoon, Bradley, Coddling.

KNAPP, PERRY, BAXTER.

District III. — Coddling, Boyer, Fitzpatrick.

POPE, CUMMINGS.

District IV. — Hawes, Tripp, Miss Turner.

EDGERLY, GLINES.

District V. — Stoodley, Miss Turner, Hawes.

FORSTER, BINGHAM.

District VI. — Morrison, Chapman, Stoodley.

CARR, MORSE, PROCTOR, DURELL, BURNS, BROWN.

District VII. — Cholerton, Curtis, Morrison.

HIGHLAND, CUTLER, LINCOLN, LOWE.

High School. — Bradley, Hawes, Fitzpatrick, Coddling, Stoodley, Morrison, Cholerton.

Finance. — Stoodley, Bradley, Fitzpatrick, Coddling, Tripp, Morrison, Cholerton, Eldridge, Rice.

Text-Books and Courses of Study. — Muldoon, Miss Turner, McCarthy, Boyer, Tripp, Chapman, Curtis.

Industrial Education. — Tripp, Boyer, Fitzpatrick, Muldoon, Miss Turner, Chapman, Curtis.

School Accommodations. — Coddling, Chapman, McCarthy, Bradley, Hawes, Stoodley, Cholerton, Eldridge, Rice.

Teachers. — Cholerton, Muldoon, Coddling, Miss Turner, Morrison.

Health, Physical Training and Athletics. — Morrison, Curtis, McCarthy, Muldoon, Boyer, Tripp, Stoodley.

Rules and Regulations. — Hawes, McCarthy, Bradley.

REPORT OF THE SUPERINTENDENT OF SCHOOLS.

To the School Committee:—

Hereby is submitted a report of the public schools for the school year ended June 30 and for the municipal year 1920. The report covers the work of the schools, and statistical tables giving facts concerning membership and expenses. The statistical tables are prepared for the school year ended June 30 in order to correspond with the reports made to the State Board of Education, but other facts to correspond with the municipal year are also presented.

Membership

There has been an increase in the membership of the schools during the past year. This increase shows equally well under the headings of average membership, enrollment, or present membership, although the numbers under those headings vary. A comparison between the membership in the schools in December, 1920, and December, 1919, is as follows:

		High	Junior High	Elementary including Kinder- gartens	Vo- cational	Total	In- crease
December	1920	1692	3168	8630	121	13,611	444
December	1919	1618	2937	8517	95	13,167	

Teachers

A similar comparison for teachers is as follows:

		High	Junior High	Elementary including Kinder- gartens	Vo- cational	Total	Decrease
December	1920	65	112	226	10	413	1
December	1919	65	113	226	10	414	

Twenty-eight teachers were elected during the year, distributed as follows: High School 4, Junior High School 6, Elementary schools 13, Vocational school 1, Continuation school 4.

Fifteen teachers resigned, — 4 to be married, 7 to accept better paying positions; the remainder for various other reasons. This statement shows a greater stability in the teaching corps during 1920 than in any other of the last few years. This change is doubtless due to two causes; first, to improved

salary schedules, second, to the return to more normal business conditions since the close of the war. It is to be hoped that this stability may continue so that the schools may have the benefit of uninterrupted service of competent teachers.

Elementary Schools

The elementary schools comprise all the classes below the seventh grade. Their function is to teach the tools of knowledge and to train the pupils in civic obligations, in the rules and practice of health, and in appreciation of the arts of music and drawing. In connection with these undertakings and as the purpose of them all, it is the function of these schools to train the pupils in regard for the right and in abhorrence of the wrong; in short, to mold the character of the youth and to make them self-dependent and upright.

In these schools are laid the foundations of learning and the foundations of habit. It is important, therefore, that adequate provision should be made to insure their successful operation. Among the most important of these provisions are good teachers, good school rooms and school furnishings, a proper ratio of pupils to a teacher, and a well planned and adequate curriculum of studies. These conditions have prevailed in the elementary schools during the past year. Some improvements have been planned and partially put into effect during that time.

Among these is the introduction in all grades of specific instruction in civics, and in United States history in accordance with the provisions of an enactment of the State Legislature made in May, 1920. A revision of the course of study in arithmetic has also been made and committees are being formed for the revision of the other courses of study. New editions of the text books in use are being furnished in replacement of older editions. The principals and teachers are working enthusiastically and good results are being secured.

While it is undoubtedly true that more is demanded of the schools today in the way of variety and extent of service than was ever asked of them before, it is also true beyond a doubt that never was there a time when the schools responded more successfully or more vigorously to their task than they do today.

Secondary Schools

In 1918 the Department of the Interior, bureau of education, issued a bulletin entitled "Cardinal Principles of Sec-

ondary Education." This was a report of the commission on the re-organization of secondary education appointed by the National Education association.

By reason of the reputation of its members, the nature of its appointment, its affiliation with many other committees dealing with the organization and administration of secondary schools, this commission has spoken with greater authority than that which attaches to the utterances of a single individual however eminent in educational thinking. After discussing the changes which have taken place in American life during the past decade and the changes that have occurred during the past 25 years in secondary school population of the United States, the commission proposes the following as the main objectives that should guide education in a democracy :

(1) health, (2) command of fundamental processes, (3) worthy home membership, (4) vocation, (5) citizenship, (6) worthy use of leisure, (7) ethical character. While applying these objectives to the whole process of education the commission deals specifically with the problem of re-organizing secondary education so as best to promote the attainment of these objectives. It favors such a re-organization of secondary education that it may be defined as applying to all pupils of approximately 12 to 18 years of age.

It favors the division of the six years devoted to secondary education into two periods, the junior and senior. "In the junior period emphasis should be placed upon the attempt to help the pupil to explore his own aptitudes and to make at least provisional choice of the kinds of work to which he will devote himself. In the senior period emphasis should be given to training in the fields thus chosen. This distinction lies at the basis of the organization of junior and senior high schools."

Our junior and senior high schools correspond with the organization recommended in the report of the commission. Each of the objectives is recognized as a "cardinal principle" in the management of the schools but equal advancement has not been made in all of them. Where the advancement is the smallest is in the case of the objectives which have not been so generally emphasized as important functions of secondary education.

As an illustration of the change of sentiment in these particulars, may be cited the action of the Massachusetts Legislature already referred to requiring the study of American history and civics in all public elementary and high schools and the proposition to make physical training and health instruction compulsory in the public schools.

Junior High Schools

The Junior High schools have had a year of uninterrupted and successful work. In the main the teaching corps was the same as that of the previous year and consisted of teachers who had had one or more years of experience in their subjects. The organization of the schools had become so well managed as to provide a good medium for the teaching forces of the schools. The courses of study were well understood. The things to be undertaken and the methods to be employed were known. Consequently the work of the year was as a whole the best since the establishment of the Junior High schools.

As an evidence of the holding power of the Junior High school the facts about promotion in June are given below. It should be borne in mind in considering these figures that many children become 14 years of age during the eighth school year and consequently are legally free to leave school. Between the eighth and ninth year, or between the grammar school and the high school, is the time when many children drop out. Another danger period is that between the ninth and tenth year, or the first and second year of the high school. The figures given below relate to those two transition points.

Eighth Grade Promotions

Promotion from the eighth grade to the ninth grade in the Junior High School corresponds to the promotion from the last grade of grammar school to the High School.

School	No. in Class in June	No. promoted to Grade 9	No. Entering Grade 9 in September, 1920
Eastern Junior High	137	134	125
Southern Junior High	233	228	215
Northern Junior High	215	204	204
Western Junior High	351	331	336
	936	897	880

Ninth Grade Promotions

Promotion from the ninth grade to the tenth is the promotion from the Junior High School to the Senior High School. The tenth grade corresponds to the second year of a four year High School.

School	No. in class in June	No. given diplomas	No. certified to High School Grade 10	No. entering High School Sept., 1920
Eastern Junior High	113	101	101	93
Southern Junior High	209	200	200	157
Northern Junior High	169	164	160	148
Western Junior High	251	240	239	226
	742	705	700	624

Senior High School

The senior high school provides training for the pupil in the field which he has chosen. The curriculums prepare for higher institutions, for work in special vocation, and for a general training upon which future specialization may be built. Each of these curriculums is well organized and taught by competent teachers. The opportunity for success is open to every serious student.

During the last school year, the work of the school was conducted with fewer interruptions and distractions than had been the case for the past few years. As a consequence more satisfactory work was accomplished in all departments of the school. The graduates in 1920 compared favorably with those in any previous year whether in preparation for higher institutions of learning or in preparation for business pursuits.

There are difficulties, however, in the way of meeting fully the objectives above outlined which grow out of the limitations of time and space. The school day is too short to permit devoting an adequate amount of time to physical training. As a consequence, this important objective of secondary education is slighted.

The school occupies the plant so completely that some activities which ought to be conducted are omitted or are conducted in a cramped manner. An illustration of the latter is the school bank and the office practice work of the commercial department. The lack of time could be remedied by making a reasonable addition to the length of the school day. For the lack of room, there is no remedy at present.

Boys' Vocational School

Several new features have characterized the conduct of the Vocational School for Boys during the past year. The first of these is the loan by the United States Government of machine equipment valued at approximately \$25,000.

These machines were received in the early part of the year and were set up in the building used by the machine shop. The second of these events was an arrangement made by the School Committee with the Federal Board for Vocational Education whereby disabled service men are to receive instruction in the trades which the school teaches.

As a consequence of this arrangement, approximately 60 men have been received in the shop and have been trained for various periods. The purpose of this work is to qualify these men to go out into the trades and become self-supporting.

Another distinctive feature of the year is the fact that the

attendance of boys has increased so that now there is a waiting list in the automobile and machine departments. Two new instructors, one a machinist and one a teacher of mechanical drawing, have been employed and a thoroughly equipped room for mechanical drawing has been provided. This school is now in the most prosperous condition that it has had since its opening.

Household Arts Department

In the fall of 1919 it was deemed wise, on account of the lessening number of pupils, to transfer the Girls' Vocational School from the building on Atherton street to the High School building. Accordingly the school was established in rooms in the east wing of the High School building, and was there conducted during the school year ended June 30, 1920.

Eleven girls were graduated but the number remaining in the school was too small to justify its continuance as a separate organization another year. The decline of this school has been coincident with the period of disturbed social and economic conditions which have attended the world war. Girls have readily found employment during this period, and the high wages paid coupled with the necessities due to the high cost of living have induced them to leave school as soon as they could.

The school has not been able to hold these girls against such attractions of employment, and consequently the attendance has diminished. The School Committee, however, was reluctant to abolish this type of work which has been so successfully conducted in the Girls' Vocational School. Consequently it took advantage of the provisions of the statutes enabling it to establish in the High School a department of Household Arts, to be conducted in co-operation with the State Board of Education.

Girls who take the work of this department devote one half of their time to Household Arts and the other half to academic subjects. This course is open to pupils in the third year of the junior high school as well as to girls in the senior high school. Like other courses in the curriculum it leads to a diploma. Graduates of this course are eligible for admission to the vocational courses for teachers at the Framingham Normal School, and will be qualified for profitable employment in the line of work which they have pursued in this course.

Kindergartens

Kindergartens form a part of the school system in most progressive communities. In Somerville there are four kindergartens, located in Wards I, II, and IV, which were pro-

vided more than a dozen years ago. During the interval since the establishment of the last one, requests have been made for kindergartens in various parts of the city.

These requests have been denied partly because of the expense involved and partly because for the most of the time there have been no vacant rooms available for this use. Recently the School Committee has been asked to open a kindergarten in the Bingham School, and informal requests have been presented for one in the western part of the city.

When the existing kindergartens were established the school system consisted of 13 grades, the kindergarten making the fourteenth. Now the system consists of 12 grades, one year having been taken off the course below the high school.

Under these circumstances it is all the more reasonable to provide kindergartens whenever it is possible to do so. Kindergartens have effectively demonstrated their usefulness. It is undoubtedly desirable that there should be at least one kindergarten in every ward in the city.

Continuation School

According to the forecast made in the last report a continuation school was organized and made ready for the opening of the school year in September. Careful examination of the conditions affecting the youth for whom the school was intended was made before the plans for the school were adopted.

From this examination it appeared that there were over a thousand minors between fourteen and sixteen years of age who were at work by authority of an employment certificate. Of this number by far the larger number were employed outside of Somerville. As under the provisions of Chapter 311, General Acts of 1919, minors must attend continuation school in the place where they work, only those who were employed in Somerville were eligible for attendance in the local continuation school.

It was found that there were about 150, of whom about 50 were girls and 100 boys. Since this number was not large enough to make it necessary to use a separate building for this school, considerations of economy dictated placing it in a school building where overhead charges could be reduced and where the expenses of installing new equipment could be avoided by using that already provided.

Arrangements were therefore made to conduct this school afternoons and to place it in the high school building. One of the manual training rooms was put at the disposal of the boys and one of the domestic science rooms was given to the girls. It was determined that the program of studies should:

be divided about equally between academic and practical arts subjects.

A director and three teachers, two men and one woman, were employed. When the school opened in September there was a good market for child labor and as a consequence the number of children who were out of school and at work was above the normal.

At the present time, however, minors are being "laid off" and are out of employment. Such minors must, under the law, attend school in the place where they reside. Most of them prefer to go to the continuation school rather than to return to the day school while waiting for a new job. Such pupils are required to attend continuation school 20 hours a week. About 50 of these minors have been added to the membership of the school.

Should this condition continue, it will have a material effect upon the plans of the school, as the problem of the twenty-hour pupils is distinct from the problem of the four-hour pupil. It involves a larger provision of room, instruction and equipment. A temporary teacher of academic subjects for the girls' classes should be provided for the opening of the schools after the holidays.

Americanization Work

Since September work in Americanization has been given an impetus by the action of the Board in appointing a Director to have supervision of this work and by the opening of additional classes. There are now in operation 9 classes for adults who are seeking instruction in our speech and customs. These classes are enthusiastic and are all making good progress. There is likelihood that several more classes can be formed when schools reopen after the holidays.

It is planned to provide instruction whenever a group can be brought together for this purpose. Such classes may be held in factories, in homes, and club rooms, as well as in school buildings, and may meet in the day time as well as in the evening. This work is being carried on in co-operation with the Americanization Division of the State Department of Education.

Evening Schools

Evening schools were conducted this fall with the following classification: High School in the High School building; Elementary Schools in the Bell and Highland School buildings; Industrial classes for Men in the Boys' Vocational School;

Practical Arts classes for Women in the High and Western Junior High School buildings; Americanization classes in four elementary school buildings.

Elementary schools have had a reduced attendance, partly on account of the opening of the Continuation School, which takes some pupils who would otherwise attend at night. The evening high school has maintained classes in commercial subjects, mechanical and free-hand drawing, Civil Service and English. These classes have been well attended and have developed a good interest throughout the term. As only experienced and capable teachers are employed, the work has been of a high order.

Industrial classes for men have been carried on at the Boys' Vocational School two nights a week. Classes have been formed in automobile repair and in machine shop work. Four instructors have been employed and the work is conducted in co-operation with the State Board of Education.

In practical arts classes for women instruction has been given in dressmaking and in millinery. These classes were very large and have met a very obvious need. Difficulty in securing teachers for these classes alone prevented opening additional ones.

Credits For Music

The study of vocal music has long been a part of the curriculum of the public schools and as such has had the help of special instructors. The ability to teach vocal music has been one of the qualifications of teachers in elementary schools. Textbooks and pianos have been provided to aid in this instruction. The place of instruction in vocal music in public schools is secure.

The results of the teaching of music have entered into the life and character of the nation. A remarkable demonstration of the fundamental spiritual value of music was given when during the period of the world war the whole nation as well as our soldiers sang and played the songs which stirred the people and raised their ideals and purposes to a lofty plain. That with the removal of the strain of war there should be a relapse in this emotional display is wholly natural, but such a relapse does not detract at all from the significance of music as an element in the life of a people.

The lesson, if one were needed, is that music is a serious pursuit and one which should be encouraged in all proper ways. In youth is the time to begin the study of instrumental music. Parents recognize this fact and provide, often times at great sacrifices, opportunities for their children to begin to

play. The more serious the effort of the child in such a study, the greater is the draft upon his time.

With the increase of demands for study made by the school as the child progresses in years, there comes a conflict between the requirements of the school for outside work and the demands of the study of music. Under these circumstances, promising students in music are frequently compelled to drop such study during a period of their school life. Sometimes this results in the pupil's abandoning such study after a favorable beginning has been made.

These considerations have induced many school systems to provide a way whereby outside study of music may be offered to take the place of some of the studies in the school curriculum. By this means children who wish to study music seriously at home may be permitted to do so and still carry on their school work unimpaired. The Somerville School Committee in June of this year, after due consideration, adopted a plan which was designed to give to students of the high and junior high schools the benefit of credits for outside study of music.

This plan was put into effect with good results at the opening of the schools in September. In view of the short notice concerning the provisions of this plan given the high school pupils, the number taking advantage of the opportunity is large. In October 92 pupils had registered for credits in music. Of this number 69 are studying the piano; 11 the violin; 4 are studying the cornet; 1 the drum; 1 the trumpet, and 6 are taking vocal lessons. 61 different teachers are represented in this group. In the junior high school a corresponding response has been made. This plan then is well begun and promises to grow in importance.

Larger provision should undoubtedly be made for the study of instrumental music in connection with the work in the high and junior high schools. Already in these schools there are orchestras, which are attempting to do serious work. That their efforts are meeting with success is shown by the fact that there is a constant request for the services of these organizations at meetings of parent-teachers' associations and other associations of a similar nature.

In the high school a military band is conducted and there is a boys' fife and drum corps and one composed of girls. These organizations have taken a conspicuous part in school outdoor events and as such are a valuable asset to the general activities of the school. There are in the senior and junior high schools glee clubs which train the children in concerted singing.

The efficiency of the instrumental music in the high and junior high schools would be greatly increased by making a

definite provision in the program of study for this work as is now made for vocal music. The plan adopted by the School Committee for giving credits for outside study of music is as follows:

I. That a pupil belonging to the High School orchestra, band, or any other instrumental school organization having weekly rehearsals, may receive one (1) diploma point credit per year if, in the judgment of the teacher in charge, he has been regular in attendance and faithful to his work.

II. That a pupil belonging to a school glee-club or choral practice class having weekly rehearsals may receive one (1) diploma point credit per year, if, in the judgment of the teacher in charge, he has been regular in attendance and faithful to his work. Either course shall be open to all pupils passing a voice and sight-reading test made by the Supervisor of Music.

III. That a pupil of the High School taking lessons on the piano, organ, any orchestral instrument or in vocal music shall be allowed two (2) points credit per year on the following conditions:

(a) An application for such credit, on forms to be furnished by the Board, shall be filed with the headmaster not later than two weeks after the opening of school.

(b) One hour of daily practice shall be required throughout the school year.

(c) One lesson per week throughout the school year shall be taken from a teacher.

(d) Lessons or study lost shall be made up before the end of the period for which credit is desired.

(e) A quarterly report, on the forms to be furnished by the Board, shall be filed with the headmaster by the pupil, signed by his teacher certifying the number of lessons taken during the quarter, the compositions studied or work covered and the grade of accomplishment, and signed by the parent or guardian certifying the number of hours per week practiced.

(f) Annually, during the first week in June, pupils desiring credit shall be examined by a Board of Examiners consisting of the Supervisor of Music and one other person to be appointed by the School Board. The examination shall be based on the private teacher's statement of the course covered.

(g) Granting of the credit shall be determined by the examination, but due weight shall be given to the quarterly reports of the private teacher.

(h) Outside study in applied music may be counted each year and may be substituted in place of an elective in any course; provided that pupils fitting for Harvard College, the Institute of Technology, Radcliffe, Mt. Holyoke, Smith and Wellesley College may not substitute this subject for an elec-

tive but may take it only after all subjects indicated in the college requirements for that year have been elected; provided, furthermore that the restrictions set forth in this paragraph shall automatically be removed at any time the college requirements permit.

IV. That the Superintendent of Schools in conjunction with the Supervisor of Music be authorized to prepare a course of study for the piano, the course to be divided into groups.

V. That no specific course offered by the publishing houses be recommended by the Board.

VI. That the Superintendent of Schools be authorized to formulate and have printed two blank forms.

1. An application blank and examination record.

2. A quarterly report blank to embody space for data called for in Paragraph III (e).

VII. That the Superintendent of Schools be authorized to have printed a circular setting forth briefly the plan for giving credit for outside study in applied music.

VIII. That the Superintendent of Schools be authorized to have printed a circular showing the course of study for the piano.

IX. Inasmuch as the point credit system does not obtain in the junior high schools, the committee recommends in lieu of credit points:

(a) that pupils of the first and second year of the junior high school be allowed to substitute outside music for drawing;

(b) that third year junior high school pupils be allowed to substitute outside music for one period of Manual and Household Arts or for one period of another subject at the discretion of the master.

X. That the requirements of applications, quarterly reports and examinations applicable to high school pupils shall be exacted of junior high school pupils.

XI. That the work of the musical groups, mentioned in paragraphs numbered 1 and 2 of this report, shall, when offered, constitute part of the approved curriculum of the high school.

Garden Work

During the summer, school gardens were conducted on public areas and upon private land loaned for the purpose. Eleven places were used for gardens; 365 children engaged in this work during the season and raised crops whose market value was estimated by Supervisor Moore to be approximately \$8,214.45.

The cost of this undertaking to the city was \$3,044.05, so it will be seen that the young gardeners have produced values in excess of the cost of the undertaking to the amount of \$5,170.40. In addition to this, they have had valuable experience both in garden training and in habits of work.

The garden supervisor has reported that many children have said they worked harder in school gardens than they had ever done in anything else. In several instances parents have expressed wonder that children who would do little work at home were willing to work in the gardens. The products of the gardens were used for home consumption, but in many cases there was a surplus which was sold and yielded a good money return to the producer.

Along with the work in gardening canning classes were conducted. 56 pupils were enrolled in these classes and they put up an average of 32 jars each. Estimating the value per jar at 40 c, this made a total valuation of \$716.80. As far as possible the products of the garden were used for canning classes. The cost of the canning is included in the statement already made for garden cost.

Thrift

During the last school year, the schools returned to the use of the school savings bank as a means of promoting thrift. This action was taken after a careful consideration of the relative merits of thrift stamps and of the school bank as a means of establishing habits of economy and saving.

For our schools it was the opinion of masters and teachers that the school bank as organized in the local schools and as carried on by co-operation with the Somerville Institution for Savings was the better agency. Consequently the school bank was set up in all the schools and children were instructed in thrift and were encouraged to bring their savings to school to be deposited in the school bank.

As a result of this effort more than six thousand children became depositors and nearly \$40,000 were put in the bank during the last school year. This is a good showing when all the facts affecting the matter are taken into consideration.

The child today lives in an environment where easy spending is the prevailing habit of mind. Economy and saving are old-fashioned virtues to which little respect is shown today. Along with this disregard of responsibility for the economical use of money which is everywhere apparent, temptations for the child to spend his money have multiplied on all sides. To offset these temptations and to counteract the tendency towards waste and extravagance, serious efforts should be made in the schools.

The teaching of thrift and the promoting of saving should be vigorously carried on in the hope that the child may by these means be taught habits which will endure when he leaves school to become self-supporting. To this end the school bank should be maintained in every school and principals and teachers should encourage children to use it systematically throughout the school year.

Classes for Retarded Children

During the year some informal inquiries were made in the schools to ascertain the number of children three years or more retarded in mental development, with a view of carrying into effect the provisions of the statutes of 1920 which require School Committees to establish special classes for such children.

This work was carried on before the close of school in June and it showed that there were enough children of this description to make several more classes. Before this work was completed, however, the announcement was made that the State Board of Education would be able to offer the services of traveling clinics for psychological testing in the schools, by means of which the children who should be instructed in such classes might be determined.

Upon the receipt of this information it was decided to defer further efforts until the travelling clinic could make the tests. It is probable that the services of the clinic will be available early in 1921. Until after the investigation shall be made by this clinic no further action need be taken. It is probable, however, that it will then be necessary to open several more classes for these children. For each one of these a room and a teacher must be provided.

School Accommodations

The situation in respect to school accommodations was presented at length in the last annual report of the School Committee. Since that time, no material change has occurred. In the high school all rooms are now in use for the regular work of the school, and several more rooms could be occupied advantageously if they were available. The junior high schools are all overcrowded and three of them seriously so. Several of the elementary school buildings are full and in three of them are part-time classes.

On the other hand in several school buildings there are rooms not devoted to regular classes. These rooms, however, are used for valuable school purposes. In one building, the

Knapp School, two rooms have been converted into an assembly room wherein general exercises of the school can be held. In other school buildings, the vacant room will soon be needed for special classes.

During the year action for providing additional accommodations has been halted by the high cost of building but there is encouragement to believe that with the advent of lower construction cost, renewed consideration will be given to providing additional accommodations.

Upon this matter, in reply to a communication sent to the School Committee from the Board of Aldermen, the School Committee made a public statement of its position which is printed in the appendix of this report.

Following this action, the Board of Aldermen replied by proposing the erection of one junior high school building, "when it shall be apparent that building can be safely carried on" to accommodate the Northern and Eastern Junior High School organizations and the releasing thereby of "the present junior high school in the Prescott School for elementary purposes."

Co-operative Work

In carrying on the work of the schools during the last year the assistance of agencies outside the administrative force has been sought wherever possible in planning the policies to be followed and in putting them into effect when once adopted.

Among the agencies which have helped in this co-operative work are the following:

First — The aid of principals and teachers has been employed by means of:

1. Frequent conferences with principals of schools.
2. Stated meetings of teachers of the junior high schools with heads of departments at which policies and methods were discussed and at which plans were made for the work which was to follow. The superintendent participated in some of these meetings and the results of all of them were reported to him by a member of the conference.
3. Committees of teachers composed for the purpose of preparing outlines of study. All the courses of study in the junior high school were revised this year by committees of junior high school teachers. These committees consisted of representatives from the several junior high schools who worked together in the preparation of the outlines. The members of the committee conferred with the other teachers in their own schools so that in this way all teachers had a part in the making of these outlines.
4. Grade meetings of elementary school teachers with

supervisors of special subjects and with the superintendent of schools.

5. Reports from teachers upon new textbooks. Teachers have had an opportunity to examine and pass upon all books which have been submitted for adoption as new textbooks.

6. Conferences with individual teachers with the superintendent upon their personal or school interests.

Second — Parent-Teachers' associations have been formed in connection with three of the junior high schools and with several of the elementary schools. These associations have met frequently and have done much to promote the interests of the schools by bringing the teachers and parents into more intimate and friendly relations.

Third — The American Red Cross has given assistance by (1) providing material for the work of boys in manual training schools, and for girls in sewing; (2) making possible the activities of the Junior Red Cross organization.

Fourth — The Somerville Visiting Nursing association has contributed \$50 for the conduct of the Modern Health Crusade in several of the public schools.

Fifth — The Anne Adams Tufts Chapter of the D. A. R. has offered a prize for an essay contest in the junior high schools and has furnished copies of the American's Creed for distribution.

Sixth — Major John A. Cummings Camp Number 3, Sons of Veterans, has offered a prize for an essay contest in the high school.

Seventh — The American Legion has offered a prize for an essay contest upon a patriotic subject in the high school.

Conclusion

This review is too brief to give more than an outline of the work of the schools. It will be amplified, however, by reports which heads of departments will submit to be printed herewith. In these reports will be found much interesting and valuable matter concerning the work of the several departments of the school undertaking.

In closing I wish to acknowledge cordial co-operation of the teachers and principals in the work of the school year. Theirs, in the largest degree, has been the responsibility and in a high degree they have borne it nobly. To the members of the School Committee I express deep appreciation of their consideration throughout the year and of their zeal and fidelity in caring for the interests of the schools.

Respectfully submitted,

CHARLES S. CLARK,

Superintendent of Schools.

December 28, 1920.

Mr. Charles S. Clark,
 Superintendent of Schools,
 Somerville, Mass.

Dear Mr. Clark: —

The year of 1920 marked a new epoch in the history of the Somerville High School, — the establishment of a Senior High School. Although junior high schools had been in operation for several years in certain parts of the city, yet not until this year were all pupils entering the High School graduates of a junior high school.

In mentioning this last rearrangement of the High School it might be interesting to note that Somerville has always been abreast the times in that it has exemplified in the changes in its High School the progress of the high school movement throughout the country. The four epochs or stages through which our High School has passed might be classified as follows:

1. The original High School (1852-1895), largely a college preparatory school, was the only school which a pupil desiring an education beyond the grammar school could attend.

2. The Specialized High Schools (1895-1911). The Latin High School, a strictly preparatory school, and the English High School, a school doing some preparatory work, but placing great emphasis on business preparation, work in the manual arts, and making a special feature of the elective system.

3. The comprehensive four-year High School (1911-1920). The curriculum of the school was planned along the following lines: College Preparatory, Scientific Preparatory, Normal Preparatory, Commercial, General, Manual Arts and Domestic Science Courses. This type of school has gradually been adopted as the accepted type of high school throughout the country and in the report of the Commission on the Reorganization of Secondary Schools, appointed by the National Education Association published in 1918, the comprehensive high school was endorsed as the standard type of secondary school in the United States.

4. The Senior High School (1920-).

The three upper classes are retained in the high school, the first class becoming the last class of the junior high schools.

Physical Training.

One feature of high school development emphasized under the "Cardinal Principles of Secondary Education" issued by

the National Education Association and endorsed by the U. S. Bureau of Education in which our city has not made satisfactory progress, is that of physical education. Health is placed first among the seven "Cardinal Principles," yet very little attention has been paid to this great need in our schools, and particularly in the high school. Although Somerville has stood out prominently in athletics, this has been of little advantage to the great mass of our young people. While much money has been spent upon members of our athletic teams who are selected from the strongest and healthiest and who are therefore in the least need of physical training, very little on the other hand has been spent on the girls and the great majority of the boys who sadly need instruction and advice on matters of health and physical development.

A request for a gymnasium has been made year after year, and has been even recommended more than once by the School Committee, but no gymnasium has as yet materialized. There are twenty-one schools in the state of a thousand or more pupils; seventeen of these schools are well equipped with gymnasiums, four are not. Somerville is in the latter group. To teach properly physical training to the pupils of this school we should have at least one, preferably two, gymnasiums well equipped with proper apparatus and properly supervised by expert instructors. Then, and not till then, will we be able to help our boys and girls to think straight in the care and proper development of their bodies.

Open House Night

An interesting experiment was tried on the evening of January 21st when parents of the pupils were invited to an evening session of the high school which consisted of recitations and demonstrations of school work. The invitation was worded as follows:

PARENTS' NIGHT SOMERVILLE HIGH SCHOOL

will keep

OPEN HOUSE

Wed., Jan. 21, 1920

7:30 - 9:30 P. M.

The program for the evening will consist of one period of the week's work, including recitations and class room work in the following subjects:

Arts and Crafts	History
Biology	Manual Training
Bookkeeping	Mathematics
Chemistry	Mechanical Drawing
Commerce and Industry	Physics
Cooking	The Languages
Dressmaking	Stenography
Freehand Drawing	Typewriting

At an assembly at 9:00 o'clock in the Auditorium the School Orchestra will play. Two Physical Training Groups will give a demonstration of the daily Setting-up-Drill.

Throughout the evening the teachers will be in their class rooms to welcome visitors for conferences.

ALL FRIENDS OF THE SCHOOL ARE INVITED

A very large number of parents were present and much interest was manifested in the demonstration of recitations, in the display of school work, and in the entertainment furnished by the orchestra and physical training groups.

Honor To Our Heroes

I wish to give public recognition, at this time, of the tablets which have been placed on the walls of the school in honor of the boys who went from this school to serve their country in the World War. Two beautiful tablets, one of the graduates of the school, and the other of the undergraduates who served in the war, were prepared by our art teachers, Blanche S. Bradford and Helen F. Lyon, who gave unstintingly their talent and time to honor our young men in the war. The other, a beautiful bronze tablet, was presented by the pupils of the school in honor of the boys who died in the service. This was formally presented at the graduation exercises last June. This tablet was made by a firm composed of graduates of the school, T. F. McGann & Company, and is in every sense symbolic of the honor and affection of all who have been members of the Somerville High School for the boys who gave their lives in loyal defense of their country.

Credit For Music

The recognition of applied music as a part of the school curriculum not only brought to our attention a great many pupils who are studying music outside of school, and who are desirous of getting diploma credit therein, but has also cre-

ated renewed interest among the many pupils who have thereby registered as members of the orchestra, school band, fife and drum corps, glee clubs, etc.

The following figures are extremely interesting, and surely indicate a great appreciation of music in the school.

Enrolled in applied music. —

	Boys	Girls	Total
Piano	6	64	70
Violin	4	5	9
Cornet	2	3	5
Voice	1	5	6
Trumpet	1	..	1
'Cello	1	..	1
Drums . . . . .	..	1	1
	<hr/>	<hr/>	<hr/>
	15	78	93

In the school band and kindred organizations, the following pupils have registered :

	Boys	Girls	Total
Drum	50	18	68
Fife	22	31	53
Trumpet	7	..	7
Horn	2	..	2
Trombone	3	..	3
Baritone	1	..	1
Bass	3	..	3
Piccolo	1	..	1
Clarinet	4	..	4
Saxophone	1	..	1
	<hr/>	<hr/>	<hr/>
	94	49	143

In the school orchestra there are 48 pupils playing the following instruments :

	Boys	Girls	Total
Piano	1	1	2
Violin	14	11	25
Viola	1	..	1
'Cello . . . . .	..	2	2
Bass	1	..	1
Cornet	3	3	6
Trumpet	1	..	1
Flute	1	..	1
Piccolo	1	..	1
Clarinet	1	..	1
Melophone	1	..	1
Saxophone	2	..	2
Trombone	2	..	2
Drum	1	..	1
Tympani	1	..	1
	<hr/>	<hr/>	<hr/>
	31	17	48

The Girls' Glee Club has an enrollment of sixty pupils.

The Boys' Glee Club has an enrollment of thirty pupils.

The total number of pupils registered in the music courses is 374; girls 204, boys 170.

Enrollment of the School by Courses, December, 1920.

III Yr.	Courses	Boys	Girls	Total
	College	35	43	78
	General	26	29	55
	Scientific	41	....	41
	Normal . . . . .	....	13	13
	Commercial	22	109	131
	Grand total	124	194	318
II Yr.	Courses	Boys	Girls	Total
	College	54	91	145
	General	55	42	97
	Scientific	119	....	119
	50-50 . . . . .	....	6	6
	Normal . . . . .	....	22	22
	Commercial	62	272	334
	Grand total	290	433	723
I Yr.	Courses	Boys	Girls	Total
	College	66	45	111
	General	85	23	108
	Scientific	102	....	102
	Normal . . . . .	....	4	4
	Commercial	73	234	307
	50-50 . . . . .	....	3	3
	Grand total	326	309	635

Summary

Courses	III Yr.	II Yr.	I Yr.	Total
College	78	145	111	334
General	55	97	108	260
Scientific	41	119	102	262
Normal	13	22	4	39
Commercial	131	334	307	772
50-50 . . . . .	....	6	3	9
Grand total	318	723	635	1676

Two interesting observations should be made from the above tabulation.

1. The size of the General Course, 262 pupils out of 1676, giving a much larger proportion of general pupils than we have had in previous years. This would seem to imply that many pupils realize that neither the College Course nor the Commercial Course furnishes the best fitting for the particular plans which they have in mind.

2. The establishing of a 50-50 course, that is, the Domestic Science course authorized by the State Board of Education wherein girls may devote 50 percent of their time to household arts subjects and the other 50 percent to academic subjects, this course being state-aided. It is to be hoped that this course will become much larger as it is truly beneficial to the school and to the pupils.

The Preparatory Course.

The result of preparation for college last year, although not satisfactory to us was nevertheless commendable. When thousands of young people had been turned away by the colleges because they had no room to accommodate them and when, therefore, the very best only of those applying were admitted, it is worth noting that Wellesley College from six pupils presenting themselves for examination from our school admitted five. Of nine girls taking examinations for Women's Colleges seven passed. Of twelve boys taking examinations for college, seven passed. It should be noted in stating the case for the schools of the present day in contrast to the old days that the recommendation of the school is not now required in order for a boy to present himself for examination. As a result, failures are often foreseen, but with no power on the part of the school to prevent them.

Honors to Our Graduates at the Colleges.

The following pupils, all of whom received their college preparation in our comprehensive high school, have been granted special honors at college.

Class of 1916

ARRINGTON, RUTH

Radcliffe. Winner of \$200 Scholarship for passing best entrance examination. Won scholarship each year of college course. Phi Beta Kappa.

ARRINGTON, WINNIFRED

Radcliffe. Winner of scholarship each year of college course. Phi Beta Kappa.

MURRAY, ARNOLD

Harvard. Price Greenleaf Scholarship.

WEISMAN, BELLA

Boston University. Scholarship each year. Phi Beta Kappa.

NEWTON, CARL

Dartmouth. Rhodes Scholarship. Rufus Choate Scholarship at Dartmouth.

Class of 1917

COLE, RUSSELL

Tufts. Leader of class and of college in scholastic standing. Elected valedictorian. (Died shortly before graduation).

COYLE, DORIS

Boston University. Phi Beta Kappa.

CAREY, FREDERICK M.

Harvard. Scholarship each year. Foreign Fellowship at graduation. Made Phi Beta Kappa in Junior Year.

BARRETT, GERALD R.

Harvard. Scholarship each year of college course. Foreign Fellowship at graduation. Phi Beta Kappa.

DERBY, EDWARD H.

Harvard. Price Greenleaf Scholarship.

Class of 1918

CURRIE, DOROTHY G.

Radcliffe. Winner of \$200 prize for passing best entrance examination.

STARBIRD, ARTHUR H.

Harvard. Second Group Scholarship.

Class of 1919

CHAPMAN, DWIGHT I.

Boston University. Winner of Augustus Buck Scholarship.

EASTON, CHARLES

Boston University. Winner of entrance scholarship.

PRICE, HAROLD F.

Harvard. Price Greenleaf Scholarship.

Class of 1920

BLANCHARD, WALTER O.

Harvard. Price Greenleaf Scholarship.

NORTHRUP, GUY H.

Harvard. Price Greenleaf Scholarship.

SLAFSKY, LEO

Harvard. Price Greenleaf Scholarship.

FOYE, LUCIAN CURTIS

Boston University. Buck Scholarship.

After careful analysis of the record of the pupils who have entered college and business from this school, it seems that the Somerville High School should in no sense be ashamed of its graduates, and in fact I feel justified in stating that the record of pupils who have gone from this school compares very favorably with the product of the best public high schools.

With a return gradually to normal conditions and with the corresponding disappearance of the disconcerting influences of the past few years, the year 1921 should produce an even higher grade of progress, efficiency, and service.

Respectfully submitted,

JOHN A. AVERY,

Head Master.

February 18, 1921.

REPORT OF VOCATIONAL SCHOOL FOR BOYS.

Mr. Charles S. Clark,
Supt. of Schools,
Somerville, Mass.

Dear Sir:

I submit the following report of the work of the Boys' Vocational School. The enrollment this year is the largest in the history of the school and there is a waiting list in two of the departments.

In June 18 boys were graduated and 17 boys were placed in the industry for which they were trained. The work of a vocational school is judged by its so-called "productivity" and in this respect our school has been signally successful as some twenty manufacturing firms in Greater Boston have co-operated with us in assigning work to be done by our school. This arrangement serves two purposes:— it provides our pupils with definitely practical work of a commercial nature and it saves the City of Somerville the expense of providing material to supply this or similar practical experience and training. The trade value of the finished product this year was \$5817.29. The school increased the value of its own plant equipment \$2007.56 and benefited the School and City Departments by their efforts to the extent of \$935.80, for which no charge was

made to these departments. No charge for labor furnished by the pupils is made to the City and the cash received from outside work done by the pupils is used to purchase raw materials, maintenance and equipment. The various manufacturing concerns with which we have been able to make connections, have furnished material to the extent of \$1401.41.

The outstanding feature of the year is the work of rehabilitation in connection with wounded and disabled servicemen of the World War, under the direction of the Federal Board for Vocational Education. In order to undertake this work properly, the Federal Board has loaned the school \$25,000 worth of new machinery, so that we now have a fairly complete machine shop accommodating 40 men in machine shop practice. In the woodworking shop 8 service men are being trained.

This work of rehabilitation will probably take three years to complete. Many of these men have had very little education and in their poor physical condition it requires very much more effort, time and patience to train them for a livelihood. The instructors are to be commended for their interest in this exacting work as it involves additional labor, time and thought.

This department is operated for twelve months in the year, from January to December. At the end of the training period the school will co-operate with the Federal Board to place these men in profitable employment.

Altogether, since April 75 men have been tried out and trained for actual work.

A new drawing room has been equipped for these men and is also used at times by the regular pupils. As far as possible the men and the boys are separated.

The present departments of the school are fairly complete in regard to room, but several new departments, especially a department of printing, should be provided so that the school may render a larger service to industry and thereby provide the pupils with added opportunities for service in industry.

Respectfully yours,

HARRY L. JONES.

December 31, 1920.

**BOYS' VOCATIONAL SCHOOL.
SOMERVILLE, MASS.**

Financial Statement, 1919-1920.

Gross Maintenance	\$24,480 51	
Gross Per Capita		\$290 05
Tuition, State Aid Smith-Hughes' Fund and Cash from product, etc.	6,044 64	
Net Maintenance	18,435 87	
Net Per Capita		\$218 42
Net Maintenance Cost to City	\$9,217 93	
Net Per Capita Cost to City		\$109 21
Difference between Cash Received and Value of Products made for City De- partment and Up-Keep and Addition- al Equipment for School	\$1,704 94	
Net Cost to City	\$7,512 99	
Net Cost per Capita		\$89 01

REPORT OF THE GARDEN SUPERVISOR FOR 1920.

Mr. Charles S. Clark,
Superintendent of Schools,
Somerville, Mass.

Dear Sir:

Herewith I submit my report as garden supervisor for the season of 1920. The conducting of supervised school gardens as a healthful and useful form of education for city boys and girls is a comparatively new idea. About ten years ago it was advocated and encouraged by the United States Departments of Education and Agriculture jointly. The different State Departments of Education immediately took up the idea and the City of Somerville was one of the first to put this form of activity into practical operation. During the late world war school garden activities received great impetus. Contrary to the belief of many, interest in this work did not cease with the signing of the Armistice, and last year supervised school gardens were conducted in a great many cities and towns in this immediate vicinity.

The general appearance of the Somerville school gardens, and the results obtained by the 365 boys and girls who successfully carried on this project last summer, are positive proof

of the real interest in school gardens. The work in Somerville was conducted along about the same lines as have been in successful operation the past three years. All of the areas, with one exception, were used again this year for school garden purposes. The land was put in proper condition and fertilized by the city and the children paid for the seeds and plants used in their individual plots, the cost to them this year being 90 cents. All seeds and plants were furnished by the garden supervisor and all planting and the care of the gardens was under his personal supervision. Early in the year those who were to have garden plots were organized into clubs. Meetings were held and instruction given by the supervisor in the methods to be pursued during the garden season. Seventeen schools were represented in garden work this year. The number of children from each school, the location of their gardens, and the size of the area cultivated are given on a schedule appended to this report. The keeping of a school garden record book is made part of their garden work. A complete and summarized report book turned in by each one of the school gardeners is on file at the Superintendent's office; in itself a positive proof of the real interest of the boys and girls of the City of Somerville to carry to a successful finish an undertaking of this kind. By the use of this record book, arithmetic, spelling, and bookkeeping are correlated with garden work. A careful summary of these record books has been made and is appended to this report. It shows the total amount of the different vegetables raised, and their retail market value. The sum total aggregates \$8214.45. This fine record of results was made during a season which was not a particularly favorable one for the raising of crops from the standpoint of weather conditions. During the planting season it was exceedingly cold and wet, which necessitated the re-planting of several of the garden areas, and later on, during mid-summer, the continued dry spell necessitated frequent watering in order to save the crops.

This year exhibits were made by the children of their products at the New England States Fair at Worcester early in September, and also at the Middlesex Agricultural Fair held at Waltham. The first prize was captured by the school gardeners of this city at both places, this in competition with a score or more of other cities and towns.

Seeds.

At the request of several principals and teachers the garden supervisor obtained a supply of flower and vegetable seeds put up in small packages from a reliable seed concern, which

were sold to school children at cost. In this way good, reliable seeds of the varieties best adapted to conditions found here in Somerville, were placed in the hands of the school children. About 12,000 packages of seeds were disposed of this season, and from the reports received good results were obtained, and it is planned to continue this practice each year.

Canning Clubs.

Canning clubs were organized and conducted through the two summer months by five clubs, with a total enrollment of 56 children. Two teachers were employed two days a week to supervise and carry on this work. What has been said in regard to the interest in school gardens is also very true of this form of work for boys and girls. Even with the inadequate paraphernalia and places for carrying on this work at our disposal, good results have been obtained each year. I would like to see more equipment and help provided so that more boys and girls might benefit from this form of activity another year. Most of the children belonging to the canning clubs have a school garden so that the vegetables canned are freshly picked and of good quality, which insures a canned product of the best. An exhibition was held at the Cutler School in October, where each member exhibited five jars of his canned products. They were judged by a representative sent by the State Board of Education, and an average percent of 91 was obtained by the five clubs and a banner awarded to them for their good work. In both the garden work and canning activities help and assistance were rendered by the officers and staff of the Middlesex County Farm Bureau and State Department of Agriculture.

Winter Instruction.

During the winter term I have been giving classroom instruction to boys and girls in the fifth and sixth grades along simple lines of properly preparing the soil and planting gardens, and it is hoped that the coming season will find the gardens more productive, and their general appearance an improvement over anything accomplished in the past.

In addition to my work with the school gardens help and assistance were given to any and all persons, juvenile or adult, who carried on backyard or vacant lot gardens during the season of 1920, children alone having about 2500 such plots under cultivation in the City of Somerville. Many of them produced vegetables enough to furnish the home table during the entire garden season. The use of some cold frames at the City Farm

was given by that Department and children from the Cutler and Western Junior High Schools raised in these frames about 2500 cabbage plants, and 1000 tomato plants which were used in the school gardens. I wish it were possible to have cold frames in the school yards of several of our school buildings where vegetables, plants and flowers might be started by the children and transplanted to their garden plots later in the season.

In closing, permit me to express my appreciation to all those who have shown an interest and have been a help in this branch of school work. It is only through the co-operation of principals and teachers that this work can be carried on successfully.

Very truly yours,

WILLIAM B. MOORE.

January, 1921.

SCHOOL GARDEN DATA, SEASON 1920

Location	School	No. Children	Area
Adrian Street	Knapp	30	1 Acres
Prospect Hill	Pope	18	$\frac{1}{4}$ "
Glen Street	E. Jr. H.	12	$\frac{1}{4}$ "
	(Edgerly	20	1 "
Broadway	(
	(Glines	12	
Central Hill	(Cummings	22	
	(		1 "
Highland Avenue	(Perry	12	
	(N. J. H.	8	
Central Hill	(S. J. H.	12	1 "
	(
School	(Proctor	20	
	(
Craigie Street	Morse	25	1 "
Lowell Street	Bingham	40	1 "
Powder House	Brown	14	$\frac{1}{4}$ "
Powder House	Lowe	15	$\frac{1}{4}$ "
	(Highland	20	
Tufts Oval	(		1 $\frac{1}{2}$ "
	(W. J. H.	30	
City Farm	Cutler	55	1 "

**ESTIMATE OF AMOUNT OF CROPS GATHERED AND THEIR
VALUE.**

Season 1920.

Individual Plots

Kind	Amt. from each plot	Retail Mkt.		Total Amount
		Total Amount per unit	Value per unit	
Radishes	30 bunches	9,600	.08	\$768 00
String Beans	8 qts.	2,560	.12	307 20
Shell Beans	7 qts.	2,240	.15	336 00
Dried Beans	2½ qts.	800	.20	160 00
Table Beets	200	64,000	.025	1,600 00
Table Carrots	100	32,000	.02	640 00
Swiss Chard	4 pks.	1,280	.35	448 00
Summer Squash	20	6,400	.15	960 00
Ripe Tomatoes	3 pks.	960	.85	812 00
Green Tomatoes	1½ pks.	480	.50	240 00
Beet Greens	1 pk.	320	.35	112 00
Cabbage	7 heads	2,240	.15	336 00
Lettuce	16 heads	5,120	.10	512 00
Parsnips	75	24,000	.02	480 00
				\$7,711 20

Community Plots

Sweet Corn	1035 doz.	.....	.45	465 75
Turban Squash	750 lbs.	.....	.05	37 50
				503 25

Total value of Garden products \$8,214 45

Canning Club Values.

No. Participating	Average No. of Jars	Value per jar	Total Value
56	32	.40	\$716 80
			716 80

Value in money of garden and canning projects
December 1, 1920. \$8,931 25

Comparison of Garden and Canning values to Cost of Undertaking.

Value of Crops.

Value of vegetables sold	\$1,630 45
Value of vegetables used at home (Fresh)	5,868 50
(Canned)	715 50
Total Value of Garden Crops	\$8,214 45

Value of Canned Products

1792 Jars @ 40c	716 80	
	<hr/>	
Total Values		\$8,931 25

Cost of Garden Undertaking.

Salaries		
Supervision	\$1,079 89	
High School Boy as helper @ \$3.00	169 50	
	<hr/>	
		1,249 39
Instruction		
Salary of Agricultural Teacher	1,024 75	
	<hr/>	
		1,024 75
Cost of preparing land for Garden Use		
Plowing	150 13	
Teaming	94 50	
Fertilizer	75 00	
Labor. Helper on team @ \$4.00	59 00	
	<hr/>	
		378 63
Miscellaneous disbursements		
Use of Auto	235 33	
Express	11 40	
Painting signs	14 00	
Sundries	11 70	
	<hr/>	
		272 43

Cost of Canning Operations

2 Teachers @ \$3.00 each per day	93 60	
	<hr/>	
Total Cost to City		\$3,018 80
		<hr/>
Actual money profit from undertaking		\$5,912 45

STATEMENT SHOWING THE NUMBER OF HIGH SCHOOL PUPILS,
BY SUBJECTS, DECEMBER, 1920.

English	1676
Elocution	663
History	827
Algebra	353
Geometry	469
Trigonometry	35
Latin	375

French	879
Spanish	330
German	22
Greek	17
Chemistry	437
Physics	120
Physiology	16
Biology	42
Astronomy and Geology	16
Stenography	660
Typewriting	695
Bookkeeping	310
Penmanship	742
Commerce and Industry	336
Business Practice and Salesmanship	107
Business Arithmetic	40
Manual Training	177
Mechanical Drawing	388
Free Hand Drawing	107
Cooking	54
Sewing	128
Textiles	10
Dietetics	10
Commercial Law	21
Arts and Crafts	19
Millinery	13
Household Science	10
Printing	10

SOMERVILLE TEACHERS' ASSOCIATION.

1920 - 1921.

President, William W. Obear

Vice-Presidents, } Mrs. Bertha M. Morton
 } Arthur L. Doe

Secretary-Treasurer Ilene C. Ritchie

Executive Committee

Charles S. Clark, ex-officio.

Ella W. Bowker, High	Alice W. Cunningham, Edgerly
Ida M. Record, E. Junior	Ida M. Kane, Glines
Raymond E. Shepherd, S. Junior	Carrie T. Lincoln, Forster
Marcella M. Garrick, W. Junior	Lillian F. Commins, Bingham
Grace M. Driscoll, N. Junior	Eva S. Bent, Carr
Charles A. Kirkpatrick, Boys' Voc.	Agnes C. Rice, Morse
Mary H. Brown, Household Arts	Grace E. Packard, Durell
Elizabeth L. Marvin, Prescott	Margaret Beattie, Burns
Florence M. Shaw, Hanscom	Edith L. Hunnewell, Proctor
Alice M. Hayes, Bennett	Maude E. Abbott, Brown
Margaret M. Breen, Baxter	Catherine A. Burden, Highland
Mary G. McCarthy, Knapp	Maude C. Valentine, Lowe
L. Gertrude Allen, Perry	Lillian M. Wentworth, Lincoln
Fannie L. Gwynne, Cummings	Ruth L. Whitehouse, Spec. Teachers
Eleanor E. Waldron, Pope	

SOMERVILLE HIGH SCHOOL ATHLETIC ASSOCIATION.

Report of Treasurer.

Balance in Bank January 1, 1920	\$1,976 12	
Check in circulation, No. 129 for \$50.00 at the time	50 00	
	<hr/>	
Balance	1,926 12	
Interest omitted in report	15 02	
	<hr/>	\$1,941 14
Disbursements, —		
Coaching, Cleo A. O'Donnell, balance due for 1918	\$1,150 00	
Hockey Supplies	118 86	
Officials, Football game, Everett vs. Somerville game, played at Braves Field	40 00	
Expense, Suburban League "Get-Togeth- er-Night" for "Letter Men" at Bos- ton City Club	62 00	
Coaching, George S. McLaughlin, on ac- count	100 00	
Expense, Parke Appel, for special Com- mittee to arrange Football game with Scott High School, Toledo, O.	3 75	
Massachusetts High School Hockey League dues	2 00	
Miscellaneous	9 83	
Check to George E. Pearson, Treasurer to balance amount in Bank	454 70	
	<hr/>	\$1,941 14

Report is from January 1, 1920 to April 20, 1920.

J. L. HAYWARD,

Sec'y-Treasurer.

TREASURER'S REPORT APRIL 15 to JANUARY 1, 1921.

Receipts

Balance on hand Apr. 15, 1920	\$454 70
Baseball games	2,044 19
Football games	5,941 28
Membership dues	215 00
Interest on bank deposits	5 37
Miscellaneous	57 50

\$8,718 04

Expenditures

Athletic supplies	2,261 02
Medical attendance and supplies	245 11
Paid to visiting teams	2,216 98
Police	589 50
Officials	352 00
Assistance at games	136 50
Telephone	11 35
Postage	5 71
Printing	178 41
Carfares and transportation of players	177 10
Coaching	560 00
Treasurer's salary	300 00
Dues — Suburban and Mass. H. S. Leagues	7 00
Special expenses	256 50
Miscellaneous expenses	56 84

\$7,354 02

Balance on hand Jan. 1, 1921

\$1,364 02

GEORGE E. PEARSON,

Treasurer.

STATEMENT OF WORK OF SCHOOL NURSES.
For Year Ending June 30, 1920.

DATE	School or Hospital	No. of Pupils		Treatments in School	PUPILS ESCORTED TO CLINICS																REMARKS														
		New	Old		Inspections for		Eye		Ear		Nose and Throat		*Medical		Surgical		Skin		Dental		Optician	Corrected Vision	Corrected Hearing	Operations		Contagion found in*		Home Visits		Hygiene Talks					
					Fed.	Uncl.	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old				New	Old	School	Home	School	Home	School	Home				
September.....	Schools Hospitals	92 1	2427	26	112	14	30																												September: Secured clothing through Junior Red Cross for four children. Assisted in arrangements for performances of Cho-Cho, Health Clown. Assisted Medical Inspectors. Family sent to Associated Charities for assistance. Case of neglected children reported to S. P. C. C. Child sent to school dentist with abscess.
October.....	Schools Hospitals	103 14	1497	162	234	92	41	4	4	1		1				1	1	5	30	42	1	9		1		11	5	33	15	389				October: Arrangements for children to be treated at Forsyth Dental Dispensary. Arrangements made for several pupils to receive hospital treatment. Case of very neglected child taken care of. Three neglected families reported to S. P. C. C. Assisted Medical Inspectors in inspection of teeth.	
November.....	Schools Hospitals	84 17	1380	235	220	88	38	3	9			2							20	54	4	2		3	3	10		21	34	323				November: Child taken to Psychopathic Hospital found to be feeble-minded. Assisted Medical Inspectors in making record of tuberculosis cases. Clothing given to needy children. Scarlet fever case reported to Board of Health. Made appointment for child to be operated on during Xmas vacation. Arranged for hospital visit. Arranged for two operations on nose and throat. Reported case to S. P. C. C. Several children sent to School Dental Dispensary.	
December.....	Schools Hospitals	91 11	1166	280	146	95	42	1	2			3							24	54	2	2	1	2	2	1		47	32	368				December: Children sent to Dental Dispensary for treatment. Clothing given to needy family with five children. Assisted Medical Inspectors in making tuberculosis records. Arranged for children to attend Xmas tree celebrations at various places. Arranged with Associated Charities for Xmas baskets to be sent to families.	
January.....	Schools Hospitals	102 16	1243	303	189	67	27	8	12										12	53	9	11		5	5	4		45	43	168				January: Arranged with Junior Red Cross to pay for milk for boy. Special dental case referred to Forsyth Dental Dispensary. Several children fitted with shoes and rubbers from Junior Red Cross funds. Arranged for five children to be examined at Psychopathic Hospital. Arranged for hospital visits for children from three schools. Assisted Medical Inspectors. Cases of bad teeth referred to School Dentist. Clothing given to two children from Junior Red Cross funds. Child fitted with glasses from Junior Red Cross funds. Eight year old boy provided with clothing and sent to school.	
February.....	Schools Hospitals	72 10	708	199	137	56	10	6	4			1				1			13	30	3	4				2		23	21	157				February: Arranged for children to visit Forsyth Dental Dispensary, Boston Dispensary, and Psychopathic Hospital. Arranged for 4 children to have eyes examined. Assisted Medical Inspectors in examinations for pediculosis and for bad teeth. Arranged with Junior Red Cross to pay for glasses and for a brace.	
March.....	Schools Hospitals	112 17	1024	340	183	67	13	6	2	1			2	1			1		27	88	2	6		1	1	11	3	35	70	114	2			March: Arranged for children to go to Forsyth Dental Dispensary. Clothing collected for needy children. Arranged for six children to receive hospital treatment. Shoes and rubbers provided from Junior Red Cross funds. Arranged for child below normal to be sent to Waverly. Scarlet fever case reported to school doctor and child excluded from school. Assisted Medical Inspectors. Arranged for adenoids and tonsil operation, to be paid for by Associated Charities.	
April.....	Schools Hospitals	98 19	988	345	133	80	52	12	9			2	1	1	1		1		10	63	10	7		4	4	2	10	35	46	294	3			April: Clothing given to two needy families. Child examined at Psychopathic Hospital found to be feeble-minded. Pair of boots provided thru Junior Red Cross. Three pairs of glasses paid for by Junior Red Cross. Two dental cases referred to Hospital, for extraction. Three cases of defective vision recommended for special class.	
May.....	Schools Hospitals	112 15	1213	250	172	131	93	4	11			11	1	1					10	63	10	7		4	4	2	10	35	46	294	3			May: Two cases of scarlet fever discovered in school. Assisted Medical Inspectors. Night dresses given to two sick children by Junior Red Cross. Assisted School Dr. with inspection of tuberculosis cases. Conferences with masters and teachers re children three or more years retarded. Clothing given needy children. Children recommended to health and dental clinics.	
June.....	Schools Hospitals	84 10	1358	173	211	50	22	4	4										13	29	8	6		2	2	2		12	36	27	1			June: Arranged for two children to visit medical clinic weekly. Two cases reported to S. P. C. C. Assisted Medical Inspectors in inspection of vaccinations. Child with abscessed tooth sent to Dental Dispensary. Child taken to Psychopathic Hospital for examination.	
Total.....	Schools Hospitals	900 130	13004	2313	1737	740	368	48	57	2		20	2	18	4		3	2	6	193	501	47	53	1	28	27	50	22	301	357	2078	12			

*Treated by family physician or dentist.

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SUMMARY OF STATISTICS.

Population and school census.
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 Attendance for year.
 Cost of school maintenance.
 Teachers' salaries.
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No. of Table.

1. Schedule of school property.
2. Cost of maintaining schools, school year 1919-1920.
3. Cost per capita of maintaining schools, school year 1919-1920.
4. Cost of maintaining schools for a series of years.
5. Cost per capita for maintaining schools for a series of years.
6. Amount spent annually for new school buildings and for repairs for a series of years.

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8. Attendance, etc., of the schools for school year 1919-1920.
9. Statistics of the high school for school year 1919-1920.
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11. Separate statistics for high, junior high, elementary and vocational schools, for school year 1919-1920.
12. Admissions to first grade in September.
13. Number of junior high school graduates, 1920.
14. Truant statistics for a series of years.
15. Evening school statistics, 1919-1920.
16. Grammar school promotees for a series of years.
17. Attendance statistics of all schools for a series of years.
18. Statistics of the high school for a series of years.
19. Promotions, junior high schools, 1920.
- 19A Promotions, elementary schools, 1920.

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20. Resignations of teachers, 1920.
21. Teachers elected in 1920.
22. Leave of absence of teachers.
23. Transfers of teachers.
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STATISTICAL AND GENERAL TABLES.

25. Changes in text-books, 1920.
26. High and Junior High school graduation exercises, 1920.
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28. Organization of school board for 1921.
29. Teachers in service January, 1921.
30. Officers in service January, 1921.
31. School janitors.

SUMMARY OF STATISTICS.

1.—POPULATION AND SCHOOL CENSUS.

Population, state census, 1895.....	52,200
Population, United States census, 1900.....	61,643
Population, state census, 1905	69,272
Population, United States census, 1910.....	77,236
Population, state census, 1915	86,854
Population, United States census, 1920.....	93,033
Children between five and sixteen years of age, April, 1920, by school census	15,704

2.—SCHOOL BUILDINGS.

Number of school buildings in June	30
Number of classrooms in use in June	382
Valuation of school property.....	\$2,271,700

3.—TEACHERS.

	*1919	*1920	Change
In high schools	69	68	—1
In junior high schools.....	106	113	+7
In elementary schools	206	209	+3
In kindergartens	8	8	0
Total in elementary schools	214	217	+3
Vocational school for boys	6	7	+1
Vocational school for girls	6	2	—4
Atypical classes	3	3	0
Cadet teachers	2	3	+1
Special	11	10	—1
Total	417	423	+6

4.—ATTENDANCE FOR YEAR.

	*1919	*1920	Change
Entire enrollment for the year.....	14,039	14,091	+52
Average number belonging	12,733	12,836	+103
Average number attending	11,609	11,807	+198
Per cent. of daily attendance.....	91.2	91.9	+0.7
High school graduates	310	241	—69
Junior High school graduates	596	705	+109

5.—COST OF SCHOOL MAINTENANCE.

	*1919	*1920	Change
Salaries of teachers	\$426,587 31	\$598,589 80	+172,002 49
Salaries of officers	11,142 89	14,704 26	+3,561 37
Cost of books and supplies	33,225 26	40,078 68	+6,853 42
Cost of light	8,820 72	10,091 82	+1,271 10
Cost of janitors' services .	55,709 67	56,381 07	+671 40
Cost of fuel	22,959 73	37,083 21	+14,123 48
Rent of Armory	882 50	750 00	—132 50
Total cost of day and evening schools	559,328 08	757,678 84	+198,350 76
Per capita cost	43 93	57 23	+13 30
Cost of high school instruction	87,112 01	111,784 91	+24,672 90
Per capita cost	51 73	71 93	+20 20

*School year.

6.—MISCELLANEOUS.

	*1919	*1920	Change
Paid for new school buildings	\$104,066 80	\$200 00	—\$103,866 80
Repairs and permanent improvements	20,491 59	44,285 91	+23,794 32
Total school expenditures..	683,886 47	802,164 75	+118,278 28
Number of dollars spent to maintain schools out of every \$1,000 of valuation	6 43	9 03	+2 60
Valuation of city	87,353,424 00	83,910,855 60	—3,442,568 40
Number of dollars spent for all school purposes out of every \$1,000 of valuation	7 82	9 56	+1 74

*School year.

Cost of the Schools.

The total amount spent for the maintenance of the schools of Somerville for the school year ending June 30, 1920, is \$757,678.84.

This includes the sums spent for care of school buildings, including janitors' services, fuel, light, and school telephones; the amount paid for salaries of officers, and the amount spent for school supplies; and the sum paid for salaries of teachers.

The expenditure for *care for school buildings* is wholly in charge of the City Government.

The amount paid for janitors is	\$56,381 07
The cost of fuel is	37,083 21
The cost of light is	10,091 82
Rental of Armory	750 00
A total cost of	<u>\$104,306 10</u>
The cost per capita	8 13
Cost of repairs	\$44,285 91

The second important expenditure is wholly under the control of the School Committee and is covered by what is known as the "*School Contingent*" appropriation. The following is the itemized account:—

CLASSIFIED STATEMENT SHOWING DISTRIBUTION OF EXPENDITURES CO

SALARIES

Schools	TEACHERS					Administration	Books	Bookkeep- ing Blanks	Book binding	Maps, Charts	White Paper	Manila Paper	Blank Books	Pencils, Pens, etc.	Station- ery	Domestic Science Supplies	Drawing Supplies	and Kindergarten Supplies	Labor- atory Supplies
	Regular	Special	Substitute	Kindergarten	Total														
High	\$122,017 96	\$1,664 10	\$209 00	.....	\$123,891 06	.....	\$3,104 43	\$171 00	\$176 65	\$5 28	\$495 96	\$413 70	\$653 75	\$493 65	\$196 02	.....	\$407 35	.....	\$732 00
Eastern Junior High	34,101 50	688 75	373 50	.....	35,163 75	.....	172 40	143 56	.....	2 17	107 96	23 32	17 60	19 45	24 65	\$ 50	17 40	.....	.....
Southern Junior High	46,367 25	691 37	304 00	.....	47,362 62	.....	454 72	35 00	.....	31 76	215 11	125 58	28 80	112 85	27 86	12 46	12 80	.....	.....
Northern Junior High	40,659 70	736 09	132 00	.....	41,527 79	.....	383 73	35 00	.....	.....	127 96	89 97	22 40	84 91	12 95	4 59	.....	.....	.....
Western Junior High	56,912 58	679 00	176 00	.....	57,767 58	.....	519 90	70 00	.....	4 66	295 26	108 92	38 40	90 01	11 76	6 65	3 66	.....	.....
Prescott	7,650 25	200 20	54 00	.....	7,904 45	.....	32 17	.....	.....	.....	47 66	40 67	3 20	37 36	1 77	.....	58	\$ 60	.....
Hanscom	16,096 25	396 48	251 50	\$1,877 75	18,621 98	.....	216 45	.....	.....	.....	68 35	57 27	8 00	33 42	5 80	.....	3 57	30 92	.....
Bennett	17,294 75	444 79	210 50	2,330 00	20,280 04	.....	70 53	.....	.....	.....	51 77	116 09	3 20	39 01	16 87	.....	17 77	30 84	.....
Baxter	8,332 00	421 59	88 50	2,590 00	11,432 09	.....	62 01	.....	.....	.....	27 55	12 47	4 00	23 85	6 44	.....	12 47	18 89	.....
Knapp	12,261 50	505 51	118 00	.....	12,885 01	.....	113 19	.....	.....	10 85	46 91	36 62	4 00	35 40	7 98	.....	15 39	1 56	.....
Perry	9,673 51	450 27	132 50	.....	10,256 28	.....	148 47	.....	.....	.....	40 40	41 57	1 60	18 65	6 28	.....	5 78	5 18	.....
Pope	18,201 50	895 74	258 00	.....	19,355 24	.....	293 00	.....	.....	9 38	85 93	112 97	4 80	46 64	7 62	.....	4 36	6 49	.....
Cummings	6,634 63	173 45	26 00	.....	6,834 08	.....	30 94	.....	.....	.....	28 71	32 64	.....	14 50	7 56	.....	5 93	8 03	.....
Edgerly	19,085 00	953 42	107 00	.....	20,145 42	.....	81 97	.....	.....	.....	82 73	99 22	17 50	76 86	14 43	.....	13 00	8 74	.....
Glines	20,648 75	801 15	255 00	2,590 00	24,294 90	.....	152 49	.....	.....	.....	48 84	88 32	11 20	43 25	6 28	.....	25 36	47 28	.....
Forster	6,231 50	223 83	54 50	.....	6,509 83	.....	108 94	.....	.....	.....	50 09	33 39	.....	33 37	3 15	.....	4 66	.....	.....
Bingham	23,035 38	852 65	112 50	.....	24,000 53	.....	141 88	.....	.....	16 38	108 90	95 43	12 00	49 92	13 58	.....	25 35	16 28	.....
Carr	22,489 51	702 29	53 50	.....	23,245 30	.....	331 19	.....	.....	8 71	123 18	85 91	6 40	74 88	5 50	.....	26 18	25 25	.....
Morse	15,601 37	442 93	70 00	.....	16,114 30	.....	197 77	.....	.....	.....	78 91	50 60	8 00	38 54	14 89	.....	18 68	32 91	.....
Proctor	11,183 26	368 39	84 50	.....	11,636 15	.....	106 77	.....	.....	.....	42 42	6 95	2 40	23 10	3 92	.....	16 79	8 11	.....
Durell	6,453 13	173 45	26 00	.....	6,652 58	.....	54 17	.....	.....	.....	13 73	11 74	.....	15 00	1 44	.....	58	6 42	.....
Burns	12,993 51	326 80	113 00	.....	13,433 31	.....	110 21	.....	.....	.....	57 73	60 48	4 80	23 80	10 65	.....	10 00	27 77	.....
Brown	16,135 26	558 99	126 25	.....	16,820 50	.....	156 05	.....	.....	8 00	41 86	41 32	8 00	39 65	5 18	.....	17 66	8 81	.....
Highland	14,978 25	1,083 84	118 50	.....	16,180 59	.....	392 23	.....	.....	26 12	129 30	106 60	13 60	73 09	14 56	.....	13 08	.....	.....
Cutler	26,557 77	943 30	179 00	.....	27,680 07	.....	392 89	.....	.....	.....	203 06	185 07	17 60	108 87	26 73	.....	11 04	25 50	.....
Lincoln	6,318 50	173 52	75 00	.....	6,567 02	.....	100 67	.....	.....	.....	22 47	33 60	1 60	22 90	5 44	.....	8 06	8 12	.....
Lowe	13,093 38	280 36	150 50	.....	13,524 24	.....	110 45	.....	.....	.....	23 41	28 29	.....	24 45	1 02	.....	8 83	9 40	.....
Atypical	4,462 00	.....	.....	.....	4,462 00	.....	.....	.....	.....	.....	4 80	6 89	.....	1 66	1 12	.....	80	23 63	.....
Boys' Vocational	14,197 50	.....	.....	.....	14,197 50	.....	3 00	.....	.....	.....	33 30	34 47	12 80	32 32	12 62	.....	17 25	.....	.....
Girls' Vocational	3,623 86	.....	.....	.....	3,623 86	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6 50	.....	.....	.....
Evening High	4,331 50	.....	.....	.....	4,331 50	.....	.....	.....	.....	.....	40 49	24 50	10 00	20 41	90	.....	31 13	.....	.....
Evening, Bell	1,973 00	.....	.....	.....	1,973 00	.....	.....	.....	.....	.....	6 07	4 53	.....	8 85	36	.....	.....	.....	.....
Evening, Highland	939 00	.....	.....	.....	939 00	.....	.....	.....	.....	.....	14 59	.....	.....	5 10	1 39	.....	.....	.....	.....
Evening, Vocational	844 95	.....	.....	.....	844 95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Evening, Practical Arts	529 45	.....	.....	.....	529 45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Americanization	606 00	.....	.....	.....	606 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Continuation	3,245 00	.....	.....	.....	3,245 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dental	1,579 00	.....	.....	.....	1,579 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Administration .....	.....	.....	.....	.....	.....	\$15,479 20	46 60	.....	.....	.....	19 67	.....	.....	1 44	177 69	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....	.....	.....	45 31	.....	.....	.....	21 78	11 20	31 20	1 13	16 00	.....	33 17	.....	.....
Total	\$647,339 21	\$15,832 26	\$3,858 75	\$9,387 75	\$676,417 97	\$15,479 20	\$8,134 53	\$454 56	\$176 65	\$123 31	\$2,806 86	\$2,220 30	\$946 85	\$1,768 28	\$670 42	\$30 70	\$788 68	\$350 73	\$732 00

EXPENDITURES CONTROLLED BY THE SCHOOL BOARD FOR THE YEAR 1920.

Laboratory Supplies	Equipment	Lumber	Hardware	Metal	Typewriter repairs and supplies	Graduation expenses	Tuition	Printing	Postage	Electric Power	Tele-phone service	Miscellaneous	Expressage	Piano tuning and repairs	Baths	Auto Maintenance	Travel	Total	
\$732 00	\$775 12	\$183 36	\$81 69	\$6 82	\$95 35	\$207 81	.....	\$230 25	\$20 76	\$308 50	\$77 36	\$127 64	\$88 51	.....	.....	.....	\$5 25	\$9,058 21	..... High
.....	18 55	.....	1 34	.....	15 90	41 71	.....	7 60	50	.....	43 90	4 79	5 25	.....	.....	.....	9 02	677 58	..... Eastern Junior High
.....	468 40	216 14	22 09	9 68	9 65	75 50	.....	7 61	.....	.....	52 50	1 30	8 05	.....	.....	.....	21 11	1,948 97	..... Southern Junior High
.....	88 72	282 58	38 02	.....	9 10	61 95	.....	12 70	3 36	.....	50 16	1 84	4 35	7 50	.....	.....	12 05	1,333 84	..... Northern Junior High
.....	212 44	236 47	24 73	24 50	9 80	90 15	.....	7 62	8 54	.....	86 55	16 19	3 85	16 25	.....	.....	12 62	1,898 93	..... Western Junior High
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2 61	.....	.....	.....	.....	.....	166 62	..... Prescott
.....	.....	.....	.....	.....	.....	.....	.....	.....	16	.....	25 88	5 38	50	.....	.....	.....	.....	455 54	..... Hanscom
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38 21	9 67	2 35	.....	171 87	.....	7 94	576 28	..... Bennett
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4 88	25	.....	.....	.....	.....	172 81	..... Baxter
.....	.....	.....	.....	.....	.....	.....	.....	.....	2 00	.....	33 74	14 65	4 50	.....	.....	.....	8 00	334 79	..... Knapp
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2 00	40	.....	.....	.....	.....	270 32	..... Perry
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30 17	4 85	25	.....	.....	.....	.....	606 46	..... Pope
.....	2 94	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2 50	.....	.....	.....	.....	.....	133 75	..... Cummings
.....	1 23	.....	.....	.....	.....	.....	.....	.....	.....	.....	32 81	2 78	55	6 00	.....	.....	.....	437 85	..... Edgerly
.....	3 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	27 96	4 32	2 25	3 00	.....	.....	.....	463 55	..... Glines
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2 14	50	.....	.....	.....	.....	236 24	..... Forster
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26 09	2 73	75	.....	.....	.....	4 00	513 29	..... Bingham
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24 41	2 11	25	3 00	.....	.....	6 20	723 17	..... Carr
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24 36	3 48	25	.....	.....	.....	13 58	481 97	..... Morse
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29 60	2 20	.....	.....	.....	.....	.....	242 26	..... Proctor
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81	.....	.....	.....	.....	.....	103 89	..... Durell
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1 23	65	.....	.....	.....	.....	307 32	..... Burns
.....	.....	.....	.....	.....	.....	.....	.....	.....	50	.....	36 20	1 37	25	3 00	.....	.....	5 90	373 75	..... Brown
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35 41	18 23	65	.....	.....	.....	.....	822 87	..... Highland
.....	.....	.....	.....	.....	.....	.....	.....	.....	1 00	.....	31 13	22 29	1 60	.....	.....	.....	16 50	1,043 28	..... Cutler
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4 48	.....	.....	.....	.....	.....	207 34	..... Lincoln
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31	25	.....	.....	.....	.....	206 41	..... Lowe
.....	7 21	22 65	81	.....	.....	.....	.....	.....	.....	.....	.....	90	25	.....	.....	.....	.....	70 72	..... Atypical
.....	1,890 52	.....	68 10	1 08	.....	7 55	.....	.....	9 50	457 95	88 83	.....	.....	3 00	.....	.....	27 00	2,696 29	..... Boys' Vocational
.....	.....	.....	.....	.....	2 55	6 76	.....	9 05	3 50	.....	38 73	.....	50	.....	.....	.....	.....	70 59	..... Girls' Vocational
.....	.....	.....	.....	.....	.....	14 35	.....	19 59	3 20	.....	.....	.....	.....	.....	.....	.....	.....	164 57	..... Evening High
.....	.....	.....	.....	.....	.....	12 86	.....	10 83	3 00	.....	.....	.....	.....	.....	.....	.....	.....	46 50	..... Evening, Bell
.....	.....	.....	.....	.....	.....	.....	.....	10 83	2 00	.....	.....	.....	.....	.....	.....	.....	20	34 11	..... Evening, Highland
.....	1 75	.....	.....	.....	.....	.....	.....	.....	1 75	.....	.....	.....	5 00	.....	.....	.....	.....	8 50	..... Evening, Practical Arts
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7 72	7 72	..... Americanization
.....	5 00	53 36	7 15	.....	.....	.....	.....	11 50	4 21	.....	.....	.....	.....	.....	.....	.....	11 20	92 42	..... Continuation
.....
.....	80 15	.....	.....	.....	7 40	.....	.....	783 73	165 13	.....	291 31	255 46	2 70	.....	.....	233 78	256 76	2,321 82	..... Administration
.....	.....	.....	.....	.....	60 75	.....	1,646 69	411 93	.....	.....	.....	81 17	25 88	.....	.....	.....	31 10	2,417 31	..... Miscellaneous
\$732 00	\$3,555 56	\$994 56	\$243 93	\$42 08	\$210 50	\$518 64	\$1,646 69	\$1,523 24	\$229 11	\$766 45	\$1,125 31	\$604 31	\$160 54	\$41 75	\$171 87	\$233 78	\$456 15	\$31,727 84	

For Supplies \$31,727 84
 For Salaries 15,479 20

Total spent from Contingent.... \$47,207 04

Expenditures.	Total.	DAY SCHOOLS.		EVENING SCHOOLS.	
		High and Vocational	Elementary	High and Vocational	Elementary
Officers' Salaries	\$14,704.26				
Office Expenses	3,592.46				
Textbooks.....	14,962.92	\$6,698.48	\$8,170.46	\$80.00	\$13.98
Stationery and Supplies and Other Expenses of Instruction	18,368.79	10,282.57	7,855.03	190.30	40.89
Miscellaneous (Tuition, etc.)...	3,153.91	1,088.78	1,634.36	418.11	12.66
Total	\$54,782.94	\$18,069.83	\$17,659.85	\$688.41	\$67.53

The third, and by far the largest, element of the cost of schools is the sum spent for the *salaries of teachers*. This expenditure is under the control of the School Committee.

The following statement shows the distribution of the sums paid for salaries:—

Expenditures.	Total.	DAY SCHOOLS.		EVENING SCHOOLS.	
		High and Vocational	Elementary	High and Vocational	Elementary
Supervisors	\$8,706.50	\$3,005.00	\$5,701.50		
Principals	43,227.25	12,185.33	29,299.92	\$842.00	\$900.00
Teachers	546,656.05	162,443.75	376,506.80	5,287.50	2,418.00
Total	\$598,589.80	\$177,634.08	\$411,508.22	\$6,129.50	\$3,318.00

The *total outlay* for all *school purposes* includes all of the preceding and the sums spent for schoolhouse repairs and new buildings.

The *total outlay* for the school year ending June 30, 1920, is as follows:—

Care	\$104,306 10
Contingent	54,782 94
Salaries	598,589 80
Total for school maintenance	\$757,678 84
Paid for repairs	44,285 91
Paid for new buildings	200 00
Total for all school purposes	\$802,164 75

Each dollar of the sum spent for the support of schools has been divided in the following proportion:—

	1915	1916	1917	1918	1919	1920
Janitors' salaries	\$0.074	\$0.077	\$0.076	\$0.079	\$0.097	\$0.074
Heat and light	0.054	0.059	0.066	0.081	0.057	0.063
Administration	0.017	0.017	0.018	0.017	0.017	0.020
School supplies	0.067	0.058	0.062	0.064	0.067	0.053
Teachers' salaries	0.788	0.789	0.778	0.759	0.762	0.790
Total	\$1.000	\$1.000	\$1.000	\$1.000	\$1.000	\$1.000

Per Capita Cost. The proper method of comparison of the cost of schools year by year is to consider the sum spent for each pupil in the average membership. In this computation we exclude the cost of evening schools, and the vocational schools. The following shows:—

THE PER CAPITA COST OF DAY SCHOOLS FOR 1919 AND 1920.

	High School.			Junior High Schools.			Elementary Schools.			All Day Schools.		
	1919.	1920.	Change	1919	1920	Change	1919.	1920.	Change	1919.	1920.	Change
Instruction	\$52.59	\$73.04	+\$20.45	\$40.40	\$57.09	+\$16.69	\$26.35	\$36.99	+\$10.64	\$32.75	\$45.90	+\$13.15
Supplies	5.21	8.51	+3.30	4.34	3.18	-1.16	1.41	1.76	+0.35	2.52	2.90	+0.38
Care	9.67	12.72	+3.05	7.61	7.18	-0.43	5.63	6.88	+1.25	6.58	7.66	+1.08
Total	\$67.47	\$94.27	+\$26.80	\$52.35	\$67.45	+\$15.10	\$33.39	\$45.63	+\$12.24	\$41.85	\$56.46	+\$14.61

Including the cost of maintenance of evening schools, the per capita cost is as follows:—

	1916	1917	1918	1919	1920
Cost of Instruction	\$26 25	\$26 72	\$29 58	\$31 82	\$44 34
Cost of Supplies	1 88	2 05	2 40	2 45	2 80
Cost of Care	4 41	4 61	6 09	6 43	7 45
Total	\$32 54	\$33 38	\$38 07	\$40 70	\$54 59

An examination of these tables shows that we have paid \$20.45 more for the instruction of each pupil in the High School than in 1919, and \$3.30 more per pupil for supplies.

The grammar and primary schools have cost \$10.64 more per pupil for instruction, and thirty-five cents more for supplies.

The amount spent for the school year 1920 was \$9.03, or \$2.60 more than was spent in 1919. The amount yielded for each child in the average membership of the schools for 1920, not including the vocational schools, was \$54.59.

Teachers' Salaries.

The salaries paid to teachers in January, 1921, are as follows:

1 man	\$4,100	2 men, 4 women	\$1,700
1 man	3,500	21 women	1,650
4 men	3,100	18 women	1,600
6 men, 1 woman	3,000	1 woman	1,575
2 men	2,900	1 man, 7 women	1,550
3 men	2,700	2 men, 19 ³ women	1,500
1 woman	2,600	19 women	1,450
3 men	2,500	27 women	1,400
1 man, 1 woman	2,400	15 women	1,350
4 men	2,300	23 women	1,300
6 men	2,200	2 women	1,250
6 men	2,100	2 women	1,200
4 men, 2 women	2,000	2 women	1,100
8 men, 6 women	1,900	1 man, (part time) 1 wo-	
2 men, 1 woman	1,800	man	1,050
5 women	1,750	10 women	1,000

Temporary teachers and cadets or apprentice teachers are not included in the list given above.

SIGHT AND HEARING.

The following gives the results of the eye and ear tests :—

Eyes.			
	1920	1919	Change
Tested	12,242	11,840	402+
Defective	1,658	1,516	142+
Per cent. defective.....	13.5%	12.8%	0.7%+
Notices sent to parents	1,070	1,084	
Professionally treated	225	202	

Ears.			
	1920	1919	Change
Tested	13,346	12,681	665+
Defective	195	219	24—
Per cent. defective	1.5%	1.72%	0.22%—
Notices sent to parents	139	149	
Professionally treated	36	27	

Table 1. — Schoolhouses, January, 1921.

NAME	No. of Classrooms	No. of Seatings	Size of Lot, including Space Occupied by Building	Material	How Heated	How Ventilated	Valuation, including Furniture	When Built	Enlargements
High } West	74	1,786	*	Brick	Steam	Fan	\$426,000	1895	8 rooms added 1906
School } East				Brick	Steam	Fan		1871	30 rooms added 1913
Prescott }	13	487		Brick	Steam	Fan		1867	
Southworth }	11	356	49,310	Brick	Steam	Fan	139,200	1916	
Knapp	13	526	24,517	Brick	Steam	Gravity	58,500	1889	4 rooms added 1894
Pope	12	578	27,236	Brick	Steam	Gravity	88,600	1891	
Bell	24	797	29,860	Brick	Steam	Fan	147,000	1874	13 rooms added 1918
Ederly	12	573	24,000	Brick	Steam	Gravity	48,000	1871	{ 4 rooms added 1882 4 rooms added 1892
Glines	14	628	28,800	Brick	Steam	Gravity	101,400	1891	5 rooms added 1896
Forster }	13	576	30,632	Brick	Steam	Gravity	112,000	1866	
Folsom }	13	293		Brick	Steam	Gravity		1899	
Bingham	16	773	35,586	Brick	Steam	Gravity	82,000	1886	{ 4 rooms added 1894 8 rooms added 1904
Carr	17	745	20,450	Brick	Steam	Gravity	63,100	1898	
Morse	12	473	29,000	Brick	Furnace	Furnace	59,000	1869	6 rooms added 1890
Highland	12	524	23,260	Brick	Steam	Gravity	71,600	1880	4 rooms added 1891
Carried forward	256	9,115					\$1,396,400		

*Buildings are located on Central Hill Park, which contains 13 1-10 acres.

†Includes home rooms, laboratories, shops, assembly rooms, dental dispensary, etc.

Table 1. — (Concluded). — Schoolhouses, January, 1921.

NAME	No. of Classrooms	No. of Seatings	Size of Lot, including Space Occupied by Building	Material	How Heated	How Ventilated	Valuation, including Furniture	When Built	Enlargements
Brought forward.....	256	9,115	.....	.....	.....	.....	\$1,396,400	.....
Hodgkins	14	568	35,034	Brick	Steam	Gravity	103,700	1896	
Western	17	577 [†]	Brick	Steam	Fan	84,000	1917	
Cutler	18	783	53,729	Brick	Steam	Fan	108,700	1912	6 rooms added 1915
Bennett	12	436	21,964	Brick	Steam	Gravity	58,000	1902	
Hanscom	10	487	16,767	Brick	Steam	Fan	70,500	1897	4 rooms added 1907
Brown	10	487	26,733	Brick	Steam	Gravity	80,600	1901	4 rooms added 1907
Proctor	9	343 [*]	Brick	Steam	Gravity	44,000	1905	
Burns	8	387	16,080	Brick	Steam	Gravity	47,000	1886	4 rooms added 1899
Lowe	8	386	21,650	Brick	Steam	Gravity	53,000	1903	
Baxter	6	290	11,000	Brick	Steam	Gravity	40,700	1901	
Perry	6	298	46,080	Brick	Steam	Gravity	48,500	1899	
†Girls' Vocational			8,850	Wood	Furnace	Furnace	5,000	1911	
Boys' Vocational { Davis 4 Machine Shop 2 Automobile Shop 2	8	50	30,155	Wood	Furnace	Furnace	71,000	1884	{ Machine shop added 1917 Automobile shop added 1918
Cummings	4	196	11,300	Wood	Furnace	Furnace	16,900	1884	
Durell	4	190	13,883	Brick	Steam	Gravity	22,900	1894	
Lincoln	4	175	17,662	Wood	Steam	Gravity	20,800	1885	
Total.....	394	14,768	.....	.....	.....	.....	\$2,271,700	.....

*State property. †Land included in City Ledger property. ‡Not in use.

Table 2. — Cost of Maintaining Schools.

FOR SCHOOL YEAR 1919-20.

SCHOOLS.	FROM SCHOOL APPROPRIATION.		SPENT BY CITY GOVERNMENT.	Total
	Instruction and Supervision.	Supplies.	Care.	
High	\$113,510.78	\$13,231.58	\$19,763.99	\$146,506.35
Eastern Jr.	32,004.64	1,502.72	4,236.58	37,743.94
Southern Jr.	41,942.64	2,751.11	5,114.93	49,808.68
Northern Jr.	37,889.21	2,031.09	4,231.39	44,151.69
Western Jr.	51,720.73	2,830.61	6,988.93	61,540.27
Prescott	6,754.70	312.80	1,607.33	8,674.83
Hanscom	17,228.99	810.57	2,593.30	20,632.86
Bennett	18,093.40	891.09	2,720.39	21,704.88
Baxter	10,280.86	293.42	1,960.97	12,535.25
Knapp	11,653.53	634.42	2,837.34	15,125.29
Perry	9,371.11	414.05	1,960.97	11,746.13
Pope	17,758.52	936.40	2,921.95	21,616.87
Cummings	6,073.18	209.79	1,607.32	7,890.29
Edgerly	18,148.06	816.90	2,921.95	21,886.91
Glines	22,082.94	796.69	3,225.60	26,105.23
Forster	5,957.70	354.81	1,841.19	8,153.70
Bingham	21,657.72	879.09	3,567.82	26,104.63
Carr	20,987.30	1,125.65	3,856.09	25,969.04
Morse	14,597.73	759.98	2,946.94	18,304.65
Proctor	10,723.39	445.57	2,416.46	13,585.42
Durell	6,052.75	187.68	1,607.32	7,847.75
Burns	12,215.42	427.06	2,289.64	14,932.12
Brown	15,291.77	670.39	2,593.30	18,555.46
Highland	15,844.91	1,175.03	2,334.18	19,354.12
Cutler	25,230.26	1,567.71	4,932.93	31,730.90
Lincoln	5,962.64	346.82	1,607.32	7,916.78
Lowe	12,367.83	506.99	2,289.64	15,164.46
Atypical	3,969.75	112.13	695.96	4,777.84
Boys' Vocational	13,548.29	2,400.67	2,640.07	18,589.03
Girls' Vocational	4,477.13	106.87	1,697.75	6,281.75
Evening	9,896.18	548.99	2,296.55	12,741.72
Total	\$613,294.06	\$40,078.68	\$104,306.10	\$757,678.84

Table 3. — Per Capita Cost of Maintaining Schools.

FOR SCHOOL YEAR 1919-20.

SCHOOLS.	Instruction and Supervision.	Supplies.	Care.	Total.
High	\$73.04	\$8.51	\$12.72	\$94.27
Eastern Jr.	63.88	3.00	8.46	75.34
Southern Jr.	54.12	3.55	6.60	64.27
Northern Jr.	59.76	3.20	6.67	69.63
Western Jr.	54.16	2.96	7.32	64.44
Prescott	30.70	1.42	7.31	39.43
Hanscom	32.38	1.52	4.87	38.77
Bennett	40.48	1.99	6.09	48.56
Baxter	48.04	1.37	9.16	58.57
Knapp	36.65	2.00	8.92	47.57
Perry	39.54	1.75	8.27	49.56
Pope	34.68	1.83	5.71	42.22
Cummings	38.19	1.32	10.11	49.62
Edgerly	35.58	1.60	5.72	42.90
Glines	35.22	1.27	5.14	41.63
Forster	34.24	2.04	10.58	46.86
Bingham	38.13	1.55	6.28	45.96
Carr	33.37	1.79	6.13	41.29
Morse	35.78	1.86	7.22	44.86
Proctor	35.27	1.47	7.95	44.69
Durell	44.18	1.37	11.73	57.28
Burns	37.36	1.31	7.00	45.67
Brown	39.21	1.72	6.65	47.58
Highland	40.01	2.97	5.89	48.87
Cutler	35.14	2.18	6.87	44.19
Lincoln	42.29	2.46	11.40	56.15
Lowe	38.32	1.57	7.09	46.98
Atypical	92.32	2.61	16.19	111.12
Evening	14.70	.82	3.41	18.93
Elementary	36.99	1.76	6.88	45.63
All schools (without vo- cational)	44.34	2.80	7.45	54.59
Boys' Vocational	205.28	36.37	40.00	281.65
Girls' Vocational	263.35	6.28	99.86	369.49

Table 4.—Annual Cost of Maintaining the Schools.

FOR A SERIES OF YEARS.

Amounts are given to the nearest dollar and include what has been paid for maintaining day and evening schools of all grades.

YEAR.	Average Membership.	FROM SCHOOL APPROPRIATION.		SUM SPENT UNDER DIRECTION OF CITY GOVERNMENT.				Total.
		Instruction and Supervision.	School Supplies.	Light.	Heating.	Janitors.	School Tele-phones.	
1912	11,710	\$306,709	\$30,319	\$5,995	\$15,676	\$30,219	\$512	\$389,431
1913	11,856	320,744	25,877	5,842	16,055	32,939	542	402,092†
1914	12,320	338,587	26,843	6,448	18,952	33,711	624	425,165
1915	12,903	357,581	29,389	5,755	18,366	32,674	213	443,978
1916	13,191	363,948	26,098	6,233	20,197	34,667	.....	451,143
1917	12,770	376,138	29,221	5,429	25,487	35,718	.....	471,993
1918	12,656	410,589	33,587	6,966	35,839	42,063	18	529,062
1919	12,733	437,730	33,225	8,821	22,960	55,710	.....	*559,328
1920	12,836	613,294	40,079	10,092	37,083	56,381	.....	*757,679

† \$92.50 included for rental of church for schoolhouse purposes in Ward 7.

* Includes \$882.50, rent of Armory.

* 750.00.

Table 5.—Annual Cost Per Capita of Maintaining Schools.

FOR A SERIES OF YEARS.

[Based on the average membership.]

YEAR.	Instruction and Supervision.	School Supply Expenses.	Janitors, Heat and Light.	Total.	Assessors' Valuation of City.	Ratio of Cost of School Maintenance to Valuation.
1912	\$23 61	\$2 12	\$3 99	\$29 72	\$69,632,540	\$.00556
1913	24 54	1 91	4 18	30 63	71,848,811	.00559
1914	24 55	1 89	4 27	30 71	74,887,800	.00568
1915	24 90	2 03	3 92	30 85	77,153,500	.00575
1916	26 25	1 88	4 41	32 54	79,304,329	.00569
1917	26 72	2 05	4 61	33 38	78,921,472	.00595
1918	29 58	2 40	6 09	38 07	84,639,280	.00625
1919	31 82	2 45	6 43	40 70	87,353,424	.00643
1920	44 34	2 80	7 45	54 59	83,910,855	.00903

Table 8. — Attendance of the Public Schools for the School Year
1919 - 1920

Rooms used for Classrooms in June	SCHOOLS.	Annual Enrollment.	Average Membership.	Average Attendance.	Per cent. of Attendance.	No. Attending in October.	No. Attending in June.
*71	High	1714	1554	1437	92.5	1639	1485
20	Eastern Jr. High	535	501	457	91.2	506	471
26	Southern Jr. High	842	775	712	91.8	806	728
22	Northern Jr. High	702	634	581	91.6	661	604
31	Western Jr. High	1038	955	898	94.0	992	912
4	Prescott	211	220	196	89.0	192	217
10	Hanscom	625	532	476	89.5	571	516
10	Bennett	500	447	408	91.3	449	454
6	Baxter	252	214	195	91.1	212	222
8	Knapp	374	318	299	94.0	320	334
6	Perry	255	237	219	92.4	245	232
12	Pope	562	512	473	92.4	527	496
4	Cummings	184	159	145	92.5	162	158
12	Edgerly	562	510	468	91.8	522	494
14	Glines	634	627	573	91.4	613	634
4	Forster	197	174	158	90.8	182	168
15	Bingham	635	568	524	92.3	565	577
15	Carr	678	629	581	92.4	647	620
10	Morse	435	408	378	92.6	410	408
7	Proctor	330	304	278	91.4	304	307
4	Durell	151	137	125	91.2	138	144
8	Burns	356	327	298	91.1	344	310
10	Brown	425	390	359	92.1	402	373
11	Highland	423	396	370	93.4	392	390
18	Cutler	798	718	662	92.2	745	682
4	Lincoln	159	141	129	91.5	153	141
8	Lowe	354	323	292	90.4	332	318
3	Atypical	48	43	38	88.4	44	44
6	Boys' Vocational	91	66	62	94.0	75	58
3	Girls' Vocational	21	17	16	94.1	19	13
382	Total	14,091	12,836	11,807	91.9	13,169	12,510
388	Total for 1918-19.....	14,039	12,733	11,609	91.2	12,997	12,397

*Includes all rooms used for school exercises.

Table 9. — Statistics of High School for School Year September 10, 1919
to June 25, 1920.

Number of teachers, including head master	65
Number of days school kept	178
Number enrolled	1714
Average number belonging	1553.8
Average daily attendance	1436.8
Tardinesses	5135
Dismissals	527
In Class 1922, September	1019
June	899
Per cent. of loss	11.8
In Class 1921, September	399
June	338
Per cent. of loss	15.3
In Class 1920, September	245
June	241
Per cent. of loss	1.6
Special Students, September	10
June	7
Per cent. of loss	30
Total, September	1673
June	1485
Per cent. of loss	11.2
Number of graduates, male	87
Number of graduates, female	154
Total	241
Average age, male graduates	18 yrs. 4 mos.
Average age, female graduates	18 yrs. 2 mos.
Number entering college	48
Number of graduates entering scientific schools	19
Number of graduates entering normal schools	7
Cost of instruction	\$110,006 89
Cost of supplies	12,638 22
Total cost	\$122,645 11
Per capita cost of instruction	\$70 79
Per capita cost of supplies	8 13
Total cost per capita	\$78 92

Table 10. — Pupils by Grades, June, 1920.

SCHOOL.	GRADE.	TEACHERS.			PUPILS.			Never in First Grade Before.
		Men.	Women.		Boys.	Girls.	Total.	
			Regular.	Assistants.				
High	Special				3	4	7	
	Twelfth				87	154	241	
	Eleventh				143	195	338	
	Tenth				368	531	899	
	Total	20	48		601	884	1,485	
Junior High	Ninth				347	385	732	
	Eighth				422	503	925	
	Seventh				490	568	1,058	
	Total	16	97		1,259	1,456	2,715	
Elementary	Sixth	7	34		581	690	1,271	
	Fifth		33		638	625	1,263	
	Fourth		33		666	640	1,306	
	Third		33		689	644	1,333	
	Second		33		687	642	1,329	
	First		35	1	729	733	1,462	
	Total Elementary	7	201	1	3,990	3,974	7,964	
	Kindergarten		4	4	78	115	193	
	Special	2	8		20	18	38	
	Cadets		3					
Atypical		3		31	13	44		
Boys' Vocational...	7			58		58		
Girls' Vocational...		2			13	13		
	Grand Total.....	52	366	5	6,037	6,473	12,510	1,339

Table 11. — Pupils in High, Junior High, Elementary and Vocational Schools, 1919 - 1920.

	High School.	Junior High Schools.	Grammar and Primary Schools.	Kinder-gartens.	Vocational School for Boys.	Vocational School for Girls.	Atypical Schools.	Total.
Annual enrollment	1,714	3117	8,873	227	91	21	48	14,091
Average membership	1,554	2865	8,089	202	66	17	43	12,836
Average attendance	1,437	2648	7,426	180	62	16	38	11,807
Per cent. of attendance.....	92.5	92.4	91.8	89.1	94.0	94.1	88.4	91.9
Number cases of tardiness	5,135	1595	4,886	.....	12	.....	.....	11,628
Number cases of dismissal	527	918	2,116	.....	21	12	.....	3,594
Membership, October, 1919.....	1,639	2965	8,224	203	75	19	44	13,169
Membership, June, 1920.....	1,485	2715	8,002	193	58	13	44	12,510
No. cases corp. punishment.....	.....	5	90	.....	.....	.....	.....	95

Table 12. — Number of Pupils Admitted to Grade 1 In September.

SCHOOL.	1916	1917	1918	1919
Prescott	40	49	46	32
Hanscom	85	100	114	153
Bennett.....	72	84	67	104
Baxter.....	35	32	31	34
Knapp.....	19	42	30	53
Perry	27	43	42	38
Pope.....	46	51	55	50
Cummings	40	71	35	47
Edgerly.....	33	45	43	43
Glines	57	91	86	92
Forster	25	31	21	25
Bingham.....	52	102	65	86
Carr.....	51	92	79	75
Morse	65	67	82	69
Proctor	38	46	48	43
Durell.....	21	45	28	34
Burns	59	107	65	83
Brown.....	70	77	63	76
Hodgkins.....	41	50	.....	.....
Cutler	73	96	136	86
Lincoln.....	55	45	60	42
Lowe	42	90	82	74
Total	1,046	1,456	1,278	1,339

Table 13. — Eighth Grade Promotions — Junior High Schools — June, 1920.

Promotion from the eight grade to the ninth grade in the Junior High School corresponds to the promotion from the last grade of a grammar school to the High School.

SCHOOL	Number in Class in June	No. Promoted to Grade 9	No. Entering Grade 9 in Sept., 1920
Eastern Junior High School.....	137	134	125
Southern Junior High School.....	233	228	215
Northern Junior High School	215	204	204
Western Junior High School	351	331	336
Total	936	897	880

Table 13A. — Ninth Grade Promotions — Junior High Schools — June, 1920.

Promotion from the ninth grade to the tenth is the promotion from the Junior High School to the Senior High School. The tenth grade corresponds to the second year of a four year High School.

SCHOOL	Number in Class in June	Number Given Diplomas	Number Certified to High School Grade 10	No. Entering High School in Sept., 1920
Eastern Junior High.....	113	101	101	93
Southern "	209	200	200	157
Northern "	169	164	160	148
Western "	251	240	239	226
Total	742	705	700	624

Table 14. — Comparative Statistics of the Attendance Department for the School Year 1919 - 1920.

	1919	1920	Change
Number of visits to the schools	571	651	+80
Number of visits to the homes	1,463	1,345	-118
Number of cases investigated	1,550	1,473	-77
Number of cases found to be truancy or absenteeism	425	482	+57
Number of different pupils who were truants or habitual absentees	329	379	+50
Number who were truants for the first time	260	302	+42
Number who were truants for the second time	48	55	+7
Number who were truants for three or more times	17	20	+3
Number of girls who were truants or absentees	78	63	-15
Number of cases of parental neglect of children found and reported to charitable institutions	4	3	-1
Number of cases of removal of children from the custody of parents by order of the court	2	2	-0
Number of visits to mercantile or manufacturing establishments	56	36	-20
Number of minors found to be working without employment certificates	70	37	-33
Number of employment certificates issued to boys	544	736	+192
Number of employment certificates reissued to boys	364	673	+309
Number of employment certificates issued to girls	502	553	+51
Number of employment certificates reissued to girls	487	507	+20
Number of educational literate certificates issued to minors over 16 years of age (first issue)	1,262	1,297	+35
Number of newspaper licenses issued to boys 12 to 16 years of age	108	74	-34
Number of transfer cards investigated	1,333	1,200	-133
Number of truants in the County Training school at the close of the year	22	18	-4
Amount paid for board of truants	\$850.13	\$1,071.42	+\$221.29

Table 14. — (Concluded). — Comparative Statistics of the Attendance Department.

For the School Year 1919 - 1920.

Disposition of truancy and habitual absentee cases:—

Warned and returned to school	290
Transferred to other schools	7
Obtained certificates (14 to 16 years)	28
Left school (over 16 years)	5
Removed from city	25
Brought before court and returned to school	9
Brought before court and sent to Training School	8
Parents brought before court for keeping children out of school (convicted)	3
Sent to Lyman School	3
Given in charge of State Board of Charity	4
	382

Table 14-A. — Truancies and Habitual Absenteeism by Ages and Grades.

GRADES.	BY AGES.											Total.
	6	7	8	9	10	11	12	13	14	15	16 or Over	
I.....	2	15	3	1	.....	.....	.....	.....	.....	.....	.....	21
II.....	6	11	4	1	.....	.....	.....	.....	.....	.....	22
III.....	9	7	7	1	.....	.....	.....	1	.....	25
IV.....	3	3	14	9	5	.....	3	.....	.....	37
V.....	2	17	11	4	7	.....	.....	41
VI.....	3	14	20	8	.....	.....	45
VII.....	3	8	25	18	2	1	57
VIII.....	15	15	5	2	37
IX.....	2	11	8	4	25
X.....	1	3	4	29	37
XI.....	2	12	14
XII.....	8	8
Boys' Voc'l	2	1	.....	3
Girls' Voc'l	1	.....	.....	1
Ungraded..	1	.....	1	1	2	1	.....	.....	6
Total.....	2	21	26	16	24	34	39	69	69	23	56	379

Table 15. — Attendance in Elementary Evening Schools from October, 1919, to June, 1920.

		Bell.	Highland.	Total.
Enrolled	Male	171	72	243
	Female	85	24	109
	Total	256	96	352
Ave. membership	Male	69	44	113
	Female	41	12	53
	Total	110	56	166
Ave. attendance.....	Male	51	34	85
	Female	30	8	38
	Total	81	42	123
Per cent. Att. out of No. belonging .....	.....	73.6	75.0	74.1
Per cent. Att. out of No. enrolled.....	.....	31.6	43.7	35.0
Ave. No. of teachers.....	Male	1	1	2
	Female	7	2	9
	Total	8	3	11
No. of sessions .....	.....	76	76	.....
Teachers, cost of .....	.....	\$2,100.00	\$942.00	\$3,042.00
Janitors, fuel, supplies, and light, cost of.....	.....	755.80	415.74	1,171.54
Total	Total	\$2,855.80	\$1,357.74	\$4,213.54
Cost per pupil per evening.....	.....	\$0.341	\$0.318	\$0.334
Cost per evening .....	.....	37.58	17.86	55.44
Cost per pupil in ave. membership.....	.....	25.96	24.25	25.38
Cost per pupil in ave. at- tendance.....	.....	35.26	32.33	34.26

Table 15. — (Concluded). — Evening High School — Season of
1919 - 1920.

	Male	Female	Total
Enrolled	319	278	597
Average membership	160	158	318
Average attendance	113	114	227
Number of teachers		18	
Number of sessions		57	
Cost of Instruction		\$4,268 00	
Cost of janitor, fuel, light, and supplies		1,368 98	
Total cost		\$5,636 98	
Cost per pupil per evening		\$0 311	

Average attendance: October, 342; November, 275; December, 225;
January, 200; February, 152; March, 170.

Table 16. — Promotions from Elementary to Junior High Schools.

	1919	1920
Knapp.	62	107
Perry.	34	32
Pope.	139	127
Edgerly.	136	171
Glines.	88	83
Forster.	35	31
Bingham.	66	66
Carr.	106	96
Morse.	46	61
Proctor.	44	59
Brown.	43	70
Highland.	143	178
Cutler.	126	120
Total.	1068	1201
Average Membership of Elementary Schools.	8345	8334
Per cent. of Average Membership Promoted	12.79	14.41

Table 17. — Attendance Statistics.

FOR A SERIES OF YEARS.

JUNE	ENROLLMENT	Average Membership	Average Attendance	Per cent. of Attendance	Number of Tardinesses	Ratio of Tardiness to Average Attendance
1912	13,272	11,710	11,083	94.6	6,307	0.569
1913	13,491	11,903	11,216	94.2	7,354	0.655
1914	13,932	12,320	11,610	94.2	7,380	0.635
1915	14,505	12,903	12,189	94.5	8,000	0.656
1916	14,647	13,191	12,323	93.4	9,373	0.761
1917	13,967	12,770	11,933	93.7	7,325	0.613
1918	14,256	12,656	11,798	93.2	8,970	0.760
1919	14,039	12,733	11,609	91.2	9,744	0.839
1920	14,091	12,836	11,807	91.9	11,628	0.993

Table 18. — Membership, Etc., of High School.

FOR A SERIES OF YEARS.

YEAR.	Average Membership all Schools.	Largest Number in High School.	Per cent. of Average Membership of all Schools.	Number of Graduates of High School.	Per cent. of Average Membership of all Schools.
1912	11,710	2,023	17.28	296	2.53
1913	11,903	2,081	17.48	296	2.48
1914	11,610	2,111	18.18	273	2.35
1915	12,903	2,258	17.50	311	2.41
1916	13,191	2,288	17.35	348	2.64
1917	12,770	1,973	15.45	340	2.66
1918	12,656	1,520	12.01	332	2.62
1919	12,733	1,854	14.56	310	2.43
1920	12,836	1,714	13.35	241	1.87

For years prior to 1912 see School Report of 1917.

Table 19. — Promotions for School Year Ending June 25, 1920.
Junior High Schools.

GRADE.	On June Promotion List	Unconditionally Promoted to Next Grade	Promoted on Trial	Retarded	Promoted more than One Grade	Special Promo- tions during Year
I	1082	910	117	54	1	1
II	936	806	91	39		
III	743	660	44	39		
Total.....	2761	2376	252	132	1	1

Percentage of Promotions for School Year Ending June 25, 1920.
Junior High Schools.

GRADE.	On June Promotion List	Unconditionally Promoted to Next Grade	Promoted on Trial	Retarded	Promoted more than One Grade	Special Promo- tions during Year
I	100	84.1	10.8	5.4	0.1	0.1
II	100	86.1	9.7	4.2		
III	100	88.8	5.9	5.3		
Average	100	86.1	9.1	4.7	0.1	0.1

Table 19-A. — Promotions for School Year Ending June 25, 1920.
Grammar Grades.

GRADE.	On June Promotion List.	Unconditionally Promoted to next Grade.	Promoted on Trial.	Retarded.	Promoted more than One Grade.	Special Promotions during Year.	Promotees Dropped Back after Three Months' Trial.
I	1,492	1,149	92	242	9	6	1
II	1,346	1,135	94	108	9	8	3
III	1,358	1,144	128	74	12		
IV	1,322	1,087	146	79	10	2	2
V	1,293	1,030	160	97	6	8	9
VI	1,292	1,102	99	88	3	12	5
Total.....	8,103	6,647	719	688	49	36	20

Percentage of Promotions for School Year Ending June 25, 1920.

GRADE.	On June Promotion List.	Unconditionally Promoted to next Grade.	Promoted on Trial.	Retarded.	Promoted more than One Grade.	Special Promotions during Year.	Promotees Dropped Back after Three Months' Trial.
I	100	77.0	6.2	16.2	0.6	0.4	0.1
II	100	84.3	7.0	8.0	0.7	0.6	0.2
III	100	84.3	9.4	5.4	0.9		
IV	100	82.2	11.0	6.0	0.8	0.2	.02
V	100	79.6	12.4	7.5	0.5	0.6	.07
VI	100	85.3	7.7	6.8	0.2	0.9	.04
Average...	100	82.0	8.9	8.5	0.6	0.4	0.2

TABLE 20. — RESIGNATIONS OF TEACHERS, 1920

School	Teacher	Resignation Took effect	In Service
High	Lester W. Dearborn	March, 1920	5 years, 4 months
"	Elizabeth H. Hunt	June 30, 1920	12 years
"	Guy C. Blodgett	June 30, 1920	9 years, 7 months
"	Julia T. Connor	June 30, 1920	9 years, 5 months
	Elise Brecker	Elected July 16, 1920	Did not accept position
Eastern Junior High	Ellen H. Coughlan	March 5, 1920	3 years, 5 months
Southern Junior High	Esther L. Small	April 16, 1920	5 years, 7 months
"	Katherine E. Read	June 30, 1920	2 years
"	Clarisse L. Tirrell	June 30, 1920	2 years
Northern Junior High	Jane H. Perkins	June 30, 1920	1 year
Glines	Leslie Caverly	June 30, 1920	12 years
"	Edith M. Dow	June 30, 1920	5 years, 8 months
Proctor	Abbie A. Gurney	June 30, 1920	32 years
Cutler	Georgie B. Collins	October 28, 1920	4 years, 4 months
"	Mary L. Ennis	June 30, 1920	5 years
"	Inez M. Rodgers	June 30, 1920	5 years
Cadet	Enna Bella Weisman	Elected July 16, 1920	Did not accept position
Ass't Sup't of Schools	Joseph A. Ewart	November 1, 1920	7 years, 8 months

TABLE 21. — TEACHERS ELECTED IN 1920.

School	Teacher	Coming From	Salary	Service Began
High	Forrest S. Miller	Boston	\$1,900	March 8, 1920
"	Elise Brecker		1,400	Did not accept
"	Gladys S. Jennison	Not teaching	1,700	Nov. 29, 1920
"	Margery Moore	Andover	1,300	Sept., 1920.
Eastern Junior High	Dorothy E. Harvey	Northboro	1,400	Sept., 1920.
Southern Junior High	Amelia M. Gray	Somerville	1,200	Sept., 1920.
"	Carrie M. Frost	Bangor, Me.	1,450	June, 1920.
"	Edith M. Joel	Arlington	1,400	Sept., 1920.
Northern Junior High	Grace M. Driscoll	Somerville	1,000	Sept., 1920.
Western Junior High	Helen M. Pulsifer	Denver, Colo.	1,500	Sept., 1920.
"	Augusta H. Bergin	Not teaching	1,400	Sept., 1920.
Prescott	Dorothea A. Shay	Hamilton, N. J.	1,000	Sept., 1920.
"	Grace E. Allen	Somerville	1,000	Sept., 1920.
Hanscom	Ethel H. Werner	Somerville	1,100	May, 1920.
Pope	Eleanor E. Waldron	Somerville	1,000	May, 1920.
Glimes	Elizabeth C. Sullivan	Somerville	1,000	Sept., 1920.
"	Laura M. Flynn	Somerville	1,000	Sept., 1920.
Bingham	Alice E. Griffiths	Newton	1,400	Sept., 1920.
Carr	Helen M. Mason	Boston	1,300	Sept., 1920.
Proctor	Ethel F. Morang	Not teaching	1,300	Sept., 1920.
Cutler	Katie L. Harmon	Somerville	1,400	May, 1920.
"	Stella G. Buckman	Somerville	1,000	May, 1920.
"	Nettie M. Humiston	Somerville	1,300	Sept., 1920.
"	E. Mildred Milner	Danvers	1,300	Sept., 1920.
Boys' Vocational	Percy A. Brigham	Malden	2,100	Nov. 1, 1920.
Continuation	Everett W. Ireland	Boston (Wentworth Institute)	2,500	Sept., 1920.
"	Lawrence E. Landahl	Not teaching	1,800	Sept., 1920.
"	Kells S. Boland	Not teaching	1,500	Sept., 1920.
"	Estelle Crowe	Not teaching	1,000	Sept., 1920.

Table 22. — Leave of Absence of Teachers.

Katherine A. Breen, Western Junior High, from Sept. 1, 1920, to June 30, '21.
 Elizabeth J. Baker, Hanscom, from Sept. 1, 1920, to Dec. 31, 1920.
 Helen L. Follansbee, High, Thanksgiving Recess to June 30, 1921.
 Hazel M. Yaeger, Western Junior High, from Sept. 1, 1920 to June 30, 1921.

Cadets

Ruth E. Arrington
 Ethel F. Rudd

Eunice S. Higgins
 Enna Bella Weisman

Table 23. — Transfers of Teachers.

Teacher	From	To
Annette B. MacKnight	Southern Junior High	High
Minnie P. Cunningham	Knapp	Bennett
Alice A. Tassinari	Bennett	Knapp
Catherine E. Giles	Northern Junior High	Western Junior High
Mary L. Gallagher	Knapp	Glines
Vernie T. Neily	Girls' Vocational	Western Junior High
Nona E. Blackwell	Knapp	Southern
Maude M. Cunningham	Bingham	Southern

Table 24. — Number of Teachers.

FOR A SERIES OF YEARS.

YEAR.	High School.	Junior High Schools.	Elementary Schools.	Special Teachers.	Assistants not in Charge of Room.	Men.	Women	Total.
1912	66‡	.....	252*	22	9	40	309	349
1913	68‡	.....	257*	28	12	39	326	365
1914	75‡	.....	266*	30	20	44	347	391
1915	76‡	.....	272*	31	15	45	349	394
1916	77‡	.....	290*	30	15	46	366	412
1917	70‡	65	238*	33	17	49	374	423
1918	70‡	108	207*	28	5	49	369	418
1919	70‡	106	207*	26	9	48	370	418
1920	69‡	113	212*	23	8	54	371	425

‡Including a secretary and a matron.

*Including four kindergartners.

Table 25. — Books Authorized for Use, 1920

For Elementary and Junior High Schools, —

As Text Books.

The Merrill Series of Readers, C. E. Merrill Pub. Co.

As Reference Books.

Broad Stripes and Bright Stars, Carolyn Sherwin Bailey — Milton Bradley Company.

Table 26. — HIGH SCHOOL GRADUATION.

The graduation exercises of the High School occurred Friday, June 18, 1920.

ORDER OF EXERCISES.

HERBERT CHOLERTON, Chairman of the School
Committee, Presiding

1. OVERTURE — "Little Red Cap"
High School Orchestra, Malcolm P. Bergmann, Leader
2. PRAYER — Rev. George E. Soper, D. D.
Pastor of the Prospect Hill Congregational Church
3. SINGING — "Look Down from Heaven" (Elijah).....Mendelssohn
Graduating Class
4. ESSAY — "Life, Liberty, and the Pursuit of Happiness"
W. Dorothea Crowne
5. WALTZ — "Barcarolle" Waldteufel
Orchestra
6. ESSAY — "Education or Chaos"
William F. Kelly
7. SINGING — "Carmena" Lane-Wilson
Graduating Class
8. PRESENTATION OF MEMORIAL TABLET
9. ADDRESS TO GRADUATES
Dean Henry W. Holmes, Harvard University
10. PRESENTATION OF DIPLOMAS TO GIRLS
11. SINGING — "Recognition of Land" Grieg
Graduating Class
12. PRESENTATION OF DIPLOMAS TO BOYS
13. SINGING — "The Star Spangled Banner"
14. POSTLUDE — "Coronation March".....Meyerbeer
Orchestra

Singing and orchestra under the direction of James P. McVey, Supervisor of Music in the Public Schools

LIST OF GRADUATES

June, 1920

*Graduated with honor

- | | |
|-----------------------------|------------------------------|
| Sarah Elizabeth Abbott | Doris Elizabeth Flint |
| Blanche Marie Amirault | Harriette Roberts Ford |
| Ethel Mae Armstrong | Marion Emma Foster |
| Mabelle Linsley Backus | *Marion Garside |
| Dorothy Phillips Baker | Anne Mae Getchell |
| *Sylvia Bateman | Edna Mabel Gilmore |
| Teresa Nancy Begley | Sadie Helen Grady |
| Marie Benedetto | Ida Sophie Graustein |
| Fannie Berman | Gratia Manola Grisim |
| Albertina Bettencourt | Grace Langton Haley |
| Edith Illeone Bixby | *Alice Winifred Hamilton |
| *Marion Alice Blood | Lola Genieve Hamilton |
| Mildred May Boggs | Alice Louise Hancock |
| Grace Clayre Brenan | Vesta Ruth Hanson |
| Eleanor Brown | Mildred Marie Harkins |
| Clara Louise Buker | Helen Louise Harney |
| Madeline Grace Burhart | Emma Elizabeth Haskell |
| *Mona Cecelia Burke | Doris Henderson |
| Myrtle Alberta Burnside | Allene Lucille Holman |
| Eleanor Gilchrist Buswell | Pearl Katherine Honold |
| Alice Louise Callahan | Ruth Evelyn Hopson |
| Sarah Louise Cameron | Lillian Elizabeth Hubbard |
| Lydia May Carlz | Helen Wilder Hudson |
| Hester Ramona Carman | Elva Gladys Hutchins |
| Marguerite Pauline Clements | Ruth Gwendolyn Johnson |
| Gussie Cohen | Florence Kavooghian |
| Loretta Jane Colbert | Frances Gertrude Kenney |
| Caroline Mae Comey | Ethel Mae Kimball |
| *Agnes Elizabeth Conwell | Mildred Loretta Kodad |
| *Anna Corliss | Elena Leighton |
| *Winifred Dorothea Crowne | Lena Leveen |
| Marion Danforth | *Dagmar Elizabeth Lindequist |
| Bessie Reina David | Rose Lipsez |
| †Ruth Eleanor Dawes | *Edna May Ludwig |
| Gladys May Deckoff | Evelyn Macgillvray |
| Lea Olive DeLorme | Florence MacLachlan |
| *Mildred Dorothy Dewire | Marjorie Grace MacPhee |
| Dorothea Violet Dion | Anastasia Mary Mannion |
| *Pauline Davenport Dodge | Anita Angela M. Marchese |
| Abbie Marie Donahue | Irene Elizabeth Mason |
| Doris Ernestine Donovan | Emily Hazel Mathews |
| Agnes Gray Crawford Dornan | Mary Mortimer McAuley |
| Barbara Virginia Douglas | Eleanor Marie McElroy |
| Mary Margaret Duffy | Alice Marie McFarland |
| Ethel Leah Durning | Margaret Whitney McGill |
| Muriel Beatrice Edwardes | Kathryn Marie McGrath |
| Helen Goldie Elliott | Emilie Mary McHale |
| June Carol Evans | Dorothy Helen McQuinn |
| *Miriam Rogers Ewart | Dorothy Tufts Miller |
| Esther Mary Filadoro | |

Margaret Catherine Miller
 Muriel Bertha Morrill
 Alice Emma Morrison
 Helen Mary Mulligan
 Alice Irene Murphy
 Fannie Myerson
 Gertrude Pauline Nangle
 Louise Viola Newcomb
 Ruth Eleanor Newman
 Victoria Newman
 Lucy Elizabeth Noreau
 *Lillian Grace Norris
 *Helen Gilson Northrup
 Gladys Josephine Nugent
 Eileen Marie O'Brien
 Baranson Helen Ohanian
 Lena Pearl Peck
 *Dorothy Perkins
 *Sophie Mae Phillips
 Sarah Teresa Pickering
 Lillian Stacy Pierce
 Velma Louise Pincus
 *Ruth Platt
 Helen Blaisdell Powers
 Ruth Margaret Ramsay
 Eleanor Alice Randall
 Elizabeth Frances Ray
 Mildred Frances Reardon
 Dorothy Dunbar Reynolds
 Helen May Rice
 Emily Gertrude Richards
 Thelma Grace Robertson
 Josephine Agnes Saunders
 Mary Kathryn Shea
 Frances Elizabeth Simmons
 Mary Simonetti
 Katherine Maitland Simpson
 Elvia Arline Spaulding
 Mary Ruth Stack
 Helen Ames Steere
 Frances Madeline Stephenson
 Rose Mary Still
 Dorothy Maxwell Sutherland
 Esther Ruth Taylor
 Margaret Dorothy Taylor
 Mildred Elizabeth Teakles
 Berenice Louise Tedford
 Louise Thornquist
 Helen Constance Tooker
 Ethel Palma Trimble
 Charlotte Burkett Wadsworth
 Violet Isabella Walker
 Gertrude Alice Walsh
 Nelle Kendall Wilder
 *Helen Wilson
 Francis Edward Aherne
 Charles Andelman
 Fred Lawrence Bacigalupo
 Roland Barker
 Lester George Barrett
 John Thomas Beaver, Jr.
 *Weston Taft Bennett
 Malcolm Prentice Bergmann
 *Walter Orville Blanchard
 Earl Elwyn Bolton
 Horace Milton Brandt
 Raymond Eugene Brinig
 Grant Kirk Chisholm
 Hartwell Robley Congdon
 Earle Ogden Cruikshank
 Learned Russell Cutter
 John Sylvester Delaney, Jr.
 Michael Bernard Dewire
 James Charles Donahue
 David Donaldson
 George Michael Dowd
 Karl Henrick Erickson
 Dwight Foster Evans
 Herrick Wrightson Farren
 Theodore Rufus Fisher
 Lucian Curtis Foye
 Adolphus Carl Gnecco
 James Edward Hagan
 Chester Twombly Hammond
 Joseph Lee Herlihy
 Henry Holsbery Holmes
 *Philip LaForest Holmes
 Ellsworth Samuel Irwin
 Warren Sumner Johnston
 Robert Joseph Keating
 Thomas Andrew Kelley
 *William Francis Kelly
 William Harold Knox
 Joseph Clarence Lane
 Reginald August Langell
 Frederic Billings Littlefield
 Lawrence Beckley Maddison
 Grahame Magee
 Walter Wellington Martin
 Walter Adolph Mayer
 James Franklin McAloney
 Edward John McCarthy
 James Andrew McNamara
 John Francis McSweeney
 Charles Alvah Mitchell
 Hobart Henry Mowers
 Leo Patrick Murphy
 James Albert Murray
 James Joseph Murray, Jr.
 *Guy Hosford Northrup
 Thomas Joseph O'Connell
 Carl Oscar Olson
 John Stephen Patten
 Francis Robbins Pray
 Warren Leslie Prescott
 John Paul Joseph Reardon

Robert Anthony Repetto	John Francis Thompson, Jr.
Allen MacDonald Rideout	Howard Simpson Tochtermann.
*William Henry Robinson, Jr.	Edward Augusta Tosi
James Birmingham Ryan	Miles Toulouse
Alfred Bernard Rowland Shelley	Frank Herbert Townsend
Manuel John Silva	Thomas Henry Twigg, Jr.
Lloyd Russell Simpson	Walter Norman Westland
*Leo Slafsky	Françis Bingham White, Jr.
Albert Daniel Sullivan	George Washington Whittier, Jr.
Eugene Joseph Sullivan	Lawrence Irving Williams
Timothy Joseph Sullivan	Henry Webster Youlden
Francis Xavier Tansey	George Franklin Young, Jr.
Henry Edward Tassinari	

† Deceased

Total Number of Graduates, 241. Boys, 87; Girls, 154.

Junior High School graduations occurred in the school buildings on June 24, 1920.

LIST OF GRADUATES

Eastern

Mary V. Bannon	Frank P. Fay
Doris J. Barnes	Helen Florence Fitzgerald
Arthur J. Barry	John L. Forey
Helena Mildred Beale	Clyde George Geake
William Austin Beard	Samuel Gilman
Henry R. Beecher	John Goslen
William Bell	Francis Harold
Rose Eleanor A. Blanche	John Joseph Harold
Charlotte E. Bonschau	Arthur Hayes
William E. Bonschau	Albert Healey
John Brennan	Mary F. Horan
Harry Leslie Brown	Edna Rose Howe
Francis J. Buckley	Isabelle Higgins Hughes
John W. Burke	Ruth Jennins
Helen C. Busby	Einer William Johansen
Edith M. Button	Kathleen L. Keaney
Eugene F. Caldaroni	Helen Kerner
Julia Mary Carney	Matthew H. Kerner
Edith Lufkin Charlesworth	Helen Winifred Kyes
Ruth Coffey	Gertrude E. Lane
Francis Leo Coffin	Anna La Terza
Kathryn M. Collins	Alma Louise Lauriat
Mary Cox	Edward Joseph Lynch
J. Lester Crooker	Helena MacDonald
Grace Edith Crosby	Walter MacDonald
Alice Louise Desmond	Artemas MacLean
Mae A. Devereau	Katherine A. McCarthy
George Nelson Dix	Mary E. McCarthy
Ida Duchin	Gertrude M. D. McCloud

Elliott M. McDermod	Lena M. Rosetta
Daniel J. McGrath	Marion Fisher Rowe
Margaret F. McGrath	Beatrice A. Ruggles
Mary McMahon	John Ryan
Mary Catherine Meaney	Francis E. Shea
Marion G. Merritt	Agnes Shepherd
Merton Mottola	Mary G. Souza
Albert H. Newhouse	Harold Stanton
George M. Newman	Frederick B. Steeves
Francis S. Noyes	John Landers Stewart
Alice Veronica O'Neil	Mary Beatrice Sullivan
Clarence Edward Overlock	Florence Mirriam Sullivan
Leona Beatrice Perkins	Esther Evelyn Tamlyn
Merue Caroline Perkins	Henry H. Thomas
Harold Porter	David Edward Wallach
Charles R. Prescott	Catherine Josephine Walsh
Solomon Price	Abraham Joseph Weisman
Marion Rita Quinn	John Wells
Paul F. Regan	David Albert Wesley
Herbert Ringer	Frederick Everett Wilson
Helen Virginia Roebuck	Frank Wood
Frank B. Rogers	

Northern

Drucilla Harriet Allen	Florence Gertrude Denney
Frances I. Beckett	Richard Joseph Desmond
Carlton E. Bessey	Joseph Henry Doll
Dorothy M. Brann	Fred Francis Driscoll
Evelyn May Breen	Milton Frederick Dyke
Robert Brine	Henry George Eimert
Amelia Bell Bruce	Esther Lorena Fisher
Peter S. Caffanges	George Flibotte
Chester Irving Carran	George Titus Fogerty
Throphilo Stone Carreiro	Ruth Louisa Foskett
Marie Antonett Castellucci	Charles Edward Fowler
Amelia A. Cavalieri	Clarence W. Fraser
James Hunter Chalmers	Margaret Frances Friel
Grace Lillian Chandler	Reginald J. Fritz
Rufus Choate	Dorothy Gallagher
Margaret Laura Ciambelli	Mary Cecelia Gallagher
Mary Theresa Clement	Charles Paul Galli
Frank J. Clements	Anna May Giacobbe
Charles Irving Conley	Dante Reginald Giorgetti
Florence Emily Cooper	Anna Goduti
William T. Corey	Verna Eulalie Goff
Edward H. Costa	Miriam Eunice Gordon
Vivian Crafts	James Joseph Gormley
Doris E. Crosby	Isobel Sarah Guibord
Raymond Cross	Bertram P. Gustin
Edward Melvin Croto	Veronica Gutosky
Charles Crowley	Edward Lovell Hall
Walter Joseph Crowley	Lauri W. Hanni
Arthur Stanislaus Cudmore	Cecil Gilbert Harries
Frank Walker Currier	Albert G. Harkins
James Dangora	Francis J. Harkins
Ruth Lowe Davis	Ruth Frances Haskins

Helena C. Havican	Helen Anna Morse
John Barr Hayward	Thelma Alice Moss
Mary P. Heiser	Hugh P. Mulligan
Pauline Dudley Hobbs	Laura Phyllis Mumford
Mildred Horton	John Joseph Murphy, Jr.
Henry John Hurford	Joseph G. Murphy
Abraham I. Jacobson	Ruth Elizabeth Nangle
Leo J. Jennings	Cathleen Helen O'Brien
Edward John Jeremiah	Julia O'Connor
Christine Helen Johnson	Estelia Elizabeth O'Neil
Warren E. N. Johnson	Arthur E. Peterson
Gladys Estella Jones	Katrina Louisa Porter
William Duncan Jordan	James Stephen Rancatore
Rena Josie	Marian Eva Rancatore
Charles E. Keenan	Celia Delora Richardson
John Jerome Kelliher	Johr A. Roma
Frances M. Kelter	Ellen Frances Ronan
John Francis Kinneen	John B. Russell
Leroy Charles Klinger	Mildred Russo
Frances Elizabeth Knibbs	A. Lucille Savage
Edward Kennamon Kyte	Lawrence J. Savage
Mary Agnes Linehan	Gladys Theodora Sculz
Eleanor MacGovern	Phelomena Seretto
Donald MacNeil	Horace Woodruff Sexton, Jr.
John Francis Maguire	Marion Alberta Shea
Arthur Attwood Mahoney	Irene Antoinette Simard
Margaret Mary Mahoney	A. Raymond Spaulding
Mary H. Mahoney	Florence A. Stack
William F. Mahoney	Gertrude Mable Stack
Marguerite J. Mansfield	Elizabeth Gertrude Stewart.
Katherine Louise Marmand	Saul Tomashevsky
Gerald McCulton Marston	Norma Gene Trefry
Helen Margaret Martignette	Yvonne Diana Tremblay
E. Rees Martine	Hester Day Waldron
Edward Matthew	Martha Marion Wegat
Francis Henry McCall	Albert James Welch
Mary Elizabeth McCarthy	Alma B. Wells
Evelyn Mary McClusky	Lawrence Francis Welsh
Frances M. McColgan	Reginald Hall Wentworth
Mary Louise McGill	Richard George Whiting
Wallace Joseph McGrath	Helen Whitney
Margaret Mary McGuigan	Muriel Lewetta Williams
Bessie Margaret McManus	Theresa Frances Williams.
Margaret Mary McSweeney	Walter E. Williams
Mildred Gertrude Merriam	Charles Edward Wilson
Margaret Elizabeth Miller	Ezella Catherine Wilson
Carol Hester Millett	Paul T. Wilson
Charles Leo Mooney	Helen M. Wright
Richard F. Mooney	Earle W. Young
Katherine Agnes Mornane	

Southern

Ethel May Adams	Helen Elizabeth Douglass
Theresa Marie Albani	Beatrice E. Everett
Daniel Edwin Anderson	Charles V. Falls
Margaret M. Aylward	Helen Elizabeth Fenton
Florence Mabel Baird	Leo Ferrarini
Thomas L. Baker	Albert F. Ferretti
Agostina Mary Balboni	Albert Leo Fitzgerald
Lillian Barberi	Robert B. Fitzgerald
Martha Irene Barrish	Josephine C. Flanagan
Anna Baruffaldi	William F. Flynn
John W. Bates	John T. Ford
Leo C. Begley	Armida Eleanor Formichelli
Arthur Ernest Benge	Mary Beatrice Fortunati
Angelo P. Bertocci	Kathryn Frances Gallagher
Philip James Beyer	Elvira Asunta Garibotto
Rose Blaustein	Joseph C. Gaudet
Mary Teresa Bloomer	Martha W. Gissler
Frances Gertrude Blute	Robert Glover, Jr.
Carl W. Bockstrom	Evelyn Loretta Goldburgh
Leslie J. Bradley	Harry Goldenberg
Margaret Dorothy Brady	Theresa Gomes
Oliver Joseph Brazeau	Eugene Alphonsus Gormley
Hilda Bridgens	William A. Graustein
Eileen V. Bridges	C. Prescott Greenleaf
Florence Irma Burns	Anna Mildred Guilderson
Lillian Louise Burry	Robert S. Harrington
John Joseph Callahan, Jr.	Francis J. Haley
William J. Campbell	Catherine Blanche Hancock
Elizabeth Pauline Canniff	Emma Fedora Hancock
Joseph A. Capodanno	Charles Dudley Harrington
Albert John Capone	Fayette Haskell
Joseph John Cardillo	Daniel Parker Hatch
Margaret Florence Carney	Theodore Haviland
Annie I. Carrigan	Katherine McLeod Henderson
Josephine Catherine Carrigan	Israel Hershkovitz
Emily Carterino	Eugene S. Holton
Warren Albert Caswell	Cleon Edson Hopkins
George Catanzano	Francis Elmer Kavanaugh
Walter Roger Caty	John Joseph Keenan
Stuart W. Chapman	Ellen Christina Kelleher
Alfred John Clark	Isabella Madeline Keppe
Annie M. Cleaves	Kathryn Anne King
James Aloysius Cloran	Edward Augustine Kirke
Oscar Norman Coddling	Mabel Marie La Rose
Nathaniel A. Colbert	Francis Lavash
Frances Conneilly	Dorothy Winifred Lawson
Arthur E. Connor	Rose Louise Lazzaro
Ralph William Crocker	Ellen Agnes Leahy
Elmer Keith Crosby	Thomas Vincent Leahy
Margaret Mary Cronin	Carl A. Leavis
William A. Curtin	Margaret Mary Lee
Dorothy Mae Dean	Mabel Irene Lewis
Woobury Curtis Dean	Fay Bertha Lipkind
Helen May DeRosear	Francelina Florence Lima
Lilian M. Dole	Miriam Lipsez
Robert Charles Donovan	Rita Moore Logan

Helen B. Lucas
 A. Warren Lynch
 Edward Barry Lynch
 Ruth A. Lynch
 John A. MacIntyre
 John D. MacKeown
 Aubrey B. MacMahan
 Mary T. Mahony
 Mildred Frances Manning
 Hilda Mary Martell
 James J. Martin
 Bertha Mason
 Thomas F. McAllister
 Mabel Violet McAuliffe
 Elizabeth Claire McCarthy
 M. Agnes McGrath
 William D. McIntire
 Robert J. McKay
 Earl Putnam McKim
 William Joseph McMahan
 Frank Meletti
 Mary Emma Mercer
 James M. Mifflin
 Raymond E. Mills
 Alice Moore
 Glennis E. Mowatt
 Loretta Catherine Murphy
 Raymond J. Murphy
 Frances Etta Murray
 Hyman Needle
 Mary Christine Nolan
 Dorothy Obear
 Grace Marion O'Brien
 Harold J. O'Brien
 Mary Eleanor O'Brien
 Margaret E. O'Connor
 Grace Gertrude Olin
 John Lawrence O'Leary
 Bertha May Parshley
 Dorothy F. Peck
 Doris Penny
 Eleanor Isabel Perry
 William C. Peterson
 Margaret Mae Pollock
 Ellen Marie Prebensen
 John W. Pretty

John Anthony Ramos, Jr.
 Myrtle Ramsay
 Walter Franklyn Robinson
 Madeline M. Rowe
 Ada R. Russ
 Irene Francis Ryan
 Myrtle A. Ryer
 Marie Dorothy Sammon
 Mary Seymourian
 Walter Frederick Shaw
 James White Shephard
 Doris Louise Short
 Celia Sigel
 Arthur Joachim Silva
 Doris Gertrude Smith
 Gladys Smith
 Katherine Martha Smith
 Mark Frederick Smith
 Mildred Sparks
 Carolyn E. Strehle
 Elizabeth Y. Stromme
 Hazen Kimball Sturtevant
 Helen Gertrude Sweeney
 Umbert Timothy Taddia
 Bessie Talalewsky
 Alice H. Thomas
 Violet Mary Thorne
 Joseph Harold Tierney
 Evelyn E. Timmins
 Joseph M. Tobin
 Henry J. Tosi
 Lilly Helen Walgis
 Francis Paul Walsh
 Teresa Anne Walsh
 Pauline S. Ward
 Ralph Baxter Ward
 Mary Alice Watts
 Ida May Weinstein
 George Foster Whitcomb
 Catherine Rita White
 Mary Louise Wiggins
 Fred E. Wilson
 Mary Wisewell
 Margaret Anna Yelinek
 Olga E. Yelinek
 Marion Selig Zwicker

Western

Alice G. Ahearne
 Eleanor M. Albertini
 Gertrude R. Albertini
 T. Edward Aldham
 Emma M. Alls
 Florence C. Anderson
 Ruth M. Atkinson
 Ruth Mary Austin

Audrey Bancroft
 Rita Elizabeth Baron
 Emma F. Bates
 Dorothy Isabel Baxter
 Henry George Bedighian
 Blanche W. Bell
 Claribel L. Benjamin
 Theodore Roosevelt Bernson

Edmund John Berry	Arnold G. H. Engborg
J. Nelson Berry	Amelia English
Marjorie Frances Birtwell	Pearl M. Fairweather
Maude E. Black	Dorothea Farnsworth
Henry Allen Blackman	Irene Marie Felt
Harold F. Bloom	Grace Figved
Bertha K. Bockman	Robert F. Fisher
James W. Boggs	David E. Flett
Grace Dorothy Boss	Annie Imilda Flynn
M. Genevieve Bowser	Mary Agnes Ford
Edna Mae Briggs	Homans Stearns Foster
Clifford R. Brooks	Joseph Raymond Foster
Charles Edward Brown	Marie M. Fuches
Hugh L. Brown	John Stanley Fudge
Welton M. Burgess	Paul Hildreth Fuller
Catherine M. Burke	David E. Gallant
Ives A. Busnel	Edna Glendon
Albert Henry Buswell	Hilda M. Goldstrass
Robert Norman Butterfield, Jr.	Carleton C. Goodspeed
Murdena A. Campbell	Alice E. Goudie
Benjamin D. Carey, Jr.	Leslie Douglas Gould
Charles Clinton Carey	Charles B. Grady
Edith Elizabeth Carlson	Alma Pauline Graves
Robert E. Carmichael	John J. Haley, Jr.
Blanche C. Carpentier	George Albro Hall
Lenora M. Chandler	Donald S. Hamilton
Norman A. Chapman	Mary Caroline Hankwitz
Marion V. Chebook	Alice Grace Hardin
Doris Cheyne	Alice I. Hardy
Charles Arthur Clapp	Lawrence E. Harris
Leslie J. Clark	Louis M. Hathaway
John Clarke	Evelyn Alice Hatten
Catherine Edith Coaker	John H. Hill
Anna L. Colbert	Kathleen R. Hill
Sarah Elisabeth Colby	Mary Loretta Hoar
Clifford Douglass Cole	John Albert Holmes, Jr.
Inez Alice Comstock	Dorothy M. Holyoke
Frank P. Connor	Lucy Gladys Howard
Cullum Coulson	Laura Florence Hughes
Doris N. Cross	Louise G. Hunt
Harold L. Cruikshank	Edward Hurley
Paul Cruwys	Herbert Francis Hurley
Warren L. Dalton, Jr.	Viola Catherine Jellison
Winifred A. Damon	Margaret Norma Jodice
Geraldine Goodwin Davis	Aram Johnian
Norman H. Dawes	Ruth Ellen Johnson
Leslie C. Densmore	Helen Johnston
Everett Bond Dewar	Edna F. Jordan
Loretta M. Dionne	Edwin F. Jordan
Kathleen E. Donohue	John W. Kaup, Jr.
Alice C. Donovan	Helen F. Keeley
D. Bailey Donovan	Marion Elizabeth Keith
Leon P. Donovan	Albert Lovejoy Kelley
Nora T. Donovan	Dorothy Irene Kerr
Norma Elizabeth Duerner	Ruth King
William B. Dunne	Reginald G. Lacount
Clarence A. Durling	Armand La France
Eunice Edwards	Florine M. Lang
Arthur F. Eldridge	Ralph L. Lawson

Blanche L. LeSueur	Carolyn Eva Russell
Myer Levinson	Charlena Mae Russell
Dorothy Levy	Mildred E. Russell
Rollo Sewell Lewis	Harold H. Sahlin
Dorothy May Linfield	Sirancosh G. Sarkisian
Beatrice Alta Lord	Zabelle G. Sarkisian
Audrey Louise Lundy	Helen M. Saunders
Doris Lydiard	Alice L. Sawyer
Charles F. Lynch	George Earl Saxton
Mary Isabel MacDonald	Mildred Wilhelmena Seckendorf
Leonard MacGovern	Eleanor Maude Shaw
Wilhelmina MacIver	Margaret T. Shea
Kenneth Alexander MacLeod	Cecile Agnes Sheldon
Margaret Anna Isabel MacNeil	Anthony C. Silva
Annie Margaret MacSween	Paul E. Simpson
Frederick C. Matheson	Priscilla Creevy Simpson
Lester A. Matheson	Sydney G. Stahl
James E. McGuinness	Alfred J. Steed
Richard Hoyt Merrill	Charles L. Stevens
Leon Miller	Charles Edward Stille
Calvin Chambers Mills	Margaret Mabel Sullivan
Edmund Lombard Mitchell	Frances M. Swinehamer
Eva Mitrano	George Richard Tadgell
Helen Louise Monte	Beatrice Etta Taylor
Eleanor A. Moore	Stanley F. Teele
Halsey Bryant Moore	Sarah P. Tennyson
Winifred Louise Moses	Warren Smiley Thomas
Barbara Muller	Alice Elizabeth Thompson
Elizabeth L. Murphy	Bernice C. Throensen
Edward Joseph Murray	Elizabeth F. Tibbetts
Ronald Naugler	Heinn Frederic Tomfohrde, Jr.
Ebba Irene Nelson	Stanley G. Tribe
Roy Nelson	Claire Macdonald Tucke
Nellie Elma Newton	Katherine Kennett Tufts
Ripley E. Nickerson	James Ernest Urlwin
Joan Henny Nielsen	Margaret M. Vacaro
Dudley Andrew Noyes	Ruth V. Van Arsdalen
Vincent T. O'Connor	Ian C. Walker
Anna T. O'Keefe	Herbert F. Wallstrom
Edna Alice Marie Olson	Richard Joseph Walsh
Edward Francis Ormond	Curtis Joseph Ware
Mildred Elizabeth Osgood	Raymond Herbert West
Sarah M. Paganussi	Hazel Westgate
Ralph E. Peterson	Marie J. White
Charles W. Phelps	Rodney E. Whittemore
Clarence Hooper Phelps	Bradford C. Wier
Arthur Gordon Pratt	Virginia Rosamond Wilkins
Evelyn Elizabeth Pratt	Isabel L. Winkley
Isabel L. Prescott	Lillian Mae Wise
Charles Raymond Reed	W. Atherton Witham
Doris D. Robinson	Alice R. Wood
Bethel Elizabeth Rockwell	Rose Dorothea Wood
Walter William Rose	Hazel M. Wythe
Tedford Harry Rourke	Evelyn W. Young
Charles Royal	Fred H. Zimmerman
Henry Preston Royal	

Table 27. — VOCATIONAL SCHOOL GRADUATES.

Vocational School for Boys

W. Bernard Brown
Eugene J. Cappuccio
Robert W. Cochran
Fred J. Coffey
Harold Dugmore
Russell Percy Foster
Bernard J. Hanley
Charles Kerr
Walter S. Lufkin

Charles C. McAlpine
Leo Thomas Murray
John W. Reynolds
Edward Solomon
Robert Joseph Spadafora
Fred Everett Starrett
Ralph L. Taylor
James Duncan Weir, Jr.
Harold E. Willey

Vocational School for Girls

Alice Ayer
Hazel E. Clark
Ethel Mae Longmire
Ruth M. Murray

Gladys Bertha Seales
Hazel B. Steele
Barbara Truelson
Alice Wahlstrom

Table 28. — Organization of School Board, 1921.

School Committee.

HERBERT CHOLERTON	Chairman
WALTER I. CHAPMAN	Vice-Chairman

Members.

EX-OFFICIIS.

CHARLES W. ELDRIDGE, Mayor,	47 Highland road.
RICHARD L. RICE, President Board of Aldermen,	296½ Broadway

WARD ONE.

FRANCIS J. FITZPATRICK,	76 Broadway
WILLIAM T. MCCARTHY,	38 Pearl street.

WARD TWO.

DANIEL H. BRADLEY,	19 Concord avenue.
CHRISTOPHER J. MULDOON,	88 Concord avenue.

WARD THREE.

CHARLES W. BOYER,	66 Avon street.
OSCAR W. CODDING,	59 Vinal avenue.

WARD FOUR.

FRANK M. HAWES,	257 School street.
EDWARD I. TRIPP,	21 Wigglesworth street.

WARD FIVE.

HARRY M. STOODLEY,	283 Highland avenue.
MISS MINNIE S. TURNER,	64 Hudson street.

WARD SIX.

WALTER I. CHAPMAN,	18-A Central street.
WILLIAM M. MORRISON,	97 Rogers avenue.

WARD SEVEN.

HERBERT CHOLERTON,	94 College avenue.
PAUL O. CURTIS,	41 Mason street.

Superintendent of Schools

CHARLES S. CLARK.

Office: City Hall Annex, Highland avenue.

Residence: 75 Munroe street.

The Superintendent's office will be open on school days from 8 to 5; Saturdays, 8 to 10. His office hour is 4 o'clock on school days, and 8:30 on Saturdays.

Superintendent's office force:—

Mary A. Clark, 42 Highland avenue.

Mildred A. Merrill, 26 Cambria street.

H. Madeline Kodad, 104 Sharon street, West Medford.

Marion E. Marshall, 30 Gilman street.

Board Meetings.

January 31.	April 25.	September 26.	December 23.
February 28.	May 30.	October 31.	December 30.
March 28.	June 27.	November 28.	
		8:15 o'clock.	

**Table 28. — Organization of School Board, 1921. — Concluded.
Standing Committees.**

NOTE.—The member first named is chairman.

District I. — Fitzpatrick, McCarthy, Muldoon.

PRESCOTT, HANSCOM, BENNETT.

District II. — Bradley, Muldoon, Coddling.

KNAPP, PERRY, BAXTER.

District III. — Boyer, Coddling, Fitzpatrick.

POPE, CUMMINGS.

District IV. — Tripp, Hawes, Miss Turner.

EDGERLY, GLINES.

District V. — Miss Turner, Stoodley, Hawes.

FORSTER, BINGHAM.

District VI. — Chapman, Morrison, Stoodley.

CARR, MORSE, PROCTOR, DURELL, BURNS, BROWN.

District VII. — Curtis, Cholerton, Morrison.

HIGHLAND, CUTLER, LINCOLN, LOWE.

High School. — Bradley, Hawes, Fitzpatrick, Coddling, Stoodley, Morrison, Cholerton.

Finance. — Stoodley, Coddling, Bradley, McCarthy, Tripp, Chapman, Cholerton, Eldridge, Rice.

Text-Books and Courses of Study. — Muldoon, Chapman, McCarthy, Boyer, Hawes, Turner, Curtis.

Industrial Education. — Tripp, Boyer, Fitzpatrick, Muldoon, Miss Turner, Morrison, Cholerton.

School Accommodations. — Coddling, Curtis, Fitzpatrick, Bradley, Tripp, Stoodley, Morrison, Eldridge, Rice.

Teachers. — Cholerton, Miss Turner, Muldoon, Coddling, Chapman.

Health, Physical Training and Athletics. — Morrison, McCarthy, Muldoon, Boyer, Tripp, Stoodley, Curtis.

Rules and Regulations. — Hawes, Curtis, McCarthy.

TABLE 29.—TEACHERS IN SERVICE, JANUARY, 1921.

Name and Residence		Salary.	Began Service.
HIGH SCHOOL.			
Central Hill.			
John A. Avery, Head Master, 22 Dartmouth Street		\$4,100	1895
Everett W. Tuttle, Vice-Head Master, 62 Highland Avenue		2,900	1895
Frank H. Wilkins, Master, 6 Highland Avenue		2,700	1906
John L. Hayward, Master, 242 School Street		2,500	1913
Harry F. Sears, Master, 44 Orris Street, Melrose Highlands		2,700	1901
William W. Obear, Master, 86 Belmont Street		2,700	1906
George M. Hosmer, Sub-Master, 13 Arlington Street		2,400	1901
Laurence A. Sprague, Sub-Master, 17 Perkins St., W. Newton		2,300	1906
John M. Jaynes, Sub-Master, 89 Oxford Street		2,300	1901
Arthur N. Small, Sub-Master, 81 Avon Street		2,300	1916
Fred W. Carrier, Sub-Master, 84 Walnut Street, Winchester		2,200	1915
Wallace S. Hall, 37 Perkins Street, West Newton		2,100	1919
Irving P. Colman, Sub-Master, Greenbush		1,900	1915
Stephen H. Mahoney, Sub-Master, 10 Oxford Street		2,300	1914
Albert O. Plantinga, 83 Park Street, Melrose		2,100	1918
George E. Pearson, Sub-Master, 325 Highland Avenue		2,200	1914
George S. McLaughlin, Teacher-coach, 85 Orchard Street		2,100	1919
Forrest S. Miller, Sub-Master, 8 Hudson Street		1,900	1920
L. Thomas DeCelles, 46 Ware Street		1,800	1919
A. Marion Merrill, Sub-Master, 2 Madison Street		2,000	1895
*Helen L. Follansbee, Sub-Master, 40 Vinal Avenue		2,000	1900
Frances W. Kaan, Assistant, 133 Central Street		1,750	1882
Mrs. Lena Gilbert, Assistant, 56 Meacham Road		1,700	1892
Harriet E. Tuell, Assistant, 40 Vinal Avenue		1,900	1899
Elizabeth Campbell, Assistant, 39 Greenville Street		1,900	1902
A. Laura Batt, Assistant, 2 Madison Street		1,900	1895
M. Helen Teele, Assistant, 11 Jason Street, Arlington		1,900	1895
Clara A. Johnson, Assistant, 177 Central Street		1,750	1897
Blanche S. Bradford, Assistant, 163 Summer Street		1,700	1903
Grace E. W. Sprague, Assistant, 888 Mass. Avenue, Cambridge		1,700	1908
Mrs. Lucy I. Topliff, Assistant, 69 Cypress Street, Brookline		1,750	1914
Eudora Morey, Assistant, 121 St. Stephen Street, Boston		1,800	1874
Ella D. Gray, Assistant, 147 Walnut Street		1,600	1901
Grace Gatchell, Assistant, 48 Vinal Avenue		1,650	1906
A. Marguerite Browne, Assistant, 27 Everett Street, Cambridge		1,750	1908
Edith L. Hurd, Assistant, 125 Central Street		1,650	1910
Esther Parmenter, Assistant, 16 Mystic Lake Drive, Arlington		1,600	1911
Annie C. Woodward, Assistant, 2 Madison Street		1,750	1906
Alice A. Todd, Assistant, 82 Munroe Street		1,600	1913
Ella W. Bowker, Assistant, 2 Hillside Avenue		1,650	1911
Florence L. McAllister, Assistant, 23 Wallace Street		1,600	1913
Laura R. Cunningham, Assistant, 62 Highland Avenue		1,600	1914
Ruth A. Davis, Assistant, 44 Benton Road		1,600	1914

* Leave of absence.

TABLE 29. — Teachers in Service January, 1921. — Continued.

Name and Residence.	Salary.	Began Service.
Julia A. Haley, Assistant, 88 Prospect Street	\$1,500	1913
Mary C. Smith, Assistant, 117 Prospect Street	1,600	1916
Gladys L. Swallow, Assistant, 15 Pleasant Avenue	1,500	1916
Alfreda Veazie, Assistant, 193 Linden Street, Everett	1,550	1916
Mrs. Phebe E. Mathews, Assistant, 159 Morrison Avenue	1,600	1916
B. Phoebe Abbott, Assistant, 67 Perrin Street, Roxbury	1,400	1916
Ruth E. Low, Assistant, 58 Central Street	1,600	1913
Irene C. Ritchie, Assistant, 15 Willoughby Street	1,600	1912
Margaret E. Ford, 83 Brattle Street, Cambridge	1,550	1918
Ella W. Burnham, 40 Vinal Avenue	1,550	1919
Mrs. Cornelia D. Pratt, 112-A Glenwood Road	1,500	1918
Bernice O. Newborg, 12 Hale Avenue, Medford	1,400	1918
Louise M. Saunders, 1 Waterhouse Street, Cambridge	1,550	1919
Gertrude W. Chaffin, 4 Copeland Terrace, Malden	1,500	1916
Mrs. Ruth L. Strand, Assistant, Central Ave., Needham Hghts.	1,450	1919
Ruth T. Merritt, Assistant, 102 Gainsboro Street, Boston	1,400	1919
Doris B. Cresto, Assistant, 52 Rush Street	1,100	1919
Elizabeth M. Welch, Asst., 3 Washington Av., Arlington Heights	1,500	1919
Harriet M. Bell, Assistant, 42 Orchard Street, Cambridge	1,650	1904
Dorothy E. Harvey, 204 Hemenway Street, Boston	1,400	1920
Margery Moore, 17 Elm Street, Charlestown	1,300	1920
Gladys S. Jennison, 40 Vinal Avenue	1,700	1920
Matilda C. Wright, Matron, 17 Gibbens Street	1,000	1919
*Edythe L. Miller, Librarian, 10 Sycamore Street	650	1919
Mabell M. Ham, Clerk, 41 Boston Street	1,400	1906
*Wesley A. Maynard, 18 Grand View Avenue	840	1918

*Part-time.

EASTERN JUNIOR HIGH SCHOOL.

Pearl Street.

Samuel A. Johnson, Master, 5 Gardner Terrace, Allston	\$3,100	1916
Francis J. Mahoney, Vice-Principal, 16 Parker Street	2,200	1919
Walter W. Newcombe, Sub-Master, 138 Sycamore Street	1,900	1917
Elizabeth M. Warren, 29 Summit Avenue	1,575	1897
Sarah H. Christie, 78 Sycamore Street	1,500	1914
Edyth M. Grimshaw, 316 Hyde Park Avenue, Jamaica Plain	1,500	1909
Pertie I. Gray, 228 Broadway	1,500	1917
Ida M. Record, 104 Hemenway Street, Boston	1,500	1899
Edith L. Laycock, 104 Hemenway Street, Boston	1,500	1913
Elizabeth J. Mooney, 41 Vinal Avenue	1,500	1904
Catherine L. Heagney, 32 Sewall Street	1,500	1912
Mary A. Hickey, 41 Sever Street, Charlestown	1,350	1918
Elma Isaac, 32 Richardson Street, Brighton	1,300	1918
Velma B. Strout, 36 Francesca Avenue	1,500	1918
Theresa Morrison, 174 Broadway	1,500	1912
Hazel W. Ruggles, 20 Hawthorne Street, Roxbury	1,450	1918
Helen B. Ryan, 35 Columbus Avenue	1,400	1918
Alice M. McNally, 50 Church Street, Watertown	1,350	1917
Mrs. Constance H. Scherer, 25 Falmouth Street, Belmont	1,500	1917
Kathinka Fessman, 1126 Boylston Street, Boston	1,650	1912
Olive E. Whittier, 78 Sycamore Street	1,500	1918
Mrs. Amelia M. Gray, 150 Riverside Avenue, Medford	1,200	1920

TABLE 29. — Teachers in Service January, 1921. — Continued.

Name and Residence		Salary.	Began Service.
SOUTHERN JUNIOR HIGH SCHOOL.			
Vinal Avenue.			
George M. Wadsworth, Master, Whitman		\$5,100	1891
Raymond E. Shepherd, Vice-Principal, 16 Grand View Avenue		2,200	1919
Arthur E. Gordon, Sub-Master, 116 School Street		2,000	1918
Melvin T. Carver, Sub-Master, 6 Loring Road, Winthrop		1,900	1917
Alice L. Davis, 40 Vinal Avenue		1,650	1895
Clara B. Sackett, 106 Summer Street		1,500	1891
Mrs. Blanche G. North, 25 Columbus Avenue		1,500	1893
Mrs. Gertrude W. Leighton, 31 Vinal Avenue		1,500	1895
Grace T. Merritt, 10 Charnwood Road		1,500	1897
Marie T. Smith-Brandt, 64 Vinal Avenue		1,500	1898
Lilla E. Mann, 33 Walnut Street		1,500	1902
Mrs. Mary B. Soule, 39 Walnut Street		1,500	1902
Leila L. Rand, 43 Norfolk Road, Arlington		1,500	1906
Rena S. Hezelton, 23 Preston Road		1,500	1909
Mrs. N. Theresa Hennessey, 9 Centre Street, Woburn		1,500	1909
Nona E. Blackwell, 45 Ibbetson Street		1,500	1906
Edith L. French, 52 Prescott Street		1,500	1912
Emma J. Kennedy, 15 Pleasant Avenue		1,500	1912
Maude M. Cunningham, 60 Central Street		1,500	1913
Carrie M. Frost, 83 Browne Street, Brookline		1,500	1920
Charlotte A. Holmes, 24 Cambria Street		1,500	1899
Ada G. Macdonald, 43 Babcock Street, Brookline		1,500	1914
Anna J. Coll, 65 Newton Street		1,400	1916
Anna E. McCully, 12 Francis Street		1,400	1916
Mrs. E. Marie Kelley, 69 Chadwick Street, Bradford		1,450	1918
F. Antoinette Pratt, 31 Vinal Avenue		1,450	1918
Olive M. Brownell, 62 Simpson Avenue		1,450	1919
Edith M. Joel, 92 Perkins Street		1,400	1920

NORTHERN JUNIOR HIGH SCHOOL.

Sycamore Street and Evergreen Avenue.

Frank W. Seabury, Master, 18 Winslow Avenue	\$3,100	1911
Joseph S. Hawthorne, Vice Principal, 233 School Street	2,200	1915
Arthur J. Marchant, Sub-Master, 99 Glenwood Road	2,000	1914
Walter P. Sweet, 4 Teele Avenue	1,900	1919
Mary I. Bradish, 112 Magoun Avenue, Medford	1,500	1899
Emma G. Blanchard, 146 Massachusetts Avenue, Boston	1,600	1902
Mrs. Mina P. Bickford, 36 Emerson Street, Medford	1,500	1903
Mary F. Mead, 52 Pearson Road	1,500	1905
M. Edna Merrill, 228 Broadway	1,500	1909
Anna R. Walsh, 27 Avon Street	1,450	1914
May A. Daly, 52 Adams Street	1,550	1915
Dorothy A. Chapin, 11 Mystic Street	1,450	1917
Ruth C. Harrington, 3 Moulton Avenue, Stoneham	1,450	1918
Mary C. Fox, 28 Linden Street	1,300	1918
Florence R. Gallagher, 16 Otis Street, Medford	1,350	1918
May B. Thompson, 120 Peterboro Street, Boston	1,500	1918
Minnie A. Holden, 6 Sanborn Avenue	1,500	1906
Maud Rose, 53 Albion Street	1,500	1919
Alice M. Patterson, 108 Glenwood Road	1,350	1919
Mrs. Ruth Hawkins, 1673 Cambridge Street, Cambridge	1,450	1919
Mrs. Gladys M. Sheldon, 55 Liberty Street, Everett	1,300	1919
Annie G. Merrill, 33 Stuart Street, Everett	1,350	1919
Marie Clifford, 1648 Mass. Avenue, Cambridge	1,500	1907
Mary Donoghue, 80 Porter Road, Cambridge	1,500	1911
Grace M. Driscoll, 25 Arthur Street	1,000	1920

TABLE 29. — Teachers in Service January, 1921. — Continued.

WESTERN JUNIOR HIGH SCHOOL.		Salary.	Began Serv- ice.
Holland Street.			
Name and Residence.			
Arthur L. Doe, Master, 27 Spruce Street, Malden		\$3,100	1896
James S. Thistle, Vice-Principal, 26 Packard Avenue		2,200	1917
John J. McLaughlin, Sub-Master, 84 Inman Street, Cambridge		2,000	1916
Ralph E. Farnsworth, Sub-Master, 26 Glenwood Ave., Camb.		1,900	1918
Charles M. Dunbar, Sub-Master, 34 Avon Street		1,700	1919
Edith W. Emerson, 51 Avon Street		1,650	1896
Sarah E. Pray, 58 Liberty Avenue		1,500	1877
Clara B. Parkhurst, 146 Highland Avenue		1,500	1889
Flora A. Burgess, 3 Crescent Hill Avenue, Arlington		1,500	1894
Alice S. Hall, 51 Avon Street		1,500	1895
Edith F. Hersey, 287 Medford Street		1,500	1899
Annie G. Smith, 59 Maple Street, Malden		1,500	1901
Mary L. Bryant, 41 Mason Street		1,500	1903
Mrs. Genieve R. Barnes, 80 Porter Road, Cambridge		1,500	1905
Florence M. Hopkins, 14 Lowden Avenue		1,500	1907
Elsie M. Ross, 120 Peterboro Street, Boston		1,500	1908
Isabelle M. Brunton, 33 Walnut Street		1,500	1910
*Katherine A. Breen, 7 Cambria Street		1,500	1912
L. Alice Grady, 19 Billings Avenue, Medford		1,500	1912
Elizabeth R. Henderson, 12 Curtis Avenue		1,500	1912
Marion F. Orne, 43 Fairmount Avenue		1,500	1912
Helen I. Stearns, 106 College Avenue		1,500	1916
Mrs. Mae W. Conant, 68 Wallace Street		1,500	1917
Marcella M. Garrick, 295 Lowell St.		1,300	1917
Blanche Preston, 84 Packard Ave.		1,500	1917
Miriam E. Priest, 6 Hudson Street		1,450	1917
Grace M. Sanders, 131 Main St., Malden		1,350	1917
Geneva C. Tobey, 43 Chelsea St., Everett		1,350	1917
Mabel C. Whitaker, 75 Walnut St.		1,500	1917
Miriam W. Hatch, 65 Walker Street, Cambridge		1,400	1919
Sophia C. Mague, 1766 Washington Street, Auburndale		1,500	1917
Jessie M. Howard, 104 Hemenway Street, Boston		1,200	1919
*Hazel M. Yaegar, 409 Van Buren Street, Litchfield, Ill.		1,550	1919
Helen A. Moran, 483 Medford Street		1,300	1919
Emma M. Damon, 89 Central Street		1,500	1908
Helen M. Pulsifer, 29 Hall Avenue		1,500	1920
Catherine E. Giles, 5 Bradley Avenue, Wellington		1,300	1918
Mrs. Vernie T. Neily, 96 Heath Street		1,500	1916
Mrs. Augusta H. Bergin, 652 Huntington Avenue, Boston		1,400	1920
* Leave of absence.			

TABLE 29. — Teachers in Service January, 1921. — Continued.

Name and Residence		Salary	Began Service.
VOCATIONAL SCHOOL FOR BOYS (Day).			
Davis Building, Tufts Street.			
Harry L. Jones, Principal, 137 Powder House Blvd.		\$3,300	1896
Nehemiah E. Gillespie, 28 Worcester Sq., Boston		2,100	1911
Charles A. Kirkpatrick, 27 Sewall Street		2,000	1913
H. Ralph Aubin, 6 Oxford Street		2,100	1917
Roy R. King, 18 Landers Street		1,900	1918
Phillip J. Heffernan, 356-A Broadway		1,700	1918
Benjamin C. Bowman, 102 Walnut Street		1,500	1919
Edward A. Mason, 63 Tonawanda St., Dorchester		1,900	1920
Percy A. Brigham, 22 Madison Street		2,100	1920
Mrs. Alice A. Hathaway, Clerk, 27 Pearson Road			
		\$16.00 per week	1920
INDEPENDENT HOUSEHOLD ARTS SCHOOL.			
High School Building.			
Mary Henleigh Brown, Director, 162 Highland Ave.		\$2,200	1911
CONTINUATION SCHOOL.			
High School Building.			
Everett W. Ireland, Principal, 57 Packard Avenue		\$2,500	1920
Lawrence E. Landahl, 99 Summer Street		1,800	1920
Kells S. Boland, 1200 Mass. Avenue, Cambridge		1,500	1920
Estelle Crowe, 55 Cedar Street		1,000	1920
(WILLIAM H.) PRESCOTT SCHOOL			
Grade.	Pearl and Myrtle Streets.		
	Samuel A. Johnson, Master, 5 Gardner Ter., Allston	.....	1893
4.	Clara Taylor, 36 Flint Street	\$1,500	1871
2.	Elizabeth L. Marvin, 17 Summit Street	1,500	1898
2.	Louise E. Pratt, 11 Prospect Hill Avenue	1,500	1889
2.	Mrs. Grace E. Allen, 271 Summer Street	1,000	1919
1.	Jeannette M. Hannabell, 166 Highland Avenue	1,500	1917
1.	Dorothea Shay, 68 Mt. Pleasant Street	1,000	1920
SANFORD HANSCOM SCHOOL.			
Webster and Rush Streets.			
	Florence A. Chaney, Master, 49 Boston Street	.....	1919
4.	Mrs. Agness M. Travis, 100 Park Ave., Winthrop	\$1,650	1908
4.	Maude A. Nichols, 166 Highland Avenue	1,500	1906
3.	Jennie M. Twiss, 67 Berkeley Street	1,500	1903
3.	Frances E. Robinson, 88 Charles Street, Boston	1,500	1908
3.	Mrs. Nellie W. McPheters, 163 Summer Street	1,500	1914
2.	Martha L. Littlefield, 163 Summer Street	1,500	1897
2.	Ethel H. Werner, 59 Cedar Street	1,100	1919
1.	Florence M. Shaw, 58 Central Street	1,500	1909
1.	Marion A. Viets, 122 Dale Street, Waltham	1,500	1912
1.	Alice M. Saben, 11 Prospect Hill Avenue	1,500	1903
Kind'n.	Elizabeth J. Baker, 33 West Cedar Street, Boston	1,400	1907
Asst.	Gertrude Prichard, 5 Webster Street	1,000	1918

TABLE 29. — Teachers in Service January, 1921. — Continued.

Name and Residence.			
CLARK BENNETT SCHOOL.			
Grade	Poplar and Maple Streets.	Salary.	Began Serv- ice.
	John S. Emerson, Master, 3 Preston Road	\$3,000	1894
5.	Kate B. Gifford, 347 Mass. Avenue, Lexington	1,650	1902
4.	Eleanor W. Nolan, 81 Benton Road	1,500	1909
4, 3.	Eliza I. Patterson, 14 Lincoln Avenue	1,350	1919
3.	Mrs. Nettie L. Fay, 15 Pleasant Avenue	1,500	1901
*3, 2.	Mrs. Minnie P. Cunningham, 77 Walnut Street	1,500	1891
2.	Isadore E. Taylor, 36 Flint Street	1,500	1883
1.	Mrs. Amy F. Woodbury, 183 College Avenue	1,500	1917
1.	Alice M. Hayes, 81 Benton Road	1,500	1913
1.	Mrs. Cora B. Gowen, 87 St. Stephen Street, Boston	1,500	1906
Kind'n.	Helen E. Harrington, 1675 Mass. Ave., Cambridge	1,400	1912
Asst.	M. Regina Desmond, 3 Oak Street, Charlestown	1,050	1918
English.	Mrs. Lillias T. Lawton, 58 E. Elm Ave., Wollaston	1,500	1913
* Leave of	Absence.		

GEORGE L. BAXTER SCHOOL.

Bolton Street.

	Francis A. Ryan, Master, 99 Raymond Avenue	.....	1919
5.	Mary G. Blackwell, Principal, 45 Ibbetson Street	\$1,600	1900
4.	Etta R. Holden, 6 Sanborn Avenue	1,500	1908
3.	Margaret M. Breen, 461 Somerville Avenue	1,500	1916
2.	Sue A. Fitzpatrick, 451-a Somerville Avenue	1,500	1912
1.	Maria D. McLeod, 78 Larchwood Drive, Cambridge	1,500	1906
Kind'n.	Eleanor A. Connor, 86 Belmont Street	1,400	1903
Asst.	Martha W. Delay, 48 Beacon Street	1,250	1911

OREN S. KNAPP SCHOOL

Concord Avenue.

	Francis A. Ryan, Master, 99 Raymond Avenue	\$2,900	1913
6.	Mrs. Clara B. Donlon, Ayer	1,650	1914
6.	Winifred I. Macdonald, 43 Babcock Street, Brookline	1,500	1917
6.	Mary T. McCarthy, 246 School Street	1,300	1919
5.	Ellen C. Moynihan, 67 Avon Street	1,500	1919
4.	Eleanor M. Lundgren, 50 Harrison Street	1,350	1919
3.	Agnes C. Riley, 451 Somerville Avenue	1,350	1918
2.	Alice A. Tassinari, 94 Beacon Street	1,300	1919
1.	M. Edith Callahan, Woburn	1,500	1911
1.	Mrs. Evelyn P. Hansen, 143 Elm Street	900	1920

ALBION A. PERRY SCHOOL.

Washington Street, near Dane Street.

	Francis A. Ryan, Master, 99 Raymond Avenue	.....	1919
6.	Catherine E. Sweeney, Principal, 633 Broadway	\$1,600	1901
5.	Mary A. Mullin, Canton	1,500	1910
4.	Irene Vincent, 47 Vinal Avenue	1,500	1903
3.	L. Gertrude Allen, 75 Ossipee Road	1,500	1884
2.	Mrs. Sarah E. Murphy, 120 Rogers Avenue	1,500	1906
1.	Grace R. O'Neil, 347 Washington Street	1,500	1913

TABLE 29. — Teachers in Service January, 1921. — Continued.

Name and Residence.		Salary.	Began Service.
CHARLES G. POPE SCHOOL.			
Washington and Boston Streets.			
	Florence A. Chaney, Master, 49 Boston Street	\$2,600	1892
6.	Alice I. Norcross, 90 Russell Avenue, Watertown	1,650	1885
6.	Harriet M. Clark, 10 Vernon Street, West Medford	1,500	1893
6.	M. Abbie Tarbett, 11 Washington Street, Stoneham	1,500	1906
5.	Marie Higgins, 55 School Street	1,500	1919
5.	C. Edith Taylor, 36 Flint Street	1,300	1917
4.	Lizzie W. Parkhurst, 146 Highland Avenue	1,500	1885
4.	Annie G. Sheridan, 57 Stanley Avenue, Medford	1,500	1886
3.	Eleanor E. Waldron, 135 Powder House Boulevard	1,000	1919
3, 2.	M. Katherine Davis, 243-A Highland Avenue	1,500	1904
2.	Florence E. Locke, 25 Highland Avenue, Cambridge	1,500	1899
1.	Mary J. Dewire, 384 Washington Street	1,450	1913
1.	Alice B. Frye, 12 Champa Avenue, Malden	1,500	1904
(JOHN A.) CUMMINGS SCHOOL.			
School Street, near Highland Avenue.			
	Charles G. Ham, Master, Watertown	.....	1919
4.	Fannie L. Gwynne, Principal, 65 School Street	\$1,600	1886
3.	Katherine M. Fox, 150 Franklin Street, Stoneham	1,500	1896
2.	Elizabeth L. Hersey, 96 Oxford Street	1,500	1896
1.	Mrs. Stella M. Hadley, 11 Greene Street	1,500	1914
(JOHN G.) EDGERLY SCHOOL.			
Grade.	Cross and Bonair Streets.		
	Charles E. Brainard, Master, 82 Munroe Street	\$3,000	1889
6.	Edith M. Snell, 4 Vine Street, Melrose	1,650	1900
6.	Annie L. Dimpsey, Hotel Woodbridge	1,500	1891
6.	Mary E. Richardson, 26 Oxford Street	1,500	1893
6.	Isabelle M. Gray, 25 Webster Street	1,500	1897
5.	Mabel C. Mansfield, 26 Oxford Street	1,500	1893
5.	Berta M. Burnett, 1619 Mass. Ave., Cambridge	1,500	1915
5.	G. Hortense Pentecost, 157 Walnut Street	1,500	1905
5.	Myrtle M. Irwin, 41 Putnam Street	1,350	1916
4.	Mrs. Louise S. Weare, 63 Hancock Street, Boston	1,500	1896
3.	Lillian Nealley, 109 Glen Street	1,500	1882
2.	Alice W. Cunningham, 62 Highland Avenue	1,500	1901
1.	Martha M. Power, 37 Gleason St., West Medford	1,500	1890
Asst.	Edna F. Scriven, 108 Summer Street	600	1920
JACOB T. GLINES SCHOOL.			
Jaques Street, near Grant Street.			
	Charles E. Brainard, Master, 82 Munroe Street	.....	1919
6.	Margaret A. Orr, 146 Massachusetts Ave., Boston	\$1,650	1890
6.	Harriet F. Ward, Weymouth	1,500	1895
5.	Alice C. Blodgett, 55 Tennyson Street	1,450	1917
5.	Clara D. Eddy, 49 Tennyson Street	1,500	1900
5, 4.	Editha A. Sharkey, 7 Wesley Park	1,300	1919
4.	Laura M. Flynn, 57 Franklin Street	1,000	1920
4.	Mrs. Carrie Armitage, 57 Madison Street	1,500	1899
3.	Florence E. Baxter, 42 Highland Avenue	1,500	1891
3.	Cora J. Demond, 146 Mass. Avenue, Boston	1,500	1900
2.	Elizabeth C. Sullivan, 74 Ossipee Road	1,000	1920
2.	Florence W. Schroeder, 268 Summer Street	1,400	1915
1.	Mary L. Gallagher, 81 Benton Road	1,450	1913
1.	Isabel J. Tift, 109 Highland Avenue	1,500	1892
Asst.	Marguerite Driscoll, 396 Medford Street	900	1919
Kind'n.	Mrs. Etta D. Ellsworth, Trinity Court, Boston	1,400	1897
Asst.	Ida M. Kane, 28 Fellsway West	1,250	1905

TABLE 29. — Teachers in Service January, 1921. — Continued.

Name and Residence.		Salary.	Began Serv- ice.
Grade.			
(CHARLES) FORSTER SCHOOL.			
Sycamore Street and Evergreen Avenue.			
	Frank W. Seabury, Master, 18 Winslow Avenue	.....	1919
6, 5.	Elizabeth F. Clement, 29 Kidder Avenue	\$1,500	1884
5, 4.	Annie S. Gage, 32 Marshall Street	1,500	1881
3, 2.	Carrie T. Lincoln, 65 Ashland Street, Medford	1,500	1893
2, 1.	Grace Shorey, 23 Forster Street	1,500	1892
(NORMAN W.) BINGHAM SCHOOL.			
Lowell Street, near Vernon Street.			
	Harry F. Hathaway, Master, 29 Albion Street	\$3,000	1890
6.	Elizabeth J. O'Neil, 82 Benton Road	1,650	1894
6, 5.	Jane Batson, 68 Cedar Street, Malden	1,500	1900
6.	Helen M. Farr, 4 Oak Street, Belmont	1,400	1915
5.	Elizabeth S. Brown, 18 Forster Street	1,500	1897
5.	Clara L. Griffiths, 39 Ames Street	1,500	1902
4.	Anna R. Canfield, 205 Cedar Street	1,400	1914
4.	Alice A. Griffiths, 39 Ames Street	1,400	1920
4, 3.	Barbara E. Drummey, 43 Short Street, Marlboro	1,400	1918
3.	Lillian F. Commins, 24 Hanson Street	1,400	1914
3.	Lynda V. Merrill, 26 Brastow Avenue	1,500	1912
2.	G. Marion Lovering, 27 Flint Street	1,450	1913
2.	Priscilla A. Merritt, 96 Oxford Street	1,500	1885
2, 1.	M. Gertrude McCarthy, 36 Brastow Avenue	1,300	1917
1.	Mabel E. Mansir, 77 Albion Street	1,500	1894
1.	Ethel Gross, 8 Fosket Street	1,300	1917
MARTIN W. CARR SCHOOL.			
Atherton Street.			
	Chas. G. Ham, Master, 20 Washburn St., Watertown	\$3,000	1898
6.	Eva S. Bent, 6 Steeves Circle	1,650	1915
6.	Susie L. Luce, 21 Francesca Avenue	1,500	1891
6.	Mrs. Hazel F. Quinn, 206 Washington St., E. Woburn	1,500	1915
6, 5.	Mrs. Helen M. Mason, 19 Grand View Avenue	1,300	1920
5.	Lillian T. Haskell, 41 Putnam Street	1,500	1913
5.	Elizabeth S. Foster, 53 Laurel Street	1,500	1895
5.	Dorothy Lundgren, 50 Harrison Street	1,300	1915
4.	Alice M. Cumming, 117 School Street	1,300	1917
4.	Ada C. Tassinari, 94 Beacon Street	1,400	1919
3.	Margaret M. Brennan, 30 School Street	1,300	1917
3.	Bessie I. Berry, 38 Wyllis Avenue, Everett	1,500	1915
2.	Annie B. Russell, 14 Kidder Avenue	1,500	1901
2.	Mary E. Flanley, 9 Avon Street, Wakefield	1,400	1915
1.	Frances E. Welch, 303 Highland Avenue	1,500	1908
1.	Mabel R. Ingham, 62 Central Street	1,350	1912
(ENOCK R.) MORSE SCHOOL.			
Summer and Craigie Streets.			
	Mina J. Wendell, Master, 211-A Summer Street	\$3,000	1882
6.	Mrs. Harriette C. Hamilton, 68 Wallace Street	1,650	1900
5.	Lennie W. Bartlett, 53 Laurel Street	1,500	1893
5.	Blanche E. Thompson, 33 Hudson Street	1,500	1906
4.	Mary A. Whitney, 10 Dow Street	1,500	1916
4, 3.	Eva A. Wilson, 9 Monmouth Street	1,350	1917
3.	Mrs. Agnes C. Rice, 34 Highland Avenue	1,500	1900
2.	Alice C. Ray, 82 Benton Road	1,500	1914
2.	Lena Munroe, 211-A Summer Street	1,500	1913
1.	Helen L. Tuck, 43 Paulina Street	1,500	1912
1.	Louise F. Deady, 84 Bay State Avenue	1,300	1917

TABLE 29. — Teachers in Service January, 1921. — Continued.

Name and Residence.		Salary.	Began Service.
Grade.	Hudson Street.		
GEORGE O. PROCTOR SCHOOL.			
Hudson Street.			
	Harry F. Hathaway, Master, 29 Albion Street	.....	1912
6.	Nora F. Byard, Principal, 27 College Avenue	\$1,650	1884
6, 5.	Alice G. Hosmer, 42 Boston Street	1,500	1906
5, 4.	Ethel F. Morang, 18 Curtis Avenue	1,300	1920
4.	Ella P. McLeod, 163 Summer Street	1,500	1888
3.	Edith L. Hunnewell, 41 Mason Street	1,500	1894
2.	Mary S. Richardson, 347 Boston Avenue, Medford	1,500	1906
1.	Lucia Alger, 163 Summer Street	1,500	1889
GEORGE W. DURELL SCHOOL.			
Beacon and Kent Streets.			
	Charles G. Ham, Master, Watertown	.....	1919
4.	Abigail P. Hazelton, Principal, 14 Billingham Street	\$1,600	1902
3.	Grace E. Packard, 12 Carlisle Street, Roxbury	1,500	1912
2.	Mary Winslow, 23 Hall Street	1,500	1887
1.	Alice M. Dicker, 82 Marion Street, East Boston	1,500	1912
MARK F. BURNS SCHOOL.			
Cherry Street, near Highland Avenue.			
	Mina J. Wendell, Master, 211-A Summer Street	.....	1919
4.	Mrs. Margaret D. Hellyar, 427 Medford Street	\$1,650	1909
4.	Lizzie E. Hill, 121 St. Stephen Street, Boston	1,500	1890
3.	Annie L. Brown, 4 Saginaw Avenue, No. Camb.	1,500	1885
3.	Margaret Beattie, 401 Washington Street	1,400	1914
2.	Mary E. Lacy, 63 Cherry Street	1,500	1890
2.	Ardelle Abbott, 71 Craigie Street	1,500	1896
1.	Alice E. Morang, 18 Curtis Avenue	1,500	1893
1.	Ruth E. Andrews, 2 Medina Building	1,450	1917
BENJAMIN G. BROWN SCHOOL.			
Willow Avenue and Josephine Avenue.			
	Geo. I. Bowden, Master, 92 Monument St., W. Med.	\$3,000	1908
6.	Maude E. Abbott, 9 Summit Avenue	1,600	1918
5.	Mary T. Ford, 32 Central Road	1,500	1911
5.	Annie Sanburn, 11 East Newton St., Boston	1,500	1906
4.	Anna N. Johnson, 33 Everett Avenue	1,500	1912
4.	Martha R. Taylor, 26 Simpson Avenue	1,500	1914
3.	Helen L. Galvin, 1681 Beacon St., Brookline	1,500	1903
2.	Alice M. Dorman, 159 Morrison Avenue	1,500	1903
2.	Mrs. Grace H. Bliss, 33 Whitfield Road	1,500	1900
1.	Mrs. Bessie T. MacCutcheon, 72 Mt. Vernon Street	1,400	1915
1.	Olivia H. Norcross, Wilmington	1,500	1914
HIGHLAND SCHOOL.			
Highland Avenue and Grove Street.			
	Harlan P. Knight, Master, 22 Hamilton Road	.....	1919
6.	Grace M. Clark, 10 Vernon Street, West Medford	\$1,650	1893
6.	Mary H. Joyce, 42 Orchard Street, Cambridge	1,500	1891
6.	Ethel M. Park, 48 Electric Avenue	1,500	1916
6.	Lillian F. Richardson, 129 Mt. Auburn St., Camb.	1,500	1904
6.	Eva M. Barrows, 71 Hudson Street	1,500	1903
5.	Marion Allen, 74 Collins Street, Danvers	1,500	1911
5.	Catherine A. Burden, 42 Kidder Avenue	1,500	1902
5.	Eva E. Perkins, 16 Buckminster Street, Allston	1,500	1911
5.	Hazel M. Stone, 2 Medina Building	1,350	1919

TABLE 29. — Teachers in Service January, 1921. — Continued.

Name and Residence.

S. NEWTON CUTLER SCHOOL.

Powder House Boulevard, near Raymond Avenue.

Grade.	Name and Residence.	Salary.	Began Service.
	Harlan P. Knight, Master, 22 Hamilton Road	\$3,000	1897
6.	Bernice J. Andrews, 10 Locke Street	1,650	1914
6.	Mrs. Edith M. Thornquist, 49 Curtis Avenue	1,500	1906
6.	Ella H. Bucknam, 1105 Broadway	1,500	1897
5.	Mrs. Mabel T. Totman, 17 Pleasant Avenue	1,500	1893
5.	Bessie J. Baker, 19 Mills Street, Malden	1,500	1905
4.	Mrs. Elva A. Cutler, 36 Powder House Boulevard	1,500	1911
4.	M. Eunice Young, 6 Myrtle Street, Winchester	1,500	1912
5.	Mabel Worcester, 24 Brastow Avenue	1,300	1919
4.	Alice A. Libbey, 20 Chandler Street	1,300	1919
3.	Mrs. Elsie M. Guthrie, 50 Bromfield Road	1,450	1919
3.	Mrs. Katie L. Harmon, 1092 Broadway	1,400	1916
2.	E. Mildred Milner, 12 Medina Building	1,300	1920
2.	Almena J. Mansir, 77 Albion Street	1,500	1899
2.	Mrs. Nettie M. Humiston, 43 Fairmount Avenue	1,300	1920
1.	Annie H. Hall, 1092 Broadway	1,500	1906
1.	Mary L. McKenna, 294 Lowell Street	1,350	1915
1.	Stella Bucknam, 319 Highland Avenue	1,000	1917

LINCOLN SCHOOL.

Broadway, near Teele Square.

	Harlan P. Knight, Master, 22 Hamilton Road	.....	1914
3.	Eliza H. Lunt, Principal, 50 Curtis Street	\$1,600	1889
4.	Mrs. Lillian M. Wentworth, 248 Highland Avenue	1,500	1911
2.	Olevia M. Woods, 116 Powder House Boulevard	1,500	1908
1.	Hortense F. Small, 91 Electric Avenue	1,500	1912

MARTHA PERRY LOWE SCHOOL.

Morrison Avenue, near Grove Street.

	George I. Bowden, Master, 92 Monument St., W. Med.	.....	1917
4.	May E. Small, Principal, 81 Orchard Street	\$1,650	1900
4.	Stella M. Holland, 7 Francesca Avenue	1,500	1903
3.	Maude C. Valentine, 1098 Broadway	1,500	1901
3.	Mrs. Jane M. Taaffe, 159 Morrison Avenue	1,500	1888
2.	Katherine E. Hourahan, 94 College Avenue	1,500	1892
2.	Clara G. Hegan, 100 School Street	1,500	1897
1.	Martha A. Jencks, 47 Meacham Road	1,500	1898
1.	Octavia A. Stewart, 15 Kenwood Street	1,500	1917

EVENING SCHOOL PRINCIPALS.

Everett W. Tuttle, High	\$7.00
John S. Emerson, Bell	6.00
Charles E. Brainard, Highland	6.00

CADET TEACHERS.

Ruth C. Arrington, 37 Walnut Street	\$600	1920
Eunice S. Higgins, 25 Berkeley Street	600	1920
Ethel F. Rudd, 46-A Franklin Street	600	1920

TABLE 29. — Teachers in Service January, 1921. — Continued.

SUPERVISORS AND SPECIAL TEACHERS.

Music.

12, 7.	James P. McVey, 29 Hammond Street, Cambridge	*\$2,500	1915-
6, 1.	Mrs. Charlotte D. Lawton, 121 St. Stephen St., Boston	1,900	1898-

Drawing.

9, 1.	Clara M. Gale, 21 Willoughby Street	\$1,900	1911
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Sewing.

	Mary H. Brown, Supervisor, 162 Highland Ave.	*\$200	1913-
6, 5.	Mary L. Boyd, 74 Heath Street	1,500	1888
6, 5.	Mrs. Emma J. Ellis, 54 Marshall Street	1,500	1900
‡6, 5.	Lucy Dorr, 124 Summer Street	1,500	1919-

Penmanship.

9, 1.	Ruth L. Whitehouse, 2 Medina Building	\$1,700	1915-
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Manual Training.

	Harry L. Jones, Supervisor, 137 Pow. House Blvd.	‡\$200	1911
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Physical Instruction.

‡12, 1.	Ernst Hermann, 58 Shepard Street, Cambridge	\$1,550	1914
12, 1.	Alma Porter, 43 Ossipee Road	1,400	1918

Atypical.

	Mary A. Holt, 13 Pleasant Avenue	\$1,550	1910-
	Mrs. Bertha M. Morton, 62 Highland Avenue	1,550	1913
	Julia M. Kiordan, 165 Albion Street	1,450	1914

Supervisor School Gardens.

	‡William B. Moore, West Peabody	\$1,050	1919 ^a
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- * Additional to salary as Director of Household Arts Courses.
 † Additional to salary as Principal of Boys' Vocational School.
 ‡ Part time.

TABLE 30. — OFFICERS, ETC., IN SERVICE JANUARY, 1921.

Name and Address.

SUPERINTENDENT AND SECRETARY

Charles S. Clark, 75 Munroe Street	Salary. \$5,000
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CLERKS.

Mary A. Clark, 42 Highland Avenue	\$1,400
Mildred A. Merrill, 26 Cambria Street	1,250
H. Madeline Kodad, 104 Sharon Street, West Medford	1,150
Marion E. Marshall, 30 Gilman Street	\$16.00 per wk.

ATTENDANCE OFFICER.

Benjamin R. Jones, 25 Loring Street	\$1,800
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TABLE 31. — SCHOOL JANITORS, JANUARY, 1921.

School.	Name.	Residence.	Weekly Salary
High School, assistant	Jeremiah M. Brennan	482 Medford St.	\$26.00
High School, assistant	John N. Quirk	202 Somerville Ave.	25.00
High School, assistant	Nicholas J. Lacey	327 Washington St.	30.00
High School, assistant	*Andrew H. Finnegan	77 Concord Ave.	25.00
High School, assistant	Joseph McCormack	206 Washington St.	25.00
High School, assistant	Charles Hoyt	18 Trull St.	30.00
High School, assistant	Thomas G. Pullen	6 Madison St.	25.00
Eastern Junior High	James J. Quirk	216-B Medford St.	27.50
Prescott	John T. Morey	21 Michigan Ave.	28.50
Hanscom	Charles F. Rose	15 Brastow Ave.	26.50
Boys' Vocational	Charles B. Kelley	25 Clark St.	26.00
Bennett	Michael Mullaney	467 Somerville Ave.	28.00
Baxter	Jeremiah Sullivan	60 Newton St.	24.00
Knapp	Maurice T. Mullins	13 Fremont St.	28.50
Perry	Dan'l E. Cunningham	15 Leland St.	24.00
Pope	John J. Kilty	662 Somerville Ave.	28.00
Southern Junior High	William Meskill	53 Partridge Ave.	30.00
Southern Junior High	John C. Kelleher	8 Newman Pl.	26.00
Cummings	Lewis G. Keene	54 Prescott St.	22.00
Edgerly	Charles P. Horton	22 Everett Ave.	28.00
Glines	Roy C. Burckes	20 Jacques St.	29.00
Forster	George W. Coombs	73 Bonair St.	28.00
Northern Junior High	Michael A. Mullin	16 Bowdoin St.	27.50
Bingham	John F. O'Brien	347 Lowell St.	31.00
Carr	John H. Lane	5-A Belmont St.	34.00
Morse	John W. Cremen	69 Oxford St.	28.50
Proctor	James F. Flynn	31 Linden St.	25.50
Durell	Ellsworth C. Lundgren	50 Harrison St.	22.00
Burns	Charles J. Elkins	35 Mansfield St.	25.50
Brown	James J. Cooper	105 Willow Ave.	26.50
Highland	E. Parker Cook	103 Willow Ave.	28.00
Hodgkins	George A. Givan	17 Henry Ave.	29.00
Western Junior High	James T. Eddy	38 Wallace St.	34.00
Cutler	Daniel Campbell	22 Barton St.	28.00
Cutler	Walter F. Burns	23 Avon St.	25.00
Lincoln	Thomas F. O'Day	134 Lowell St.	22.00
Lowe	Frank H. Flagg	22 Clyde St.	25.50

* Leave of absence.

Report of a Special Committee appointed by the School Committee to consider and report upon the Junior High School and Vocational system, submitted to the School Committee on June 11, 1920. This report was accepted by the School Committee and its recommendations were adopted.

To the School Committee:

Your committee has given careful consideration to the communication of the board of aldermen dated May 14, notifying the school committee that it had accepted a report from the committee on public property relative to additional school accommodations, and reporting "that no action is necessary and that it is the opinion of this committee that the present junior high school system and the present system of vocational education be abolished and in its place be substituted a centrally located vocational school, and that the present Western Junior High School be converted for use as a high school."

In reply your committee begs leave to report adversely upon all the recommendations therein contained. In support of its action it submits herewith a report which points out errors in the assumptions of the board of aldermen and states reasons for opposing its conclusions.

Taking up first the recommendation that "the present system of vocational education be abolished and in its place be substituted a centrally located vocational school," your committee calls attention to the fact that the Somerville system of vocational education was established in accordance with the laws of the Commonwealth in 1910 by the joint action of the school committee, the city government, and the Massachusetts State Board of Education. On December 8, 1910, the board of aldermen of the city of Somerville passed the following resolution and it was approved by the mayor on December 9, 1910:

"That the board of aldermen of the city of Somerville hereby authorizes and approves the establishment and maintenance of an independent industrial school for boys and an independent industrial school for girls by the school committee of Somerville."

Vocational education has been conducted since that time in accordance with the laws of the Commonwealth and in partnership with the State department of education. By law this opportunity is open to youths 14 years or more of age. This system is the established system of the State and cannot be changed unless Somerville desires to go contrary to the practice of the other communities. If this should be done the entire expense for such school would have to be borne by the city of

Somerville instead of being borne as now, one-half by the State and one-half by the city.

Nor can manual training and household arts be withdrawn from the course of study of the junior high school inasmuch as by law communities of 20,000 or more inhabitants are required to provide both manual and household arts instruction in the elementary and high schools.

Proceeding now to the main recommendations of the board of aldermen "that no action is necessary and that it is the opinion of this committee that the present junior high school system be abolished," your committee contents itself with presenting several convincing reasons for opposition to these recommendations.

Chief among these reasons is the one of educational policy. The committee is thoroughly convinced that the junior high school system should be maintained because of the educational advantages which it affords the children of the early adolescent age.

The second reason is that the committee is convinced that the cost of the junior high school system as compared with the cost of any substitute therefor is not enough greater, if any greater, to be a consequential factor.

Finally the committee is convinced that the proposed program of additional accommodations is one which provides for the needs of future years in a way consistent with the spirit of the times and with the practice of other progressive communities. Moreover, this program can be carried into effect by units, one unit at a time, rather than all at once, if, for any reason, it is desirable to do so.

This report will consider the junior high school question in relation to the educational advantages which that system provides, in relation to cost of education, and in relation to the building program involved.

For a number of years a discussion of re-organization of the educational system of the country has been carried on by leading educators and by various bodies devoted to the study of education. The purpose of the study has been to define more clearly the objectives of education and to determine in what way those objectives could best be accomplished. During the last ten years the discussion has taken more definite form and direct proposals for action have been advanced. In his report for 1913, page XXIV, the United States Commissioner of Education, among other suggestions, made the following: "The 12 years of elementary and high schools now grouped in the primary and grammar school and four years of high school should be rearranged into six years of elementary and six years

of high school. The high school should be sub-divided into three years junior high and three years senior high school." Some of the reasons given for this change are the following:

"For most children the beginning of adolescence marking the transition from childhood to youth comes at 12 or 13. In most of our schools children make little real progress in the 7th and 8th grades. There has been much complaint that this is a period of marking time. Taking up the 7th and 8th years as part of the high school makes it easy to begin departmental teaching in these grades and to adapt the methods of teaching and discipline to the changing demands of the children."

"We lost much by postponing the study of languages to the later years, when children have grown out of the imitative period of life in which they can learn to speak, read, and write a new language."

"Many more children than now enter the high school at all would remain throughout the entire high school period."

In the Annual Report of the Massachusetts State Board of Education 1914-1915, (page 37) the Commissioner of Education, Dr. David Snedden, in discussing the work in the 7th, 8th and 9th grades says: "The older pupils in our elementary schools should as far as possible be gathered into central schools where departmental and flexible courses can be provided. The creation of the intermediate or junior high school in central locations for all children over 12 years of age is essential to other administrative changes to be expected as educational demands become more exacting and knowledge of how to meet these demands is accumulated."

The plan here outlined and the reasons given have been adopted and approved by various organizations and societies. The National Education Association, the Federal Bureau of Education, State Departments of Public Instruction, the leading universities and recognized educational authorities of the country are all on record as favoring the movement. The 15th Year Book of the National Society for the Study of Education, published in 1917, said: "If a complete canvass were made of all the cities of the United States, it would probably be found that the nation is pretty well committed to the plan of reorganizing its schools on a broad junior high school basis."

The report of the special commission of Education for Massachusetts, appointed under authority of Chapter 88, Resolves of 1918, to investigate educational systems of the Commonwealth, says (on page 38): "The junior high school is a distinct step in advance. It offers to pupils an earlier opportunity to find themselves; to discover their tastes and capacities by extending the range of their school experience. It affords a certain amount of prevocational experience in manual training

and homemaking courses. If well organized and managed, it lessens the number of misfits in the senior high school. It introduces at an earlier stage studies which, while in a sense by nature elementary, are usually deferred to the high school: e. g., foreign languages and algebra. If desirable, it may lessen the time needed for preparation for higher institutions. It increases markedly the advantage of departmental teaching."

It is estimated by competent educational authority that at the present time the number of communities in the United States having established junior high schools is between 800 and 1,000 and that in the near future the plan of six elementary, three junior high school, and three senior high school grades will be adopted generally throughout the country. Over 40 communities in Massachusetts have now established junior high schools, and half as many more are now making plans to establish them or are investigating the subject with that end in view. Nearly all the large cities of the State are included in one or the other of these two lists.

In Somerville in 1914 the school committee authorized the organizing of an intermediate school in the upper grammar grades in the Forster School. Departmental teaching was established and manual training and household arts were provided. A program of studies was adopted which included all of the work of the elementary course, while at the same time it provided an opportunity for the pupil to make selection of an additional study in accordance with his inclinations and aptitudes.

This school had been in successful operation for two years, when in 1916 it became necessary for the school committee to make recommendation to the mayor and the board of aldermen concerning building accommodations. At this time there was complaint about the overcrowding of the high school, and there was overcrowding in the Prescott, Hanscom, Edgerly, Glines, Carr, Morse, Burns, Brown and Hodgkins elementary schools. The whole situation both in relation to the giving of relief from overcrowding and to providing for the future educational policy of the city was considered by the school committee, His Honor the Mayor, and the president of the board of aldermen in meetings held during the early part of 1916. Various organizations and representatives of citizens' associations took part in the consideration.

It was finally decided to adopt the junior high school plan of organization and in September, 1916, a junior high school was established in the Forster School district and one in the Prescott School, where a new nine-room building had just been

completed. In September, 1917, a third junior high school was opened in a new building on Holland street, and in 1918 the fourth was opened in the Bell School, where an addition provided for the purpose was completed in September of that year.

When this plan was adopted it was clearly intended to provide at each center the additional room which then could be foreseen would be needed. The character of this undertaking is well shown by the letter quoted below, which was written by Hon. Z. E. Cliff near the close of his last term as mayor in the city of Somerville.

January 4, 1918.

“Mr. Charles S. Clark,
Superintendent of Schools,
Somerville, Mass.

“Dear Sir: At this time, at the completion of my four years' service as mayor and as a member of the School Committee, I desire to express to your committee my appreciation of your hearty co-operation in all matters considered by us.

“At the beginning of my administration, we were confronted with the high school problem, and I believe that the solution at which we have arrived, made possible by the action of the school committee, board of aldermen and the mayor, is a satisfactory one. The comprehensive plan contemplated four junior high school centers.

“In the eastern district, the new building adjoining the Prescott schoolhouse is now in use; in the northern district, the Forster School annex has been adapted for junior high school purposes; in the western district, the new building on Holland street property has been completed and is in use; in the southern district, a building is now in process of erection on Vinal avenue, adjoining the Bell schoolhouse. It was not considered by us that these buildings would be sufficient to care for all the pupils, but we have built as far as the finances would permit. The comprehensive plan anticipated the construction of future units in each of these districts from time to time, and the buildings are designed with this in mind.

“I earnestly hope that appropriations will be made from year to year and additional units constructed until sufficient accommodations are provided in all these districts.

“My experience in the school committee has convinced me of the wisdom of the charter change which provided for the membership of the president of the board of aldermen and the

mayor, and I believe that this membership enables both of these officers to consider school needs with much greater understanding.

"Though my official connection with the school committee ceases within a few days, I wish to assure you that my personal interest in the schools and your work will continue in the future years.

Very truly yours,

(Signed) Z. E. CLIFF, Mayor."

The plan contemplated, also, the release from school use of certain elementary buildings which had been used approximately a half century. As a consequence of these changes there has been set up an educational organization corresponding to the prevailing opinion of the day. Relief has been given to the high school; relief has been given to a number of elementary schools which were formerly overcrowded; the number of pupils per teacher in the elementary schools has been reduced so that now the average is about 42. For a number of years the opinion of educational authorities has been that no elementary school teacher should have more than 40 pupils. In a bulletin recently issued by the Department of the Interior, Bureau of Education, the number was made as low as 35.

Somerville was one of the first cities in the East to establish junior high schools and during the few years of their operation, school men, including members of the school committees, superintendents of schools, principals of high and elementary schools, and teachers have visited the junior high schools of Somerville for the purpose of studying their organization, course of study, and educational practice. Among these are representatives of the following school systems: Cambridge, Haverhill, Wellesley, Salem, Arlington, Watertown, Revere, Malden, Gloucester, Newton, Boston, Winchester, Lynn, Lowell, Brockton, Wakefield, Melrose, Natick, Medford, Holyoke, Needham, New Bedford, Fall River, Milton, Danvers, Lexington, Springfield, Chelsea, Waltham, Brookline, Beverly, Worcester, Woburn, Hingham, Pepperell, Webster, Ipswich, Everett, Bridgewater, Franklin, Quincy, Chicopee, Swampscott, Marlboro, Hamilton, Gardner, Marblehead, Stoneham, Fitchburg, Keene, N. H., Jefferson, Vt., Englewood, N. J., Waterbury, Conn., East Orange, N. J., Forest City, Ark., Salem, Ind., Manchester, N. H., St. Johnsbury, Vt., Pawtucket, R. I., Rochester, N. H., Augusta, Me., Bethel, Me., Wilton, N. H., St. Paul, Minn., Madison, Wis., New York City, Nashua, N. H., Rockland, Me., Camden, Me., Charleston, W. Va., Baltimore,

Md., Kansas City, Mo., Bellows Falls, Vt., Canaan, Vt., Sendai, Japan, Hartford, Conn., Bristol, R. I., Bangor, Me., Brooklyn, N. Y., Kumamoto, Japan, and others. The interest in our schools shown in this way is continuous. Only within a week seven members of the school committee of Watertown visited one of our junior high schools.

The present outlook for the junior high school movement is shown in this statement recently made by the Commissioner of Education of Massachusetts, Payson Smith: "In my opinion, there is no question of the fundamental soundness of the junior high school idea. I believe the public as well as school officers are coming to see that the elementary schools, including the first five or six grades, ought to be devoted more definitely to giving the children a mastery of what we may call the "tools" of an education. With the beginning of the adolescent period, much larger provision must be made for individual differences in children. The junior high school represents the only economical plan for making this provision. Junior High Schools have been rapidly developing in this State in the past four years and the idea seems to be gaining such rapid acceptance that the general adoption of it in the very near future seems probable."

Practically every survey of a school system conducted in the country by the U. S. Bureau of Education has recommended the establishment of junior high schools as a means of increasing school efficiency.

Following are quotations taken from statements made by well-known educational authorities. These statements appeared in the Somerville Press of May 28, 1920. They constitute a notable contribution to the literature of the junior high school, and The Press is to be congratulated for the civic interest it has shown in collecting them and making them accessible to the public. They were made with specific reference to the Somerville junior high schools.

Clarence D. Kingsley — Agent in charge of high schools for the Mass. State Board of Education and chairman of the Commission on the Reorganization of Secondary Education of the National Education Association.

"I know of no one who has made a careful study of the junior high school who is not convinced that it is highly desirable. It is advocated not by theorists, but by practical school administrators, teachers, and parents. No city to my knowledge which has given the plan a thorough trial has discarded it. It is no longer an experiment. It has demonstrated its value.

"The junior high school has met a long felt need. Heretofore the last two years of the elementary school and the first

year of the four-year high school were the weakest points in our school system. The junior high school is adapted to the needs, interests, and capacities of children 12 to 15 years of age, as neither the elementary nor the senior high school can be. As a result fewer children become discouraged and drop out of school.

"The junior high school helps young people to find out what they can do best so that it will not be necessary to choose blindly the work which they should begin in the senior high school.

"The junior high school should be supported by everyone who wants to see the school system turn out the most effective citizens, because it is possible in the junior high school to develop certain civic qualities that cannot be so effectively developed at any other time in the life of the child."

Dr. John M. Brewer — Director of Bureau of Vocational Guidance, Harvard University.

"More than sixty per cent. of the children who leave school do so because they or their parents do not believe further education worth while. This erroneous opinion is largely due to the rigid program of studies and artificial atmosphere of the old-style 7th and 8th grades. The junior high school has largely changed these evils and it aims to give an education that fits for life. Citizens with civic imagination see the dangers ahead if children are allowed to grow up without knowing about the serious social and economic problems of the future. If the fire department were to be abolished to save money, we should suffer loss at once. A blow at the schools causes a loss which is postponed, perhaps, till long after the term of office of our present city officials has expired, but a loss just as real and dangerous."

Dr. Paul H. Hanus — Professor of Education, Harvard University; for many years a member of Massachusetts State Board of Education.

"To abandon the junior high schools already established in Somerville would be a calamity. Junior high schools are the best means yet developed for adapting the educational opportunities which a school system affords to the needs and abilities of individual pupils, and this adaptation is an indispensable element of efficient schools."

Prof. Henry W. Holmes — Dean of the New School of Education, Harvard University.

"I believe heartily in the general theory of the junior high school, and I have supposed from all I have heard that the Somerville practice in junior high school work is as effective and valuable as any that has been worked out."

Dr. Thomas H. Briggs — Professor of Education, Teachers' College, Columbia University, who has recently finished a survey of junior high schools of the country for the U. S. Bureau of Education.

"Although less than ten years old, the movement has spread to all parts of the country, with the exception of five Southern and two arid states. The total number of junior high schools today is probably about 800."

Dr. A. H. Wilde — Director of Boston University, School of Education.

"The junior high school is an important addition to our public school organization. It saves losses of time and energy in the 7th and 8th grades, gives adolescent boys and girls a better preparation for life or for higher education, and appeals to them more deeply."

Prof. Antoinette Roof — Instructor in Education at Simmons College.

"The results prove the soundness of the theory, for when put into operation it holds children in the schools, it opens the door of opportunity for many who would otherwise drift into unskilled occupations and be lost in blind alley jobs—in other words, it aims to give a fair deal to 'all the children of all the people,' giving them the right kind of an education at the right time. No community can afford to give its future citizens anything less than the best educational opportunities."

Prof. Alexander Inglis — Assistant Professor of Education at Harvard.

"It should be recognized that the primary and fundamental purpose of the junior high school is to provide a more effective and valuable form of education, with special reference to the different capacities and needs of children of ages approximately 12 or 13 to 15 or 16—a form of education which is absolutely impossible under the old form of organization. A return to the older form of education in Somerville would be nothing short of an educational crime against the interests of the children."

Prof. George A. Mirick — Lecturer on Elementary Education at Harvard.

"So far as one can judge it will not be many years before the junior high school will have replaced the seventh, eighth, and ninth grade organizations generally in this country, not only in cities and towns but in rural sections. I cannot conceive that Somerville will undo the fine piece of work she has done in her junior high schools. She might as well think of going back to horse-cars, and wells in the back yards."

Cost — The per capita cost of schools in Somerville for the school year 1919 was \$44.82. Although in the number of pu-

pils in the average membership Somerville was the seventh city in the Commonwealth, in per capita expenditure it was 13th among the 14 largest cities, only one of them having a lower per capita expenditure. Among the 354 cities and towns in the State it was 238th in per capita expenditure. This means that 237 communities expended more upon each pupil in its average membership. Of the first fourteen cities of the State, Worcester, Fall River, New Bedford, Cambridge, Lowell, Lawrence, Haverhill and Malden spend more for education per child than Somerville, although they do not as yet maintain junior high schools, while Somerville does. This fact shows conclusively that the presence of the junior high school system in Somerville has not raised the cost of education here to the level of other cities of its class. On the other hand, Boston and Springfield both have junior high schools, and both spend more than Somerville.

Contrasting the expenditure per capita in 1909 with that of 1919 we find a decrease in expenditure per pupil as compared with the expenditures in other cities and towns of the State. In 1909 the expenditure per pupil was \$29.71 and Somerville was 93d among the communities of the State in the amount which it expended for each child in its average membership. In 1919 Somerville expended \$44.82 per child but was only 238th among the 354 communities of the State. From this comparison it is evident that although the amount spent by Somerville upon each pupil has increased in the last ten years, yet in those years 144 communities have passed Somerville in the amount expended per child, giving to Somerville a rank in 1919 of 238 in place of 93 in 1909.

Again Somerville's expenditures for education have not increased proportionately to its increase in wealth. In 1909 Somerville had a valuation of \$5,165 for each pupil in the average membership of the schools. In 1919 it had a valuation of \$6,722 per pupil. There was expended for school support during the school year ending June 30, 1909, \$5.75 on each thousand dollars of valuation, which gave Somerville a rank in expenditure per thousand dollars of valuation in 1909 of 121 among the 354 communities of the State. In the school year ending June 30, 1919, there was expended for school support \$6.68 on each thousand dollars of valuation. Somerville's rank for expenditure on each thousand dollars of valuation in 1919 was 163 among the 354 communities of the State. In other words, while in 1909 120 communities appropriated more per thousand dollars of valuation for education than Somerville, in 1919 162 cities and towns expended more. These facts show that during the last ten years Somerville's valuation per pupil has increased over thirty per cent., and its expenditure only

sixteen per cent. These facts show also that education in Somerville is not so expensive today compared to that in other cities and towns as it was in 1909.

These conclusions hold despite the fact that during this period the change to the junior high school system has been effected, that junior high schools now have been in operation several years, and that these years of operation have been the most expensive years because of initial cost of installation of equipment.

Buildings — In a statement prepared for the board of aldermen and by them used as an exhibit, it is asserted that there are 317 rooms and 17,117 sittings. Reports submitted to the school committee by principals of the schools showed 272 rooms and 14,881 sittings. This is a decrease of 45 rooms and 2,236 sittings.

What appears, even then, superficially considered, to be a surplus of sittings in the city has no effect whatever upon the validity of the claim of overcrowding which resulted in the request for additional school accommodations. The vacant seats are found principally in Wards 2 and 6; serious overcrowding exists in East Somerville and at Winter Hill. In both of these latter sections relief has been sought through transfers of pupils to more distant schools and has been met, almost without exception, with protest on the part of parents. It is evident that no more relief can be obtained in this way.

Moreover, in reporting the maximum capacity of the several buildings, principals reckoned upon 48 or 49 seats per room. If the children of our city are to have educational opportunities equal to those of other places, this number of pupils per class should be reduced at least 8 pupils. Such reduction covering the entire elementary school system would of itself reduce the number of vacant sittings by about 1,600. The School Committee believes that the parents will endorse its position that the interests of the children rather than the number of desks that can be gotten into a room, should determine the size of the classes. Large classes increase failures of promotion. Every failure of promotion increases the cost of instruction. The reduction of the size of classes is, therefore, not only in the interest of the children themselves but also in the interest of economy.

It is well known to persons who are acquainted with management of schools that rooms must be provided for a variety of purposes. There are regular classrooms in which pupils sit to study and recite. There are rooms which are used only for recitation purposes; there are laboratories and shops; there should be assembly rooms in large school buildings. In the enumeration of rooms and sittings made by principals, regular

classrooms alone are counted in the seating capacity of the schools. Carpenter shops, kitchens, chemical and physical laboratories, sewing rooms, etc., are not counted as suitable for home rooms. Rooms now used for manual training and household arts cannot be diverted from that use to home rooms for academic use inasmuch as the teaching of household arts and manual arts is required by law in both elementary and high schools.

An illustration of the application of this general distinction in the use of rooms is shown in the erroneous report submitted to the board of aldermen for the Folsom building. This is a six-room building and was used as a primary school until 1914. Its class rooms would provide 291 sittings, 48 or 49 in a room. There were two rooms in the basement used as storerooms and an unfinished attic. There was also a small room on the second floor used chiefly as a storeroom. In the Fall of 1914 this building was taken for the intermediate school work. During that year a floor was laid in the attic by the pupils and later beaver board partitions were set, making four rooms unventilated and insufficiently heated. These rooms are used as cooking, sewing, typewriting and recitation rooms. None of them can be used properly as a home room. The two rooms in the basement are shops. The room on the second floor is used for recitations for small classes. These rooms also are unfit for home room purposes. Yet, all of these rooms have been treated as suitable for sittings for home rooms in the report submitted by the board of aldermen. The total number of sittings for the school building is given as 459, whereas it should have been only 291 at the most.

In the Southern Junior High School building basement rooms used as manual training and typewriting rooms have been counted as furnishing seating space. Besides being basement rooms, in other respects they are wholly unfit to be used as home rooms. In the Bell Schoolhouse the wardroom, which has been divided to furnish space for recitations, is counted as two home rooms. These two rooms are unsuitable for their present use, being insufficiently lighted, heated and ventilated, and would not be tolerated as places for seating classes for home room purposes.

In the Southworth building a basement room now used for assembly and physical exercises has been rated as a space suitable for permanent sittings. Besides being a basement room, this room is insufficiently lighted for regular classroom use. In fact, basement rooms are being put to their largest possible educational use now as shops, cooking rooms, sewing rooms, etc. In a few instances where such work is done in regular classrooms, it is done of necessity. Inasmuch as manu-

al training and household arts instruction must by law be given to children in the elementary and high schools, rooms must be provided for their use. Such rooms cannot be properly used also as classrooms for study and recitation purposes. In junior high schools space has been taken for these classes, in most cases, which would not otherwise be applied to any other educational use. However, all these rooms appear to have been counted as home rooms in the report of the board of aldermen.

The building program submitted to the board of aldermen in May, 1919, was intended to present in a comprehensive way a plan that would be sufficient for these schools through 1925 at least. It was intended to include accommodations which the committee believed to be necessary for the children to have in the years that are to come. It recognized that certain school buildings have long since outlived their adaptability to present day educational needs. This building program set forth the additional accommodations which are needed to complete the plans for the junior high schools which were adopted in 1916. It was then foreseen that the junior high schools when completed should contain auditoriums, gymnasiums, and seating capacity sufficient for all of the pupils, and it was proposed at that time to add units periodically until the whole plan was completed in each center. The plan adopted in 1916 was approved by the mayor and board of aldermen of that year and was still further endorsed by them in an appropriation for a new building on Holland street. It was further approved by the mayor and the board of aldermen in 1916 in the purchase of land on Vinal avenue and an appropriation in 1917 for the erection of an addition to the Bell School. The building program also contained a request for a gymnasium for the high school. This is a need which has been conceded by public opinion for many years. In these days in which additional emphasis is laid upon health instruction, the need for a gymnasium for the high school is more urgent than ever before. The tendency of the times is now to provide facilities to furnish a broader educational experience for pupils. An assembly room, gymnasium, science laboratory, cooking and manual training rooms are among the indispensable features which modern schoolhouses for higher elementary and high school purposes should possess.

It should be noted that while the furnishing of these provisions at one time would afford a means of treating all parts of the city alike and would make immediately available for pupils concerned the advantages which this program would give, still it is capable of division, in point of time, whereby part can be furnished at one time and part at another.

As a summary of these various considerations it is main-

tained that the provisions of the junior high school are in accordance with the best and most competent educational thought; that the junior high school presents an educational program looking to the future and adaptable to the demands which the future may make upon the schools for the education of the youth of twelve to sixteen years of age. At a time when a decision had to be made to meet a condition of general overcrowding, Somerville decided to establish junior high schools. Those schools have been organized, successfully conducted, and have met the high approval of educators not alone from Massachusetts and New England, but from more distant points.

Among the latter was Superintendent Broome and a member of the school committee of East Orange, New Jersey, which is confronted by a situation similar to that which existed in the high school and the upper grammar grades in Somerville in 1916. They spent a forenoon here in two of the junior high schools six weeks ago. In the *Journal of Education* of May, 25, 1920, Dr. A. E. Winship, Editor, who is recognized as one who knows more about school conditions throughout the country than any other person, in speaking of East Orange says: "Superintendent E. C. Broome has presented a comprehensive plan providing three junior high school buildings to accommodate all children of the seventh and eighth grades and the ninth or lower high school class. Mr. Broome's vision will make East Orange as distinct a city as any in the country. Mr. Broome's vision is as clearly outlined professionally as it is administratively. His plans for East Orange's educational future are as definite as is his building planning."

When one considers the aims and ideals of the junior high school system, the enthusiastic and unanimous approval of its plan by the leading educational experts of the State and the Nation, and its successful working in practice everywhere it has been adopted, and notably in our own city, it seems inconceivable that any public official in Somerville should advocate its abandonment.

The subject is too large, too vital to be debated or decided on narrow lines. It affects too deeply the present and future lives of thousands of the school children of Somerville on whom we must rely, as the coming citizens, for the stability and permanence of all we hold dear in our republican institutions.

The issue then is between a plan which looks towards the future and one which faces the past; between a plan which asks for the children of the future, school accommodations suited to their needs and adapted to the most approved educational processes of the day and a plan which contemplates filling existing school rooms to their maximum capacity and using at-

tics and basements for classrooms ; between a plan which, while meeting the needs of the future wholly, can yet be provided in installments, if necessary, and a plan which says that existing accommodations meet all the needs of the present and the future.

Upon this issue the school committee stands firmly committed to the plan which promises better schoolhouses in the future for the school children of Somerville, and to that end cordially invites the co-operation of the public and of the board of aldermen.

Respectfully submitted,

(Signed) H. M. STOODLEY,
Chairman Finance

OSCAR W. CODDING,
Chairman School Accommodations

CHRISTOPHER J. MULDOON,
Chairman Text Books and Courses of Study

EDWARD I. TRIPP,
Chairman Industrial Education Committee

QUESTIONNAIRE ON STUDY OF MUSIC

In the Spring of 1920 a questionnaire was circulated among the pupils of the High and Junior High Schools in order to ascertain facts on which to base a plan for giving school credits for the outside study of music. These replies show the musical inclinations of the pupils and to what extent pupils are making a serious study of music.

Following is a summary of the questionnaire:

1,470 questionnaires were taken in the Senior High School and 2,417 in the Junior High Schools, making a total of 3,887.

Of the whole number 2,330 or 59.9% have had musical training and 1,307 or 33.6% were studying music outside of school at that time.

Of the 1,470 Senior High School pupils 954 or 64.8% had had training and 436 or 29.6% of the whole number or 45.7% of those trained were then studying.

Of the 2,417 Junior High School pupils 1,376 or 56.9% had had training and 871 or 36% of the whole or 63.2% of those trained were still studying. 98 had given up their musical study on account of school work.

Of the 2,417 Junior High School pupils 1,564 or 65% expressed a wish to study music. Of the 1,564 or 65% who wished to study 1,315 or 54.4% of the whole number would like credit for their musical study, and 187 or 7.7% of the whole number stated that they did not wish credit. Not all of those then studying music wished to do so though the number who were dissatisfied was far less than those who were not studying but wished to.

There was shown a wide preference as to the line of study, the detail of which is set forth by schools in the following table:

Number of Questionnaires	Aspiration				Total
	Northern	Southern	Eastern	Western	
Wish to Study Music	331	453	242	538	1564
Voice	44	63	31	85	223
Piano or Organ	226	248	140	367	981
Violin	47	79	57	74	257
Other Strings	1	1	0	6	8
Flute, Clarinet or Saxophone	2	9	3	3	17
Cornet	9	14	8	25	56
Other Brass	3	4	3	5	15
Banjo, Mandolin, etc.	8	7	4	12	31
Fife	2	0	0	0	2
Drum	5	9	2	12	28
Other Instruments	1	2	1	0	4
No Preference	3	9	0	1	13

By schools the percentage of those wishing to study music is: Western 67%, Northern 65.5%, Southern 63%, Eastern 59%.

The number of pupils in the Senior High School trained or studying, and the instrument are shown in the following table. The number is greater than the number of children, some being counted twice as they were trained upon or were studying more than one instrument. In this connection the voice is considered as an instrument.

	Training					Total
	Senior	Northern	Southern	Eastern	Western	
Number of Questionnaires	1470	505	703	409	800	3887
Training	954	293	364	200	519	2330
No Training	516	212	339	209	281	1557
Voice	88	20	23	11	48	190
Piano or Organ	750	230	266	144	415	1805
Violin	135	41	57	30	57	320
Other Strings	8	0	1	0	5	14
Flute, Clarinet or Saxophone	2	0	4	2	0	8
Cornet	13	5	2	3	9	32
Other Brass	11	3	2	0	2	19
Banjo, Mandolin, etc.	18	5	3	4	6	36
Fife	29	0	0	0	0	29
Drum	45	0	3	3	2	53
Other Instruments	0	2	3	0	5	10
Harmony	2	0	0	0	2	4

2,330 or 59.9% of the whole number answering questionnaires have had training.

Studying, 1,307 or 33.6% of the whole.

Senior High School (trained 954 or 64.8% of the whole (studying 436 or 29.6% of the whole or 45.7% of those trained).

Junior High Schools (trained 1,376 or 56.9% of the whole (studying 871 or 36% of the whole or 63.2% of those trained (98 gave up studying on account of school work. (1,315 or 54.4% of the whole wish credit for music (187 or 7.7% of the whole do not wish credit for music).

COURSES OF STUDY IN JUNIOR AND SENIOR HIGH SCHOOLS 1921

Required:	Grade VII						
							Periods per week
English	3
Arithmetic	3
History and Geography	3
Hygiene	1
Music	1

Spelling	1
Writing	1
Drawing	1
Cooking and Sewing	2
or	
Shop work for boys	2
Physical Training	
Elective: (choose one)	
Latin	4
French	4
Spanish	4
German	4
Special Household Arts	4
Special Manual Arts	4
Typewriting and Commercial Principles	4
Elementary Subjects (Special)	4

Grade VIII

Required:	Periods per week
English	3
Arithmetic	3
History and Geography	3
Hygiene	1
Music	1
Spelling	1
Writing	1
Drawing	1
Cooking and Sewing	2
or	
Shop Work for boys	2
Physical Training	
Elective: (choose one)	
Latin	4
French	4
Spanish	4
German	4
Special Household Arts	4
Special Manual Arts	4
Typewriting and Commercial Principles	4
Elementary Subjects (Special)	4

Grade IX

Required:	Periods per week
English	5
Community Civics	1
Music	1
Physical Training	
Elective: (choose one group)	
College: —	
Latin	5
Algebra	5
Ancient History	3
Scientific: —	
Algebra	5
Ancient History	3
Mechanical Drawing	1
Latin or Manual Training	5
Normal: —	

Algebra	5
Ancient History	3
Freehand Drawing	1
Latin or French	5
Manual Arts: —	
Algebra	5
Mechanical Drawing	1
Manual Arts	7
Household Arts: —	
Algebra	5
Freehand Drawing	1
Household Arts	7
Commercial: —	
Bookkeeping	5
Typewriting	2
Penmanship	1
Spanish or French or German or Manual Arts or Household Arts	5

(Scientific group omits music. Normal has English four periods instead of five.)

Shop Work for Boys

Carpentry (including project work, construction and repairs) in all schools. In addition a second occupation is provided in the several schools as follows: Eastern, Bookbinding; Northern, Printing; Southern and Western, Metal Working.

COLLEGE COURSE

Grade X

	Recitations	Points
English	4	4
Geometry	5	5
Latin (2)	5	5
Anc. History (2)	2½	2½
Electives (Take one)		
Greek (1)	5	5
French (1)	5	5

Grade XI

English	4	4
Latin (3)	5	5
Algebra (2)	2½	2½
Electives (Take two)		
Greek (2)	5	5
French (2)	5	5
Chemistry	5	5
Eng. History	4	4
Spanish (1)	5	5
German (1)	5	5

A science must be taken either second or third year.

Grade XII

English	4	4
Latin (4)	5	5
Geometry (2)	2½	2½
Algebra (3)	2½	2½
Electives (Take two)		
Physics	6	5
Greek (3)	5	5
French (3)	5	5
U. S. History and Civics	4	4
Spanish (2)	5	5
*Review Chemistry	2	2
German (2)	5	5

* Only for pupils offering Chemistry for Examination at Harvard, Radcliffe, Wellesley, Smith, Mt. Holyoke.

SCIENTIFIC COURSE

Grade X

	Recitations	Points
English	4	4
Geometry	5	5
Anc. History (2)	2½	2½
Mec. Drawing (2)	2½	1
French (1)	5	5
Electives (Take one)		
Latin (2)	5	5
Man. Training (2)	6	4

Grade XI

English	4	4
Algebra (2)	2½	2½
Geometry (2)	2½	2½
Mec. Drawing (3)	2½	1
French (2)	5	5
Chemistry (1)	5	5
Electives:		
U. S. History and Civics	4	4
Spanish (1)	5	5
German (1)	5	5

Grade XII

English	4	4
Algebra (3)	2½	2½
Geometry (3) Solid	2½	2½
Physics	6	5
Mec. Drawing (4)	2½	1
French (3)	5	5
Trigonometry	2½	2½
Electives:		
Spanish (2)	5	5
German (2)	5	5

NORMAL COURSE
Grade X

	Recitations	Points
English	4	4
Geometry	5	5
Biology	5	5
Freehand Drawing (2)	2	1
Elocution	1	1
Anc. History	2½	2½
Electives (Take one)		
Latin (2)	5	5
French (2)	5	5

Normal Art students must take extra drawing periods each year.

HOUSEHOLD ARTS COURSE

Grade X

	Recitations	Points
English	4	4
Elocution	1	1
Dressmaking	2	} 9
Cooking	2	
Millinery	2	
Food Study	2	
Design (Garments)	2	
Textiles	1	
Hygiene (Personal)	2	
Commerce and Industry	2½	

Elective

Foreign Language	5	5
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Grade XI

English	4	4
English History	4	4
Chemistry	5	5
Freehand Drawing (3)	2	1
Elocution (2)	1	1
Electives (Take one)		
Latin (3)	5	5
French (3)	5	5
Spanish (1)	5	5
German (1)	5	5

Grade XII

English	4	4
U. S. Hist. and Civ.	4	4
Freehand Drawing (4)	2	1
Elocution (3)	1	1
Physiology	4	4
Electives (Take one)		
Physics	5	5
Latin (4)	5	5
Spanish (2)	5	5
German (2)	5	5
Algebra (2)	2½	2½
Geometry (2)	2½	2½

Grade XI

English	4	4
U. S. History	4	4
Elocution	1	1
Dressmaking	2	} 9½
Cooking	2	
Millinery	2	
Food Study	1	
Design (Home)	3	
Hygiene	2	
Arithmetic (Household)	2½	
Elective		
Foreign language	5	5

Grade XII

English	4	4
Chemistry	5	5
Elocution	1	1
Dressmaking	2	} 8
Cooking	2	
Design (Interior decoration)	4	
Hygiene (Community)	2	
Household Management	1	
Chemistry (Household)	2½	
Elective		
Foreign language	5	5

GENERAL COURSE

Grade X

	Recitations	Points
English	4	4
Eur. History	4	4
Elocution	1	1
Electives		
Latin (2)	5	5
French (2)	5	5
Spanish (2)	5	5
German (1)	5	5
Physics	5	5
Biology	5	5
Man. Training (2) &	6	4
Mec. Drawing (2)	2½	1
Cooking (2)	4	2
Dressmaking (2)	4	2
Geometry	5	5
Commerce and Industry	2½	2½
Optional		
Freehand Drawing	2½	1
Mec. Drawing	2½	1
Penmanship	2½	1

Grade XI

English	4	4
Mod. Eur. History	4	4
Physiology	1	1
Electives		
Latin (3)	5	5
French (3)	5	5
Spanish (3)	5	5
Geometry (2)	2½	2½
Chemistry	5	5
Bookkeeping (1) &	5	5
Penmanship (1)	2½	1
Stenography (1) &	5	5
Typewriting (1)	5	2½
Man. Training (3) &	6	4
Mec. Drawing (3)	2½	1
Cooking (3)	4	2
Dressmaking (3)	4	2
Optional		
Freehand Drawing	2½	1

Grade XII

English	4	4
U. S. History & Civ.	4	4
Electives		
Latin (4)	5	5
French (4)	5	5
Spanish (4)	5	5
German (3)	5	5
Physics (2)	5	5
Chemistry (2)	5	5
Astronomy and Geology	5	5
Stenography (2) &	5	5
Typewriting	5	2½
Bookkeeping (2) &	5	5
Penmanship (2)	2½	1
Man. Training (4) &	6	4
Mec. Drawing (4)	2½	1
Cooking (4)	4	2
Dressmaking (4)	4	2
Optional		
Freehand Drawing	2½	1

COMMERCIAL COURSE

Grade X

	Recitations	Points
English	4	4
Elocution	1	1
Penmanship (2)	2½	1
Commerce and Industry	2½	2½

Electives

Bookkeeping (2) or	5	5
Stenography (1) &	5	5
Typewriting (1)	5	2½
Spanish (2)	5	5
French (2)	5	5
German (1)	5	5
Physics	5	5
Man. Training (2) &	6	4
Mec. Drawing (2)	2½	1

Optional

Com. Drawing (2)	2½	1
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Bookkeeping or Stenography and Typewriting must be included in the electives chosen by each pupil.

Grade XI

English	4	4
Elocution (2)	1	1
Physiology	1	1
Penmanship (3)	2½	1

Electives

Bookkeeping (3) or	5	5
Stenography (2) &	5	5
Typewriting (2)	5	2½
Spanish (3)	5	5
French (3)	5	5
German (2)	5	5
Commercial History	4	4
Mod. Eur. History	4	4
Chemistry	5	5

Bookkeeping or Stenography and Typewriting must be included in the electives chosen by each pupil.

Grade XII

English	4	4
U. S. History and Civ.	4	4
Elocution (3)	1	1
Bus. Arithmetic (2)	2½	2½
Penmanship (4)	2½	1

Electives

Bookkeeping (4) or	5	5
Stenography (3) &	5	5
Typewriting (3) or	5	2½
Bus. Practice and Salesmanship	2½	2½
Spanish (4)	5	5
French (4)	5	5
Commercial Law	2½	2½

Bookkeeping or Stenography and Typewriting or Business Practice and Salesmanship must be included in the electives taken by each pupil. Pupils who do not take Bookkeeping need not take Penmanship. Pupils who take Bookkeeping or Business Practice and Salesmanship need not take Business Arithmetic (2).

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GEORGE H. EVANS.

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December 31, 1920.

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Senior Assistants.

RUTH L. SWETT, Children's Librarian.
————— Circulation Department.

Junior Assistants.

EDNA L. HARTWELL, Circulation Department.

UNGRADED SERVICE.**Attendants on Part Time.**

————— Page

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MARION F. MACDONALD
MARSTON C. SARGENT

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Senior Assistants.

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————— Children's Librarian

Junior Assistant.

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Junior Assistant.

————— Circulation Department.

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MARY STACK, Page.

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ALICE RUSSELL

LEOLA STROUT

MEMBERS OF THE TRAINING CLASS.

MILDRED A. FULLER
LUCY W. HARRIS
MILDRED J. HESS
ORPHA B. MATHESON

MARION J. MESERVE
ELEANOR A. RANDALL
FLORENCE SEWALL

NOTE: For changes in staff personnel during the year see Librarian's Report.

Report of the Trustees.

To the Honorable, the Mayor, and the Board of Aldermen of
the City of Somerville:

Gentlemen: The forty-eighth annual report of the trustees
of the public library is herewith respectfully submitted; being
the report of the librarian and tables of statistics of operation.

Very respectfully,

The Board of Trustees, by

THOMAS M. DURELL,

President.

REPORT OF THE LIBRARIAN.

Gentlemen of the Board of Trustees :

The forty-eighth annual report of the Somerville Public Library, for the year 1920, is herewith submitted.

As the year has drawn toward its close signs of a re-action from the abnormal conditions of employment that have worked havoc with library service far and wide have begun to be manifest. The war has left a mark that will not soon nor easily be erased, but there is a dawning hope that we are already entering a period of re-building that will in due time restore the standards of service to which our people have previously been accustomed. That we were able in October to register a promising training class of seven, as against none last year, points unmistakably to such a conclusion.

The total recorded home circulation for 1920 is 476,035. A moderate decline appears in the reports of all our circulating agencies, except the Central Library, which shows a slight increase. In no case, however, has the change either way been of significant proportions.

There are two disturbing features in our present condition. The general movement of upward salary adjustment of the last two years leaves us at a relatively lower level than formerly as compared with other libraries in or near our class. We must expect to see the inevitable operation of economic law that brings to the better paying institutions the more efficient personnel and to the poorer paying institutions the less efficient. Equally serious in another direction is the decline in our book purchasing power, shown in sharp relief by the net reduction of our book collection this year by 3,619 volumes. This means that the funds available for book purchase are not sufficient to replace the wear and tear of use. In 1917 our total appropriation for book purchase was \$8,313. It was thereafter radically reduced, and in succeeding years was as follows: 1918, \$5,335; 1919, \$5,902; 1920, \$6,126. In the meantime the cost of books has nearly doubled. As a result of a decreased appropriation during a period of sharply increasing costs our purchasing power has declined approximately one half in the last three years. We are not now able to maintain the collection with the present appropriation, but are in the position of a merchant who takes out of his business the money received from sales without replenishing his stock of merchandise. It is unnecessary to point out to any intelligent observer to what

end this process leads. Your librarian would be derelict in his duty if he failed to direct attention to these features of our present condition.

During 1920 the following changes have occurred in the staff. Mildred R. Holt, Branch Librarian at Union Square Branch, and Beatrice E. Kelliher, Branch Librarian at East Somerville Branch, resigned to accept better paid positions. Miss Holt was succeeded by Alice G. Worthen who came to us from the Melrose Public Library where she was Acting Librarian. The position at East Somerville has not yet been filled. Abbie G. Glover, Librarian in charge of school deposits, resigned to accept the position of Librarian of the Women's Educational and Industrial Union of Boston. She was succeeded by Nina L. Winn, promoted from Senior Assistant by examination. In addition the resignations of the following Senior and Junior Assistants have been received: Dorothy Kinney, Ruth S. Fales, Helen P. Smith, Ruth G. Markle, Ruth Burckes, Harriet C. Fenwick, and Jessie B. Alcock. Resignations from the ungraded service were those of Lillian McGowan, Marion Fall, and Gladys Preble.

Appointments during the year have been as follows: to the First Grade, Alice G. Worthen; to the Second Grade, Dorothy B. Spear, H. Luthera Fisher, and Ruth A. McDuffee; to the Third Grade, Edna L. Hartwell and Olive W. Gleason; to the Ungraded Service, Bernice L. Watt, Jessie E. Bennett, and Mary Stack. Ruth L. Swett has been promoted to the position of Children's Librarian at West Somerville Branch, and Marguerite C. Kelly to the position of First Assistant at Union Square Branch, both for meritorious work. The library service was greatly reinforced at a critical time by the temporary summer appointment of Edith K. Coulman, Helen G. Gilman, and Elsie K. Wells, all of whom were experienced in library work.

Seven candidates for the Library Training Class successfully qualified for admission, either by passing the required examination, or by presenting a college diploma. The class began its six months' course on the first Monday of October with the following members enrolled: Mildred A. Fuller, Lucy W. Harris, Mildred J. Hess, Orpha B. Matheson, Marion J. Meserve, Eleanor A. Randall, Florence Sewall.

The usual statistical tables herewith appended are submitted as a part of this report.

Respectfully submitted,

GEORGE H. EVANS,

Librarian.

The Public Library of the City of Somerville.

APPENDIX A.

Statistics of Use and Growth. Circulation.

	Central	West	East	Union	Schools	Total
Volumes circulated, adult	120,474	90,196	48,274	32,317	7,680	298,941
Volumes circulated, juvenile	38,974	33,163	24,512	37,018	43,427	177,094
Total circulation (A. L. A. rules)	159,448	123,359	72,786	69,335	51,107	476,035

Accessions.

	Central	West	East	Union	Schools	Total
Volumes in library Dec. 31, 1919	93,743	13,043	6,150	6,033	6,645	118,969
Volumes added	3,748	1,117	787	993	6,645	
Volumes transferred to	1	56	55	142	254	
Volumes restored	15	0	1	1	17	
Total additions	3,764	1,173	843	1,136	6,916	
Volumes withdrawn	7,557	716	488	628	9,389	
Volumes transferred from	177	67	10	0	254	
Volumes lost	321	48	272	251	892	
Total reductions	8,055	831	770	879	10,535	
Net gain		342	73			
Net loss	4,291			257		3,619
Volumes in library, Dec. 31, 1920	89,452	13,385	6,223	6,290		115,350

Registration.

	Central	West	East	Union	Total
Borrowers registered Dec. 31, 1919	3,474	3,444	1,543	1,617	10,078
Borrowers registered during year	2,953	2,042	905	1,068	6,968
Registration in force Dec. 31, 1920	6,427	5,486	2,448	2,685	17,046

Expenditure in Library Department.

Population per capita cost of library service	\$.492	Circulation cost per book lent	\$.096
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APPENDIX B

American Library Association Form For Uniform Statistics.

The Public Library of the City of Scmerville, Mass.

Population served			93,091
Free for lending and free for reference			
Total number of agencies			207
Consisting of Central Library			
3 Branches			
High School Department			
190 School Rooms			
4 Institutions			
8 Playgrounds			
Number of days open during year for lending and for reading			304
Hours open each week for lending (Central Library)			72
Hours open each week for reading (Central Library)			72
Number on staff: regular full time positions	34		
part time positions in whole units	6		40
Number of volumes at beginning of year			118,969
Number of volumes added during the year by purchase			6,090
Number of volumes added by gift or exchange			416
Number of volumes added by binding material not otherwise counted			410
Number of volumes withdrawn during the year			10,535
Total number at end of year			115,350
	Adult	Juvenile	Total
Number of volumes of fiction lent for home use	226,132	94,468	320,600
Total number of volumes lent for home use	298,941	177,094	476,035
Number of borrowers registered during year			6,968
Number of valid borrower's cards, December 31			17,046
Number of newspapers and periodicals currently received			
Titles			240
Copies			499
Receipts from:			
Local taxation			
Library Department	\$40,313	54	
Public Buildings Department	12,763	00	
Endowment Funds:			
Total credit	1,599	94	
Fines	2,343	61	
Other sources, Dog licenses	2,180	85	

 \$59,200 94

Payments for:

Library Department:

Books	9,491 78
Pictures	43 13
Periodicals	1,410 67
Music	37 38
Binding	2,969 51
Salaries, library service	28,724 88
Other maintenance	3,207 13
Balance from Appropriation	13 86
Balance from Endowment	
Funds	539 60

Public Buildings Department:

Janitor service, heat, light, etc.	12,248 58
Balance	514 42

\$59,200 94

BOARD OF HEALTH**ORGANIZATION — 1920.**

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 DUNCAN C. GREENE.

School Nurse.
 ELLA B. HORN BROOKE, R. N. Resigned Nov. 1, 1920.
 GRACE M. ANDREWS, R. N. From Nov. 1, 1920.

Assistant School Nurse.
 GRACE M. ANDREWS, R. N.
 to Nov. 1st.

Health Nurses.
 HELEN B. BERRY, R. N. MARY L. SCOTT, R. N.

Matron at Contagious Hospital.
 LILLIAN E. GOULD, R. N.

Assistant Matron at Contagious Hospital.
 GLADYS HORNE, R. N.
 Resigned June 26, 1920.

Office of the Board of Health,
City Hall Annex, January 1, 1921.

To His Honor, the Mayor, and the Board of Aldermen:—

Gentlemen:—We respectfully submit the following as the forty-third annual report of the Board of Health in which is presented a statement, tabulated, and otherwise, of the sanitary condition of the city and the business of the board for the year ending December 31, 1920:

Nuisances.

A record of the nuisances abated during the year, in compliance with notices issued by the board, or under the board's direction, is presented in the following table:

Complaints referred from 1919	27
Complaints received during 1920	480
	<hr/>
	507
Complaints referred to 1921	26
	<hr/>
Nuisances abated in 1920	481
	<hr/>
Second and third notices sent	64
Received during 1920	480
	<hr/>
Total notices sent	544

In addition to the above, 373 dead animals have been removed from the public streets. Many nuisances have been abated on verbal notice from the agent, without action by the board, of which no record has been made. Each spring the whole city is examined, and cellars, yards and alleyways where rubbish and filth have collected are required to be cleaned.

Glanders. Not a single case of glanders has been reported in the city during the past year.

Record of Licenses and Permits Issued.

Cows.—Six applications were received for permits to keep seven cows, all of which were granted.

Goats.—Five applications were received for permits to keep nine goats, all of which were granted. The fee is one dollar for each goat.

Hens.—One hundred and eight-five applications for permits to keep 2957 hens were received. One hundred and fifty-nine permits to keep 2559 hens were granted, and twenty-six permits were refused.

Grease. — Fifteen applications were received for permits for seventeen teams to collect grease, which were granted. The fee is two dollars for each team.

Melting and Rendering. — Three parties have been licensed to carry on the business of melting and rendering, under the provisions of the revised laws of 1902, chapter 75, Section 111, for which a fee of one dollar is charged.

Massage and Manicure. — Four persons have been licensed to practice massage and manicure. The fee is one dollar for each license.

Sale of Alcohol. — Chapter 360, Acts of the Legislature of Massachusetts for the year 1919 provides that no person, firm or corporation other than a registered druggist shall engage in the business of manufacturing, buying, selling or dealing in methyl alcohol, or wood alcohol, so called or denatured alcohol, or any preparation containing more than three per cent of any of the said alcohols, without being licensed so to do by the board of health.

Under the provisions of this act eighteen licenses have been issued. The fee is one dollar for each license.

Stables.

No person has the legal right to erect, occupy or use any building in this city, as a stable, without obtaining a license from the Board for such occupancy. Each application is referred to the Agent of this Board and no license is granted unless all regulations of the Board are complied with. The following is a record of applications received and licenses granted:—

Applications pending from 1919	7
Applications received during 1920	15
	<hr/>
	22
Licenses granted	14
Licenses refused	0
	<hr/>
	14
	<hr/>
Licenses pending	8

Board of Infants.

Thirteen applications having been made to the State Department of Public Welfare for licenses to care for children in this city, were referred to this Board under Provisions of Chapter 83 of the Revised Laws of 1902. Twelve of these ap-

plications were approved for the care of twenty-four children and one was returned without the approval of this board.

Deaths.

There were 1137 deaths and sixty-four stillbirths in the city during the year, as specified in the following table, which shows an increase of deaths over the previous year of sixty-three.

Deaths at Somerville hospital	105
Deaths at hospital for contagious diseases and tuberculosis	34
Deaths at home for aged poor (Highland Avenue)	45
Deaths at city home	16
Deaths at other institutions	56

Mortality in Somerville in 1920.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
I. GENERAL DISEASES.													
(A. Epidemic Diseases.)													
Anterior Poliomyelitis.....									4	2			6
Cerebro-spinal meningitis.....										1			1
Diphtheria.....	5	2		1		2	1			2	2	4	19
Influenza.....	1	17	1	1									20
Measles.....					1								1
Pertussis.....		1		1	3			3	1				9
Scarlet Fever.....				1								2	3
Typhoid Fever.....							1		1	1			3
(B. Other General Diseases.)													
Abscess.....			1									1	2
Acidosis.....	2	1						1			1	1	6
Addisons disease.....	1												1
Arthritis.....		1											1
Cancer of breast.....		1		1		1			1	1	1	1	6
Cancer of intestines.....		5		1				1	1		1		9
Cancer of rectum.....	1							1		1		1	4
Cancer of stomach.....	1	4						3	1	3	1	1	14
Cancer uterus.....								1		1	2	2	6
Cancer other forms.....	3	6	8	5	1	4	7	2	6	2	2	2	48
Cardio Renal disease.....										1			1
Diabetes.....	2		3			1	2	1		1	2		12
Erysipelas.....				1	1								2
Hernia.....					1	1							2
Hodgkins disease.....										1			1
Leuchaemia.....	1						1						2
Pernicious anaemia.....	2	2	2	1					1			1	9
Pleurisy.....				1									1
Progressive mus. atrophy.....								1					1
Septicæmia.....			1			1	1		1				4
Status Lymphaticus.....	1			1									2
Tuberculosis pulmonary.....	2	7	4	5	9	4	9	2	2	4	4	8	60
Tuberculosis other forms.....	1			1	3			2	1	1			9
Rheumatism.....					1								1
II. DISEASES OF THE NERVOUS SYSTEM.													
Apoplexy.....	9	14	8	8	6	8	9	4	5	9	12	9	101
Eclampsia.....			1										1
Encephalitis.....					1								1
Oedema of Brain.....						1							1
Paralysis.....							1		1		2		4
Hemiplegia.....					1								1
Meningitis.....	1	2	1	1	2				2				9
III. DISEASES OF THE CIRCULATORY SYSTEM.													
Aneurism of aorta.....				1								1	2
Angina pectoris.....	1	1	1		1			1	2		2	1	10
Endocarditis.....	1	2	1	3	4	1	1	1	2	4	3	1	24
Heart disease.....	9	10	9	7	4	1	12	4	4	9	12	7	88
Mesentery Thrombosis.....								1					1
Myocarditis.....	5	8	1	5	4	1	3	1	4	1	5	4	42
Pericarditis.....			1		1				1				3
Regurgitation.....	4	5	3	1	3	1		1	1		4	1	24

Mortality in Somerville in 1920.—Concluded.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
IV. DISEASES OF THE RESPIRATORY SYSTEM.													
Bronchitis		4	2	3	1					2	2	2	16
Empyema		1		1									2
Myxoedema								1					1
Pneumonia	27	66	17	11	9	3	3	1	5	3	9	7	161
Pulmonary œdema.....		3	1	1		1		1		1	1		9
V. DISEASES OF THE DIGESTIVE SYSTEM.													
Appendicitis						1							1
Cholangitis.....					1								1
Cholecystitis.....										1			1
Cirrhosis liver.....	1				1			1	1			1	5
Colitis	1									1	1		3
Enteritis.....		1	3	1	1		1	12	2	3	1		25
Gall stones.....			1										1
Gastritis		1	1	1		1			1		1		6
Intestinal toxæmia.....	1						1			1			3
Intestinal obstruction.....									1		1		2
Pancreatitis.....					1								1
Peritonitis.....		1		1		1		1		1		1	6
VI. DISEASES OF THE GENITO-URINARY SYSTEM.													
Cystitis							1		1				2
Hepatitis.....		1											1
Nephritis.....	3	3	5	5	2	8	5	4	1	3	7	4	50
Uremia.....		1				1	1						3
VII. CHILDBIRTH.													
Caesarian operation								1					1
Hyperimess			1										1
Internal Hemorrhage.....			1					1					2
Puerperal Mania.....												1	1
VIII. DISEASES OF THE SKIN AND CELLULAR TISSUES.													
Gangrene.....	1	1				1	1						4
IX. MALFORMATIONS.													
Anacephalic			1										1
X. EARLY INFANCY.													
Asphyxia Neonatorum					1		2						3
Atalectasis			2	1		2							5
Forceps delivery								1					1
Malnutrition	1				1	1			2	1		1	7
Premature birth and congenital debility.....	8	4	6	5	3	6	7	1	4	4	2	10	60

Mortality in Somerville in 1920. — Concluded.

	January.	February.	March.	April.	May.	June.	July.	August	September.	October.	November	December.	Total.
XI. OLD AGE.													
Arterio sclerosis	19	20	11	3	17	5	4	4	11	9	9	13	125
Senile dementia.....	1		1		1		1		1	1	1	2	9
XII. VIOLENCE.													
Accidental burns from fire			2			1				1	1	1	6
Accidental burns from hot water							1			1			2
Accidental fall.....			1				1	2					4
Accidental gas poisoning.....	2				1			1					4
Acc. carbonmonoxide poi.												1	1
Drowning.....					1								1
Heat Prostration.....							1	1					2
Homicide.....										1			1
Railroad	1	1									1	1	4
Struck by automobile.....					1						1	1	3
Suicide	2		1	1		1				1			6
Surgical shock		1				2					1		4
Total.....	121	198	103	81	89	62	78	64	71	80	95	95	1137

Population (census)..... 93,033
 Death rate per thousand..... 12.22

DEATHS BY AGES.

AGES.	Total.	Male.	Female.
Under one	152	90	62
One to two	31	15	16
Two to three	14	6	8
Three to four	7	2	5
Four to five	7	2	5
Five to ten	29	16	13
Ten to fifteen	10	6	4
Fifteen to twenty	17	5	12
Twenty to thirty	55	14	41
Thirty to forty	63	34	29
Forty to fifty	84	40	44
Fifty to sixty	151	81	70
Sixty to seventy	167	78	89
Seventy to eighty	215	93	122
Eighty to ninety	119	39	80
Ninety and over	16	7	9
Total	1137	528	609

Table of Deaths During the Last Ten Years.

Year.	No. of Deaths.	Rate per 1,000
1911	1,035	12.93
1912	983	12.13
1913	993	12.11
1914	990	11.65
1915	1,003	11.55
1916	1,081	12.01
1917	1,067	11.85
1918	1,533	16.84
1919	1,074	11.30
1920	1,137	12.22
Average death rate per 1,000 for ten years		12.45

Table Showing the Five Principal Causes of Death in Somerville in 1920.

PNEUMONIA.		ARTERIO SCLEROSIS		APOPLEXY.		HEART DISEASE.		CANCER ALL FORMS.	
Number of Deaths.	Number per 10,000 of Pop.	Number of Deaths.	Number per 10,000 of Pop.	Number of Deaths.	Number per 10,000 of Pop.	Number of Deaths.	Number per 10,000 of Pop.	Number of Deaths.	Number per 10,000 of Pop.
161	17.30	125	13.42	101	10.87	88	9.46	87	9.35

Deaths from Scarlet Fever, Diphtheria, Typhoid Fever, and Tuberculosis in the Last Ten Years.

MONTHS.	SCARLET FEVER.										DIPHTHERIA.										TYPHOID FEVER.										TUBERCULOSIS ALL FORMS.									
	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
January	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	12	9	8	8	8	5	4	12	3
February	1	1	1	1	1	1	1	1	1	4	4	4	4	4	4	4	4	4	4	1	1	1	1	1	1	1	1	1	1	13	11	10	14	10	10	16	7	6	7	
March	1	1	1	1	1	1	1	1	1	3	3	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1	5	10	6	9	10	10	10	14	9	7	
April	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	4	8	5	3	3	11	7	7	6	
May	1	1	1	1	1	1	1	1	1	4	2	2	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	13	8	8	9	5	10	8	10	12	
June	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	4	7	8	5	9	8	6	11	4	
July	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11	5	5	7	3	3	4	4	4	7	
August	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	9	7	6	9	8	3	9	10	4	
September	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7	6	4	3	4	11	6	8	6	3	
October	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	6	2	10	6	1	8	7	8	2	5	
November	1	1	1	1	1	1	1	1	1	4	3	5	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1	6	5	9	7	6	10	4	6	10	4	
December	1	1	1	1	1	1	1	1	1	3	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11	10	4	14	6	6	11	4	2	8	
Total	3	2	4	11	4	2	3	1	3	15	14	13	25	18	21	24	19	9	19	6	4	6	6	11	1	6	2	1	3	99	91	87	95	74	108	85	84	90	69	

Table Showing Comparison Between 1919 and 1920 in Prevalence, Deaths Reported and Percentage of Deaths of Scarlet Fever, Diphtheria, Typhoid Fever and Tuberculosis.

MONTHS.	SCARLET FEVER.				DIPHTHERIA.				TYPHOID FEVER.				TUBERCULOSIS ALL FORMS.									
	Cases Reported.		Number of Deaths.	Percentage of Deaths.	Cases Reported.		Number of Deaths.	Percentage of Deaths.	Cases Reported.		Number of Deaths.	Percentage of Deaths.	Cases Reported.		Number of Deaths.	Percentage of Deaths.						
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920						
January.....	15	39	.....	.....	30	22	.....	.....	.....	.....	.....	.....	2	12	3	160.9	25
February.....	26	21	.....	.....	35	9	3	2	8.5	22.2	.....	.....	12	7	7	58.3	100	
March.....	28	35	.....	1	32	13	1	.....	3.1	.....	.....	.....	14	15	7	4	50.0
April.....	24	34	.....	.....	17	8	.....	.....	.....	12.5	.....	.....	17	10	6	35.3	60.
May.....	27	18	.....	.....	13	2	1	.....	7.7	.....	.....	.....	26	17	10	34.6	70.5
June.....	7	16	.....	.....	12	16	2	.....	.....	12.5	.....	.....	23	17	11	4	47.8
July.....	9	2	.....	.....	7	5	.....	.....	20.0	.....	.....	.....	10	16	7	9	50.00
August.....	5	3	.....	.....	9	4	.....	.....	.....	.....	.....	.....	14	10	10	4	100.00
September.....	10	5	.....	.....	8	3	.....	.....	.....	.....	.....	.....	15	15	6	3	40.00
October.....	20	7	.....	.....	15	3	.....	.....	.....	66.6	.....	.....	12	21	2	5	16.66
November.....	17	11	.....	.....	20	17	2	2	10.	11.7	.....	.....	12	11	10	4	83.33	
December.....	16	16	.....	2	7	23	2	4	2.9	17.3	.....	.....	12	17	2	8	16.66		
Total.....	204	207	1	3	265	125	9	19	4.4	15.2	17	16	1	3	5.9	18.7	169	184	90	69	53.2	37.5

Diseases Dangerous to the Public Health.

This board has adjudged that the diseases known as actinomycosis, anterior poliomyelitis, anthrax, Asiatic cholera, cerebro-spinal meningitis, chicken pox, diphtheria, dog-bite (requiring anti-rabic treatment), dysentery, German measles, glanders, hookworm disease, infectious disease of the eye, influenza, leprosy, malaria, measles, mumps, pellagra, plague, pneumonia (lobar only), rabies, scarlet fever, septic sore throat, small pox, tetanus, trichinosis, tuberculosis (all forms), typhoid fever, typhus fever, whooping cough, yellow fever, are infectious, or contagious and dangerous to the public health and safety within the meaning of the statutes. Physicians are required to report immediately to the board every case of either of these diseases coming under their care, and postal cards conveniently printed and addressed are supplied to them for the purpose. On receipt of a card from a physician, the principal of the school in the district in which the patient resides, the librarian of the public library and state board of health are notified.

Specimens and Supplies.

Outfits for specimens to be examined for tuberculosis, diphtheria, and typhoid fever, and diphtheria anti-toxin, vaccine lymph and nitrate of silver solution may be obtained at the laboratory and at the following places:—

R. A. Peckham, 154 Perkins street.
Edward Edwards, 25 Union square.
Willis S. Furbush & Co., 1153 Broadway.
Hall Drug Co., Hobbs building, Davis square.
Ernest B. McClure, 529 Medford street.
John Morrison, 288 Highland avenue.
Richardson Pharmacy, 310 Broadway.
George E. Wardrobe, 693 Broadway.

Hereafter the Agent of this Board will collect, daily, at five o'clock, p. m., all specimens left at culture stations for examination, prior to that hour.

Physicians desiring reports on the following day, of specimens taken after this collection has been made must deposit the same at the City Hall Annex, in the receptacle provided, before nine-thirty p. m.

Results of all examinations of specimens received at the City Hall Annex prior to nine-thirty p. m., will be reported to the physicians on the following morning.

Medical Inspection of Schools.

The medical inspection of the schools of Somerville, which was instituted in December, 1907, has been continued during the year. The value of the system has been constantly demonstrated, and the work has been done in a very satisfactory manner. There has been harmony of action between the board of health and the school board, and the school principals and teachers have very generally co-operated with the inspectors in making the system as successful as possible.

The inspectors make daily visits to the schools under their charge, and to them are referred all children who show evidences of disease or abnormal conditions. Children who are found to be unfit to remain in school are sent home, accompanied by a slip properly filled out advising that the family physician be consulted. The inspectors also make an annual inspection of all the children in the schools, and any defects discovered are called to the attention of the parents. Monthly inspections of the school buildings and premises are made, and suggestions or criticisms are referred to the proper authorities. Every effort is made to protect the health of the children and to co-operate with the parents in keeping the children in as normal a condition as possible.

In accordance with the provisions of the statute, tests of sight and hearing are made by the principals or teachers.

The districts and inspectors are as follows:—

District No. 1 — Eastern Junior High, Prescott, Hanscom, Edgerly and Boys' Vocational schools. Inspector, Dr. Francis Shaw, 57 Cross street.

District No. 2. — Baxter, Knapp, Perry and Southern Junior High schools. Inspector, Dr. Edward J. Dailey, 46 Bow street.

District No. 3. — Bennett, Pope, Cummings and Proctor schools. Inspector, Dr. L. H. Raymond, 146 Highland avenue.

Dr. Raymond resigned December 1, 1920, and Dr. Walter Jellis, 1028 Broadway, was appointed in his place to assume his duties January 1, 1921.

District No. 4. — Morse, Carr, Durell, Burns and Girls' Vocational schools. Inspector, Dr. W. L. Bond, 322 Highland avenue.

District No. 5. — Brown, Bingham, Forster and Northern Junior High schools. Inspector, Dr. H. M. Stoodley, 283 Highland avenue.

District No. 6. — Western Junior High, Lincoln, Highland, Cutler and Lowe schools. Inspector, Dr. H. Cholerton, 94 College avenue.

District No. 7. — Glines and High schools. Inspector, Dr. Edgar F. Sewall, 281 Broadway.

Parochial Schools. — Inspector, Dr. M. W. White, 21 Walnut street.

During the year, 17,337 children have been referred to the inspectors during their daily visits, and 672 have been sent home because of illness.

The following list will show the classes of diseases and defects which have been found in the schools, except defects of sight and hearing:—

List of Diseases and Number of Cases Reported.

1. Infectious diseases:—		
Chicken pox	32	
Infantile paralysis	1	
Influenza	10	
Measles	38	
Mumps	72	
Scarlet fever	17	
Tuberculosis	28	
Whooping cough	11	
	<hr/>	
Total		209
2. Diseases of the nose and throat:—		
Enlarged tonsils and adenoids	1014	
Inflammatory diseases	190	
Other abnormal conditions	19	
	<hr/>	
Total		1223
3. Diseases of the eyes:—		
Inflammatory conditions	67	
Foreign bodies	6	
Other abnormal conditions	22	
	<hr/>	
Total		95
4. Diseases of the ears:—		
Inflammatory conditions	33	
Other abnormal conditions	12	
	<hr/>	
Total		45
5. Diseases of the skin:—		
Eczema	43	
Herpes	42	
Impetigo	133	
Pediculosis	577	
Scabies	58	
Tinea	24	
Miscellaneous conditions	157	
	<hr/>	
Total		1034

6. Miscellaneous diseases:—

Diseases of the circulatory system	6
Diseases of the digestive system	55
Diseases of the lymphatic system	51
Diseases of the nervous system	17
Diseases of the respiratory system	199
Wounds and injuries	57
Diseases of the teeth	419
Other conditions	37
	<hr/>
Total	841
	<hr/>
Total number of diseases reported	3447
Vaccinations performed	48
Examinations for vaccinations	792
Certificate to work	150

Bacteriological Department.

The report of the work of this department is made by Frank L. Morse, M. D., on a subsequent page and becomes a part of this report.

Undertakers.

Under the provisions of Section 44 of Chapter 78 of the Revised Laws of 1902, twenty-two persons have been duly licensed as undertakers.

Examination of Plumbers.

The public statutes provide for a board of examiners of plumbers, consisting of a chairman of the board of health, the inspector of buildings, and an expert at plumbing, to be appointed by the board of health. This board appointed Duncan C. Greene, the inspector of plumbing, to fill the place of expert. The number of licenses granted will be found in the report of the inspector of buildings.

Health Nurses.

There are at present four nurses employed by this Board. Two of these are employed as school nurses and the work of the others, consists of follow-up work regarding tuberculosis cases and post-natal baby hygiene work.

The reports of the school nurses are made a part of the report of the School Committee and those of the other nurses are made a part of this report being submitted in detail in subsequent pages.

R. M. LAVENDER, Chairman,
JOHN E. GILLIS, M. D.
WARREN C. BLAIR,
Board of Health.

Attest:

LAURENCE S. HOWARD, Clerk.

REPORT OF HEALTH NURSES.

Somerville, Mass.,
January 1, 1921.

To the Board of Health,
Somerville, Mass.

Gentlemen:—

We submit the following report of work performed by us in infant hygiene, post natal and tuberculosis cases for the year ending December 31, 1920.

Infant Hygiene.

Infants reported as born in Somerville during 1920	1740
Infants born elsewhere resident in Somerville	263
Pairs of twins born in Somerville	21
Still-births in Somerville	64
Infants who moved away from Somerville	102
Infants artificially fed before eight months old	700
Infants artificially fed before six months old	500
Infants artificially fed before one month old	200
Infants afflicted with Ophthalmia Neonatorum	17
Infants afflicted with Conjunctivitis	11

There were one hundred and fifty-two deaths of infants under one year of age in Somerville during the past year as shown in the following table:

Causes of Death	NATIONALITY OF PARENTS						Total.
	American.	Irish.	Italian.	Portugese.	Swedish.	Greek.	
Premature births.....	18	15	6	2	2	.....	43
Contagious diseases.....	18	20	3	.....	.....	5	46
Congenital causes.....	16	17	4	.....	.....	.....	37
Intestinal causes.....	7	8	7	.....	.....	4	26
Totals.....	59	60	20	2	2	9	152

Infants who died who were on breast feeding alone at time of death	18
Infants who died who were artificially fed at time of death	45
Infants who died who were both artificially and breast fed at death	9
Boarding places for babies inspected	12
Infants under medical supervision at the two Baby Welfare Clinics	400
Total visits made to infants	8709

Tuberculosis.

Pulmonary tuberculosis cases reported in 1920	164
Other forms of tuberculosis reported in 1920	20
Patients admitted to Sanatoria	55
Patients previously reported in Sanatoria	33
Deaths in Sanatoria	52
Patients now in Sanatoria	52
Patients who have moved away from the city	25
Patients now living in Somerville	288
Patients temporarily out of Somerville	26
Deaths from tuberculosis	69
In Sanatoria	52
At Home	17
	<hr/>
	69
Homes where there is or has been tuberculosis where there are school children	
Previously reported	199
Found this year	54
	<hr/>
	253
Children in homes where there is or has been tuberculosis. Reported to School Department.	
Previously reported	360
Found this year	95
	<hr/>
	455
Houses from which second and third reports of tuberculosis have come.	
Previously reported	22
This year	23
	<hr/>
	45

TABLES SHOWING AGES AND SEX OF CASES IN THIS CITY.
Pulmonary Tuberculosis.

Ages	SEX		Total
	Male	Female	
Under fifteen years.....	11	8	19
From fifteen to twenty years.....	5	15	20
From twenty to thirty years.....	27	31	58
From thirty to forty years.....	23	23	46
Over forty years.....	40	27	67
Total	106	104	210

Other Forms of Tuberculosis.

Ages	SEX		Total
	Male	Female	
Under fifteen years	5	7	12
From fifteen to twenty	5	6	11
From twenty to thirty years.....	5	10	15
From thirty to forty years.....	4	4	8
Over forty years.....	2	6	8
Total	21	33	54

Patients in Somerville Pulmonary 210 Other Forms 54 Suspects 31 295
Total visits made to Tuberculosis patients 1012

Miscellaneous.

Typhoid Fever cases reported (died 3) . . . 16
Total miscellaneous visits . . . 79

Recapitulation of Visits.

Baby Hygiene 8709
Tuberculosis 1012
Miscellaneous 79
Total visits 9800

Respectfully submitted,
H. B. BERRY,
M. L. SCOTT,
Health Nurses.

REPORT OF DEPARTMENT OF MEDICAL INSPECTION.

Somerville, Mass.,
January 1, 1921.

To the Board of Health,
Somerville, Mass.

Gentlemen:—

I herewith present the report of the Department of Medical Inspection for the year 1920 including statistics of the Contagious Disease Hospital.

Visits.

Scarlet Fever — Each case must be inspected before release from quarantine to see that the condition of the patient is suitable for release	186
Diphtheria — Before patients are released from quarantine two successive negative cultures must be obtained	73
Contagious Hospital	361
	<hr/>
Total number of visits	620

Contagious Disease Hospital.

Diseases	In Hospital Jan. 1, 1920	Ad- mitted	Discharged Well or improved	Dead	In Hospital Jan. 1, 1921
Diphtheria	2	82	69	15	0
Scarlet Fever	4	58	59	1	2
Tuberculosis	15	30	22	14	9
Miscellaneous	0	15	10	4	1

The daily average of patients was 7.6 in the contagious department, 11.37 in the tuberculosis department, a total of 18.97.

LABORATORY EXAMINATIONS.

Diphtheria.

	Negative	Positive	Total
January	94	31	125
February	72	3	75
March	79	6	85
April	79	22	101
May	43	15	58
June	39	12	51
July	55	4	59
August	28	2	30
September	25	0	25
October	30	0	30
November	70	4	74
December	107	12	119
	<hr/>	<hr/>	<hr/>
Totals	721	111	832

Tuberculosis.

	Negative	Positive	Total
January	18	13	31
February	19	4	23
March	13	5	18
April	18	9	27
May	18	6	24
June	16	9	25
July	7	6	13
August	11	2	13
September	14	5	19
October	13	10	23
November	9	7	16
December	25	5	30
Totals	181	81	262

Typhoid.

	Negative	Positive	Total
January	2	0	2
February	5	0	5
March	3	0	3
April	6	0	6
May	3	0	3
June	4	0	4
July	12	0	12
August	5	0	5
September	12	0	12
October	12	1	13
November	5	0	5
December	3	0	3
Totals	72	1	73
Examinations made for Malaria, Ophthalmia, Paratyphoid, Gonorrhoea and Pneumonia			15
Total examinations			1182

Respectfully submitted,

FRANK L. MORSE,

Medical Inspector and Bacteriologist.

REPORT OF THE INSPECTOR OF ANIMALS AND PROVISIONS.

Somerville, Mass.,
January 1, 1921.

To the Board of Health,
Somerville, Mass.

Gentlemen:—

I submit the following as my report for the year ending December 31, 1920.

Inspections.

The following table shows the number of inspections made during the past year. In order to safeguard the consumer, all establishments handling foodstuffs are under constant supervision. Bakeries, lunch carts and restaurants have been inspected weekly.

All the factories in the city have been inspected monthly.

The Barber Shops are under very careful inspection and must be kept in a sanitary condition and the barbers are required to keep themselves neat and clean and to properly sterilize their instruments.

Number of Inspections.

Bakeries	284	Premises where Cows are kept	10
Barber Shops	331	Premises where Goats are kept	11
Billiard Halls and Bowling Alleys	157	Public Halls	31
Blacksmith's Shops	17	Rendering Plants	154
Candy and Ice Cream Plants	225	Slaughter Houses	421
Factories	242	Stores and Markets	5114
Fish Markets	586	Stables	272
Hen Houses and Yards	412	Swine Pens	26
Lunch Rooms and Cars	525	Theatres	142
Milk and Cream Plants	156	Vacant Lots	62
Pedlers Wagons and Stock	2449	Yards and Cellars	279

Articles Condemned.

Owing to market conditions dealers have been obliged to purchase very conservatively and, therefore, no large surplus has been carried by any dealer.

The following is a list of the articles condemned.

Fish.	
Clams	1 Bush.
Finnan Haddie	12 Lbs.
Haddock	125 Lbs.
Halibut	24 Lbs.
Lobsters	19 Lbs.
Mackerel	39 Lbs.
Salmon	24 Lbs.
Fruit.	
Apples	3 Bush.
Bananas	15 Doz.
Blackberries	3 Qts.
Blueberries	12 Qts.
Cantaloupes	14 Crates
Grape Fruit	16 $\frac{1}{2}$ Boxes
Grapes	12 Baskets
Lemons	2 Boxes
Oranges	5 Boxes
Raspberries	16 Cups
Strawberries	92 Qts.
Meats.	
Beef (corned)	367 Lbs.
Beef (fresh)	113 Lbs.
Fowl	465 Lbs.
Lamb	438 Lbs.
Liver	53 Lbs.
Pork (fresh)	12 Lbs.
Sausages	25 Lbs.
Shoulder (Corned)	14 Lbs.
Veal	152 Lbs.
Veal (whole)	1 $\frac{1}{4}$
Vegetables.	
Asparagus	82 Bunches
Beans (string)	8 Bush.
Beans (string)	5 Baskets
Beans (string)	3 Crates
Beets	3 Bush.
Carrots	$\frac{1}{2}$ Bush.
Cauliflower	2 Boxes
Celery	1 Box
Greens	7 Bush.
Lettuce	4 Bush.
Lettuce	4 Boxes
Lettuce	2 Doz.
Parsnips	1 Box
Potatoes (white)	13 Bush.
Potatoes (white)	3 Baskets
Potatoes (white)	4 Bags
Potatoes (sweet)	1 Basket
Squash	6 Bbl.
Tomatoes	5 Bush.
Turnips	10 Bush.

Slaughter Houses.

During the year weekly inspections have been made at all slaughtering establishments and these plants were never in a more sanitary condition than at present.

The number of animals slaughtered during 1920 in this city was somewhat less than during previous years.

Number of Animals Slaughtered in 1920.	
Swine	898,723
Sheep	262,752
Calves	97,110
Cattle	31,555
	<hr/>
	1,290,140

Examination of Animals for Contagious Diseases.**Glanders.**

There has been a steady decrease of glanders in this city for several years which I believe is largely due to a thorough inspection and disinfection of stables and blacksmith shops, and to the discontinuance of public drinking fountains for horses. Every stable and blacksmith shop in the city is in first class condition.

In 1913 there were 55 horses killed for glanders; in 1914 thirty; in 1915 ten; in 1916 thirteen; but eight of these were in one stable; in 1917 nine; in 1918 seven; in 1919 only three were killed and in 1920 not a case of glanders was reported, thus showing a very marked decrease in the disease.

Animals Examined.

	Inspected	Quaran- tined	Killed	Released
Horses	2092	0	0	0
Swine	309	0	0	0
Cows	10	0	0	0
Goats	8	0	0	0
Dogs	2	2	0	2
	<hr/>	<hr/>	<hr/>	<hr/>
	2421	2	0	2

Respectfully submitted,

CHARLES M. BERRY,

Inspector of Animals and Provisions.

REPORT OF THE INSPECTOR OF MILK AND VINEGAR.

Chemical and Bacteriological Laboratory,
City Hall Annex

Somerville, Mass.,
January 1, 1921.

To the Board of Health,
Somerville, Mass.

Gentlemen:—

I herewith present my annual report for the year ending December 31, 1920.

On the above date there were in this city licensed to sell milk, 490 stores and 50 dealers, and 145 stores to sell oleomargarine.

Of the 50 dealers 22 are located in this city and 28 in the neighboring cities and towns, and 3 dealers have discontinued business.

There are approximately 28,000 quarts of milk and 2100 quarts of cream distributed in Somerville daily, and 16 dealers are pasteurizing their milk according to Revised Laws Chapter 259, Acts 1917.

Three dealers discontinued business, 3 new dealers (distributors) applied for a license and there are 6 dealers who handle cream exclusively.

Table 1.

Months.	Licenses Issued.	License Fees.	Analytical Fees.	Cash Paid City Treas.	Analyses on Account.	Total Income for Dept.
January	19	9.50	.....	9.50	12.00	21.50
February	9	4.50	.....	4.50	2.00	6.50
March	13	6.50	3.00	9.50	18.50	28.00
April.....	12	6.00	1.50	7.50	53.50	61.00
May	394	197.00	2.00	199.00	40.50	239.50
June.....	125	62.50	9.00	71.50	.....	71.50
July	19	9.50	1.50	11.00	17.50	28.50
August	12	6.00	11.00	17.00	27.50	44.50
September.....	12	6.00	13.50	19.50	23.00	42.50
October.....	29	14.50	1.50	16.00	22.00	38.00
November.....	28	14.00	.....	14.00	6.00	20.00
December	13	6.50	.....	6.50	22.50	29.00
Total.....	685	342.50	43.00	385.50	245.00	630.50

Income from license fees, analytical work, etc.	\$630 50
Witness fees returned to City Treasurer	21 80
Fines in Somerville Court	355 00

Total income for department 1007 30

Table 2.

Samples of Milk, Cream, Ice Cream and Vinegar Examined.

Months.	Chemical Samples Collected.	Bact. Collections.	Lorenz Tests.	Total Collections.	Samples left at Office.	Total Examinations.
January	100	80	16	196	22	218
February	155	43	71	269	4	273
March	212	33	35	280	36	316
April.....	224	180	38	442	107	549
May	210	46	64	320	75	395
June	271	37	51	359	18	377
July....	200	42	48	290	34	324
August	134	36	36	206	72	278
September.....	262	135	37	434	70	504
October	217	35	40	292	37	329
November	244	40	44	328	12	340
December	230	58	38	326	40	366
Total.....	2459	765	518	3742	527	4269

Table 3.

Months.	Chemical Notices.	Bact. Notices.	Sanitary Notices.	Temperature Notices.	Total Notices.	Inspections.
January	2	.....	17	.....	19	21
February	8	4	3	.....	15	19
March	6	2	3	.....	11	8
April.....	11	7	1	4	19	11
May	19	12	9	22	44	23
June	23	5	4	6	54	16
July	12	7	11	8	36	40
August	26	12	8	.....	54	28
September.....	12	12	7	.....	31	16
October	7	8	2	.....	17	25
November	2	3	6	.....	11	10
December	7	23	4	.....	34	30
Total.....	135	95	75	40	345	247

The above is a summary of the Laboratory Work during 1920.

Each month during the year pint samples have been taken from every milk dealer and analyzed for food value (fats and solids) and cleanliness (bacterial count and sediment) and the yearly average is shown in the alphabetical list of dealers which follows:

Name of Dealer	Bacteria Per C. C.			
	Butter Fat	Total Solids	Maximum	Past. or Raw
	Legal Standard 3.35%	Legal Standard 12.00%	Allowed Raw 500,000 Past. 100,000	
A. H. Andrews	3.69	12.21	84,200	Past.
Brandon Farms Milk Co.	3.70	12.26	415,000	Past.
John H. Bergman	3.68	12.37	330,000	Raw
H. E. Bemis	3.77	12.37	175,000	Past.
E. E. Breen	3.60	12.16	122,000	Past.
F. S. Cummings Co.	3.72	12.34	122,000	Past.
*John H. Dillon	3.64	12.16	79,000	Raw
F. C. Edgerly	3.67	12.23	237,000	Raw
*A. F. P. Gassett	3.56	12.04	298,000	Raw
J. E. & H. J. Giroux	3.71	12.27	75,000	Raw
*B. J. Griffin	3.66	12.19	447,000	Raw
J. P. Griffin	3.73	12.28	354,000	Raw
F. E. Giles	3.84	12.15	42,000	Past.
*J. M. Hager	3.75	12.29	170,000	Past.
M. B. Harris	3.65	12.13	375,000	Raw
H. P. Hood & Sons	3.64	12.18	48,000	Past.
Kendall Brothers	3.69	12.24	161,000	Raw
J. J. Mulkerin	3.60	12.22	300,000	Raw
*E. M. Monahan	4.07	12.60	287,000	Raw
*Maple Farm Milk Co.	3.76	12.36	191,000	Past.
W. F. Noble	4.14	12.84	36,000	Past.
P. O'Shaughnessy	3.69	12.23	329,000	Raw
*H. A. Prescott	3.68	12.24	181,000	Past.
S. E. Paige	3.69	12.21	162,000	Raw
*Thomas Ronayne	3.86	12.35	257,000	Raw
M. P. Shattuck	3.65	12.09	171,000	Raw
*H. L. Stone	3.64	12.12	188,000	Past.
Seven Oaks Dairy Co.	3.85	12.43	143,000	Raw
*Swenson Brothers	3.85	12.42	215,000	Raw
Toothaker Brothers	3.85	12.47	102,000	Past.
*F. P. Thompson & Son	3.75	12.24	284,000	Raw
Turner Centre Cr. Co.	4.11	12.84	59,000	Past.
*A. S. Tyler	3.69	12.18	144,000	Raw
*E. L. Tyler	3.53	11.97	336,000	Raw
D. Whiting	3.79	12.43	166,000	Past.
J. K. Whiting	3.77	12.37	189,000	Past.
C. A. Woodbury	3.68	12.25	110,000	Raw
Walker-Gordon	4.40	13.22	24,000	Raw

* Found guilty of violation of milk laws.

The higher the fat and solids the greater the food value. The lower the bacterial count, the greater care in production, better handling or more efficient pasteurization is shown. The analysis of special grades of milk supplied on request.

Court.

In addition to the distributors fined, Carl H. Morgan, 2-4 College Avenue, West Somerville, Manuel C. Rogers, 7 Union Square, Somerville, Herbert C. Woodward, 1297 Broadway, Somerville, conducting lunch rooms, were also found guilty.

Summary of Court Cases.

Watered milk	4
Not of good standard quality	18
Foreign substance	4
Total	<hr/> 26
Court cases in Somerville	23
Court cases in Framingham	1
Court cases in Concord	1
Court cases in Lowell	1
Total	<hr/> 26
Fines imposed and paid	\$455.00

In General.

By comparing the average standing of the various dealers with last year's list, it will be seen that there has been considerable improvement in both average food value and bacteriological content.

Constant supervision, sampling and notifying, more efficient pasteurization and refrigeration with an energetic prosecution of all cases of violation, whether intentional or accidental, I believe is responsible for this improvement.

During 1920 it became necessary to inspect creameries in Maine, New Hampshire and Vermont as the nearby supply of milk failed and distributors were forced to purchase from creameries at a distance.

Creameries are run on a co-operative plan. The farmers in a district forming a creamery association, sending their milk to the plant where it is mixed with the milk produced at other farms in that district and shipped as whole milk to various points in New England. The surplus is utilized for butter and cheese and some skimmed milk is sold back to the farmers for stock feeding. This method has proven very satisfactory in some places.

Where the milk can be delivered promptly at the creamery it usually receives better care than it would at the individual farms, but constant supervision is necessary as routine work becomes irksome and carelessness often results, which can be promptly corrected if an inspector appears at unexpected intervals.

During September it was found that farmers were sending milk to Somerville dealers that was below the legal standard for fat and solids (food value) so the collector was sent into the country to take samples from the individual dairymen. Samples were taken from over 150 farms and over 50 percent of the samples were found to be below the Massachusetts standard. The fact that a special law provides that, "Producers may not be prosecuted for low standard milk until two low samples have been found and that twenty days must elapse before the second sample can be taken," prevented prosecutions in these cases, but the fact that only *two* producers were found with low standard milk on a second visit speaks for itself. On the first visit two farmers were found to be watering milk. These cases were prosecuted, one in Concord, Mass., and one in Lowell, Mass., and in each case they were found guilty and paid a fifty dollar fine. On the second visit to these farms *no* adulterated milk was found.

Infant Mortality.

For the past ten years a table has appeared in this report showing the steady decrease in infant mortality, i.e., deaths of babies under one year of age from enteric diseases. In the future this subject will be treated in the section devoted to the Public Health Nurses' report.

Respectfully submitted,

HERBERT E. BOWMAN,
Inspector of Milk and Vinegar.

SUPPORT OF POOR DEPARTMENT.

Board of Overseers of the Poor.

FRED E. DURGIN, President.
MICHAEL COLL, Vice-President.
HENRY F. CURTIS, M. D.

Committees.

On Finance, Investigation and Relief, and City Home
MR. DURGIN, MR. COLL AND DR. CURTIS.

Clerks.

JOSEPHINE M. SANDER

CORA F. LEWIS

General Agent.

WILLIAM E. COPITHORNE.

City Physician.

C. CLARKE TOWLE, M. D.

Warden and Matron, City Home.

MR. AND MRS. J. FOSTER COLQUHOUN.

Office.

City Hall Annex, Highland Avenue.

Somerville, Mass., December 31, 1920.

To His Honor, the Mayor, and the Board of Aldermen of the
City of Somerville:—

Gentlemen:—The Overseers of the Poor submit herewith
reports of the General Agent, the Warden of the City Home
and the City Physician, with tables showing the work.

Respectfully submitted,

FRED E. DURGIN,

MICHAEL COLL,

HENRY F. CURTIS,

*Overseers:
of the
Poor..*

REPORT OF GENERAL AGENT.

City Hall Annex, January 1, 1921.

To the Overseers of the Poor, Somerville, Mass.:—

Gentlemen:—The following as the report of the general agent for the year ending December 31, 1920, is herewith submitted:

Table No. 1.

FULL SUPPORT (During the year).

In City Home (men 32, women 42)	74
In City Home, December 31, 1920	40
In private families	17
In hospitals for the sick in other towns, cities and state	48
In care of state division minor wards (children)	16

Table No. 2.

PARTIAL SUPPORT (Outside Relief).

Families	244
Persons aided (including hospital cases)	1023
Burials	10
Permits to State Infirmary	7
Average expenses to the city for each (carriage for three)	\$3.54

Table No. 3.

AID UNDER 1913 LAW (Mothers' Aid).

Number of applications from widows or deserted women	92
Number of families aided at close of year	65
Number of children	335
Amount allowed each family, from \$4.00 to \$16.00 per week	
Number of out-of-town families	19
Number having no settlement	23

COST TO CITY.

Somerville settlement	\$15,941.17
Settled in other cities and towns (reside here)	6,858.31
State	7,692.52
Somerville families living in other cities and towns	4,159.06
	\$34,651.06

Table No. 4.

REIMBURSEMENTS.

Commonwealth of Massachusetts	\$19,835 92
City of Boston	4,130 70
“ “ Brockton	698 90
“ “ Cambridge	1,791 97
“ “ Chelsea	67 00
“ “ Everett	520 07
“ “ Gloucester	145 71
“ “ Lynn	108 40
“ “ Malden	451 12
“ “ Medford	322 39
Town of Acton	17 14
“ “ Millis	312 29
“ “ Watertown	30 00
“ “ Winthrop	21 00
Individual	495 10
	<hr/>
	\$28,947 71

Table No. 5.

SOMERVILLE HOSPITAL (PATIENTS ON CITY BEDS)

Patients having settlement in Somerville	70
Patients having settlement in other cities and towns	27
Patients having no settlement (chargeable to State)	53
Total number of patients sent to hospital	150
Amount paid to hospital	\$7,779.29

Table No. 6.

POPULATION AND GROSS EXPENDITURES, 1900 TO 1920.

Year	Population (Estimated)		Home,	Total
1900	*61,643 (Misc.	\$23,697.62	\$5,528.83)	\$29,226.45
1901	— 62,500	29,171.15	6,622.43	35,793.58
1902	— 63,500	28,667.04	7,396.64	36,063.68
1903	— 65,500	30,470.20	7,548.39	38,018.59
1904	— 69,500	20,476.54	6,563.11	27,039.65
1905	—*69,272	17,527.88	7,474.36	25,002.24
1906	— 72,000	18,237.53	6,806.79	25,044.32
1907	— 74,000	17,852.20	7,001.23	24,853.43
1908	— 75,500	17,955.34	6,875.56	24,830.90
1909	— 75,500	16,843.17	7,562.83	24,406.00
1910	—*77,236	16,110.42	7,695.89	23,806.31
1911	— 78,000	16,327.56	7,842.03	24,169.59
1912	— 81,000	19,201.33	8,998.97	28,200.30
1913	— 82,000	21,827.73	10,945.95	32,773.68
1914	— 85,000	35,619.68	11,200.25	46,819.93
1915	—*86,854	45,490.98	11,218.65	56,709.63
1916	— 90,000	51,759.62	11,593.41	63,353.03
1917	— 90,000	53,653.33	13,417.77	67,071.10
1918	— 90,500	63,420.48	15,411.20	78,831.68
1919	— 91,000	67,682.53	15,789.34	83,471.87
1920	—*93,033	77,456.57	17,308.29	94,764.86

* Census

Table No. 7.

Expenditures in Detail for the Year 1920.

1920	Cash Allowance	Med. Att. and Medicine	Board.	Groceries.	Somerville Poor in other Cities and Towns.	Dry Goods and Shoes.	Burials.	Salaries.	Fuel.	Sundries.	Cash Paid Out.	Telephone.	Stationery and Printing.	Somerville Hospital.	State Institutions.	Other Institutions.	Nursing.	Somerville Poor in other Cities and Towns 1913 Law.	Total
January	\$177.78	\$21.80	\$187.86	\$374.50	\$529.95	.....	.....	\$457.01	\$478.13	.....	\$4,218.10	\$7.64	\$10.25	\$292.86	\$33.00	\$48.25	\$9.00	.....	\$6,846.13
February	167.92	10.92	115.44	198.00	652.41	.....	\$72.00	424.72	.....	\$ 1.00	3,350.46	7.28	3.00	855.43	.....	312.54	6.50	\$152.00	6,229.62
March.....	173.78	25.87	563.29	233.75	159.30	.....	.....	496.06	630.28	30.00	3,391.40	8.34	4.75	2,208.20	.....	292.01	4.00	.....	8,221.03
April.....	170.29	19.07	246.42	144.00	29.34	.....	.....	447.68	44.45	8.33	3,483.40	7.84	4.00	545.80	44.14	.....	10.00	.....	5,204.76
May	127.22	18.62	95.29	265.00	83.00	.....	25.00	522.10	.....	8.33	4,293.60	7.70	25.39	475.80	.....	.....	7.50	266.82	6,221.37
June	119.58	20.65	556.27	207.50	167.86	\$5.50	.....	447.68	.....	8.33	3,438.90	7.94	31.46	663.40	.....	311.99	2.00	169.73	6,158.79
July.....	99.36	9.07	231.36	125.00	289.58	8.00	.....	597.43	.....	19.00	4,285.60	17.86	4.50	477.40	96.72	.....	2.50	1,337.10	7,600.48
August.....	99.36	25.62	100.36	162.00	.....	.....	.....	439.01	.....	12.50	3,382.70	21.85	4.00	521.80	.....	37.53	4.50	.....	4,811.23
September...	97.58	30.00	604.27	292.00	288.48	.....	105.00	481.01	.....	16.50	3,530.20	.....	19.99	454.60	.....	233.14	.....	1,257.54	7,410.31
October.....	92.36	17.16	223.07	160.50	222.36	.....	106.00	555.43	.....	17.50	4,493.70	10.54	.....	593.20	90.49	122.85	12.00	.....	6,717.16
November ...	90.58	11.35	103.57	178.00	.....	.....	62.00	481.01	307.15	17.50	3,591.30	20.96	3.00	438.40	.....	.....	6.00	743.87	6,054.69
December....	82.36	.....	692.21	67.00	16.00	.....	.....	545.12	250.71	17.51	3,539.40	2.00	.....	252.40	.....	.....	.....	232.00	5,696.71
Totals.....	\$1,498.17	\$210.13	\$3,719.41	\$2,407.25	\$2,438.28	\$13.50	\$370.00	\$5,894.26	\$1,710.72	\$156.50	\$44,998.76	\$119.95	\$110.34	\$7,779.29	\$264.35	\$1,358.31	\$64.00	\$4,159.06	\$77,272.28

OVERSEERS OF THE POOR OF SOMERVILLE

Since the reorganization in 1885.

†Hon. Mark F. Burns, chairman, ex-officio	1885	1888	inclusive
†Col. Herbert E. Hill	1885	1889	"
†Charles S. Lincoln, Esq., chairman	1885	1887	"
†Hon. Edward Glines	1885	1887	"
†Charles G. Brett (president 1888-1892)	1885	Apr. 1893	"
Edward B. West (president May, 1894-February, 1912)	1888	to 1912	"
†Daniel C. Stillson	1888	Apr. 1892	"
†Hon. Charles G. Pope, chairman ex-officio	1889	1891	"
†Nathan H. Reed (president 1893 to April, 1894	1890	Apr. 1894	"
†Hon. William H. Hodgkins, chairman ex-officio	1892	1895	"
†James G. Hinckley	May, 1892	1894	"
†Albert W. Edmands	May, 1893	Oct. 1918	(Died)
†Herbert E. Merrill	May, 1894	1909	inclusive
†Ezra D. Souther	1895	Feb. 1898	(Died)
Hon. Albion A. Perry, chairman ex-officio	1896	1898	inclusive
James H. Butler	March, 1898	1899	"
Hon. George O. Proctor, chairman ex-officio	1899		
Henry F. Curtis, M. D.	1910	to date*	inclusive
Philip Koen	1912	Nov. 9, 1916	"
Michael Coll	November, 1916	to date*	"
Fred E. Durgin	October, 1918	to date*	"

Table No. 8.

RECAPITULATION (Miscellaneous).

Expenditures and transfers	\$77,167 07 net
Reimbursements	28,947 71
	<hr/>
Net cost to city	\$48,219 36

* Present Member

† Deceased

Respectfully submitted,
 WM. E. COPITHORNE,
 General Agent.

REPORT OF WARDEN OF CITY HOME.

City Home, January 1, 1921.

To the Overseers of the Poor, Somerville, Mass.:—

Gentlemen:—I submit the following as the report of the Warden of the City Home for the year ending December 31, 1920:—

Table No. 1.

Number of weeks' board of inmates	2,273-5
Number of males admitted during 1920	11
Number of females admitted during 1920	15
Number of males discharged during 1920	8
Number of females discharged during 1920	10
Number of males supported during 1920	32
Number of females supported during 1920	42
Number of males died during 1920	5
Number of females died during 1920	11
Number of inmates in home, December 31, 1920	40

City Home Hospital.

Number of weeks' board	599-3
Number of patients admitted	30
Number of patients in hospital, December 31, 1920	11

Table No. 2.

Reimbursements	\$9,916 33	
Net expenditures	7,391 96	
		\$17,308 29
Appropriation	\$17,318 00	
Balance	9 71	
		\$17,308 29

Respectfully submitted,
 J. FOSTER COLQUHOUN,
 Warden.

REPORT OF THE CITY PHYSICIAN.

OFFICE OF THE CITY PHYSICIAN,
Somerville, January 1, 1921.

To His Honor, the Mayor, and the Board of Aldermen:—

Gentlemen:—The work of your City Physician during the year 1920 is presented in the following abstract:—

Office consultations and treatments	322
Total outside visits	1138
Confinements	6
Vaccinations	87
Visits at City Home	120
Attended at police station	22
Examinations:—	
For legal department	16
For highway department	19
For police department	31
For fire department	18
For water department	2
For pension	10

Respectfully submitted,

C. CLARKE TOWLE,
City Physician.

REPORT OF RECREATION AND PLAYGROUND COMMISSION.

January 1, 1921.

To the Honorable, the Mayor, and the Board of Aldermen of the City of Somerville, Massachusetts:

The Playground and Recreation Commission submits the following report for the municipal year just closed.

The Commission expended \$5000 during the last year, an increase of \$1322.57 over the expenditure of 1919. It has conducted the work along the lines already laid down but has not started any new lines. Detailed information about the social center movement, the summer playgrounds, and the school gardens will be found in the statements prepared by the leaders of those enterprises, which are filed herewith. The careful reading of these reports will show that the work of the year has been conducted even more successfully than last year.

The civic social worker has developed in the Clark Bennett School and in the Bingham School a social center movement of good promise. At both of these places, classes have been carried on in response to the needs of the community and entertainments of an interesting and instructive nature have been given at frequent intervals. These two schoolhouses have, through the agency of the social center work, given a larger measure of service to the community than ever before. Notwithstanding the fact that neither building has provisions designed for adult use, they have afforded a meeting place where the adults of the neighborhood have conducted these community undertakings with interest and benefit. While it cannot be said that the social center work was started during this last year, it is nevertheless true that its present development is due to the energetic work of the civic social worker, Miss Minnette Zuver, who was engaged by the Commission last March. She has been assisted by volunteers from the several women's clubs and by a number of paid workers. Prominent citizens have made addresses at the evening meetings and musicians have given their services as entertainers.

The summer playground work was conducted in as successful a manner as could be expected when it is considered that the amount of money spent for this purpose was but little in excess of the amount needed for the salaries of the instruc-

tors. The supervised summer playgrounds afford a safe place for young children during the vacation weeks. Mothers can trust their children to the care of the supervisors of the summer playgrounds with the assurance that the children will be safe and happy and in the way of learning useful rather than harmful things. In a city so crowded as Somerville with only the public parks as play spaces, it is most desirable that there should be these play centers for children on all of our public parks. The director of playgrounds asks for the provision of two additional instructors in order that two more supervised playgrounds may be opened this summer. The Commission hopes that this request can be met in order that a slight extension of the work may be made this year.

Despite very unfavorable spring weather which interfered greatly with spring planting and caused many farmers to abandon undertakings in large part, the school gardens were a decided success. The report of the supervisor shows that the value of the crops far exceeded the total cost of production. In addition to their economic value, the gardens have been a valuable means for teaching children to work. Inasmuch as the success of a garden is directly dependent upon the intelligent care which is given to its cultivation, the young gardener is compelled to know what he ought to do and how to do it if he wants to secure a good return. The relation between cause and effect is so obvious that even a child can see it. Consequently the child who works in a garden is forming a habit of doing well today's task in order to obtain a future benefit.

While this is a brief recital of the activities which have been conducted under the direction of the Recreation and Playground Commission, it does not embrace all of the agencies which have worked for the recreational welfare of the city, nor all of the recreational facilities which the city affords to its citizens. Among the former should be numbered the women's clubs of the city, which have supported social welfare work by generous contributions of money and personal service. These clubs have organized a ways and means committee under which each club is represented whose business it is to encourage and develop the civic social welfare work. This committee has kept open the Neighborhood House and has furnished money and workers for the social centers at the Clark Bennett and Bingham Schools. In connection with this report, there is filed a statement of the money which has been contributed by this organization. Another organization which has been of great assistance to the work is the Somerville Playgrounds Association. This association for many years has supported summer playground work and during the last year has contributed to

its support a generous sum of money. Churches of the city also have contributed both money and supplies to help summer playgrounds.

Without the help of these organizations, the Commission could not have given so large a service to the community. Had it been necessary to pay for the services rendered by the volunteers of these organizations, the total amount involved would have been beyond the resources of the Commission. It is the belief of the Commission that for the present, at least, the support of organized public recreation must come largely from private sources. It is the hope of the Commission, however, that as private interest increases and as the gifts from private funds grow, there may be a corresponding enlargement of the amounts which the city can allot for public recreation. One of the serious problems of urban life is a provision for the proper use of the leisure of adults as well as that of children. Any money which the community devotes to providing wholesome outdoor recreational opportunity for citizens is a sum well invested whose whole benefits accrue to the persons from whom the money is drawn and whose return is rich in happiness and contentment.

Other recreational opportunities which the city provides for its citizens are the public parks, playground areas, and the Somerville Bathing Beach. While these undertakings are not directly under the control of the Commission, they are nevertheless allied interests which should be taken into account in any statement of the total of the city's recreational enterprises.

Respectfully submitted,

CHARLES S. CLARK

Supt. of Schools, Chairman

MRS. A. H. WEEKS

MRS. CHARLES E. MONGAN

ERNEST W. BAILEY, City Engineer

J. FOSTER COLQUHOUN, City Warden

GEORGE L. DUDLEY,

Commissioner of Public Buildings, Secretary.

REPORT OF THE CIVIC SOCIAL WORKER.

To the Members of the Recreation and Playground Commission:—

When I started my work last March in Somerville about 35 small boys, 15 girls and 3 young men were attending the Bennett Social Center. There were no boys above the age of 16. At the Bingham Center there were 30 girls and no boys. The attendance has grown steadily. At the Bennett School Center there is now an attendance of 70 boys and young men between the ages of 16 and 24, and an equal number of girls. There is an average of 60 boys and 60 girls in attendance at the Bingham School Center. In addition twenty or more non-English-speaking adults have patronized these social centers. Thus, an average of 250 persons is reached and influenced each week, and occasional mass meetings make the number much higher.

The number of leaders and classes have also grown. There are now eight regular paid leaders, and at some times during the year twelve have been employed. An orchestra composed of three young men from the Bingham School Center is paid upon occasion for services at either center. Three volunteer workers have at different times given their help by teaching sewing, dramatics and music.

Classes are now being conducted at the Bennett Social Center as follows:

For girls: in sewing, dramatics, aesthetic dancing, and physical culture;

For boys: in wrestling, modern dancing, basket ball, rope-quoit, boxing and physical culture.

The following classes are being held at the Bingham Social Center:

For girls: modern dancing, millinery, dressmaking and nursing;

For boys: dancing and basket ball, including games with matched teams.

During the year three dramatic entertainments have been given by the young people themselves, and two bazaars for the sale of fancy work made by the girls have been held.

At the Bingham School Miss O'Neil held a millinery exhibition and sale. A course in citizenship lectures has been given at both centers and nineteen prominent citizens have volunteered for this work. At these meetings twenty musicians, eight vocal soloists, five readers, and ten representatives of women's club, have given their services.

These centers have been open an average of three nights each week and some times five nights a week, and large numbers of Greek, Italian and English-speaking residents have been reached. At the Bingham School rehearsals are being carried on for the presentation of the operetta "The Disagreeable Princess." Plans are being made for an Italian mass meeting to be conducted at the Bennett School. At a mass meeting held last Spring, seventy-five attended and of that number twenty later joined classes for the study of English. At a recent mass meeting for Greeks, of the fifty who attended, twenty-two joined such classes.

The Neighborhood House, which is run in connection with the social center work, has been open five days a week from March to July. It was opened again in November and since that time has been thoroughly renovated. During the year two matrons have been employed, at different times, and eight other persons have been engaged to teach cooking and sewing. The clubs of the neighborhood use this house for a meeting place.

The civic social center work is advancing steadily but we need more equipment and money to carry the work further. Added interest and co-operation on the part of the citizens of Somerville would be of valuable assistance.

Respectfully submitted,

MINNETTE ZUVER,

Civic Social Worker.

REPORT OF THE DIRECTOR OF SUMMER PLAYGROUNDS.

To the Members of the Recreation and Playground Commission of Somerville:—

In presenting my annual report of the activities of the summer playgrounds to your body, I desire to summarize the accomplishments of the past season, and to point out suggestions for the work in the future.

Grounds. Grounds were conducted on seven plots of the city during the summer of 1920, the number and location being the same as at the close of the season of 1919. Because of existing conditions in the matter of equipment, it seemed advisable that the same grounds be operated as heretofore. In the opinion of the director this lay-out does not adequately meet the needs of the city, especially in the proportionate allotment of playgrounds to the density of population. In this regard I repeat again the recommendation made a year ago for the fitting out of the Athletic Field on Alewife Brook as a playground by the erection of swings, slides, and other apparatus. As an alternative for this recommendation I submit the plan of the early grading of the land behind the Western Junior High School and its adoption as a playground. Either of the above locations would be more suitable for play on a larger scale than the present Hodgkins School ground, which is the only playground in populous Ward 7. The Kent Street and Bennett Playgrounds are other locations in the city where more ample space is desirable. I am also of the opinion that the grounds on Central Hill Park should be opened as a quiet playground during the summer under supervision. The large number of children who frequent this spot in the warm weather, many of them accompanied by elders, would thus be provided with an opportunity for play and handwork, and at the same time it would help to accommodate the small children who live in the vicinity of the playground formerly located at the Bell School which had to be abandoned because of the erection of the Junior High School on that site.

The large number of girls at Richard Trum Park last summer would seem to warrant the employment of a lady supervisor for girls at that place hereafter.

Attendance. The season of 1920 was remarkable for the attendance on all of the playgrounds. From the best possible method of counting, the total attendance of the grounds for the

summer represented an increase over the year before of more than 10,000 individual visits to the grounds by children.

The good weather which prevailed throughout the seven weeks of the playground season undoubtedly is responsible for some of this increase. On the other hand the work of the playgrounds during the season seemed, in the opinion of the director, to run more successfully than ever before.

As noted in the report of 1919, larger children (i.e. those over sixteen years of age) seemed to have been entirely eliminated from the playgrounds. This has been true to such an extent that it has necessitated the re-arrangement of ages in the class for competition, such as baseball and track sports. I find that the same condition prevails in other communities which conduct playgrounds, and the indication is that boys and girls of this older group are, for the most part, finding summer employment.

The figures for the season by grounds are as follows :

Bennett	13,155
Broadway	6,724
Hodgkins	4,671
Kent	7,645
Lincoln	26,270
Perry	4,770
Trum	12,285
Total	<u>75,520</u>

	1919	1920
Total Attendance	65,000	75,520
Average Weekly	9,227	10,790
Average Daily	1,846	2,220

Finances. The budget allowed by your commission for summer playground work in 1920 was \$1,722.50. This was augmented by approximately \$400 from the Treasury of the Somerville Playgrounds Association, making a total expenditure for the season of a little more than \$2,100. Of this amount approximately \$1,400 was spent for salaries of supervisors, leaving a balance of \$700 for teaming, supplies, maintenance, extra labor, and the like. This latter amount while it has been sufficient for keeping the playgrounds active, does not allow any provision for more permanent equipment, or even the repair or replacement of what permanent equipment we now have. I suggest that it would be well for your Commission in making up its future budgets, to make provision for permanent equipment, for it must be borne in mind that the most of the frame work now on our public playgrounds has been in use for

a dozen years, and during that time has been exposed to the elements, and before long will have to be replaced.

It seems desirable also in allotting finances hereafter, to provide for a final demonstration such as was conducted this year on Lincoln Park. Had it not been for the money contributed by the Somerville Playgrounds Association, this feature could not have been carried out during the past season.

Another desirable provision for the future would be the addition of shelters on some of the grounds particularly at such open areas as the Richard Trum Playground. A start was made in this direction during the season of 1920 by the erection of a shelter at the Bennett School Ground from funds contributed by the Somerville Playgrounds Association.

To summarize the financial situation as based on the figures for the past year, I would recommend that in order to carry out the above recommendations even on a small scale, the allotment for summer playgrounds for another season should be at the minimum \$3000.

Supervision. The slight increase in remuneration advocated in my last report and granted by your commission showed its effect during the past summer. The extra inducement enabled the director to secure the services of more proficient supervisors, three of whom had previously been in service in Somerville, with the result that the success of the season can be attributed in some degree to this more efficient supervision. A comparison of the salaries paid in Somerville with those offered in other communities of greater Boston will show, however, that in proportion to the amount spent for supervisors the results obtained in our city will compare favorably with those of other places.

The one desirable object to be obtained from the standpoint of supervision is, as far as possible and within reason, to retain the services of desirable supervisors in order that the playgrounds shall continue in efficiency.

Meetings. Following the plan of previous seasons, meetings of the entire staff of supervisors were held at the High School at regular intervals during the season for the purpose of concerted action throughout the city and for exchanging plans which would prove beneficial for the different grounds. Such meetings are of valuable assistance in the conduction of the work, especially for such purposes as arranging the program for the final exhibition.

Equipment. I have already alluded to the future need of permanent equipment on the grounds. Almost every ground in the city could use additional swings. The swings on Broadway Park are in need of repair before the opening of the next

playground season. I suggest that the framework of the old gymnasium on Lincoln Park might be utilized to furnish additional swing accommodations at that ground and perhaps others in the city. The iron swing frame in the yard of the Bingham School which has not been used for some seasons may be in condition to be used if it can be transferred to the Richard Trum Playground. Slides would add much to the equipment of the Broadway Playgrounds and also Richard Trum Park. An unused slide in storage in the basement of the Union Square Branch Library could possibly be put into condition for use if sufficient funds are available. I have also referred to the desirability of adding shelters to some of the grounds. There should be drinking facilities on every playground and the wading pool at Trum Park should be placed in condition for use. With assistance from the City Engineer's Department some seats were placed at the Kent, Bennett, and Perry grounds during the past summer.

Handwork. For the first time in the history of Somerville Playgrounds the handwork was supervised by a person employed solely for the purpose. This was made possible by the co-operation of the supervisor of school gardens, an arrangement being made whereby the same person was employed three days per week as handwork supervisor for the playgrounds and the remainder of the week as a canning instructor for the school garden organization. Heretofore it has been necessary to use one of the regular supervisors on part time for this purpose. The new plan proved a success over the former one, because it provided more frequent visits to the individual grounds by the person in charge and thus brought about more interest on the part of the children and a better finished product. It is hoped that such a plan of supervision can be adhered to in future seasons.

The original cost of operation for the handwork, exclusive of the salaries of the supervisors was borne by the Somerville Playgrounds Association, and whatever new material was provided during the season was furnished from the money obtained by the sale of the finished articles to the children on the grounds. In the opinion of the director this is also a desirable method of handling this portion of the playgrounds movement because it eliminates the undesirable feature of free distribution to the children at public expense.

Dancing. Folk-dancing, which has always been one of the principal activities on the girls' playgrounds was likewise conducted in a new and improved manner this past season. A special supervisor was employed to visit each ground and take charge of the dancing, whereas in previous seasons the super-

visor of the ground conducted this activity. Accordingly uniform instruction was provided with the result that at the close of the season the children were well prepared to present the dances for the demonstration. As noted before, however, the dancing in our city is greatly handicapped by the lack of musical accompaniment which is so essential to this particular feature of the playground program. The acquisition of a few used phonographs would greatly assist in this connection another season.

Games. At the outset of the 1920 season an effort was made to provide a series of playground games which would combine physical activity with enthusiasm on the part of the participants. It is believed that this objective was obtained in the games used on the grounds last summer. This is particularly true of the boys' grounds, and the best testimony of the above statement was given in the popular approval of the games and races displayed at the final demonstration of the season. As usual baseball received its share of attention, three mornings each week being devoted to the playing of inter-playground league games. These leagues were conducted in three classes as follows: Class A, boys under sixteen years; Class B, boys under thirteen; Class C, boys under eleven years of age.

Co-operation of the Public Library. One of the features of the past season which has proved both popular and educational was the use of each playground as a place of deposit for books from the Somerville Public Library. At the outset of the season the director arranged with the library management to secure a deposit of more than five hundred books suitable for both boys and girls of the playground ages. These books were divided into lots and placed on each ground and interchanged during the season so that the children had access throughout the seven weeks to the whole deposit. The best testimony of the popularity of this feature was evidenced in the interest displayed by the children in reading and their request for more books in succeeding seasons.

Co-operation from the Community. The custom of conducting outings during the summer for the children who visit the playgrounds was followed in the past season. This feature is very popular with the children and no season would be considered a success unless the children from each ground had at least one day's outing at some favorite picnic ground. The picnics conducted this season proved more popular than ever, probably due to the fact that in every case transportation to and from the grounds was furnished by several business men of the city who gave the use of their automobile trucks for the purpose. In the mind of the director nothing gave more satis-

faction to those who conducted the playground work than the ready response of these merchants to the request for the service of their machines. During the last three weeks of the playground season everyone of the seven grounds enjoyed its own picnic, and when one considers that the number of children who attended each ranged from one hundred to five hundred, it can readily be seen how many automobile trucks were furnished to accommodate the entire group.

A second evidence of how the playground links itself up with the community interests, is the fact that the prizes for all of the events conducted at the aforesaid picnics were given by the merchants who have places of business in the vicinity of the respective playgrounds.

In addition to the above, one hundred and fifty children from the Richard Trum and Hodgkins Grounds were the guests one afternoon of the management of Keith's Boston Theatre.

As has been remarked before, interest of the above sort is the best proof that playgrounds are well received by the people of the community. At the same time the thanks of the playground management is tendered to those who have helped to make a public undertaking successful.

Annual Demonstration. The annual demonstration of the playgrounds was conducted at Lincoln Park on Wednesday, August 18th. Taking advantage of the Daylight Saving which gave the opportunity for more adults to witness the events, the exhibition this year was held at twilight beginning at 6 p. m., and finishing before 8 p. m.

Approximately two thousand children from all parts of the city took part, each playground being well represented. It is estimated that about three thousand people witnessed the demonstration which consisted of folk-dancing, competitive games, races, drills, and exhibition games. An exhibit of hand-work made by the children during the summer was also placed in a prominent position at the grounds. The competitions were all closely contested and the whole affair was conducted with such precision that it showed the training and efficiency of the playgrounds upon the children.

Recommendations. From close contact with the situation, I respectfully submit the following recommendations as means of improving our playgrounds system:

1. Early fitting out of High School Athletic Field or land in rear of Western Junior High School as a large playground for West Somerville.
2. Enlargement of Kent and Bennett Grounds.
3. Opening Central Hill Park as a playground for small children.

4. Employment of a supervisor for girls at Richard Trum Park.
5. Setting aside funds each year for permanent equipment.
6. Erection of shelters on grounds where needed.
7. Additional swings on all playgrounds. Repairing swings at Broadway Park. Using the frame of gymnasium at Lincoln Park for additional swings. Transferring swing frame at Bingham School to Trum Park.
8. Repairing broken slide for use at Broadway Park.
9. Use of wading pool at Trum Park.
10. Providing musical accompaniment for dancing.
11. Drinking facilities at every playground.
12. Extension of supervised play to the period after school hours.

Conclusion. In closing my report, allow me to frankly state that from the standpoint of co-operation the season of 1920 has been the most satisfactory of any I have experienced in my twelve years' connection with the Somerville Playgrounds. Cordial assistance has been rendered by the Chairman and other members of your Commission, by other departments of the city, and by the Somerville Playgrounds Association. The staff of supervisors and assistants worked constantly for the betterment of the playgrounds and the welfare of the children. The children themselves have co-operated to the best of their ability and have undoubtedly acquired considerable experience in the fundamentals of citizenship involved in organized play, i. e., submission to authority, team-work, loyalty, and regard for the rights of others.

Respectfully submitted,

STEPHEN H. MAHONEY,

Director of Playgrounds.

REPORT OF THE SUPERVISOR OF SCHOOL GARDENS.

To the Members of the Recreation and Playground Commission :

It is with pleasure that I submit to you my third annual report as your Garden Supervisor.

The year 1920 proved to be one of exceptional weather conditions which greatly affected work and the results obtained in gardening. Early in the spring we had continued rain which made some of the areas of ground used for School Garden purposes unfit for use until very late in the season. The piece of ground used by the Bingham School children at Lowell Street, we were forced to abandon after their garden had been completely submerged.

But to me the pleasant part of work with boys and girls is the fact that they often surprise the general public and older people, in particular, by showing ability to persevere and win out in spite of great difficulties. This was the case with the Somerville gardens the past season. In every instance but the one mentioned the gardens were brought through difficult and trying times on account of weather conditions, and made a fine showing both from the standpoint of general appearance and production.

Sixteen different schools participated in school garden work this season. There were a total of 365 children who cultivated public areas, given for their use by the City and private citizens, which covered a total acreage of nearly ten acres.

Your Garden Supervisor was employed by the School Committee during the winter months in giving instruction to boys and girls who were interested in gardening. Those who had a garden at home or else expressed a desire to have a school garden during the summer were organized into classes and were given practical lessons one period each week in the classroom. In this way the children were better prepared than ever to start actual work when the planting season arrived. With the aid of one high school boy, supervision and help was given to the 365 children having school gardens; aid and assistance was also given to several hundred who carried on successful back-yard gardens at home.

The same general plan used in the past two years for the planting and care of all school gardens was continued during the season of 1920. Children paid for the seeds and plants actually used in their individual plots. Everything raised was the property of the children and could be taken home and used

or sold. One half day was devoted by the supervisor to each garden area, and the children showed their interest and enthusiasm in this work by their prompt and consistent attendance during the entire garden season. Less than one half dozen gardens suffered from neglect out of the total of 365.

In connection with this garden work arithmetic and spelling were linked through the use of a garden record book. The keeping of this record book by the children was made one of the garden requirements, and has proved to be a valuable means of stimulating an interest in the value and ways of marketing garden products. A careful analysis of these books by your garden supervisor after the close of the garden season has resulted in the gathering of some rather valuable and interesting information. The total value of all garden crops on school garden areas was \$8,214.45. Some of the books showed total receipts from their gardens, which in all instances were 300 square feet, of more than \$20. A schedule showing the amount and value of all the different kinds of vegetables raised in the school gardens is appended to this report. On every garden area wherever there was sufficient land a community plot was planted where sweet corn and winter squash were raised. Every boy and girl having a garden on this area did his part towards taking care of these two crops which were harvested by the supervisor and equally distributed among the children.

During the summer we received aid and encouragement from the Middlesex County Farm Bureau and State Department of Agriculture whose agents visited our city several times. The school children made exhibits again this year at the New England State Fair held at Worcester where they carried away the first prize, won in competition with 26 other cities and towns representing all parts of New England.

For the first time a County Fair was held in Middlesex County this year at Waltham. The Somerville School Gardeners again won first prize for their exhibit of garden products in competition with many other cities and towns in this county.

The raising and care of flowers is also included in garden work. On all school garden areas where there was sufficient suitable land flower seeds were planted and plants set out this year, and the children instructed in their proper care. They were also encouraged to plant flowers at home wherever a suitable place could be found and through this means I believe the general appearance of a great many of the homes of this city were improved.

Early last spring the garden supervisor purchased a good

supply of vegetable and flower seeds and the same were disposed of to boys and girls through the public schools at cost, thereby placing in their hands only the varieties adapted to soil and climatic conditions in this vicinity.

This fall our garden areas were properly cleaned up by the children and the garden refuse disposed of. Most of these areas have since been plowed and dressing placed on them ready for use another year.

This year 56 children carried on canning operations at two canning centers. Through the courtesy and co-operation of the School Committee the basement of the High School and the cooking room at the Western Junior High School were utilized. One teacher was employed for the whole season of ten weeks and one other for a part of that time.

These children canned an average of 32 jars apiece with an average value of 40c each, their products totaling in value \$716.80. Most of the materials canned were vegetables taken directly from their school gardens, which insured a good canned product because of the fact that they were freshly gathered and properly picked.

This useful form of summer work for boys and girls has gained in popularity very rapidly the last three or four years. Many other cities and towns now carry on canning operations on a very much larger scale than we have been able to do here in Somerville, and I would recommend that more equipment and better facilities be provided another year and two teachers hired to devote all of their time to this work.

Besides the actual work of canning the vegetables and fruits the children are taught to demonstrate and explain the work in its different stages. Two demonstration canning teams from Somerville participated in a competitive demonstration held at the Middlesex County Fair at Waltham, and at Jordan Marsh's Department Store in Boston, and a very favorable showing was made in both instances. A public exhibition of canned products was held in one of the school halls at which the general public were present, and a competent judge sent from the State Department of Agriculture to score and mark the work and results obtained by the children.

Concluding my report for the season of 1920, I desire to express appreciation of the service and valuable assistance rendered by heads of departments and city officials, with whom I have come in contact. Whatever success was accomplished in garden work was due to a large extent to the interest and enthusiasm and the actual work of the boys and girls themselves.

Respectfully submitted,

WILLIAM B. MOORE,

Supervisor of School Gardens.

SCHOOL GARDEN DATA, SEASON 1920.

Location	School	No. Children	Area
Adrian Street . . .	Knapp . . .	30	1 Acres
Prospect Hill . . .	Pope . . .	18	¼ "
Glen Street . . .	E. Jr. H. . .	12	¼ "
	(Edgerly . . .	20	1 "
Broadway . . .	(. . .		
	(Glines . . .	12	
Central Hill . . .	(Cummings . . .	22	
	(. . .		1 "
Highland Avenue . . .	(Perry . . .	12	
	(N. J. H. . .	8	
Central Hill . . .	(S. J. H. . .	12	1 "
	(. . .		
School . . .	(Proctor . . .	20	
	(. . .		
Craigie Street . . .	Morse . . .	25	1 "
Lowell Street . . .	Bingham . . .	40	1 "
Powder House . . .	Brown . . .	14	¼ "
Powder House . . .	Lowe . . .	15	¼ "
	(Highland . . .	20	
Tufts Oval . . .	(. . .		1½ "
	(W. J. H. . .	30	
City Farm . . .	Cutler . . .	55	1 "
		365	

Season 1920.

ESTIMATE OF AMOUNT OF CROPS GATHERED AND THEIR VALUE.

Individual Plots.

Kind	Amt. from each plot	Total Amount	Retail Mkt. value per unit	Total Amount
Radishes . . .	30 bunches	9,600	.08	\$768.00
String Beans . . .	8 qts.	2,560	.12	307.20
Shell Beans . . .	7 qts.	2,240	.15	336.00
Dried Beans . . .	2½ qts.	800	.20	160.00
Table Beets . . .	200	64,000	.025	1,600.00
Table Carrots . . .	100	32,000	.02	640.00
Swiss Chard . . .	4 pks.	1,280	.35	448.00
Summer Squash . . .	20	6,400	.15	960.00
Ripe Tomatoes . . .	3 pks.	960	.85	812.00
Green Tomatoes . . .	1½ pks.	480	.50	240.00
Beet Greens . . .	1 pk.	320	.35	112.00
Cabbage . . .	7 heads	2,240	.15	336.00
Lettuce . . .	16 heads	5,120	.10	512.00
Parsnips . . .	75	24,000	.02	480.00
				\$7,711.20

Community Plots.

Sweet Corn	1,035 doz.	.45	465.75
Turban Squash	750 lbs.	.05	37.50
			<hr/>
Total value of Garden products			\$503.25
			<hr/>
			\$8,214.45

Canning Club Values.

No. Participating	Average No. of Jars	Value per jar	Total Value
56	32	.40	\$716.88
Value in money of garden and Canning projects			\$8,931.25
December 1, 1920.			

COMPARISON OF GARDEN AND CANNING VALUES TO COST OF UNDERTAKING.

Value of Crops.

Value of vegetables sold	\$1,630 45
Value of vegetables used at home (Fresh)	5,868 50
(Canned)	715 50
	<hr/>
Total Value of Garden Crops	\$8,214 45

Value of Canned Products.

1792 Jars	@ 40c	\$716 80
		<hr/>
Total Values		\$8,931 25

Cost of Garden Undertaking.

Salaries		
Supervision	\$1,079 89	
High School Boy as helper @		
\$3.00	169 50	
	<hr/>	\$1,249 39
Instruction		
Salary of Agricultural Teacher	1,024 75	
	<hr/>	
Cost of preparing land for Garden Use		1,024 75
Plowing	150 13	
Teaming	94 50	
Fertilizer	75 00	
Labor. Helper on team @		
\$4.00	59 00	
	<hr/>	378 63
Miscellaneous disbursements		
Use of Auto	235 33	
Express	11 40	
Painting signs	14 00	
Sundries	11 70	
	<hr/>	272 43

Cost of Canning Operations.

2 Teachers @ \$3.00 each per day	\$93 60
Total Cost to City	<u>\$3,018 80</u>
Actual money profit from undertaking	\$5,912 45

**REPORTS OF THE WORK OF ORGANIZATIONS ASSOCIATED
WITH THE RECREATION AND PLAYGROUND COMMISSION
IN THE PROMOTION OF THE RECREATIONAL
ACTIVITIES IN SOMERVILLE**

Somerville Playgrounds Association.

The secretary of this association, Mrs. Mary F. Lincoln, furnishes the following report of the work of this organization for 1920.

The Somerville Playgrounds Association, organized in 1909 to provide summer playgrounds, has since that time, in co-operation with the city, conducted supervised playgrounds during the summer vacation.

The Association feels that Somerville has now a well-established playground system, and that its methods compare favorably with those of other cities of its size and that it is only prevented by limited funds, from extending its work.

The Playgrounds Association has acted as a stimulating force to assist and encourage all recreational activities in the city. It has for some time desired to broaden its work and to establish a year-round system. To carry out this idea, it has lent its aid towards the establishment of evening centers in school buildings, believing this to be the best kind of Americanization work that could be done.

The Association is supported by donations from organizations and individuals and by annual membership fees. Among other annual donations, eighteen women's church societies contributed this year toward the purchase of materials for sewing for the summer playgrounds.

The Association has this year been obliged to accept the resignation of the treasurer, Frank W. Kaan, who has held the position at our urgent desire since its formation, eleven years ago. His advice and help have also been of great value in many legal and legislative matters which have come before the organization.

We are still fortunate in being able to secure as treasurer, another valuable man, well known in Somerville, Frank M. Hawes, who is giving us much assistance.

Meetings of the Directors Board have been held at City Hall Annex on a Tuesday of each month from October to May, with good average attendance. The annual public meeting was held December 2, 1920, at the Y. M. C. A. rooms.

Field Day.—The one special event conducted under the auspices of the Playgrounds Association was a Field Day, or school athletic day, held on June 9, 1920. A vacation was granted by the School Committee and hundreds of children and their parents spent the entire day at Somerville Field.

Respectfully submitted,

MARY F. LINCOLN,

Secretary.

SOMERVILLE PLAYGROUNDS ASSOCIATION INCORPORATED

Officers :

President: Hon. Albion A. Perry
 Vice-President: Charles S. Clark
 Secretary, Mrs. Charles P. Lincoln
 Treasurer: Frank M. Hawes

DIRECTORS :

Hon. Charles W. Eldridge	Mrs. Geo. G. Brayley
Mrs. A. H. Weeks	Hon. Charles L. Underhill
Mrs. George Whiting	Mrs. Walter A. Ladd
Rev. James J. O'Brien	Mrs. Warren Dalton
Mrs. Frank E. Bateman	Mrs. Henry C. Fish
Mrs. Charles E. Mongan	Clarence R. Skinner
William P. Jones	Mrs. James T. Mulroy
Mrs. Gilbert Hood	Frederick J. White
Rev. Geo. E. Soper, D. D.	Mrs. Charles A. Landers
Mrs. F. E. Dickerman	

Ways and Means Committee.

The Ways and Means Committee consists of twenty-seven women, representatives of the several women's clubs of Somerville and the Somerville Playgrounds Association and Associated Charities. Regular meetings are held on the second Thursday of each month at the home of Mrs. F. E. Bateman, 163 Highland Avenue. At each meeting, the civic social worker gives a detailed report of the work being carried on at the social centers and recommends certain things necessary for the improvement of her work. Members of the committee question, criticise, advise and plan ways and means to strengthen the work.

The chairman of the Ways and Means Committee, Mrs. S. C. Bateman, furnishes the following report of the work for 1920 :

The Ways and Means Committee introduced a new feature at the Neighborhood House this year in the person of a matron who kept the house open from 3 to 9:30 p. m. each week day. Her duty was to keep order among the children who came in large numbers after school, to direct their games and to help them with sewing. With the help of Miss Belmont, a volunteer, she

aided the children in making small articles for a sale which was held in June. Four classes in cooking, three afternoon classes and one evening class, were conducted and instruction in sewing and dramatics was given. One cooking class entertained the mothers an afternoon with refreshments of their own cooking.

Last Fall the opening of the house was delayed by illness in the family of the house chairman. After the matron was employed, the children used the house as formerly, but of course classes were late in starting. At present there are several cooking and sewing classes being held and two dancing classes have just been started. In January a new matron is to begin work and we are expecting this undertaking to advance rapidly. Our new house chairman, Mrs. Perry, is a fine worker and deeply interested. The Neighborhood House we consider now as an auxiliary to the school center, gathering in the younger children in the afternoons and the older girls in the evening. These older girls are very anxious to use the building for social purposes in the evening, and with the proper supervision, they will be allowed to do so.

Lack of money is our chief hinderance, but the women have raised a considerable amount of money for the work during the past year. We are doing the best we can with what we have, and although figures cannot be used to show what is being accomplished, the influence of the work is certainly being felt in the neighborhood.

S. C. BATEMAN,
Chairman Ways and Means Committee.

STATEMENT SHOWING THE AMOUNT EXPENDED FOR RECREATION DURING 1920.

By City Government and Various Other Private Organizations.

Recreation and Playground Commission	\$5,000 00	
Engineering Dept., Maintenance of Parks	11,299 89	
Engineering Dept., Maintenance of Play-grounds	5,159 69	
Public Bldgs. Dept., Maintenance of Park Bldgs.,	1,490 24	
Public Bldgs. Dept., Maintenance of Bath-house	2,361 24	
Public Bldgs. Dept., Maintenance of Band-stand	162 09	
Public Bldgs. Dept., Bennett Social Center	1,749 60	
Public Bldgs. Dept., Bingham Social Center	1,634 98	
Celebrations	803 52	
	<hr/>	
Total expended by City Government		\$29,661 25
Somerville Playgrounds Association	930 04	
Ways and Means Committee	680 13	
	<hr/>	
Total expended by outside organizations		\$1,610 17
Total amount expended for recreation		\$31,271 42

REPORT OF THE PLANNING BOARD.

December 31, 1920.

To His Honor the Mayor and Board of Aldermen.
Gentlemen :

In accordance with the provisions of the Acts of 1913, and as required by Section 2 of Chapter 494 of said Acts, the Planning Board herewith respectfully submits its annual report, and recommendations for the year 1920.

The Board organized for the year by re-electing William F. Riley, Chairman, and David J. Kelley, Secretary, the other members of the board being George J. Rauh and Paul R. Valentine. At the time of meeting for organization there was a vacancy existing, caused by the resignation of Harrison L. Evans.

During the year the Board held several meetings and discussed various matters of interest to the citizens, and after consideration thereof it was voted to make the following recommendations ;

Housing Conditions.

During the past year the problem most in the minds of the majority of our citizens has been the serious shortage of houses. This situation has been state wide, and has received the attention of the Legislature, resulting in the passage of laws tending to help relieve the existing conditions, but a serious shortage of houses still continues.

Although the Planning Board has no jurisdiction affecting this economic condition it respectfully calls attention to the authority given it by the Act of the Legislature creating it, which defines its duties to be chiefly "to make careful studies of the resources and needs of the city, particularly with respect to conditions injurious to public health — in and about rented dwellings."

The Planning Board is ready at any time to investigate any complaints made to it tending to prove that conditions exist which may be detrimental to the public health due to the present housing shortage, and recommends that all complaints from citizens alleging that such conditions exist, be referred to it for investigation and report.

Bridge Street Widening

The urgent and increasing necessity of some action with reference to the widening of Bridge Street becomes more ap-

parent each succeeding year. The Planning Board believes that some solution for the dangerous condition due to the narrowness of this public highway should be determined upon by a joint conference of a committee from the Board of Aldermen of our city and the City Council of our neighboring city of Cambridge.

The worst part of Bridge Street, that is, the part which needs widening, is practically all located within the boundaries of the City of Cambridge. At the last conference held by the Planning Board with the Cambridge Planning Board about two years ago, the opinion of the Cambridge City government was that it should not be called upon to spend money for an undertaking which would chiefly benefit Somerville.

As recommended in the reports of 1916, 1917, 1918 and 1919 the Planning Board again strongly urges that some definite action be taken to remedy this condition before the property now abutting on that part of Bridge Street is increased in value. At present the old houses now standing are nearly all unoccupied, and if the widening could be undertaken during the coming year it would result in a large saving for damages due to the taking based on the present assessed valuation of this property.

Street Car Service.

It seems that the street car service still needs a great deal of improvement. The so-called one man cars now in operation are unsuitable, and their operation during rush hours should be prohibited by the Public Service Commission. The Planning Board is mindful of the fact that the Mayor and Board of Aldermen have continually and consistently tried to improve the street car situation, and recommends that these efforts be continued until better results are apparent. Somerville has no so-called jitneys and their exclusion entitles this city at least to additional accommodations, especially when our citizens are being taxed to secure better street car service and more cars.

Public Parks and Buildings.

The development of social centers in the various school-house districts should be encouraged, and our citizens urged to make use of the school buildings for social entertainments, thereby fostering an interest in civic affairs and helping to make better citizens.

The school buildings are public buildings, and as such the Planning Board recommends that they be freely used by all our citizens for neighborhood gatherings and public meetings or entertainments.

The Planning Board again suggests that the land owned by the city known as the City Ledge be graded and laid out as a playground for the benefit of the Clarendon Hill section of our city.

Fire Protection.

As recommended in our report for 1919 the Planning Board again respectfully calls your attention to the necessity of establishing Fire Districts in our city. The conditions existing last year still continue and the Planning Board is of the opinion that something should be done while new building is at a standstill to establish fire districts. Somerville is practically the only city in the Metropolitan District without an ordinance establishing fire districts. Somerville should not delay longer in passing an ordinance of some kind to establish fire districts. Therefore the Planning Board recommends that a committee be appointed to draw up a plan, dividing the city into fire districts, and that an ordinance be drafted by the City Solicitor for the purpose of establishing the fire districts so decided upon.

Appropriation.

The Planning Board did not use the whole of the appropriation allotted to it because it did not wish to attempt to carry out plans which it would be unable to pay for out of the limited sum given. It hopes to add to its equipment from time to time, so that eventually it will be able to render valuable service to the citizens of the city and the city government.

During the past year it has corresponded with many cities in several states, and has information in its files with reference to industrial facts which may be of value to our citizens. It has also furnished information concerning Somerville to other cities of the country and recommends that inquiries concerning Somerville industrial sites be referred to it for attention.

The Planning Board respectfully requests that it be given an appropriation of at least \$200 this year, so that it may be able to make further progress in its effort to be of service to the citizens of Somerville.

Respectfully submitted,

WILLIAM F. RILEY, Chairman
GEORGE J. RAUH
PAUL R. VALENTINE
DAVID J. KELLEY, Secretary

REPORT OF THE CITY ENGINEER.

OFFICE OF THE CITY ENGINEER,
City Hall, Somerville, January 17, 1921.

To His Honor, the Mayor, and the Board of Aldermen: —

Gentlemen, — In accordance with the city ordinances, the following report of the work done and expense incurred for the year ending December 31, 1920, by the Engineering Department and appropriations under my charge and supervision, including the accounts of city engineer, sewers construction, sewers maintenance, parks maintenance, playgrounds maintenance, and other public works, is herewith presented: — my twenty-fifth annual report as city engineer.

ENGINEERING DEPARTMENT.

In previous reports the general work, charter requirements and city ordinances relating to the duties of the city engineer have been fully described.

On account of the excessive cost very little new construction work has been attempted, the greater part of the work done, being for repairs and maintenance in the various divisions.

Divisions	Appropriations	Credits	Expenditures	Balances
City Engineer	\$15,835 00	904 00	\$16,785 36	\$3 14
Parks Maintenance	10,500 00	800 00	11,299 89	11
Playgrounds Maint.	5,160 00	150 13	5,309 82	31
Sewers Maintenance	23,435 00	79 79	23,514 26	53
Sewers Construction	4,784 75	50 47	4,834 60	62

(Expenditures are shown in detail in the City Auditor's annual report).

CITY ENGINEER DIVISION, CLASSIFICATION OF EXPENSES, 1920.

Sewers, — comprising surveys, estimates, profiles, lines, grades, titles, plans, assessments and all engineering work relating to sewers and supervision	\$1,789 80
Highways, — comprising plans, estimates, titles, profiles, lines and grades, inspection of paving and all other engineering work relating to the department	2,947 78
Sidewalks, — comprising profiles, lines, grades, measurements, inspection, titles, costs and assessments	963 78
Water Works, — comprising lines, grades, locations of mains, gates, hydrants and services and other matters relating to the department	876 00

Parks and Public Grounds,—comprising surveys, plans, estimates, profiles and grades, including laying out of parks, playgrounds, boulevard and supervision	1,060 49
Public Buildings, — comprising surveys, estimates, lines and grades, and other work relating to construction and laying out of grounds	241 68
Street Numbering,—comprising locations of buildings, plans, assigning street numbers	662 78
Street Lines and Grades, — comprising establishing of lines, grades, and miscellaneous data given parties for building and grading	255 74
Bridges and Grade Crossings,—comprising surveys, plans, profiles, estimates, lines and grades, etc.	256 34
City Survey,—comprising establishing of street lines, acceptance plans, and miscellaneous survey work for city map, etc.	1,387 80
Middlesex Registry,—comprising copying of plans, and abstracts from deeds and examination of titles filed at East Cambridge, also tracing of street acceptance and sewer taking plans filed for record	230 20
Private Corporations, Railway, Telephone, Electric Light and Gas Light Companies,—comprising grades, plans, profiles and office notes, locations of poles and conduits	365 92
Setting Stone Bounds and Brass Rods,—defining street lines	515 96
Office work, — comprising record of all locations, indexing, typewriting, bookkeeping, calculations, reports, and general draughting	3,502 06
Miscellaneous Work,—comprising preliminary surveys, designs, sketches, etc., relating to various schemes for different committees	617 54
Holidays, Vacations and Sickness	1,039 65
Guard duty	22 34
	<hr/>
Total	\$16,735 86

Value of field instruments, tools and office instruments, \$2,000.00.

The total cost of maintaining the Engineer's Division since it was established, 1872 - 1920, both years inclusive, has amounted to \$410,090.00.

Seven assistants have been employed during part of the year and six assistants the entire year, on engineering work.

A number of plans were made during the year for street acceptance and four streets have been accepted as public highways, under the betterment act.

There are plans for acceptance of fourteen private streets on file in this office, that for various reasons have not been made public ways.

Many streets and avenues in the city are of the same, or very similar, name and could be changed at the present time

(renamed in memory of deceased veterans of World War)
eliminating the confusion now existing.

Some of the old main thoroughfares should be re-numbered their entire length, so as to eliminate half numbers and letters now being used; and certain streets where traffic is congested should be made "one way" streets.

STREETS ACCEPTED AS PUBLIC HIGHWAYS IN 1920, UNDER THE BETTERMENT ACT.

Name of Street	Ward	From	To	Width in ft.	Length in ft.	Date of Acceptance
Cedar Avenue	6	Linden Avenue	Cedar Street	22	293	May 28, 1920
Crescent Street	1	End of Accepted part	Boston Line	21-32	387	November 17, 1920
Dickson Street	7	Broadway	Fairmount Avenue	40	271	November 12, 1920
Spring Hill Terrace	6	Highland Avenue	Belmont Street	20	673	June 28, 1920
Total			(0.308 miles)		<u>1624</u>	

Supplement to the Table of Streets in the 1919 report of City Engineer.

New streets or courts added during 1920.

Street	From	To	Public or Private	Width in Feet	Length Public	Private
Court	Washingtonave	Franklin ave.	Private	6	....	95

Four private streets changed to public ways during 1920
(foregoing table) 1,624

(Summary) Total 446,707 85,590

Public, 84.603 miles (includes 1.406 miles of City Boulevard and Park Roadways, 2,331 miles of State Boulevard (Metropolitan Park Commission), and 1.596 miles State Highway); private 16,210 miles.

Total length of streets in the city 100.813 miles.

In the 1910 report, tables were published showing old names of certain streets as formerly known, and names of public squares in the city. (Name of Oak Square changed to Wilson Square).

Length of Public Streets In Each Ward.

	Miles
Ward one	10.732
Ward two	9.572
Ward three	7.630
Ward four	9.965
Ward five	12.388
Ward six	13.689
Ward seven	20.627

Total length of public streets in the city . . . 84.603

Stone bounds have been reset in Portland cement concrete at a number of street intersections and angles, to define and preserve the true lines of public streets, and this work should be continued as much as possible each year. These bounds are also of great convenience in establishing permanent "Bench Marks" throughout the city for giving grades.

In the 1907 report a table was compiled from old reports, maps, and office notes, showing the location of stone bounds; the year when set, and whether existing or removed from 1860 to 1907 inclusive, and in the reports of 1908, 1910, 1911, 1913, 1919, and with the following table will show location of all bounds set to 1921.

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STREET BOUNDS SET IN 1920. (Brass rods set in cement).

- Belknap Street, — East side at Broadway X 2 foot offset lines.
 Clarendon Avenue, — East side at Broadway X 2 foot offset lines.
 Clarendon Avenue, — East side at Cambridge City line X 2 foot offset line of Clarendon Ave. and True City line.
 Conwell Avenue, — South side at Curtis St. X 2 foot offset lines.
 Conwell Avenue, — South side at North St. X 2 foot offset lines.
 Cooney Street, — East side at Line St. X 2 foot offset lines.
 Dane Avenue, — South side at Leland St. X 2 foot offset lines.
 Dane Avenue, — South side at Dane St. X 2 foot offset lines.
 Derby Street, — North side at Grant St. East side X 2 foot offset lines.
 Derby Street, — North side at Wheatland St. X 2 foot offset lines.
 Foskett Street, — North side at Liberty Ave. X 2 foot offset lines.
 Glendale Avenue, — North side at Cameron Ave. X 2 foot offset lines.
 Josephine Avenue, — West side at Morrison Ave. X 2 foot offset lines.
 Josephine Avenue, — West side at North side of Kidder Ave. X 2 foot offset lines.
 Josephine Avenue, — West side at Broadway X 2 foot offset lines.
 Linden Avenue, — East side at North side of Summer St. X 2 foot offset lines.
 Malvern Avenue, — North side at Cameron Ave. X 2 foot offset lines.
 Malvern Avenue, — North side at Yorktown St. X 2 foot offset lines.
 Meacham Street, — North side at West side Fremont St. X 2 foot offset lines.
 Ossipee Road, — North side at Curtis St. X 2 foot offset lines.
 Ossipee Road, — North side at West side Packard Ave. X 2 foot offset lines.
 Ossipee Road, — North side at East side Packard Ave. X 2 foot offset lines.
 Raymond Avenue, — South side at Curtis St. X 2 foot offset lines.
 Raymond Avenue, — South side at North St. X 2 foot offset lines.
 Seven Pines Avenue, — North side at Cameron Ave. X 2 foot offset lines.
 Taylor Street, — East side at Sydney St. X 2 foot offset lines.
 Victoria Street, — West side at South side of Woodstock St. Stone Bound drilled.
 Wigglesworth Street, — East side at South side of Otis St. Stone Bound set at X 2 foot offset lines.

There are at the present time a total of 657 bounds or brass rods set for defining street lines.

Three new streets have been constructed, under the betterment act, with a bituminous macadam wearing surface, concrete gutters and granite edgestones, a total of 1,521 feet (.29 mile) ; the work being done by contract.

The average cost of this type of construction complete, for a forty-foot width street, was \$9.35 per linear foot, a high rate, on account of the unusual cost of materials and labor.

Assessments have been levied on abutting property owners for approximately one-half of the cost of constructing these streets.

New granite block pavement has been laid on a concrete base with a cement grout in sections of Linwood Street and Beacon Street — also Windsor Street and Hunting Street

have been constructed with this type of pavement. 8,100 square yards (2,304 feet in length) were constructed by contract at \$7.10 per yard complete; including Fitchburg Street (a private way) where the property owners paid the entire expense of paving.

In constructing the granite pavement, new streets and sidewalks 4,300 feet (0.81 mile) of new edgestone were set.

The total length of permanent paved streets in the city amounts to 17.64 miles.

Permanent street pavement should be extended as rapidly as possible, using old granite block, re-cut and laid on a concrete base, the best and most economical pavement for this city.

Grades were given and measurements taken for the re-construction of twenty-four streets with a bituminous wearing surface, a length of 16,906 feet (3.2 miles).

TABLE OF STREET CONSTRUCTION.

	Square Yards	Miles
*Streets paved with granite blocks	130,089	5.59
**Streets paved with concrete	23,990	1.42
†Streets paved with asphaltic top	42,215	2.59
Streets paved with vitrified brick	20,958	1.29
Streets paved with "Bi-co-mac"	10,100	0.77
Streets paved with bitulithic (patent)	3,059	0.06
Combination pavement (concrete base with bituminous top)	89,205	5.92
‡Streets macadamized (bituminous binder)		42.01
Streets madacamized (water bound)		24.73
Streets graveled or unimproved		16.43
Total		<u>100.81</u>

* Also 31.9 miles (single track) electric railway paved with granite, asphalt, bitulithic, etc.

** Includes 0.42 mile state highway.

† Includes 1.16 miles of state highway.

‡ Includes 1.406 miles of city boulevard and park roadways and 2.331 miles of state boulevard (Metropolitan Park Commission).

There are a number of very dangerous crossings in this city at intersecting public thoroughfares, where the corners should be cut back and the roadway widened for the safety of traffic and improvement in appearance.

Lines and grades were given for constructing ten new granolithic and brick sidewalks, 3,737 square yards (0.8 mile), and assessments computed, the abutting property owners paying one-half the cost.

In laying out new work, under orders passed for construction of sidewalks, etc., occasionally portions of buildings and fences are found to be encroaching on the sidewalk and on some of the old rangeways these encroachments have existed for many years; as improvements are made, the full width of sidewalk should be maintained.

In sections of the city where brick sidewalks have been laid many years, and must necessarily be relaid on account of deterioration and unevenness, granolithic should be substituted in place of brick.

Miles of Edgestone, Granolithic, Gravel and Brick Sidewalks In Each Ward.

	Edgestone	Gravel Sidewalk	Brick Sidewalk	Granolithic Sidewalk
Ward one . . .	19.827	3.756	12.093	4.617
Ward two . . .	16.807	6.591	6.497	3.534
Ward three . . .	14.325	0.840	11.572	1.911
Ward four . . .	15.309	1.342	9.993	3.906
Ward five . . .	22.679	4.540	12.194	5.875
Ward six . . .	24.826	4.387	10.678	10.711
Ward seven . . .	32.791	2.502	8.389	22.073
	<hr/>	<hr/>	<hr/>	<hr/>
	146.564	23.958	71.416	52.627

(Details, etc., streets and sidewalks in report of Street Commissioner).

The Boston Elevated Railway Company have petitioned for a relocation of tracks in certain streets and has made extensive repairs in its roadbed in this city during the past year, replacing long sections of old tracks with new and heavier rails. There are, however, a number of miles of trackage, orders having been granted for widening in the city's main thoroughfares, where the old granite block pavement, within the railroad location, should be relaid and grouted with cement and additional catch basins constructed between the rails to relieve the flooding of sections of certain streets in times of heavy storms. There are 32 miles of electric railroad (single track length) at the present time in the city's streets. A considerable length of high power cables have been placed in underground conduits.

Plans have been made by the various companies and filed in the city engineer's office, showing the locations of gas mains, poles, tracks and conduits in this city, which have been granted by the board of aldermen during the year; and the work of placing overhead wires in conduits underground and removing all poles from the streets should be extended as rapidly as possible.

A special ordinance should be enacted concerning city inspection on all underground work done by private companies or corporations and regulation as to method of street openings.

At the present time there are underground in the city's streets 17.64 miles of telephone conduits, 12.42 miles of electric light conduits, 1.65 miles of electric railway conduits; and about 9.7 miles of underground conduits used for the city's wires.

The Cambridge and Charlestown gas companies have respectively 63.42 and 28.1 miles of gas mains in the city's streets.

Lines and grades have been given for laying new city water mains. New house services, many gates, hydrants, water posts and blow-offs have been located and recorded, sketches and plans made showing the same, and the water works maps corrected to date; also a large number of old water services where new meters were installed, have been located and recorded.

A number of the locations of old hydrants, gates, etc., have been found to be incorrect, a few having been removed entirely; a new survey of the entire distribution system should be made and the maps and office records compiled. (Length of water mains, details, etc., in report of Water Commissioner).

Lines and grades have been given for the erection of city buildings and plans and sketches made for the laying out of surrounding grounds.

Plans have been made and photographs taken where accidents have occurred on the city work, or where boundaries were in dispute and special plans and data prepared for the city solicitor's use in court cases and Federal, State and Municipal hearings attended where information was required.

All plans of estates in Somerville recorded at the Registry of Deeds, East Cambridge, including land court plans, have been copied, also titles examined, abstracts from deeds made for the purpose of assessments, and the proportional part of the cost of new work computed, and schedules of assessments made out showing the property owners.

Total number of plans on file in the office approximately eight thousand two hundred.

A skeleton map of the city has been made for the Somerville Board of Trade showing steam and electric car lines, principal streets, public buildings and locations of principal industries: — also a street map for the American Automobile Association showing the various routes for auto traffic through the city, details of pavement, land marks, etc.

A plan and data has been compiled showing a proposed widening of Bridge Street (East Cambridge) being the exten-

sion of Somerville Avenue: — a much needed public improvement for relieving the present congested traffic and business.

Lines and grades were given and a concrete foundation constructed for the monument erected in Union Square in memory of the (ward two) World War veterans.

Considerable information and data has been prepared for the Somerville Civic Survey report.

Perambulation of the Somerville-Cambridge city boundary line: — In December, a committee appointed from each city, (city engineers and street commissioners) examined the monuments and reference points defining the division line between these two cities and reported their findings in due form to the board of aldermen. The granite bound No. 10 is to be cut off to the Beacon Street sidewalk grade and bound No. 19 is to be raised to the surface of lawn at estate Russell Street.

These boundary lines are perambulated every five years as prescribed by the statutes.

Several conferences were held by representatives of the city governments (including city engineers) of Somerville and Medford relative to the changing of the boundary line between the two cities, but no definite action was taken by either municipality. From the various studies presented, an exchange of territory can be made that would be equally advantageous.

For the immediate improvement of conditions in this city the highway bridges and approaches over the steam railroads should be re-built the full width of the street at Broadway, (North Somerville) Prospect Street and Washington Street, near Union Square; and the steam railroad bridge over Washington Street (East Somerville) re-constructed with increased head-room for street traffic, — the dangerous grade crossing at Park Street should be abolished, as decreed by the courts a number of years ago, and a foot-bridge should be constructed over the railroad tracks making a connection between Wilson Square-Craigie Street and Stanford Terrace-Beacon Street.

I respectfully refer to some of the more important recommendations and suggestions made in reports of the city engineer for a number of years past which are for the improvement of conditions in this city.

SEWER DIVISION.

The high cost of materials and labor has prevented the extension of the "separate system" sewers and likewise storm drain construction work, except that absolutely necessary.

No sewers have been petitioned for during the year and only a small amount of new construction work has been done.

Construction Account, Statement of Expenses, 1920.

Constructing sewers (combined system)	\$757 60	
Constructing storm drains	2,429 46	
Constructing catch basins	2,026 79	
Constructing manholes on sewers	165 00	
	<hr/>	
Cost of new work		\$5,378 85
Charged to other departments, material, etc.	50 47	
Materials on hand December 31	786 28	
	<hr/>	836 75
		<hr/>
Total		\$6,215 60
	Credit.	
Appropriation	\$4,100 00	
Balance unexpended, 1919	684 75	
	<hr/>	4,784 75
Received for materials, etc.	50 47	
Materials on hand January 1, 1920	1,381 00	
	<hr/>	
Total		6,216 22
		<hr/>
Balance unexpended (over to 1921)		\$ 62

The Elmwood Street and Conwell Avenue storm drains commenced in 1919 have been completed and future extensions will provide for the disposal of storm water from two large areas in the westerly part of the city.

This work has been done by the city employing day labor; 520 feet of 12" pipe laid during the year.

One sewer was constructed during the year, a length of 206 feet of 10" and 8" pipe, being the extension of a private sewer in Windsor Street southerly to near the Cambridge line; this work was done by the contractor, who was paving the street.

The total length of the city's drainage system is 113.247 miles, and the entire cost of construction has amounted to about \$1,356,538.00, exclusive of the amount paid to the state for assessments for the construction of the North Metropolitan sewerage system.

The city's assessment for the Metropolitan sewerage system for the past year was \$53,381.08 on construction account and \$36,558.18 for maintenance, and the total amount paid the Commonwealth of Massachusetts for this state sewer has been \$1,501,206.05 (1892 - 1920, both years inclusive). The total length of the Metropolitan sewerage system mains running through the city amounts to 3.475 miles.

There are within the city's limits thirteen connections with the North Metropolitan state sewerage system, also four outlets through the city of Cambridge and three outlets through the city of Medford. The locations of the connections of the city's mains with the state sewer are shown in the 1912 report, and details of construction in previous reports.

STATEMENT OF SEWERS AND STORM DRAINS CONSTRUCTED TO 1921.

Total length of public sewers in the city, January 1, 1921	501,665.6 ft.	
Total length of private sewers in the city, January 1, 1921	34,748.0	
	<hr/>	
Total length of sewers in the city, January 1, 1921	536,413.6	= 101.593 miles*
Total length of storm drains in the city, January 1, 1921	61,532.3	= 11.654 miles
	<hr/>	
Total length of city drainage system, January 1, 1921		113.247 miles
Total length of Metropolitan sewerage system mains running through the city		3.475 miles

* (32.344 miles separate system sewers).

The 1918 report contains a compiled table of Storm Drains constructed to 1919 showing length, cost, date of construction, district benefited, etc.

Sixteen catch basins have been constructed in the highways during the year, making a total of 1,980 basins in the city for drainage purposes, constructed and maintained as follows:—

By the city (sewers division):—	
Located in streets and subways	1,818 basins
Located in city boulevard	33 “
Located in parks (17) and other city lots (12)	29 “
<hr/>	
Total catch basins constructed and maintained by the city	1,880
By Boston & Maine Railroad Company on railroad locations	36 basins
By State, located in boulevards, and highways	130 “
<hr/>	
	166
<hr/>	
Total catch basins in the city for storm drainage purposes	2,046

The separate system sewers should be extended in the old sections of the city each year, as the appropriation will allow, and storm drains completed in certain localities as previously recommended:— especially in the North Somerville district, — and at the East Cambridge line extending from the Somerville Avenue sewer and discharging into Miller's River.

The city's drainage system will be greatly improved when all the foregoing changes are made and construction work completed.

MAINTENANCE ACCOUNT, STATEMENT OF EXPENSES, 1920.

Maintenance of sewers, including cleaning and flushing (113.25 miles)	\$4,633 40
Maintenance of catch basins, cleaning and flushing 1,880)	14,756 56
Maintenance of storm water pump, Medford Street	96 77
Changing line and grade and repairing catch basins	608 00
Changing line and grade and repairing manholes	414 67
Repairing old sewers	638 83
Inspection and location of house drains	1,048 35
New tools and supplies	308 14
Repairs of tools and property	69 55
Maintenance of sewer division yards	838 75
Telephone	53 05
	<hr/>
	\$23,466 07

Labor, teaming and materials for other departments			48 19
			<hr/>
Total expenditures			\$23,514 26
Transferred to Parks division (\$800) to City Engineer Account (\$590)			1,390 00
			<hr/>
Total			\$24,904 26
	Credit.		
Appropriation (\$23325) (\$1500)		\$24,825 00	
Received from other departments		79 79	
		<hr/>	
Total credit			\$24,904 79
			<hr/>
Balance unexpended			\$ 53

Value of tools and property on hand in maintenance of sewers, \$2,500.00.

A permanent force of men, varying in number from twelve to seventeen, and teams are kept continually at work flushing, cleaning and repairing the city's drainage system, catch basins, etc., the expense necessarily increasing yearly as lengths of sewers, drains and catch basins are added to the system, and the distance increased to the dumps. These dumping places are fast diminishing and in a very few years' time some other means of disposal will have to be provided.

Approximately 5,600 cubic yards of material have been removed from the catch basins and sewers during the year, at an average cost of about \$2.64 per cubic yard, and the average cost per mile for cleaning and flushing the drainage system, including catch basins, has amounted to about \$171.21. There are about twenty catch basins (average) to a mile of roadway in this city and the approximate cost of cleaning per basin has been \$7.85 the past year.

A number of repairs have been made and sections rebuilt on some of the old sewers, alterations made in the outlets and overflows, and extra manholes built for the purpose of improving the system.

Many catch basins and manholes have been repaired and grade or line changed.

One hundred and five permits have been issued to licensed drain layers for connecting buildings with main sewers and storm drains, seventy-two being for repairs or alterations: all of the work being done under the supervision of the city's inspector.

Certain persons are licensed as drain layers by the city and under bonds, for the purpose of laying these private drains.

There are to date about 16,556 private house drain connections with the city's drainage system.

During the year the sewer division has done considerable miscellaneous work for other city departments and outside companies furnishing materials and labor, and being partially reimbursed for the same.

Some of the old trunk sewers which were constructed many years ago are in a dangerous condition; sections, where the arch is badly cracked and liable to collapse any time, should be immediately rebuilt.

PARKS AND PLAYGROUNDS DIVISION.

Under this division about seventy-five acres are maintained as parks and playgrounds, and approximately a mile of city boulevard; 65.5 acres are owned by the city and certain areas owned by private parties are turned over to the city for recreation purposes, also satisfactory arrangements have been made for a number of years whereby the city has the use of Tufts College playfield during the summer vacation months, and skating areas in the winter. Over 2,000 trees of various varieties are located on these grounds. These areas when completely developed will compare favorably with other cities in the vicinity.

Athletics in general have revived since the war and the baseball "diamonds," football fields, tennis courts and athletic apparatus located on the various playfields have been in constant use. The money generally spent for flower beds, shrubs, etc., for ornamentation of the various city grounds has been used in cultivating areas of park and playground land, and many school children have devoted their time and energies to the raising of vegetables.

The past year, this division of the engineering department has had the supervision and work of plowing and harrowing the various parcels of land used, an expenditure of approximately \$250.00.

MAINTENANCE ACCOUNT, STATEMENT OF EXPENSES, 1920.

Playgrounds		Parks
\$318 75	Broadway Park (15.9 acres)	\$1,837 89
	Broadway Parkway (2.0 acres)	223 00
160 66	Central Hill Park (13.1 acres)	1,843 01
1,060 07	Lincoln Park (8.3 acres)	1,146 81
30 00	Prospect Hill Park (2.6 acres)	1,743 89
8 00	Tufts Park (4.5 acres)	1,243 23
	Paul Revere Park (.02) acre)	21 00
	Belmont Street Park (0.4 acre)	561 11
	Powder House Boulevard (0.9 mile long)	1,254 42
	Powder House Square Parkway (0.2 acre)	121 75
	Cemetery, Somerville Avenue (0.7 acre)	141 50
1,016 89	Somerville Field at Alewife Brook (11.5 acres)	469 47
1,195 50	Richard Trum Playground, Cedar street and Broadway	385 84
268 03	Playground, Glen street and Oliver street (0.9 acre + 1.5 acres private land)	23 00
261 90	Playground, Kent street and Somerville av- enue (0.8 acre)	114 63
113 59	Playground, Poplar and Joy street (0.5 acre)	14 00
23 00	Playground, Beacon street near Washington street (0.2 acre)	8 00
29 00	Playground, Webster avenue, near Cambridge line (0.2 acre)	12 00
151 99	Playground, Mason street and Broadway Ten- nis court (0.3 acre)	4 00
59 50	Playground, Fellsway East (2.5 acres private land)	24 00
430 81	Tufts College Land (Summer and Winter Playground, 4.8 acres)	8 00
32 00	Plowing, harrowing and fertilizing Park and Playground areas for planting	99 34
150 13	Plowing, harrowing, etc., for Recreation Com- mission, Private Land	
	Total expenditure, maintenance (75 acres) 65.5 acres city property + 8.8 acres priv- ate land, .7 acre cemetery and 0.9 mile boulevard, and 0.54 mile parkway roads	
<hr/>		<hr/>
\$5,309 82		\$11,299 89

Playgrounds and Recreation	Credit.	Parks
	Appropriation for Parks	\$10,500 00
	Transfer from Sewers Maintenance Account	800 00
\$5,160 00	Appropriation for Playgrounds	
150 13	Received from Recreation and Playground Commission	
<hr/>		<hr/>
\$5,310 13	Total credit	\$11,300 00
<hr/>		<hr/>
\$0 31	Balance unexpended	\$0 11

The number of men employed has varied from seven to sixteen.

The city's assessment for Metropolitan parks and boulevards for the year 1920 amounted to \$18,601.69 on construction account, and \$38,907.90 being the proportional cost for maintaining the same; in addition to this the city's special assessment for the Charles River basin construction and maintenance amounted to \$9,593.89; for the improvement of Alewife brook and maintenance of same \$1,140.65 and for the maintenance of Wellington bridge across Mystic River, \$3,520.70. The total of these assessments amounts to \$71,764.83, being Somerville's proportional payment to the State on account of the Metropolitan park system for the year 1920.

The total assessment paid to the State for parks and boulevards amounts to \$837,735.62, January 1, 1921, and the length of State boulevard at present constructed in this city consists of seven-tenths of a mile of double roadway, located in the easterly part of the city and extending between Broadway and Mystic River, and one and two-tenths miles bordering Mystic River and Alewife brook located in the westerly part of the city.

Extensive repairs have been made on the Park roads and boulevard.

Back-stops on the ball fields have been re-constructed and fences repaired.

New shower baths were installed in the highway stable building at the Trum Playground, and the baths located at Lincoln Park have been kept open certain evenings during each week.

A hockey rink was constructed on Tufts College land and maintained during the winter.

All flag poles on the parks were repaired and painted; — flags are displayed on all parks every day throughout the year.

An unusual vegetable growth covering the entire water surface of the pond at Broadway Park with a thick green scum was removed at an expense of over Five Hundred Dollars.

A number of large Poplar trees on the Powder House Boulevard was uprooted and blown down during terrific wind and rain storms causing considerable damage to abutting property, houses, etc., and costing over \$400.00 for removal — new hardy growth trees should replace these trees the entire length of the boulevard.

Tennis courts have been in use at Mason Street playground, Somerville Field, Broadway, Central Hill and Lincoln parks.

The Metropolitan District Commission have furnished band concerts, certain evenings during summer months, at Broadway park.

At the 4th of July fireworks display on Lincoln park a number of serious accidents to the spectators occurred.

All tar walks on Central Hill Park should be reconstructed and the wooden seats in the grand-stand at Somerville Field rebuilt immediately.

A permanent concrete field house should be constructed at the Somerville athletic field with all modern equipment and the remaining area graded as soon as possible; when completed as originally designed the city will own one of the best recreation fields in the vicinity. (In the 1910 report, plan shows proposed complete laying out).

The city has become so densely populated that some of the larger park areas should be more extensively utilized for public recreation and physical training purposes; on several of the playfields concrete buildings should be constructed in place of some of the old wooden structures, additional apparatus provided on some of the principal parks and playgrounds for the smaller children's pleasure, where a regular park employee can have the care of the same, and some of the smaller playground areas should be enclosed by wire fencing for the protection of children.

In certain localities of the city well-lighted playgrounds, during the summer evenings, should be maintained, for the young men and women working in the factories daily.

Paul Revere Park area should be enlarged by acquiring additional land, constructing a street across from Main street to Broadway separating the city's park from the adjoining land, and thereby preserving an historical spot on the top of Winter Hill for the future, also making a convenient connection for travel.

In connection with the departmental work the Recreation and Playgrounds Commission, the Playgrounds Association and Women's Clubs have been of great assistance in advising, directing and promoting the city's welfare. (Details, etc., in Commission and Association reports).

The total yearly expenditure by the city departments and other Associations for recreation and play is over \$15,000.00.

Respectfully submitted,

ERNEST W. BAILEY,

City Engineer.

REPORT OF THE STREET COMMISSIONER.

OFFICE OF THE STREET COMMISSIONER,
CITY HALL, Somerville, January 1, 1921.

To His Honor, the Mayor, and the Board of Aldermen:—

Gentlemen:—I most respectfully submit the forty-fifth annual report, containing a brief summary of the principal work performed by the Highway Department, by day labor and contract, during the year 1920, with recommendations for necessary additions the coming year.

This department has charge of the construction, alteration, repair, maintenance and management of ways, streets, sidewalks and bridges; the setting out and care of shade trees; the suppression of gypsy and brown tail moths and elm leaf beetles; the oiling and watering of streets.

Highway Department Appropriations.

	Appropriations	Expenditures
Highway Maintenance	\$66,053 00	
Departmental transfers	28,659 29	
	94,712 29	
Total credit		94,691 05
Sidewalks Maintenance	8,484 96	8,484 91
Street Sprinkling	43,330 00	43,328 52
Street Cleaning	26,600 00	28,597 14
Suppression of Moths	4,902 48	4,902 48
Care of Trees	3,372 58	3,372 34
New Streets	29,650 00	29,609 00
Permanent Pavement	69,646 00	36,109 64
Sidewalks Construction	13,350 21	9,962 20
Reconstruction and Resurfacing	39,900 00	39,899 74
	\$333,948 52	\$298,957 02

This city is fortunate in being located so that most of the supplies for this department are shipped to us by auto trucks.

The question of how to make, and how to maintain good streets, is one that is steadily pressing to the front as one of the most important concerns of this department.

In my opinion, granite paving blocks grouted on a concrete base, is the only kind of paving for any street where

there is to be heavy travel, and especially on a narrow street where there are double car tracks.

The Great Atlantic and Pacific Tea Company erected a fine fireproof store house on Fitchburg street and Linwood street. In order to have a good entrance to this store house they paved Fitchburg street, which is a private way, with granite paving blocks grouted on a concrete base, at their expense. This end of Linwood street should be paved by the city the coming year. Permission was given this company to lay a spur track under the Somerville avenue bridge connecting their store house with the Boston and Maine Railroad, Fitchburg Division. They, the Great Atlantic and Pacific Tea Company to repave the street on a concrete base and to assume all liabilities.

Highway Maintenance.

The maintenance of all the equipment is charged to this appropriation. Such work as repairs of all streets, care of snow and ice, subways, street and traffic signs, bridges and approaches where grade crossings have been eliminated, is charged to this account. If any equipment is used for other accounts in this department or for other city departments, Highway Maintenance receives credit for same. Any work done for corporations, the revenue received is credited to general city revenue account.

Highway Maintenance.

Total Appropriations		\$66,053 00
Street Commissioner	\$3,100 00	
Bookkeeper and clerk	2,711 47	
Telephones, 240.81 — Office expense, 112.87	353 68	
Equipment and repairs	5,229 70	
Harnesses	1,458 49	
Horses	1,300 00	
Tools and machinery	1,383 48	
Repairs — Rollers and mixers	444 04	
Stable expense	6,413 14	
Hay, straw and feed	11,499 62	
Shoeing	1,568 43	
Veterinary	231 71	
Repairs to streets, gutters, crossings	2,583 66	
Repairs special streets	979 58	
Repairs permanent pavement	4,601 94	
Repairs macadam pavement	1,951 18	
Repairs bridges - approaches and subways	743 55	
Care of lanterns and traffic signs	720 81	
Snow and ice	13,196 60	

Signs	1,891 42	
Care Highway property	576 17	
Emergency calls	165 62	
Auto maintenance	2,853 48	
Chevrolet Roadster	847 00	
Sawing wood	195 00	
Allowance vacations and holidays	6,797 95	
Crushed stone	1,495 63	
Sand and gravel	4,612 24	
Ashes 211.03 - lampblk 30.86 - Lumber 157.13	399 02	
Bricks	999 61	
Cement	2,323 29	
Gasoline - kerosene	1,559 30	
Edgestone - paving blocks	62 50	
Fuel	926 92	
Tarvia (patching)	336 96	
Insurance on boilers	139 48	
City of Waltham. (taxes)	281 20	
Miscellaneous	16 11	
Public service corporations	846 05	
Departmental charges	4,598 93	
Driveways, etc.,	2,312 09	
	<hr/>	
	94,691 05	
Credits	28,659 29	66,031 76
	<hr/>	<hr/>
Unexpended balance		\$21 24

Underground Wires.

No underground conduits were constructed this year.

Snow and Ice.

As no special appropriation is made for the care of ice and snow, what money is expended is taken from Highway Maintenance, thus cutting the appropriation where it is needed for work of a more permanent nature.

As many automobilists and truck owners desire to, and some must, use their machines the year round, they are demanding that the roads be cleared of snow, it means a large expenditure of money if any amount of snow should fall. The winter of 1920 will long be remembered by road men. The employees and horses of this department worked day and night trying to keep the streets and sidewalks opened for travel. All requests such as teaming away snow for funerals, weddings and emer-

gency calls were attended to. The coming year this department will have ploughs equipped on auto trucks and new horse drawn ploughs to keep the streets opened for travel.

569 requests and reports were attended to.

\$13,196.60 was expended for the care of snow and ice. 5358 cubic yards of snow and ice were removed. 4 cubic yards of sand and 327 cubic yards of ashes were used in caring for icy sidewalks, streets and crossings.

Bridges.

Most of the bridges are in good condition, except the Lowell street bridges where extensive repairs must be made the coming year at the expense of the city.

Crushed Stone.

The William J. McCarthy Co. furnished 15 tons of local crushed rock at \$2.00 per ton at their crusher and 5,031 tons at \$2.40 per ton on the line of work. Coleman Brothers 2,341 tons of trap rock at \$2.70 per ton on line of work.

Steam Rollers.

No. 1 roller worked 128 $\frac{1}{4}$ days.

No. 2 roller worked 1 day.

No. 4 roller worked 112 $\frac{1}{2}$ days.

The old No. 2 roller should be exchanged for a new fifteen ton maintenance roller.

Sidewalks Maintenance.

The old brick sidewalks on the north side of Somerville avenue from Union square to Drouett's block and in Davis square in front of the Medina and Lewis Blocks were removed and 1135 square yards of granolithic were laid. A good sum was saved on this work, under the estimate, because after removing the brick I found a good sand and gravel base and did not have to do any excavation. This work was done by city labor for \$2.36 per square yard. I hope this work in all the squares will be continued.

The resetting of edgestones, repairs of all kinds of sidewalks and Police reports pertaining to sidewalks are taken from this account.

5,478 linear feet of edgestones were reset. 1,815 square yards of brick sidewalks were relaid. 764 square yards of paved gutters were repaved and 141 square yards of granolithic were relaid.

\$8,484.91 was expended for Sidewalks Maintenance.

Street Sprinkling.

Nearly all of our main streets and squares where there are car tracks are sprinkled and flushed by the American Car Sprinkler of Worcester. This car is in operation seven days a week and eight hours a day for \$1019.28 a month and has given good satisfaction.

About all the macadam streets were covered with Tarvia "B."

A new auto oiling truck was purchased this year and was used on tar work.

Calcium Chloride was used in the winter on the squares to keep down the dust to the satisfaction of the store-keepers.

Dust layers used during the year: —

- 142,728 gallons of Tarvia "B" (Barrett's).
- 8,077 gallons of Lemery oil.
- 1,200 gallons of Gas House Tar.

I most respectfully recommend the purchase of a small auto truck with sprinkler attachment to care for the paved streets in different parts of the city where it is impossible for the car sprinkler to operate, for example, the slaughter house district where there are many paved streets and paved streets leading from the several squares with no car tracks on the same.

This year the assessment was increased one cent per foot making an assessment of six cents per linear foot for each abutter on any width of street.

This division of the department is self supporting.

\$43,328.52 was expended for Street Sprinkling.

Street Cleaning.

This year, following the annual Clean-Up-Week, Mayor Eldridge, by suggestion from delegates of the several Women's Clubs, had circulars printed and distributed to every tenant, calling their attention to a city ordinance in regard to throwing or dropping all kinds of rubbish in the street, and asking

their earnest co-operation in carrying out the meaning of the ordinance. From my observation I think the people did comply with the Mayor's request.

I have received many suggestions from residents stating where they thought a waste barrel would help keep the streets clean. Their requests have been gladly complied with. There is a day cleaning patrol in all the squares, and the night cleaning crew patrols the same and attends to all police reports and emergency calls during the night.

5,899 cubic yards of street sweepings were removed.

\$28,597.14 was expended for Street Cleaning.

Suppression of Moths.

This year the city did not make any assessment to the abutters for the care of moths on private property. This expense was taken from the appropriation. Public and private trees are cared for in regard to the removal of moth nests in the winter, thus giving work for the employees who otherwise would be unemployed at this time of the year. Street trees are sprayed in the spring and summer.

The city is nearly rid of the brown-tail moth. I am finding the gypsy moths on the increase, but by continuous fighting every year I hope to keep them from spreading.

A new moth has appeared in this country called the Satin moth, it is found on the poplar trees. An inspector from the forester's office at the State House has inspected our city and found some of these egg clusters on our poplar trees and I surely will have these eggs destroyed.

Our spraying machine was thoroughly overhauled and placed in first class condition for next year.

6,856 street trees were inspected and cared for.

15,493 private trees were inspected and cared for.

5,436 bushes were found moth infested.

15 vines were moth infested.

2,242 fences and buildings on which moths nested.

47,876 gypsy-moth nests were painted with creosote.

12 brown-tail moth nests were gathered and destroyed.

7,363 trees were sprayed by the gasoline spraying machine to exterminate the different kinds of caterpillars and beetles.

\$4,902 42 was expended for the Suppression of Moths.

Shade Trees.

Street shade trees, in any city, unless they are set back of the sidewalk line, or in the grass plot back of the edgestone, stand a poor show to develop to any size. The conditions with which the shade trees have to contend in the city are a serious

drawback to their growth, namely:—electric wires, gas leaks, permanent paving and insects.

- 80 trees were set out.
- 135 trees were removed.
- 350 trees were trimmed.
- 130 tree guards and supports installed.

\$3,372.34 was expended for the Care of Trees.

Highways Construction — New Streets.

Five new streets were constructed during the year under the Betterment Act, by contract with William J. Sullivan, viz:

Setting edgestones 65c per linear foot.

Gutter construction \$3.45 per square yard.

Construction of Macadam roadway \$1.15 per square yard.

The city furnished the edgestone and tarvia binder. Straight edgestone \$1.36 per linear foot. Circles \$1.90 per linear foot from S. & R. J. Lombard, delivered on line of work.

Tarvia binder 13c per gallon from the Barrett Co. delivered on line of work.

Four new streets were accepted this year.

\$29,609.00 was expended for New Streets.

NEW STREET CONSTRUCTED IN 1920.

Street	From	To	Material	Length	Cost
Allen street	Somerville Ave.	Charlestown St.	Bituminous Macadam	644	\$4,343 04
Cooney street	Beacon St.	Line St.	"	245	2,166 84
Hillsdale road	Conwell Ave.	Sunset Rd. & Medford line	"	632	6,116 08
Hunting street	South St.	Cambridge line	Granite paving blocks on concrete base.	117	2,486 49
Windsor street	Cambridge line	F. R. R. Boynton yard	Granite paving blocks on concrete base.	530	14,418 25

Sidewalks Constructed, One-half the Cost Being Assessed Upon the Abutting Estates.

Street	Location	Yards of Grano.	Cost
Benton Road	In front Est. No. 20 and Lots No. 3 and No. 4 and part No. 1	123.1	\$ 553 30
Elm street	Easterly side — Linden Ave. to Porter St.	732.3	2,595 23
Farragut avenue	Broadway to No. 42 Inc.	370	1,361 11
North street	Westerly side — Woods Ave. to Medford line	286.7	1,820 38
Oxford street	Trull lane to School St.	332.9	1,169 15
Prichard avenue	Kidder Ave. northwesterly to already laid	379	1,416 54
Willow avenue	S. E'y side of Lot No. 1 Morrison Ave. and at B. & M. R. R.	162.3	569 34
Glenwood road	N. E'y side, Medford St. to Vernon St. Grass plot filled in with brick 216 sq. yds.		477 15

Sidewalks Construction.

The contracts for granolithic sidewalks were let to Denis I. Crimmings and Peter Salvi, of Somerville, who furnished all material and did the excavation at \$3.50 per square yard.

The city employees constructed a granolithic sidewalk with edgestones on North street at Medford line.

Cost of edgestones, excavating and setting, \$2.22 per linear foot.

Cost of granolithic including excavation, \$3.00 per square yard.

Miles of edgestones, granolithic, brick and gravel sidewalks in the city:—

Length of edgestones	146.564 miles.
Granolithic sidewalks	57.627 miles.
Brick sidewalks	71.416 miles.
Gravel sidewalks	23.958 miles.

\$9,962.20 was expended for Sidewalks Construction.

Highways Construction — Permanent Pavement.

A contract was let to William J. Sullivan at \$7.10 a square yard, for the paving with granite paving blocks grouted on a concrete base. He furnished all materials and did the excavating.

\$36,109.64 was expended for Permanent Pavement.

*Washington street	Medford St. to Tufts St. southerly side	\$213 57
*Tufts street	Portion from Washington St. north-easterly	165 52
*Webster avenue	Cambridge line to north of Columbia St.	81 67
*Beacon street	Dickinson St. to Buckingham St.	2,149 95
Beacon street	Park St. to Sacramento St.	18,872 15
North street	Repair gutters	410 10
Linwood street	Congress place, northerly	\$14,216 68
* Final Payments on work of 1920.		

Reconstruction and Resurfacing.

Twenty-four streets were reconstructed or resurfaced under this appropriation at an average cost of \$2.34 per linear foot, by city employees.

The Public Works Committee, with the Mayor's approval, selected streets in each ward to be resurfaced or reconstructed from this appropriation. I hope they will continue the work the coming year.

\$39,899.74 was expended for Reconstruction and Resurfacing.

RECONSTRUCTION AND RESURFACING APPROPRIATION.

Streets Reconstructed and Resurfaced in 1920.

Street	From	To	Width	Length	Cost
Ames street	Bartlett street	Robinson street	40	580	\$1,233 69
Arthur street	Broadway	Bonair street	40	438	1,079 25
Bartlett street	Medford street	Vernon street	40	830	3,028 67
Benedict street	Union street	Austin street	40	585	1,159 95
Calvin street	Beacon street	Washington street	34	655	1,030 97
Campbell Park	Meacham road	Kingston street	40	399	511 69
Central street	Highland avenue	Summer street	40	930	1,743 42
Charnwood Road	Willow avenue	Hancock street	40	589	2,447 68
Kingston street	Meacham Road	Cambridge Line	40	647	468 69
Lexington avenue	Willow avenue	Cedar street	45	1349	3,333 41
Meacham Road	Cambridge Line	Permanent Pavement	40	850	2,003 74
Mt. Vernon street	Pearl street	Washington street	40	600	2,006 45
Perry street	Washington street	Lincoln Park	40	606	1,209 27
Quincy street	Somerville avenue	Summer street	40	781	2,719 26
Robinson street	Central street	Bartlett street	40	582	1,104 95
Rush street	Broadway	Pearl street	40	1100	2,000 15
Sewall street	Temple street	Grant street	40	615	423 30
Sycamore street	Pembroke street	Medford street	40	350	925 71
Tower street	Crown street	Highland avenue	40	559	1,429 00
Virginia street	Aldrich street	Jasper street	40	405	1,122 45
Westwood road	Central street	Benton Road	40	484	669 64
Wheatland street	Broadway	Mystic avenue	40	1364	4,105 54
Windsor Road	Willow avenue	Hancock street	40	575	1,514 87
Winslow avenue	College avenue	Clifton street	40	1123	2,627 99

Miscellaneous.

- 66 Granolithic driveways constructed.
- 42 Brick driveways constructed.
- 17 Edgestones dropped.
- 4 Driveways extended.
- 4 Driveways discontinued.
- 3 Carriage walks constructed.

Driveways are constructed, discontinued, relocated or extended at the expense of the petitioners.

Length of public streets 84.603 miles.

Two horses were killed on account of disability and five horses were purchased during the year.

The department maintains its own municipal repair shop for the different lines of work.

I have attended meetings of the Public Works and of the different committees of the Board of Aldermen for consultation regarding work and petitions.

Labor.

The regular employees were given two weeks vacation and all employees, twelve months Saturday half holiday without loss of pay. Mayor Eldridge increased the pay of all employees May 2, 1920, to a minimum daily wage of \$4.00, drivers and chauffeurs \$4.10, mechanics \$4.50 and engineers \$4.75.

Eight hours constitute a day.

The city does its own insuring for injured laborers. There are fifteen former employees receiving pensions under the act providing for the pensioning of laborers.

There were during 1920:—

- 113 permits were issued to the Cambridge and Charlestown Gas Companies.
- 226 permits issued to occupy streets and sidewalks.
- 71 permits issued to cross sidewalks.
- 27 permits issued to feed horses.
- 35 street sprinkling complaints and requests.
- 237 notifications to other departments and corporations.
- 24 accident reports.
- 873 police reports.
- 507 brick and granolithic sidewalks repaired.
- 865 miscellaneous reports and requests.
- 38 drain layers permits.
- 581 water department openings.
- 92 permits to open streets and sidewalks.
- 15 danger signs erected.
- 41 new signs erected.
- 101 signs repainted.
- 78 streets cleaned by request.
- 4025 cubic yards of sand and gravel used.
- 2666 cubic yards of dirt removed.
- 1785 cubic yards old macadam used.
- 979 cubic yards of ashes used.
- 1790 bags of Portland cement used.

Recommendations.

I most respectfully recommend that Somerville avenue from Beacon street to Porter Station, Cambridge, be paved with granite paving blocks grouted on a concrete base; that the granite paving started on Linwood street, Tufts street and Beacon street be completed. I should like to see some of the good work, started a few years ago, such as re-cutting the paving blocks and relaying them on a concrete base on such main thoroughfares as Somerville avenue and Washington street, continued the coming year.

I recommend the purchase of a small auto-truck sprinkler, also a garage to be erected at the city stable yard to care for automobiles and trucks used in the department.

I wish to express to His Honor, Charles W. Eldridge, my appreciation of the interest and valuable assistance rendered me and the department.

My acknowledgments are due to the Board of Aldermen and heads of departments for their courtesy and consideration in matters pertaining to the business of the city, also for the co-operation of all employees of the department and citizens of our city.

Respectfully submitted,

ASA B. PRICHARD,

Street Commissioner.

TABLE SHOWING THE LOCATION, LENGTH AND WIDTH OF PUBLIC AND PRIVATE STREETS.

Street	From	To	Public		Length.
			Private.	Width in Feet.	
Abdell	Somerville ave	Southwesterly	Private.	25	..... 203
Aberdeen road	Cedar st.	Highland ave.	Public.	40	..... 449
Aberdeen rd. ex.	Angle	Westerly	Private.	30	..... 67
Acadia pk.	Somerville ave	Northeasterly	Public.	40	..... 256
Adams	Broadway	Medford st.	Public.	40	..... 907
Adelaide rd	Somerville ave	Northeasterly	Private.	20	..... 138
Adrian	Marion st.	Joseph st.	Public.	40	..... 579
Albion pl.	Albion st.	Northeasterly	Private.	10	..... 166
Albion ct.	Albion st.	Southeasterly	Private.	16	..... 116
Albion	Central st.	Cedar st.	Public.	40	..... 2,742
Albion	Broadway	Medford line	Private.	50	..... 100
Albion ter.	Albion st.	Southwesterly	Public.	25	..... 100
Aldersey	Walnut st.	Vinal ave.	Public.	40	..... 508
Aldrich	Pearl st.	B. & L. R. R.	Public.	40	..... 611
††Alewife Brk pky	Mystic Val. pky	Cambridge line	Public.	.....	..... 4,775
Alfred	Broadway	Medford line	Private.	50	..... 50
Allen	Somerville ave	Charlestown st.	Public.	25	..... 644
Allen ct	Park st.	Northwesterly	Private.	20	..... 150
Alpine	Cedar st.	Southeasterly	Public.	30	..... 667
Alpine	Alpine st.	Lowell st.	Public.	40	..... 688
Alston	Cross st.	Shawmut st.	Public.	40-30	..... 757
Ames	Bartlett st.	Robinson st.	Public.	40	..... 580
Appleton	Willow ave.	Clifton st.	Public.	40	..... 548
Appleton	Clifton st.	Liberty ave.	Public.	40	..... 120
Arlington	Franklin st.	Lincoln st.	Public.	40	..... 452
Arnold ave	Porter st.	Southeasterly	Private.	15	..... 127
Arnold ct.	Beacon st.	Northeasterly	Private.	10	..... 115
Arthur ct.	Linden st.	Easterly	Private.	about 10	..... 100
Arthur	Broadway	Bonair st.	Public.	40	..... 438
Ash ave.	Meacham st.	East Albion st.	Public.	40	..... 554
Ash ave.	East Albion st.	Northeasterly	Private.	40	..... 151
Ashland	Summer st.	Sartwell ave.	Public.	30	..... 478
Atherton	Central st.	Spring st.	Public.	40	..... 741
Auburn ave.	Cross st.	B. & L. R. R.	Public.	30	..... 606
Austin	Broadway	Mystic ave.	Public.	40	..... 716
Autumn	Broadway	Bonair st.	Public.	20	..... 408
Avon	School st.	Central st.	Public.	40	..... 1,360
Avon pl.	Cross st.	B. & L. R. R.	Private.	25	..... 150
Bailey	North st.	West Adams st	Private	40	..... 420
Banks	Elm st.	Summer st.	Public.	40	..... 639
Bartlett	Vernon st.	Broadway	Public.	40	..... 1,550
Barton	Broadway	Hamilton road	Public.	40	..... 382
Bay State ave.	Broadway	Foskett st.	Public.	40	..... 1,237
Beach ave.	Webster ave.	Columbia st.	Private.	about 20	..... 200
Beacon pl.	Beacon st.	Northeasterly	Private.	15	..... 200
Beacon	Cambridge line	Somerville ave.	Public.	66	..... 6,007
Beacon ter.	Somerville ave.	Northeasterly	Private.	24	..... 110
Bean ter.	Cutter st.	Southeasterly	Private.	16	..... 100
Beckwith circle	Beacon st.	Southwesterly	Private	28.5	..... 112
Bedford	South st.	Cambridge line	Public.	30	..... 165
Beech	Somerville ave.	Atherton st.	Public.	40	..... 323
Belknap	Broadway	Hamilton road	Public.	40	..... 449
Bellevue ter.	Albion st.	Northeasterly	Private.	20	..... 90
Belmont	Somerville ave	Highland ave.	Public.	40	..... 2,192
Belmont pl.	Belmont st.	Southeasterly	Public.	25	..... 177
Belmont sq.	Belmont st.	Southeasterly	Public.	30	..... 75
Belmont sq.	Belmont ter	N. E. & S. W.	Public.	20	..... 145
Belmont ter.	Belmont st.	Easterly	Private.	15	..... 137
Benedict ave.	Broadway	Benedict st.	Private.	20	..... 200
Benedict	Union st.	Austin st.	Public.	40	..... 585
Bennett ct.	Bennett st.	Prospect st.	Private.	10	..... 100
Rennett	Prospect st.	Rennett ct.	Private.	40 to 25	..... 400
Renton road	Summer st.	Hudson st.	Public.	40	..... 1,208
Berkeley	School st.	Central st.	Public.	40	..... 1,360
Berwick	Hinckley st.	Northwesterly	Private.	20	..... 170
Bigelow	Boston st.	Munroe st.	Public.	50	..... 208
Billingham	Broadway	William st.	Public.	40	..... 563

††Metropolitan Park Commission Boulevard.

Table Showing the Location, Length and Width of Public and Private Streets.—Continued.

Street	From	To	Public	Width	Length
			or Private	in Feet	Public Private
Bishop's pl.	Glen st.	Easterly	Private.	10	.... 75
Blakeley ave.	Fellsway east	Cross st.	Private.	40	.... 630
Bleachery ct.	Somerville ave.	Fitchburg R.R.	Private.	30	.... 450
Bolton	Oak st.	Houghton st.	Public.	40	476
Bonair	Cross st.	Walnut st.	Public.	40	1,535
Bond	Broadway	Jaques st.	Public.	40	655
Bonner ave.	Washington st.	Columbus ave.	Public.	40	376
Boston ave.	Medford line	Mystic river	Public.	60	915
Boston ave.	Broadway	Medford line	Public.	50	80
Boston ave.	Broadway	Highland road	Public.	65	287
Boston ave.	Highland road	Prichard ave.	Public.	50	509
Boston ave.	Prichard ave.	East to angle in street	Private.	50	.... 146
Boston ave.	Angle in st. s'ly	Kidder ave.	Private.	40	.... 376
Boston ave.	Kidder ave.	Morrison ave.	Public.	40	649
Boston	Washington st.	Prosp't Hill av.	Public.	45	640
Boston	Prosp't Hill av.	Walnut st.	Public.	40	1,242
Bow	Union sq.	Wesley sq.	Public.	60	658
Bow	Wesley sq.	Somerville ave.	Public.	50	570
Bowdoin	Washington st.	Lincoln park	Public.	40	341
Bowers ave.	Cottage ave.	Elm st.	Private.	24	.... 288
Bow St. pl.	Bow st.	Northwesterly	Private.	40	.... 300
Bradford ave.	School st.	Southeasterly	Private.	40	.... 150
Bradley	Pearl st.	Walter st.	Public.	40	762
Braemore road	Broadway	Medford line	Private.	40	.... 9
Brastown ave.	Lowell st.	Porter st.	Public.	40	686
Bristol road	Broadway	Medford line	Public.	40	146
Broadway	Charlest'n line	Cross st.	Public.	100	2,590
Broadway	Cross st.	Marshall st.	Pub.	100 to 200	2,060
Broadway	Marshall st.	Main st.	Public.	100	1,570
Broadway	Main st.	Top of hill	Public.	100 to 90	1,030
Broadway	Top of hill	Albion st.	Public.	90	2,540
Broadway	Albion st.	Willow ave.	Public.	90 to 70	1,030
Broadway	Willow ave.	Paulina st.	Public.	70	3,250
Broadway	Paulina st.	Arlington line	Public.	65-60-65	3,220
Broadway pl.	Broadway	Southwesterly	Private.	22	.... 250
Bromfield road	Warner st.	Dearborn road	Public.	40	1,262
Brook	Glen st.	Cross st.	Public.	40	504
Browning road	Sycamore st.	Central st.	Public.	40	679
Buckingham	Beacon st.	Dimick st.	Public.	40	292
Buena Vista rd.	Holland st.	Southwesterly	Private.	35	.... 276
Burnham	Broadway	Pow. House Bl.	Public.	40	543
Burnside ave.	Elm st.	Summer st.	Public.	40	720
Cady ave.	Simpson ave.	Northwesterly	Private.	40	.... 203
Caldwell ave.	Washington st.	Southerly	Private.	20	.... 210
Calvin	Beacon st.	Dimick st.	Public.	40	263
Calvin	Dimick st.	Washington st.	Public.	30	392
Cambria	Central st.	Benton road	Public.	40	488
Cameron ave.	Holland st.	Cambridge line	Public.	60	1,065
Campbell pk.	Meacham rd.	Kingston st.	Public.	40	399
Campbell Pk. pl.	Kingston st.	Arl'ton Br. R.R.	Private.	20	.... 84
Carlton	Somerville ave.	Lake st.	Public.	40	300
Carter terrace	Summer st.	Southwesterly	Public.	40	171
Carter terrace	Accepted part	Southwesterly	Private.	18+	.... 43
Carver	Porter st.	Northwesterly	Private.	40	.... 156
Cedar ave.	Cedar st.	Linden ave.	Public.	22	290
Cedar ct.	Cedar st.	Southeasterly	Private.	15+	.... 70+
Cedar St. pl.	Murdock st.	Southwesterly	Private.	20	.... 378
Cedar St. pl.	Cedar n Elm st.	Southeasterly	Private.	12+	.... 80+
Cedar	Elm st.	Broadway	Public.	40	4,137
Central road	Central st.	E'ly and N'ly	Public.	40	377
Central road	Central road	Sycamore st.	Public.	30 to 15	221
Central	Somerville ave.	Summer st.	Public.	33	1,043
Central	Summer st.	Medford st.	Public.	40	2,539
Central	Medford st.	Broadway	Public.	45	1,079
Centre	Albion st.	B. & L. R. R.	Private.	35	.... 200
Chandler	Park ave.	Broadway	Public.	40	1,232
Chapel	College ave.	Chandler st.	Public.	40	273
Chapel ct.	Sycamore st.	Northwesterly	Private.	12	.... 130
Charles	Washington st.	Easterly	Public.	30	166
Charlestown	Allen st.	Easterly	Private.	15	.... 400
Charnwood rd.	Willow ave.	Hancock st.	Public.	40	589

Table Showing the Location, Length and Width of Public and Private Streets.—Continued.

Street	From	To	Public		Length
			or Private	Width in Feet	
*Chelsea	Mystic ave.	Melrose st.	Private.	50	1,390
Cherry	Elm st.	Highland ave.	Public.	45	1,450
Cherry	Highland ave.	Northeasterly	Private.	45	110
Chester	Elm st.	Cambridge line	Public.	40	885
Chester ave.	Medford st.	Angle	Public.	about 22	220
Chester ave.	Angle	Cross st.	Public.	20	451
Chester pl.	Chester st.	Northwesterly	Private.	40	200
Chestnut	Poplar st.	Southeasterly	Public.	40	537
Chetwynd road	Curtis st.	West Adams st.	Private.	40	892
Church	Summer st.	Lake st.	Public.	40	964
City road	Broadway	Cedar st.	Private.	45	980
Claremon	Holland st.	Mead st.	Public.	40	560
Clarendon ave.	Broadway	Cambridge line	Public.	40	1,217
Clark	Newton st.	Lincoln pky.	Public.	35	552
Cleveland	Central st.	Harvard st.	Public.	40	459
Clifton	Appleton st.	Morrison ave.	Public.	40	200
Clifton	Morrison ave.	Arlngtn Br. RR	Private.	40	220
Clyde	Cedar st.	Murdock st.	Public.	30	664
College ave.	Davis sq.	Medford line	Public.	60	4,080
College Cir.	College av. around	College av.	Private.	10 and 12	284
College Hill rd.	Conwell ave.	North st.	Private.	40	449
Columbia	Webster ave.	Cambridge line	Public.	40	816
Columbia ct.	Columbia st.	Webster ave.	Private.	9	150
Columbus ave.	Washington st.	Walnut st.	Public.	40	1,425
Concord ave.	Prospect st.	Wyatt st.	Public.	40	1,483
Concord ave.	Wyatt st.	Beacon st.	Public.	30	472
Congress pl.	Linwood st.	Somerville ave.	Public.	50	202
Conlon ct.	Columbia st.	Easterly	Private.	20	200
Connecticut av.	Mystic ave.	Penn. ave.	Public.	40	487
Conwell ave.	Curtis st.	North st.	Public.	40	1,346
Conwell	Highland ave.	Southwesterly	Public.	35	363
Cooney	Beacon st.	Line st.	Public.	30	245
Corinthian road	Broadway	Cady ave.	Private.	40	560
Cottage ave.	Russell st.	Chester st.	Public.	40	550
Cottage circle	Cottage ave.	Southwesterly	Private.	25	87
Cottage pl.	Washington st.	Southwesterly	Private.	about 11	150
Craigie	Somerville ave.	Summer st.	Public.	50	1,280
Craigie ter.	16 Craigie st.	Westerly	Private.	25	126
Crescent	Washington st.	Hadley st.	Public.	30	402
Crescent	Hadley st.	Pearl st.	Public.	30	174
Crocker	Highland ave.	Crown st.	Public.	40	528
Cross	Medford st.	Broadway	Public.	45	2,680
Cross st. (East)	Broadway	Mystic ave.	Public.	40	1,100
Cross St. pl.	Cross st.	Northwesterly	Private.	24	150
Crown	Porter st.	Lowell st.	Private.	30	700
*Cummings	Fellsway	Middlesex ave.	Private.	40	625
Curtis ave.	Curtis st.	Hillsdale road	Public.	40	654
Curtis	Broadway	Medford line	Public.	40	2,357
Cutler	Hinckley st.	Northwesterly	Private.	20	170
Cutter ave.	Summer st.	Highland ave.	Public.	40	480
Cutter pk.	Cutter ave.	Northwesterly	Private.	12	83
Cutter	Broadway	Webster st.	Public.	40	730
Cypress	Central st.	Beech st.	Public.	40	262
Dana	Bonair st.	Pearl st.	Public.	40	696
Dane	Somerville ave.	Washington st.	Public.	40	1,341
Dane ave.	Dane st.	Leland st.	Public.	30	569
Dante terrace	Craigie st.	Westerly	Private.	25	125
Dartmouth	Medford st.	Broadway	Public.	40	1,465
Day	Elm st.	Cambridge line	Public.	40	908
Dearborn road	Boston ave.	College ave.	Public.	50	469
Delaware	Aldrich st.	Pearl st.	Public.	40	451
Dell	Glen st.	Tufts st.	Public.	40	466
Derby	Temple st.	Wheatland st.	Public.	40	1,031
Dexter	Broadway	Medford line	Private.	50	25
Dickinson	Springfield st.	Beacon st.	Public.	40	770
Dickson	Broadway	Fairmount ave.	Public.	40	271
Dimick	Concord ave.	Calvin st.	Public.	40	957
Dix pl.	Linwood st.	Southwesterly	Private.	10	100
Douglas ave.	Edgar ave.	Southeasterly	Private.	30	162
Dover	Elm st.	Cambridge line	Public.	40	975

*Proposed.

Table Showing the Location, Length and Width of Public and Private Streets.—Continued.

Street	From	To	Public	Width in Feet	Length	
			or Private		Public	Private
Dow	Powder House	Ware st.	Private.	40	....	257
	Bd.					
Downer pl.	Downer st.	B. & L. R. R.	Private.	20	....	125
Downer	Nashua st.	Southeasterly	Private.	20	....	120
Dresden circle	Cutter ave.	Westerly	Private.	30	....	133
Durant	Washington st.	Southerly	Private.	20	....	200
Durham	Beacon st.	Hanson st.	Public.	40	423	....
Dynamo	Willow ave.	Whipple st.	Private.	30	....	255
Earle	South st.	Northerly	Private.	30	....	322
Earle	End of above	Fitchburg R. R.	Private.	15	....	115
East Albion	Mt. Vernon	E. of Moreland	Private.	25	....	188
	ave.	st.				
East Albion	E. of Moreland	Medford line	Private.	40	....	490
	st.					
Eastman road	Highland ave.	Southwesterly	Public.	40	296	....
Edgar ave.	Main st.	Meacham st.	Private.	50	....	800
*Edgeworth	Mystic ave.	Melrose st.	Private.	50	....	1,380
Edmands	Broadway	near Bonair st.	Public.	40	376	....
Edmonton ave.	Cross st.	Fellsway east	Private.	40	....	630
Electric ave.	Mason st.	Curtis st.	Public.	40	1,374	....
Eliot	Vine st.	Park st.	Public.	40	291	....
Ellington road	Highland ave.	Northeasterly	Private.	35	....	120
Ellington road	West st.	Northwesterly	Private.	30	....	405
Ellsworth	Cross st.	Rush st.	Public.	40	230	....
Elm ct.	Villa ave.	Northwesterly	Private.	18	....	70
Elm pl.	Harvard st.	Westerly	Private.	30	....	190
Elm road	Elm st.	Northeasterly	Private.	25	....	183
Elm	Somerville ave.	Cherry st.	Public.	63	1,672	....
Elm	Cherry st.	White st.	Public.	63 to 60	330	....
Elm	White st.	Banks st.	Public.	60	660	....
Elm	Banks st.	Beech st.	Public.	60 to 77.5	290	....
Elm	Beech st.	Tenney st.	Public.	77.5 to 60	570	....
Elm	Tenney st.	Davis sq.	Public.	60	1,429	....
Elmwood	Holland st.	Cambridge line	Public.	40	1,057	....
Elmwood ter.	Elmwood st.	Easterly	Private.	20	....	190
Elston	Elm st.	Summer st.	Public.	40	396	....
Emerson	Everett st.	Newton st.	Private.	30	....	170
Endicott ave.	Broadway	Woodstock st.	Private.	40	....	800
		(Ext'n)				
Essex	Medford st.	Richdale ave.	Public.	40	232	....
Eustis	Beacon st.	Cambridge line	Private.	30	....	150
Everett ave.	Cross st.	Dana st.	Public.	40	845	....
Everett	Webster ave.	Newton st.	Private.	30	....	350
Evergreen ave.	Marshall st.	Sycamore st.	Public.	40	1,320	....
Evergreen sq.	Porter st.	Southeasterly	Private.	22	....	179
Exchange pl.	Washington st.	Southerly	Private.	4.5	....	70
*Fairfax	North st.	Powder House	Private.	40	....	915
		Bld.				
Fairlee	Cherry st.	Northwesterly	Public.	30	144	....
Fairmount ave.	Curtis st.	Northwesterly	Public.	40	679	....
Fairview ter.	Sycamore st.	Southwesterly	Private.	15	....	173
Farragut ave.	Broadway	Woodstock st.	Public.	40	905	....
		(Ext'n)				
††Fellsway	Mystic ave.	Mystic river	Public.	70 to 130	2,500	....
††Fellsway east	Broadway	Mystic ave.	Public.	50	1,222	....
(Winthrop						
ave.)						
††Fellsway West	Broadway	Mystic ave.	Public.	50	1,324	....
(Chauncey						
ave.)						
Fennell	Hinckley st.	Northwesterly	Private.	20	....	175
Fenwick	Broadway	Jaques st.	Public.	40	601	....
Fisk ave.	Hinckley st.	Lowell st.	Public.	20	484	....
Fitchburg ct.	Fitchburg st.	Southeasterly	Private.	10	....	225
Fitchburg	Linwood st.	B. & L. R. R.	Private.	40	....	400
Flint ave.	Flint st.	Northerly	Public.	40	202	....
Flint	Franklin st.	Aldrich st.	Public.	40	1,790	....
Florence	Washington st.	Perkins st.	Public.	40	1,304	....
Florence ter.	Jaques st.	Southwesterly	Private.	20	....	90
Forest	Beacon st.	Cambridge line	Public.	40	117	....
Forster	Sycamore st.	Central st.	Private.	30	....	430

*Proposed.

††Metropolitan Park Commission Boulevard.

Table Showing the Location, Length and Width of Public and Private Streets.—Continued.

Street	From	To	Public	Width in Feet	Length	
			or Private		Public	Private
Foskett	Willow ave.	Liberty ave.	Public.	40	668	....
Fountain ave.	Cross st.	Glen st.	Public.	30	578	....
Francesca ave.	College ave.	Liberty ave.	Public.	40	762	....
Francis	Porter st.	Conwell st.	Public.	30	180	....
Franklin ave.	Washington st.	Franklin st.	Public.	20	575	....
Franklin pl.	Franklin st.	Southeasterly	Private.	15	....	100
Franklin	Broadway	Washington st.	Public.	40+	2,316	....
Fremont ave.	Bowdoin st.	Lincoln pk.	Public.	30	232	....
Fremont	Main st.	Nr E. Albion st	Public.	40	1,112	....
Fremont	Nr E. Albion st	Mystic ave.	Private.	40	....	335
Garden ct.	Somerville ave.	Fitchburg R. R.	Private.	25	....	370
Garfield ave.	Broadway	Blakeley ave.	Public.	40	447	....
Garfield ave.	Blakeley ave.	Middlesex ave.	Private.	40	....	983
Garrison ave.	Broadway	Land of City of Camb.	Public.	40	460	....
Garrison ave.	Land City of Camb.	Woodstock st. (Ext'n)	Private.	40	....	390
George	Broadway	Lincoln ave.	Public.	30	275	....
Gibbens	Central st.	Benton rd, w'ly	Public.	40	665	....
Giles pk.	Walnut st.	Northwesterly	Public.	32.71	167	....
Gill's ct.	Franklin st.	Westerly	Private.	10	....	100
Gilman	Cross st.	Walnut st.	Public.	40	1,430	....
Gilman ter.	Pearl st.	Northeasterly	Public.	40	360	....
Gilson ter.	Linden ave.	Northwesterly	Private.	20	....	124
Glen	Broadway	Tufts st.	Public.	40	2,373	....
Glendale ave.	Cameron ave.	Yorktown st.	Public.	40	410	....
Glenwood road	Vernon st.	Broadway	Public.	40	1,524	....
Glover circle	Meacham road	Southeasterly	Private.	20	....	110
Gordon	North st.	Pow. House Bd	Private.	40	....	1,245
Gorham	Holland st.	Howard st.	Public.	40	763	....
Gould ave.	Porter st.	Southeasterly	Private.	16	....	156
Gove ct.	Cedar st.	Southeasterly	Private.	18	....	144
Grand View av.	Walnut st.	Vinal ave.	Public.	40	542	....
Granite	Somerville ave.	Osgood st.	Public.	40	411	....
Grant	Broadway	Mystic ave.	Public.	40	1,405	....
Greene	Summer st.	Laurel st.	Public.	40	555	....
Greenville	Medford st.	Munroe st.	Public.	40	660	....
Greenville ter.	Greenville st.	Northerly	Private.	20	....	250
Greenwood ter.	Beacon st.	Northeasterly	Private.	25	....	165
Gritter way	College ave.	Bromfield rd.	Private.	4	....	160
Grove	Elm st.	Morrison ave.	Public.	40	996	....
Hadley ct.	Franklin st.	Westerly	Private.	16	....	95
Hall ave.	College ave.	Liberty ave.	Public.	40	926	....
Hall	Cedar st.	Cherry st.	Public.	30	456	....
Hamlet	Highland ave.	Boston st.	Public.	30	616	....
Hamilton road	Russell road	North st.	Public.	40	560	....
Hammond	Dickinson st.	Concord ave.	Public.	40	267	....
Hancock	Elm st.	Highland ave.	Public.	40	1,349	....
Hancock	Highland ave.	Lexington ave.	Public.	50	376	....
Hanson ave.	Hanson st.	Easterly	Private.	30	....	252
Hanson	Washington st.	Skehan st.	Public.	30	469	....
Hanson	Skehan st.	Vine st.	Public.	35	347	....
Hardan road	Pow. House Bd	Ware st.	Private.	20 and 40	....	283
Harding	No. of Ward st.	Cambridge line	Public.	30	465	....
Harold	Dimick st.	Marion st.	Public.	40	316	....
Harold	Gordon st.	Medford line	Private.	40	....	48
Harrison	Ivaloo st.	Kent st.	Public.	40	644	....
Harrison	Elmwood st.	Southeasterly	Public.	40	....	210
Harvard pl.	Harvard st.	Westerly	Private.	35	....	200
Harvard	Summer st.	Beech st.	Public.	40	717	....
Hathorn	Broadway	Arlington st.	Public.	40	339	....
Hawkins	Somerville ave.	Washington st.	Public.	40	330	....
Hawthorne	Willow ave.	Cutter ave.	Public.	30	807	....
Hayden ter.	Linden ave.	Easterly	Private.	20	....	120
Heath	Temple st.	Bond st.	Public.	45	1,043	....
Heath	Bond st.	Moreland st.	Public.	40	754	....
Henderson	Richardson st.	B. & L. R. R.	Public.	20	569	....
Hennessy ct.	Medford st.	Fisk ave.	Private.	20	....	250
Henrietta ct.	Somerville ave.	Northerly	Private.	8 and 20	....	161
Henry ave.	Highland ave.	Lexington ave.	Public.	40	290	....

Table Showing the Location, Length and Width of Public and Private Streets.—Continued.

Street	From	To	Public	Width	Length		
			or Private	in Feet	Public	Private	
Herbert	Chester st.	Day st.	Public.	40	337	....
Hersey	Berkeley st.	Oxford st.	Private.	40	....		230
Higgins ct.	Mt. Vernon st.	Westerly	Private.	16	....		149
High	North st.	Pow. House B ^d	Private.	40	....		678
Highland ave.	Medford st.	Davis sq.	Public.	60	9,135	....
Highland path, east	Morrison ave.	Arlington Br. R. R.	Private.	10	....		107
Highland path, west	Morrison ave.	Arlington Br. R. R.	Private.	10	....		108
†Highland rd.	Morrison ave.	Boston ave.	Pub. 30(70wide)	1,499	....	
Hill	Broadway	Fairmount ave.	Public.	40	284	....
Hillsdale rd.	Conwell ave.	Sunset rd.	Public.	40	632	....
Hillside ave.	Pearl st.	Southwesterly	Private.	30	....		150
Hillside cir.	Craigie st.	Westerly	Private.	16	....		151
Hillside pk.	Walnut st.	Northwesterly	Public.	40	196	....
Hinckley	Broadway	B. & L. R. R.	Public. 30 and 35	1,081	....	
Hodgdon pl.	Dane ave.	Northeasterly	Private. about 20	....			150
Holland	Davis sq.	Broadway	Public.	60	2,696	....
Holt's ave.	Oak st.	Southeasterly	Private.	10	....		100
Holyoke road	Elm st. around	to Elm st.	Public.	40	637	....
Homer sq.	Bonner ave.	Northwesterly	Public.	30+	200	....
Horace	South st.	Fitchburg R. R.	Public.	30	517	....
Houghton	Springfield st.	Cambridge line	Public.	40	653	....
Howard	Thorndike st.	Gorham street	Public.	40	431	....
Howe	Marshall st.	School st.	Public.	40	445	....
Hudson	Central st.	Cedar st.	Public.	40	2,760	....
Hunting	South st.	Cambridge line	Public.	30	117	....
Ibbetson	Somerville ave.	Lowell st.	Public.	40	802	....
Illinois ave.	Broadway	Penn. ave.	Public.	40	427	....
Indiana ave.	Broadway	Penn. ave.	Public.	40	384	....
Irving	Holland st.	Broadway	Public.	40	1,180	....
Ivaloo	Beacon st.	Park st.	Public.	40	685	....
James	Pearl st.	Radcliffe road	Public.	40	320	....
Jaques	Fellsway west	Temple st.	Public.	40	1,182	....
Jaques	Temple st.	Bond st.	Public.	45	1,005	....
Jaques	Bond st.	Edgar ave.	Public.	40	395	....
Jasper pl.	Walnut st.	Easterly	Private.	20	....		80
Jasper	Pearl st.	Gilman st.	Public.	40	283	....
Jay	Holland st.	Howard st.	Public.	40	534	....
Jerome ct.	Sycamore st.	Jerome st.	Private.	10	....		150
Jerome	Montrose st.	Jerome ct.	Private.	20	....		125
Jerome	Lawrence rd.	Mystic Val. py	Private.	40	....		495
Joseph	Newton st.	Lincoln pky	Public.	40	458	....
Josephine ave.	Morrison ave.	Broadway	Public.	45	1,718	....
Joy	Washington st.	Poplar st.	Public.	30	1,121	....
Joy St. pl.	Joy st.	Southwesterly	Private.	16	....		168
Keneson road	Broadway	Walnut road	Private.	30	....		338
Kensington av.	Broadway	Blakeley ave.	Public.	40	455	....
*Kensington av	Blakeley ave.	Middlesex ave.	Private.	40	....		1,150
Kent ct.	Kent st.	Northerly	Private. about 25	....			420
Kent	Somerville ave.	Fitchburg R. R.	Public.	40	292	....
Kent	Fitchburg R. R.	Beacon st.	Public.	25	386	....
Kenwood	College ave.	Billingham st.	Public.	40	322	....
Kidder ave.	College ave.	Boston ave.	Public.	40	2,554	....
Kilby	Somerville ave.	Southwesterly	Private.	20	....		180
Kilsyth road	Broadway	Medford line	Private.	40	....		5
Kimball	Lowell st.	Craigie st.	Private.	40	....		303
Kingman road	Washington st.	Fitchburg R. R.	Private.	25	....		400
Kingston	Meacham road	Cambridge line	Public.	40	647	....
Knapp	School st.	Granite st.	Public.	40	379	....
Knowlton	Tufts st.	N'E' line Est. 37	Public.	40	461	....
Knowlton	End of above	Oliver st.	Private.	40	....		464
Lake	Hawkins st.	Church st.	Public.	40	840	....
Lamson ct.	Linwood st.	Poplar st.	Private.	20	....		370
Landers	School st.	Westerly	Public.	40	228	....
Langmaid ave.	Broadway	Heath st.	Public.	30	353	....
Latin way	Talbot ave.	Professors row	Private.	60	....		250

*Proposed.

†Roadway (only) accepted 30 feet wide, full width of street 70 feet.

Table Showing the Location, Length and Width of Public and Private Streets.—Continued.

Street	From	To	Public	Width in Feet	Length	
			or Private		Public	Private
Laurel ave.	Laurel st.	Northwesterly	Private.	18	....	125
Laurel	Somerville ave.	Summer st.	Public.	40	983	....
Lawrence road	Medford line	Mystic Val. py	Private.	40	....	585
Lawson ter.	Putnam st.	Easterly	Private.	5	....	200
Lee	Medford st.	Richdale ave.	Public.	40	385	....
Leland	Washington st.	Dane ave.	Public.	40	359	....
Leon	Concord ave.	Dickinson st.	Public.	40	155	....
Leonard pl.	Joy st.	Northeasterly	Private.	13+	....	98
Leonard	Broadway	Pow. House Bd.	Public.	40	450	....
Lesley ave.	Highland ave.	Lexington ave.	Public.	40	333	....
Leslie pl.	Highland ave.	Northerly	Private.	12	....	75
Lester ter.	Meacham road	Northwesterly	Private.	20	....	190
Lewis	Magnus ave.	Easterly	Private.	40	....	416
Lexington ave.	Willow ave.	Hancock st.	Public.	50	624	....
Lexington ave.	Hancock st.	Angle	Public.	45 to 40	147	....
Lexington ave.	Angle	Cedar st.	Public.	40	578	....
Liberty ave.	Broadway	Appleton st.	Public.	40	1,493	....
Liberty rd.	Morrison ave.	Liberty ave.	Private.	16	....	200
Lincoln ave.	Lincoln st.	Mt. Vernon st.	Public.	30	478	....
Lincoln pky	Washington st.	Perry st.	Public.	40	1,520	....
Lincoln pl.	Lincoln ave.	Northerly	Private.	9	....	120
Lincoln	Broadway	Perkins st.	Public.	40	550	....
Linden ave.	Elm st.	Cedar ave.	Public.	45	1,413	....
Linden circle	Linden ave.	Southeasterly	Private.	24	....	120
Linden pl.	Linden ave.	Northwesterly	Private.	20	....	160
Linden	Somerville ave.	Charlestown st.	Public.	33	587	....
Line	Washington st.	Cambridge line	Public.	33	1,727	....
Linehan ct.	Linwood st.	Chestnut st.	Private.	about 15	....	200
Linwood pl.	Linwood st.	Southwesterly	Private.	about 12	....	150
Linwood	Somerville ave.	Washington st.	Public.	50	2,114	....
London	Linwood st.	B. & L. R. R.	Private.	40	....	340
Loring	Somerville ave.	Osgood st.	Public.	40	413	....
Louisburg pl.	Autumn st.	Easterly	Private.	13	....	90
Lovell	Broadway	Electric ave.	Public.	40	385	....
Lowden ave.	Broadway	Foskett st.	Public.	40	1,247	....
Lowell	Somerville ave.	Summer st.	Public.	36	1,259	....
Lowell	Summer st.	Medford st.	Public.	40	3,472	....
Lowell circle	Lowell st.	Westerly	Priv. 11 and 27.5	....	....	143
Lowell ter.	Lowell st.	Northwesterly	Private.	20	....	150
Madison	School st.	Sycamore st.	Public.	40	891	....
Magnus ave.	Washington st.	Southerly	Private.	40	....	509
Main	Broadway	Medford line	Public.	50	966	....
Maine ave.	Mystic ave.	Penn. ave.	Public.	40	379	....
Maine ter.	Maine ave.	Southeasterly	Public.	32	205	....
*Malden	Mystic ave.	Melrose st.	Private.	50	....	1,360
Mallet	Willow ave.	Liberty ave.	Public.	40	657	....
Malloy ct.	Somerville ave.	Merriam ave.	Private.	30	....	255
Malvern ave.	Cameron ave.	Yorktown st.	Public.	40	410	....
Mansfield	Somerville ave.	Washington st.	Public.	40	735	....
Maple ave.	School st.	Southeasterly	Private.	40	....	300
Maple pl.	Marshall st.	Maple ave.	Private.	5	....	125
Maple	Poplar st.	Medford st.	Public.	30	699	....
Mardel circle	Spring st.	Northwesterly	Private.	8	....	140
Marion	Concord ave.	Dimick st.	Public.	40	1,141	....
Marshall	Broadway	Pearl st.	Public.	40	1,650	....
Mason	Broadway	Pow. House Bd.	Public.	40	681	....
May pl.	Hawkins st.	Easterly	Private.	12	....	100
McCarroll ct.	Clyde st.	Southwesterly	Private.	25	....	75
McCulpe pl.	Medford st.	Easterly	Private.	10	....	110
McGregor ave.	Wigglesworth st.	Walnut st.	Private.	13	....	302
Meacham road	Dover st.	Cambridge line	Public.	40	1,060	....
Meacham	Mt. Vernon ave.	Medford line	Public.	40	777	....
Mead	Cameron ave.	Moore st.	Private.	40	....	340
Medford	Cambridge line	Central st.	Public.	50	8,047	....
Medford	Central st.	Broadway	Public.	55	1,985	....
Melrose	Mystic ave.	Fellsway	Private.	50	....	2,310
Melvin	Broadway	Bonair st.	Public.	40	487	....
Merriam ave.	Merriam st.	Malloy ct.	Private.	15	....	255
Merriam	Washington st.	Somerville ave.	Public.	40	360	....

*Proposed.

Table Showing the Location, Length and Width of Public and Private Streets.—Continued.

Street	From	To	Public	Width in Feet	Length	
			or Private		Public	Private
Prosp't Hill pky	Munroe st.	Stone ave.	Public.	40	400	....
Prospect pl.	Prospect st.	Newton st.	Private.	20	....	130
Putnam	Summer st.	Highland ave.	Public.	50	1,262	....
Quincy	Somerville ave.	Summer st.	Public.	40	781	....
Radcliffe road	Walnut st.	Bradley st.	Public.	35	392	....
Radcliffe road	Bradley st.	Marshall st.	Public.	40	261	....
Randolph pl.	Cross st.	Westerly	Private.	15	....	244
Raymond ave.	Curtis st.	North st.	Public.	40	1,345	....
Record ct.	Broadway	Southwesterly	Private.	10	....	110
Reed's ct.	Oliver st.	Southwesterly	Private.	20	....	105
Remick ct.	Cutter st.	Southeasterly	Private.	10	....	100
Rhode Is. ave.	Mystic ave.	Penn. ave.	Public.	40	460	....
Richardson	Lowell st.	Hinckley st.	Public.	35	467	....
Richardson ter.	Richardson st.	Northeasterly	Private.	20	....	135
Richdale ave.	School st.	Sycamore st.	Public.	40	875	....
Roberts	Hinckley st.	Northwesterly	Private.	20	....	170
Robinson	Central st.	Bartlett st.	Public.	40	582	....
Rogers ave.	Morrison ave.	Boston ave.	Public.	45	1,682	....
Roland	Waverly st.	Boston line	Private.	40	....	100
Rose	Washington st.	Lewis st.	Private.	40	....	450
Roseland	Beacon st.	Cambridge line	Public.	40	121	....
Rossmore	Somerville ave.	Washington st.	Public.	40	534	....
Royce pl.	Bonair st.	Northeasterly	Private.	15+	....	175
Rush	Broadway	Flint st.	Public.	40	1,400	....
Russell rd.	Broadway	N. line Hamil- ton rd.	Public.	40	559	...
Russell rd.	N. Line Ham- ilton rd.	Northerly	Private.	40	....	75
Russell	Elm st.	Cambridge line	Public.	40	700	....
Sacramento	Somerville ave.	Fitchburg R. R.	Public.	40	80	....
Sacramento	Fitchburg R. R.	Beacon st.	Public.	40	290	....
Sacramento	Beacon st.	Cambridge line	Public.	40	154	....
Sanborn ave.	Warren ave.	Walnut st.	Public.	40	280	....
Sanborn ct.	Washington st.	Northwesterly	Private.	30	....	176
Sargent ave.	Broadway	Walnut st.	Public.	40	1,075	....
Sartwell ave.	Cedar st.	Cherry st.	Public.	35	427	....
Sawyer ave.	Packard ave.	Curtis st.	Private.	40	....	690
School	Somerville ave.	Highland ave.	Public.	40	1,901	....
School	Highland ave.	Broadway	Public.	50	2,500	....
Sellon pl.	Marshall st.	Northwesterly	Private.	12	....	120
Seven Pines av.	Cameron ave.	Cambridge line	Public.	40	92	....
Sewall ct.	Sewall st.	Southwesterly	Private.	25	....	190
Sewall	Grant st.	Temple st.	Public.	40	615	....
Shawmut	Washington st.	Cross st.	Public.	40	575	....
Shedd	Somerville ave.	Merriam ave.	Private.	40	....	310
Sherman ct.	Sargent ave.	Marshall st.	Private.	10	....	250
Sibley ct.	Cutter st.	Northwesterly	Private.	10	....	100
Sibley pl.	Cutter st.	Northwesterly	Private.	10	....	100
Simpson ave.	Broadway	Holland st.	Public.	40	1,018	....
Skehan	Dane st.	Hanson st.	Public.	30	306	....
Skehan	Hanson	Durham	Private.	30	....	414
Skilton ave.	Pearl st. around	to Pearl st.	Private.	40	....	540
Smith ave.	Beacon st.	Line st.	Private.	25+	....	200
Snow ter.	Jaques st.	Southwesterly	Private.	16	....	120
Somerville ave.	E. Camb. line.	Union sq.	Public.	75	4,325	....
Somerville ave.	Union sq.	N. Camb. line	Public.	70	6,793	....
South	Medford st.	Water st.	Public.	30	989	....
Spencer ave.	Cedar st.	Hancock st.	Public.	40	727	....
Spring ct.	Somerville ave.	Westerly	Private.	20	....	200
Spring	Somerville ave.	Summer st.	Public.	40	1,220	....
Springfield	Concord ave.	Cambridge line	Public.	40	788	....
Spring Hill ter.	Highland ave.	Belmont st.	Public.	20	670	...
Stanford ter.	Beacon st.	Northeasterly	Private.	20	....	200
Steeves circle	Cherry st.	Easterly	Private.	15	....	120
*Sterling st.	North st.	Pow. House Bd.	Private.	40	....	800
Stickney ave.	Marshall st.	School st.	Public.	40	458	....
St. James ave.	Elm st.	Summer st.	Public.	40	488	...
St. James ave. ext.	Summer st.	Northeasterly	Public.	30	125	....

*Proposed.

Table Showing the Location, Length and Width of Public and Private Streets.—Continued.

Street	From	To	Public or Private	Width		Length	
				in Feet	Public	Private	Public	Private
Stone ave.	Union sq.	Columbus ave.	Public.	40		676	....
Stone ave.	Columbus ave.	Prosp't Hill py.	Public.	38		107	....
Stone pl.	Stone ave.	Southeasterly	Public.	30		142	....
Strathmore rd.	Broadway	Medford line	Private.	40		....	15
Summer	Bow st.	Elm st.	Public.	45	7,900	....	....
Summit ave.	Walnut st.	Vinal ave.	Public.	45		532	....
Summit	College ave.	Billingham st.	Public.	40		262	....
Sunnyside ave.	Walnut st.	Wigglesworth st.	Public.	25 to 35		306	....
Sunset rd.	Curtis st.	Hillsdale road	Private.	40		....	658
Sycamore	Broadway	Medford st.	Public.	45	1,275	....	....
Sycamore	Medford st.	B. & L. R. R.	Public.	40		667	....
Sycamore	B. & L. R. R.	Highland ave.	Public.	35		722	....
Sydney	Grant st.	Temple st.	Public.	40		679	....
Talbot ave.	Packard ave.	College ave.	Private.	50		....	1,409
*Tannery Ex.	Cambridge line	Woodstock st. (Ext'n)	Private.	40		....	160
Taunton	Wyatt. st.	East'y to angle	Private.	30		....	170
Taunton	Angle	Marion st.	Private.	20		....	95
Taylor pl.	Somerville ave.	Southerly	Private.	15		....	200
Taylor	Mystic ave.	Sydney st.	Public.	40		309	....
Teele ave.	Packard ave.	Curtis st.	Public.	40		685	....
Temple	Broadway	Mystic ave.	Public.	66	1,637	....	....
Tenney ct.	Mystic ave.	Northeasterly	Private.	30		....	400
Tennyson	Forster st.	Pembroke st.	Public.	40		922	....
Thorndike	Holland st.	Arlington Br.					
Thorndike	Arlington Br.	R. R.	Public.	40		465	....
Thorpe	Highland ave.	Kingston st	Public.	40		115	....
Thurston	Broadway	Southwesterly	Public.	30		468	....
Timmins pl.	Dane st.	Richdale ave.	Public.	40	1,660	....	....
Tower ct.	Tyler st.	Westerly	Private.	3.5		....	97
Tower	Crown st.	Northeasterly	Private.	25		....	150
Tremont pl.	Tremont st.	Highland ave.	Public.	40		559	....
Tremont	Webster ave.	Southeasterly	Private.	about 10		....	75
Trull	Vernon st.	Cambridge line	Public.	40		589	....
Trull lane	Highland ave.	Medford st.	Public.	40	1,050	....	....
Tufts parkway	College ave.	Oxford st.	Private.	15		....	200
Tufts	Washington st.	College ave.	Public.	22		900	....
Turner ct.	Franklin st.	Cross st.	Public.	40		982	....
Tyler	Vine st.	Westerly	Private.	20		....	150
Union	Broadway	Dane st.	Public.	40		404	....
Union pl.	Linwood st.	Mystic ave.	Public.	40		345	....
Upland Park	Main st.	Southwesterly	Private.	10		....	100
		Southwesterly	Private.	20		....	175
Vermont ave.	Mystic ave.	Penn. ave.	Public.	40		433	....
Vernon	Central st.	Glenwood road	Public.	40		764	....
Vernon	Glenwood road.	Partridge ave.	Public.	40 to 30		190	....
Vernon	Partridge ave.	Lowell st.	Public.	30		434	....
Victoria	Broadway	Cambridge line	Public.	40	1,036	....	....
Villa ave.	Winslow ave.	Arlington Br.					
		R. R.	Private.	35		....	200
Village	Dane st.	Vine st.	Private.	25		....	370
Vinal ave.	Summer st.	Highland ave.	Public.	45	1,425	....	....
Vinal	Richardson st.	Northeasterly	Private.	20		....	200
Vine ct.	Vine st.	Northwesterly	Private.	25		....	140
Vine	Somerville ave.	Fitchburg R. R.	Public.	40		540	....
Vine	Fitchburg R. R.	Hanson st.	Private.	40		....	222
Vine	Hanson st.	Beacon st.	Public.	30		662	....
Virginia	Aldrich st.	Jasper st.	Public.	40		405	....
Wade ct.	Cedar st.	Westerly	Private.	20		....	180
Waldo ave.	Beacon st.	Dimick st.	Public.	40		277	....
Waldo	Highland ave.	Hudson st.	Public.	40		287	....
Walker	Broadway	Leonard st.	Public.	40		713	....
Wallace	Holland st.	Broadway	Public.	40	1,342	....	....
Walnut	Bow st.	Broadway	Public.	40	3,948	....	....
Walnut road	Walnut st.	Kenneson road	Public.	40		270	....
Walter terrace	Walter st.	Southwesterly	Public.	40		222	....

*Proposed.

Table Showing the Location, Length and Width of Public and Private Streets. — Continued.

Street	From	To	Public	Width in Feet	Length	
			or Private		Public	Private
Walter	Walnut st.	about 100 ft N. of Bradley st.	Public.	40	548	....
Ward	Medford st.	Harding st.	Public.	30	433	....
Ware	Curtis st.	Russell rd.	Public.	40	749	....
Warner	Pow. House sq.	Medford line	Public.	60	500	....
Warren ave.	Union sq.	Columbus ave.	Public.	40	663	....
Warren	Medford st.	Cambridge line	Public.	30 to 40	109	....
Warwick place	Warwick st.	Northeasterly	Private.	15	....	150
Warwick	Cedar st.	Warwick pl.	Public.	40	665	....
Washington av.	Washington st.	Northerly	Private.	18	....	350
Washington pl.	Washington st.	Southerly	Private.	about 7.5	....	114
Washington	Charlest'n line	Franklin ave.	Public.	75	1,060	....
Washington	Franklin ave.	Fitchburg R. R.	Public.	60 to 100	3,977	....
Washington	Fitchburg R. R.	Cambridge line	Public.	60	2,344	....
Water	South st.	Northerly	Public.	25	366	....
Waterhouse	Broadway	Cambridge line	Public.	40	987	....
Watson	Broadway	Fairmount ave.	Private.	40	....	236
Waverly	Washington st.	Roland st.	Private.	35	....	200
Webster ave.	Union sq.	Cambridge line	Public.	49.5	1,955	....
Webster	Franklin st.	Cross st.	Public.	40	1,034	....
Wellington ave.	Walnut st.	Montgomery av	Public.	40	215	....
Wellington ave.	Montgomery av.	Easterly	Private.	40	....	85
Wesley pk.	Wesley sq.	Northeasterly	Public.	40	405	....
Wesley	Pearl st.	Otis st.	Public.	40	515	....
West	Hawthorne st.	Highland ave.	Public.	30	192	....
West	Highland ave.	Arlington Br. R. R.	Private.	30	....	266
West Adams	Conwell ave.	Medford line	Public.	40	710	....
Westminster	Broadway	Electric ave.	Public.	40	376	....
Weston ave.	Clarendon ave.	Broadway	Private.	40	....	525
West Quincy	Bailey st.	Medford line	Private.	40	....	291
Westwood road	Central st.	Benton road	Public.	40	489	....
Wheatland	Broadway	Mystic ave.	Public.	40	1,364	....
Wheeler	Pinckney st.	Mt. Vernon st.	Public.	40	269	....
Whipple	Highland ave.	Arlington Br. R. R.	Private.	30	....	318
†White	Elm st.	Cambridge line	Public.	..	307	....
White St. pl.	White st.	Southeasterly	Private.	20	....	200
Whitfield road	Packard ave.	Curtis st.	Public.	40	687	....
Whitman	Mason st.	Packard ave.	Public.	40	632	....
Wigglesworth	Bonair st.	Pearl st.	Public.	40	744	....
William	Chandler st.	College ave.	Public.	40	381	....
William	Broadway	Medford line	Private.	50	....	50
Williams ct.	Porter st.	Northwesterly	Private.	30	....	454
Willoughby	Central st.	Sycamore st.	Public.	40	427	....
Willow ave.	Elm st.	Broadway	Public.	50	3,534	....
Willow pl.	Cambridge line	South st.	Public.	25	125	....
Wilson ave.	Broadway	B. & L. R. R.	Public.	20	307	....
Wilton	Lowell st.	Hinckley st.	Public.	35	470	....
Winchester	Broadway	Medford line	Private.	40	....	65
Windom	Elm st.	Summer st.	Public.	40	300	....
Windsor road	Willow ave.	Hancock st.	Public.	40	575	....
Windsor	Cambridge Line	Northerly	Public.	40	40	....
Windsor	End of above	Fitchburg R. R.	Public.	27	490	....
Winslow ave.	College ave.	Clifton st.	Public.	40	1,123	....
Winter	College ave.	Holland st.	Public.	30	402	....
Winter Hill cir.	Broadway	Northeasterly	Private.	25	....	177
Winthrop ave.	Mystic ave.	Middlesex ave.	Private.	40	....	583
Wisconsin ave.	Broadway	Penn. ave.	Public.	50	499	....
Woodbine	Centre st.	Westerly	Private.	30	.....	461
Woodbine Ex.	End of above	Lowell st.	Private.	35	.....	212
*Woods ave.	North st.	Pow. House Bd.	Private.	40	....	1,135
Woodstock	Victoria st.	Alewife brook	Public.	40 to 32	403	....
*Woodstock (Extension)	Victoria st.	Tannery st. (Ext'n.)	Private.	40	....	920
Wyatt circle	Wyatt st.	around to Wyatt st.	Private.	20	....	315
Wyatt	Concord ave.	Lincoln pkway	Public	40	496	....
Yorktown	Cambridge line	N. E. line				
	N. E. line	Malvern ave.	Public.	40	294	....
Yorktown	Malvern ave.	Northerly	Private.	40	....	100

*Proposed.

†Sidewalk in Somerville.

Table Showing the Location, Length and Width of Public and Private Streets.—Concluded.

Street	From	To	Public or Private	Width in Feet		Length	
				Public	Private	Public	Private
Court	39 Adams st.	Southeasterly	Private.	8	....	90	
Court	Albion st.	Central st.	Private.	12	....	216	
Court	11 Albion st.	Northeasterly	Private.	9	....	178	
Court	21 Albion st.	Northeasterly	Private.	10	....	100	
Court	292 Broadway	Southwesterly	Private.	15	....	90	
Court	612 Broadway	Southwesterly	Private.	20	....	188	
Court	Buena Vista rd.	Easterly	Private.	15	....	145	
Court	Cambria st.	Northerly	Private.	9	....	59	
Court	12 Carlton st.	Southeasterly	Private.	25	....	75	
Court	112 Central st.	Northwesterly	Private.	10	....	168	
Court	113 Central st.	Southeasterly	Private.	20	....	150	
Court	227 Columbia st.	Northwesterly	Private.	10	....	117	
Court	Conlon ct.	Windsor st. ex.	Private.	20	....	240	
Court	36 Craigie st.	Westerly	Private.	25	....	126	
Court	59 Craigie st.	Easterly	Private.	23.63	....	129	
Court	58 Dane st.	Easterly	Private.	10	....	70	
Court	20 Dimick st.	Southwesterly	Private.	39.25	....	136	
Court	91 Franklin st.	Westerly	Private.	12	....	171	
Court	66 Lowell st.	Westerly	Private.	25	....	101	
Court	78 Lowell st.	Westerly	Private.	25	....	101	
Court	101 Medford st.	Easterly	Private.	8	....	75	
Court	Sacramento st.	Southeasterly	Private.	25	....	318	
Court	10 Stone ave.	Northwesterly	Private.	20	....	113	
Court	Windsor st. ex.	E'ly and W'ly	Private.	20	....	370	
	Total				445,083		87,128

Public, 84.60 miles [includes 1.406 miles of City Boulevard and Park Roadways, 2.331 miles of State Boulevard (Metropolitan Park Commission), and 1.596 miles State Highway]; private 16.21 miles.

Total length of streets in the city, 100.8 miles.

REPORT OF COMMISSIONER OF PUBLIC BUILDINGS.

City Hall, Somerville, January 1, 1921.

To the Honorable, the Mayor, and the Board of Aldermen of the City of Somerville:—

Gentlemen:—

In accordance with the provisions of the City Charter, I submit herewith the annual report of the public buildings department for the year ending December 31, 1920.

The total valuation of the public property which is in the custody of the public buildings department is approximately \$3,550,000.

The total expenditure for the year 1920 for the care and maintenance of this property was \$209,961.25.

This amount was expended as follows:

	Janitors	Fuel	Light	Care and Repairs	Totals
School Buildings	\$56,957 56	\$39,485 17	\$10,557 17	\$47,227 70	\$154,227 60
Electrical Dept.	753 00	400 12	104 41	23 03	1,280 56
Fire Buildings . . . . .	.....	4,545 45	3,000 07	2,773 42	10,318 94
City Home Buildings . . . . .	.....	1,228 39	553 13	1,704 99	3,486 51
Contagious Hospital	544 96	1,766 59	677 76	1,214 74	4,204 05
Highway Buildings . . . . .	.....	412 95	213 46	362 18	988 59
Central Library	3,057 00	1,051 64	1,436 65	443 94	5,989 23
West Branch Li- brary	1,355 88	400 33	504 90	189 70	2,450 81
East Branch Li- brary	1,086 59	263 68	271 01	12 88	1,634 16
Union Sq. Branch	1,107 83	323 95	291 73	30 87	1,754 38
Municipal Buildings	5,776 60	2,027 59	1,550 73	2,460 82	11,815 74
Park Buildings	417 48	141 41	464 13	467 22	1,490 24
Police Buildings	2,021 82	956 09	598 28	712 93	4,289 12
Polling Places . . . . .	.....	8 31	18 42	1,098 23	1,124 96
Sanitary Buildings . . . . .	.....	114 46	240 31	398 84	753 61
Sewer Buildings . . . . .	.....	69 97	29 96	542 85	642 78
Water Buildings . . . . .	.....	619 03	313 87	53 74	986 64
Bathhouse	924 54	.....	.....	1,436 70	2,361 24
Bandstand . . . . .	.....	.....	16 25	145 84	162 09
Totals	\$74,003 26	\$53,815 13	\$20,842 24	\$61,300 62	\$209,961 25

Inspection of Buildings.

The Commissioner of Public Buildings is also the inspector of buildings according to the terms of the charter and as such during the past year has made 1160 formal inspections of buildings in the process of construction.

The following table shows the number of permits issued for building operations during the year 1920:—

Buildings	WARDS.							Totals
	1	2	3	4	5	6	7	
Dwellings	18	14	6	9	27	21	21	116
Stores	3	2	1		1	1	3	11
Dwellings and stores	1					2	2	5
Garages	15	16	14	14	24	22	70	175
Storage	4	3		3		4	3	17
Manufactories	5	2	3	1	2	2	4	19
Sheds	2	5	1	2	3	2	2	17
Offices		2		1			1	4
Stables	1	3		1	1		1	7
Shops	2	2		1	1	2	3	11
Churches		1	1			1		3
Warehouse and loading Shed	2							2
Offices and stores			1					1
Creamery	1							1
Hospitals						1		1
Miscellaneous		1	1	1	3		2	8
Totals	54	51	28	33	62	58	112	398

	Wood	Fire resisting	Totals
New Buildings	40	161	201
Alterations	186	11	197
Totals	226	172	398

Buildings	WARDS.							Totals
	1	2	3	4	5	6	7	
Wood	31	37	11	17	35	31	37	199
Wood and Cement			1				6	7
Wood and Concrete	2							2
Wood and Metal				1	1			2
Fireproofed wood	3	2	5	5	2	2	2	21
Brick	2	1	2		1	3	1	10
Brick and wood						3	2	5
Brick and Concrete	1	2	1			2	1	7
Cement Block	9	10	6	6	11	13	54	109
Concrete	3	1	2	3	8	4	3	24
Concrete and Wood	1							1
Steel	1				1		6	8
Artificial Stone					1			1
Miscellaneous				1				1
Galvanized iron					1			1
Totals	53	53	28	33	61	58	112	398

The number of plumbing permits issued during 1920 was 171
 Number of permits for plumbing in new buildings 19
 Number of permits for plumbing in old buildings 152
 Number of buildings in which soil pipes were tested 102

The total estimated cost of the new buildings and alterations during the year 1920 was \$1,384,456, while the estimated cost in 1919 was \$773,099, showing an increase of \$611,357.

The total number of permits issued during the year 1920, viz. 398, was 43 less than during the year 1919, when 441 permits for new buildings and alterations were issued.

There has been very little of speculative building of dwellings going on this year owing to the high cost of both labor and materials.

There has been, however, a considerable number of alterations of dwellings owing to the scarcity of rentals.

Single family houses have been altered into two family houses and some of the larger houses have been altered into small kitchenette suites. These types of alterations demand very careful inspection and supervision by this department and entail considerable more time than new construction.

On September 1, 1918, the Board of Aldermen of the City of Somerville passed an ordinance requiring a fee to be collected for every building permit issued by this department. In accordance with this, fees collected for building permits during the year 1920 amounted to \$1,051.

The Commissioner has under his charge and direction the work of maintenance and keeping in repair all of the eighty-four public buildings of the city and the grounds in connection therewith, all janitors in the city's employ, a force of nine mechanics who perform most of the work of keeping the buildings in repair, the inspection of installation and care of all elevators, the supervision of construction of all new municipal buildings, the maintenance of the public bathing beach and public municipal baths in the Bennett and Bingham Schools and Lincoln Park.

The various activities in connection with the department work require a vast amount of time and attention in order to keep the property in proper condition for occupancy.

Coal.

As in the past years an invitation for bids was advertised for supplying the necessary tonnage of both anthracite and bituminous coal for the city buildings for the winter of 1920 and spring of 1921.

Two bids were received, one being from a local concern. After taking same under consideration His Honor, the Mayor, decided to reject both, as they were extremely high, and have all coal purchased direct by this department. The wisdom of this has been amply justified as there has been a large saving in money as a result of this decision.

Elevators

According to an act of the Legislature the Building Commissioner is required to have every elevator in the city inspected yearly and a report of the conditions and necessary repairs made to the State District Police.

Plans and specifications of all new installations of elevators must be filed in this office and certificates of approval granted by the Commissioner.

During the year 1920, there were 135 elevators inspected and 38 orders for repairs to be made, sent to the owners.

Plans and specifications were filed and applications granted for the installation of 10 new elevators.

School Buildings.

The maintenance and care of school buildings has, as formerly, demanded the most vigilant attention from this department and the appropriation made for that purpose has, I believe, been expended carefully and judiciously.

Every year just before the summer vacation arrives this department sends out a blank to be filled in by both the principals and janitors of schools of all requisitions and repairs needed.

These repairs and requests are taken up with the Superintendent of Schools and taken care of in the order which he suggests so far as the appropriation will allow.

First are taken into consideration the requests and repairs absolutely needed for the opening of schools. Then the others are taken up in the order of their importance. This in itself is a huge task as the wants of every section must be taken into consideration.

Among the necessary repairs that were taken care of this year are the following :

Four boilers were retubed. A number of new grates were installed and repairs made on 24 other boilers.

Steam repairs were made in 20 buildings.

Plaster repairs were made in 11 buildings.

Plumbing repairs and new installations were made in 21 buildings.

New water service with larger main installed in 3 buildings.

Mason repairs were made in 9 buildings beside repairs of fire boxes of boilers in nearly every building.

65 teachers' guest chairs were recaned.

3 teachers' couches were recovered.

Roof leaks and other roof repairs were taken care of on 14 buildings.

Carpenter repairs, such as:

Window cords.

Repairing and tightening furniture.

Fitting up one room in Morse, Southern Junior High, Lowe and Hodgkins Schools with larger size furniture.

A new hall has been fitted up in the Knapp School by the removal of a partition between two class rooms and the installation of a Wilson Rolling lift partition. These two rooms can with this arrangement be used as separate class rooms, or, with the partition rolled up, make a hall with a seating capacity of 300.

Painting:

The Hodgkins, Cummings, Prescott and Pope buildings were thoroughly painted and renovated throughout and a few of the rooms in the Boys' Vocational School were fitted up and painted.

At High School several rooms and office walls and ceilings tinted and woodwork varnished.

3,000 desk tops, 40 Teachers' desks and 30 tables in various schools refinished and varnished.

All toilet seats finished in white enamel and several school toilets painted out.

Students' chairs in several buildings refinished and varnished.

Toilets at the Cutler School were thoroughly renovated, walls and ceilings painted and woodwork varnished.

The lintels and sills of the Cutler School which are of artificial stone and had broken off in a very dangerous and unsightly manner have, during the year, been entirely replaced, adding a great deal to the looks and safety of this building which is located on Powder House Boulevard, a much travelled thoroughfare.

Lighting:

Proper lighting of school rooms is a problem to which the head of this department has given considerable time and study. We have made a good start during the past two years and established a system, from experience gained by studying the methods used by other cities, which we intend to follow up until every school has the proper lighting required.

In the following buildings we have installed electric lighting systems with service lines, mains and cut-out boxes on each floor, of sufficient size to take care of the entire building at present and at any future time:

Northern Junior High, Bingham, Proctor, Lowe, Prescott, Glines and Knapp Schools.

Heating:

At the Glines School an additional direct heating system has been installed during the past year. This system has been recommended by this department for several years, and has proven satisfactory and will eventually show quite a saving of fuel.

At the Central Heating Plant and Glines School a Coppus Blower system has been installed to the boilers enabling us to use a cheaper grade of anthracite coal instead of Bituminous, formerly used, with a saving of money on fuel, and the removal of the smoke nuisance which is so objectionable.

Fire Loss.

The city suffered a slight loss by fire at the Cummings School caused by spontaneous combustion. This loss was partially covered by insurance. The building was thoroughly renovated and repaired with very little loss of time to pupils, by fitting up two rooms at the Carr School during Christmas week, and using them for the scholars on half time.

The most pressing needs this year will be the following:

That the policy of yard resurfacing be continued so that the school yards may be kept sanitary and free from dust.

That the policy of painting as many school buildings as possible during the year be continued.

Additional windows in the Edgerly School.

Outside enclosed fire escapes on the Edgerly, Morse and Highland School buildings. These buildings are three stories high and the old style type of construction with very little distance between stairways.

New heating and ventilating plant in the Morse School, doing away with the present seven furnaces which are in bad condition.

New floors should be installed in both the Edgerly and Highland School buildings.

Installing direct steam coils thermostatically controlled in the new wing of the Brown School, also the Pope school and the High School Annex. This would mean a great saving of coal and would eventually pay for itself. A start must be made this year on at least one of the buildings.

Extending the heat control system in the High School to the remainder of the building.

The third story of the Pope School to be fitted up for a hall.

Installing motor and doing away with the present engine used to run the ventilating fan at the Bell School as this engine is in bad shape and would cost as much to be repaired as a new motor.

Removing the partitions between the fire rooms and coal bins in the Bingham, Durell, Morse and Highland Schools and replacing same with eight-inch brick walls.

Continuation of the policy of installing sprinkler systems, doing as many buildings as possible during the coming year.

Fire Department Buildings.

There has been considerable work done and many improvements made in the several fire department buildings.

The front portion of the first floor of Hose 7 was torn out

because of decayed timbers and replaced with cinder fill and a concrete floor.

At the Union Square Fire Station extensive repairs had to be made on the tower and roof again this year as the building was struck by lightning during a severe thunder storm in August.

The great increase in the cost of fuel, light and labor curtailed a great number of the needed repairs during the past year but much necessary work was accomplished.

The most pressing needs for this year will be the following:

New heating plants in Engine 6 and Hose 8, thus doing away with old and wholly inadequate furnaces.

Repairs to Engine 6 house.

New floor in shop at Central Fire Station.

Interior and exterior painting of portions of Engine 1, Engine 2, Hose 3, Hose 5, Engine 6, Hose 7 and Hose 8 houses.

Several other minor repairs are being considered and will be carried out as far as necessary.

I urgently recommend something being done to Engine 4 house. This building is in such bad shape that it does not seem wise to spend any money on repairs and as it is a well located building on a good lot of land, I urgently recommend it being torn down and a modern building erected on this site. There is much material in the present building which could be used in the new.

Municipal Buildings.

The municipal buildings consisting of City Hall and City Hall Annex, are in fair condition generally.

Considerable new fittings and furniture have been requested by various departments.

During the past year only such repairs as were absolutely necessary were attended to.

Libraries.

Very few repairs were necessary at any of the libraries the past year as the buildings are in very fair condition.

The outside of the Central Library building was repainted 2 coats and much of the furniture refinished.

At the West Somerville Branch Library the roof needs

repairing and some of the interior finish needs attention.

There is also quite a little new furniture required this year which must be furnished.

Water, Highway, Sanitary, and Sewer Buildings.

Water Department buildings are in need of a new heating plant, as the old plant which was installed as a power plant for the high pressure pumps is not economical and wholly inadequate as a low pressure heating plant.

The Highway, Sanitary and Sewer buildings call for considerable repairs. Stall bottoms must be replaced, roof and other repairs made. One thing which calls for serious consideration is the replacement of glass of which there have been more than 200 lights replaced this year.

The Veteran Firemen's building which was Somerville's first Town Hall was repaired and refinished inside and out during December:

Hospital Buildings.

General repairs were made this last year in these buildings, as follows:

New awnings were purchased and installed; principally on the Tuberculosis Camp.

Quite extensive outside repairs were made to piazzas, steps, etc., and some painting was done on the interior.

There is still much to be done, however, in order to keep these buildings in proper sanitary condition.

City Home Buildings.

Quite extensive repairs have been made to the buildings during the past year, some of which are the following:

A new sun room was added to the Hospital wing.

A cement platform was built at the piggery, and a cement run was made into the barn.

A new hot water boiler was installed in the wash room.

Besides these considerable new furniture had to be purchased.

Request has been made by the Overseers of the Poor for considerable work to be done this coming year.

Police Buildings.

Very little was done during the past year to the Police Buildings outside of the necessary boiler repairs and the purchase of a few much-needed, metal lockers for the patrolmen.

I urgently recommend a new heating plant be installed in the stable and garage in the rear. This is needed to properly

heat these buildings as the heater in the stable is beyond repair and there is no heat in the garage.

Bathhouse.

The public bathhouse on the Mystic River at Wellington Bridge was opened and maintained as usual last year with a very good attendance. No serious accidents were reported for the year.

We were able to secure 500 tons of sand for the resanding of the beach which was greatly appreciated by the patrons.

The theft of bathing suits by the patrons is causing a great deal of trouble and thought to the Building Commissioner and a very large unnecessary expenditure of money by the City. Changes are being planned to eliminate this trouble the coming year.

We hope with these changes to give better service and expect that the bathing beach will another year be taxed to its utmost.

Park Buildings.

This coming year the building located in Broadway Park will need considerable attention in the way of repairs as the building leaks badly and new sills must be installed.

I heartily recommend the erection of a permanent bandstand in Broadway Park as it is fair to assume that we will continue to have more band concerts here in the future than in the past, and there is no permanent place to have such affairs in the city.

There is considerable agitation being made for a new recreation building to be located in Recreation Field, West Somerville; this building to have toilet facilities for the public and locker and shower-bath rooms for the various athletic teams.

Drawings have been made by the Building Commissioner for such a building and an appropriation of about \$3500 stands available to be used, but this amount is entirely inadequate and should be greatly increased.

In General.

The Commissioner of Public Buildings has had the cooperation of all branches of the City Government, including His Honor, the Mayor, the honorable members of the Board of Aldermen and all the city officials, and desires to thank them for their kindly consideration.

Respectfully submitted,

GEORGE L. DUDLEY,
Commissioner of Public Buildings.

REPORT OF THE COMMISSIONER OF ELECTRIC LINES AND LIGHTS.

Somerville, Mass., January 1, 1921.

To the Honorable, the Mayor and the Board of Aldermen of the
City of Somerville.

Gentlemen:—

I most respectfully submit my twelfth annual report as
Commissioner of Electric Lines and Lights for the year end-
ing December 31, 1920.

Inspection of Wiring in Buildings.

With conditions gradually approaching the normal and
prices of materials being somewhat reduced, installations of
electric lights and appliances have increased in number.

While few new buildings have been erected this past year
a larger number of old houses have been wired for electric
lights, heating and cooking appliances.

Careful inspection has been made of all work done for
which permits have been issued and other old work has been
followed up as far as possible.

The practice of attaching unapproved wiring and appli-
ances to existing installations by persons using electricity still
continues but soon comes to the attention of the Inspector, who,
if conditions are found to be dangerous, notifies the owner of
the premises and if defects are not remedied the removal of
the meter is liable to occur.

Very few refuse to rectify such conditions after being noti-
fied, as want of proper information is generally the cause of
existing defects.

Occasionally work is done by unlicensed workmen caus-
ing considerable annoyance to the customer who should not
employ such persons who have not a State License to do wiring.
No work should be accepted until inspected and approved.

I again call your attention to the unwise practice of over-
fusing circuits for light or power. The approval of an installa-

tion provides that proper fuses are supplied and they should not be changed to larger sizes.

Changes in the construction of buildings that interfere with the existing wiring should be immediately reported to the inspection department.

The ordinance passed July 1, 1918, requiring permits to be obtained to do work in the City has been a great help in keeping the inspections down to a minimum.

Number of notifications of new work	1400
Number of inspections of new work	1897
Number of re-inspections of new work	57
Number of inspections of old work	98
Number of defective installations of old work	10
Number of defective installations remedied	8
Number of re-inspections of old work	10
	<hr/>
Total number of inspections	2080
Number of permits issued to the Edison Electric Illuminating Company for installing meters, lamps, etc.,	1909
Number of permits issued to the Malden Electric Company	3

Fire Alarm System.

The Fire Alarm System is in first class condition and is giving excellent service, being rated as one of the best systems in the State.

240 bell alarms have been received and transmitted during the year.

Over the central telephone desk with connections to each Fire Station 448 calls for fire have been received and telephone alarms sent to the different stations.

2 A. D. T. alarms have been received at headquarters and transmitted over our own system to the fire stations.

One blow is struck on inside bells in all fire stations at 8 A. M. and 6 P. M. to announce the change of day and night forces.

The central office equipment consists of the following:

- 2 — 6 circuit operating boards.
- 1 — 5 circuit tapper board.
- 1 — 5 circuit gong board.
- 2 — 16 circuit storage battery charging boards.
- 1 — 32 circuit protector board.
- 1 — 12 circuit automatic repeater.
- 1 — 1 dial, 4 number manual transmitter.
- 2 — 5 circuit punching registers.
- 13 punching registers and take up reels.
- 2 automatic time and date stamps.
- 1 master clock.
- 940 cells storage battery.
- 5 — 10 foot, 4 shelf battery racks.
- 4 metropolitan tappers and 2 gongs.

The apparatus outside of the central office consists of the following:

- 131 signal boxes.
- 8 tower strikers.
- 45 gongs.
- 10 punching registers.
- 20 tappers.
- 1 automatic steam whistle.
- 9 private telephones.
- About 60 miles of overhead wires.
- About 78 miles of underground wires.

6200 feet of old overhead wire has been replaced by new.

No new underground wires were installed last year but provisions are made to continue the work during the present year.

Police Signal System.

The police signal system is giving the same excellent service as in former years.

Boxes have been thoroughly tested and found to be in good working order. Some replacements have been made this past year and some others will have to be made this year on account of wear.

The system consists of the following:

- 1—4 circuit police desk.
- 59 street signal boxes.
- 4 special boxes.
- About 19½ miles of overhead wire.
- About 13 miles of underground wire.

Supervision of Poles and Wires on the Streets.

The same attention has been given to the condition of poles and wires on the streets as in previous years. A number of defective poles have been replaced by companies owning the same. New poles have been placed in locations granted for the purpose of supplying lighting and telephone service and abandoned poles have been removed.

	New poles.	Re-placed.	Re-moved.	Re-set.
New England Telephone & Telegraph Co.	5	23	1	8
Edison Electric Illuminating Co.	21	182	...	4
Boston Elevated Railway Co.	2	2	...	4
Postal Telegraph Co. . . . .	...	2	...	...
Permits given to the New England Tel. & Tel. Co. for attachments to the Edison Company's poles	195			
Permits given to the Edison Electric Ill. Co. for attachments to the New England Tel. & Tel. Company's poles	91			

Street Lighting.

The matter of street lighting has had the same attention as in previous years and additional lights have been placed in various parts of the city.

More lights are required in the western part of the city as some new streets are inadequately lighted.

Our contract with the Edison Company for street lighting having expired, the cost of street lighting has been materially increased, necessitating economy in the placing of new lights.

Additional spot lights have been installed at places where traffic officers are posted and are of great assistance to them.

The number of street lights January 1, 1921, are as follows:

133 Magnetite lights.
376 - 600 C. P. lights.
108 - 125 C. P. lights.
940 - 60 C. P. lights.

Recommendation.

I respectfully recommend that an assistant inspector be employed to enable the department to more thoroughly cover all old installations of electrical wiring in the City.

Conclusion.

I wish to thank His Honor, the Mayor, the members of the Board of Aldermen and the several departments for the many courtesies received.

Respectfully yours,

WALTER I. FULLER,
Commissioner of Electric Lines and Lights.

REPORT OF SANITARY DEPARTMENT.

CITY HALL, SOMERVILLE,

January 26, 1921.

To the Honorable, the Mayor, and the Board of Aldermen of the City of Somerville.

Gentlemen :

I have the honor to submit to you the report of the Sanitary Department for the year 1920.

Collection of Ashes and Paper.

	Ashes (Cubic Yards)	Paper (Cubic Yards)
January	15,080	300
February	14,100	.....
March	14,600	720
April	11,110	2,100
May	10,743	2,080
June	9,138	1,840
July	7,555	1,880
August	8,255	2,190
September	7,660	2,780
October	7,580	2,740
November	8,025	3,020
December	9,755	3,260
Totals	123,601	22,910

During the year the Sanitary Department paid to the Highway Department \$6,810.39 for the use of teams. Collections of garbage amounted to 2,275 cords, all of which was disposed of at the department yard.

Departmental Revenue.

Sale of garbage \$16,083 20

The equipment and its valuation follows :

Horses	\$9,000 00
Vehicles	13,675 00
Harnesses, blankets, etc.	2,665 00
Stable equipment, etc.	300 00
Fittings in blacksmith shop	75 00
	\$25,715 00

There is no public dump within the city limits and the dumps now used by this department are located in the city of Medford and are subject to the rules and regulations of the Medford Board of Health.

Respectfully submitted,

EDGAR T. MAYHEW,

Supt. of Sanitary Department.

REPORT OF THE LICENSE COMMISSION.

To His Honor the Mayor,

Dear Sir: —

The License Commission respectfully begs leave to submit to you and the people of our city the following report of its engagements and activities since its creation early last year. Your commission entered upon its duties zealously and with a keen desire to respond fully to the obligations imposed upon it.

Applications for Common Victuallers, Lord's Day, Lodging House, Inn Holders and Second Hand Automobile Dealer's Licenses were received and acted upon by the Commission as herein set forth.

Common Victuallers.

60 Applications Received.
 44 Applications Granted.
 8 Applications Rejected.
 10 Licenses Transferred.
 1 License Revoked.

Lord's Day.

130 Applications Received.
 114 Applications Granted.
 4 Applications Rejected.
 22 Licenses Transferred.
 5 Licenses Revoked.

Lodging House.

54 Applications Received.
 50 Applications Granted.
 4 Applications Rejected.
 6 Licenses Transferred.
 3 Licenses Revoked.

Inn Holders.

2 Applications Received.
 2 Applications Granted.
 Applications Rejected.
 Licenses Transferred.
 Licenses Revoked.

Second Hand Automobile Dealers.

- 57 Applications Received.
- 39 Applications Granted.
- Applications Rejected.
- 1 License Transferred.
- 2 Licenses Revoked.

During the year 298 applications for licenses were received and carefully investigated and your commission was at all times in close touch with conditions respecting licensed places and rules and regulations governing licensed places have been adopted by the commission looking to the proper administration of licensed places.

Lodging houses have been compelled to carry registers which have been and will continue to be of considerable service and assistance to the Assessors and the Police Department. Abuses existing in the past in some of the eating places of the city have been eradicated through the co-operation of the holders of the licenses.

During December of this year special meetings of the commission were held to enable holders of second hand automobile dealers licenses to renew their licenses and thus obtain their number plates in time to comply with the new regulations of the Highway Commission.

The commission wishes to acknowledge the splendid and valuable services rendered it by its Inspector Daniel G. Simonds in investigations and Miss Anne M. Gridley, who has served your commission in the capacity of secretary.

Very respectfully submitted,

EUGENE M. CARMAN, *Chairman,*
WILLIAM H. SMITH,
WILLIAM J. SHANAHAN.

SOMERVILLE WATER WORKS.

SOMERVILLE, MIDDLESEX CO., MASSACHUSETTS.

Settled, when part of Charlestown, 1630.
 (Home of Colonial Governor John Winthrop).
 Incorporated a town, 1842.
 Established a city, 1872.

Location: Somerville City Hall (near centre of the city) is $2\frac{3}{4}$ miles northerly from State House in Boston.
 Greatest extent of the City north and south about 4.2 miles.
 Greatest extent of the City east and west about 2.1 miles.
 Elevation Highland avenue at City Hall 105 feet above mean low water.
 Lowest building elevation in the city 13 feet.
 Highest building elevation in the city 145 feet.
 Area of city, including land and water, about 4.22 square miles.
 Land, 2,461.50 acres; water and marsh, 238.50 acres.
 Population, 1920 census, 93,033.
 Present population, estimated, 94,000.
 Entire population on line of pipe and supplied with water.

Water works owned by City of Somerville.
 Construction commenced in 1868.

Source of supply: Metropolitan system, taking water of the Nashua river at Clinton, Mass.

Range of pressure on street mains:
 Low service 35 to 65 pounds.
 High service 45 to 100 pounds.

Mayor.

HON. CHARLES W. ELDRIDGE.

Water Commissioner.

FRANK E. MERRILL.

Office of the Water Department.
 Room 10, City Hall.

Department Buildings and Yard.
 Cedar street, near Broadway.

ADMINISTRATION OF WATER WORKS
VESTED AS FOLLOWS:

1868 — 1871

SOMERVILLE MYSTIC WATER COMMITTEE (5)
Acts 1868; Chap. 202

1872 — 1890

SOMERVILLE MYSTIC WATER BOARD (5)
Acts 1871; Chap. 182

1891 — 1897

SOMERVILLE MYSTIC WATER BOARD (3)
Acts 1890; Chap. 218

1898 — 1899

BOARD OF WATER COMMISSIONERS (3)
Acts 1898; Chap. 33

1900 —

WATER COMMISSIONER (1)
Acts 1899; Chap. 240

REPORT OF THE WATER COMMISSIONER.

OFFICE OF THE WATER COMMISSIONER,

January, 1921.

To His Honor, the Mayor, and the Board of Aldermen:—

I present herewith my report for the year ending December 31, 1920, this being the forty-seventh annual report of the water department and my twenty-first as water commissioner:

Revenue and Expenditures.

Water bills have been issued as follows:—

"Annual" water charges, amounting to	\$40,229 50
"Additional" water charges, amounting to	1,230 63
"Metered" water charges, amounting to	216,246 33
	<u>\$257,706 46</u>

	Annual and Additional	Metered	
Abatements and refunds on above charges	\$1,043 75	\$339 83	1,383 58
		<u> </u>	<u> </u>
Income from sale of water			\$256,322 88.
Receipts; water service assessments		\$1,905 10	
Receipts; labor and materials sold:—			
Miscellaneous accounts	\$4,797 65		
Less abated and carried to 1921 accounts	359 29		
	<u> </u>	4,438 36	6,343 46:
		<u> </u>	<u> </u>
Total income of water works			\$262,666 34.

This amount was used as follows:—

For water works purposes:—

Under Control of the Water Commissioner.

Water Works Maintenance	\$61,306 77	
Water Works extension	6,051 40	
Miscellaneous accounts	4,438 36	
	<u> </u>	\$71,796 53.

Not Under Control of the Water Commissioner.

Interest on water loan bonds	\$80 00	
Maturing water loan bonds	2,000 00	
Metropolitan water works assessment	127,505 74	
Maintenance water works buildings	986 64	
	<hr/>	\$130,572 38

For other municipal purposes:—

Not Under Control of the Water Commissioner.

Surplus	\$60,297 43	
	<hr/>	\$262,666 34

In addition to the appropriations from water income to other municipal purposes enumerated above, water has been furnished without charge to all the city departments that have required its use and it is paid for out of the income from sale of water.

Department Receipts and Disbursements.

WATER MAINTENANCE ACCOUNT.

Appropriation made by Board of Aldermen		\$62,500 00
Transferred from Water Works Extension account		3,400 00
Department accounts; receipts		1,094 64
Water works extension account; receipts		4,500 15
Amount expended for labor and materials for operation, maintenance, and renewal of the water works	\$61,306 77	
Amount expended for materials used in extension of the water works	4,500 15	
Miscellaneous accounts	4,438 36	
Labor and materials furnished municipal departments	1,094 64	
Balance: Unexpended	154 87	
	<hr/>	<hr/>
	\$71,494 79	\$71,494 79

WATER WORKS EXTENSION ACCOUNT.

Appropriation made by Board of Aldermen		\$12,000 00
Amount expended for labor and materials used in extension of the water works	\$6,051 40	
Transferred by Board of Aldermen: to Water Maintenance Account	3,400 00	
to Interest account	2,400 00	
Balance: unexpended	148 60	
	<hr/>	<hr/>
	\$12,000 00	\$12,000 00

Cost of Water Works.

The total cost of water works on December 31, 1919, as represented by the expenditures from appropriations for water works extension was	\$1,073,196 79
Expended during the year 1920, on extension account	6,051 40
	<hr/>
Total expenditures, December 31, 1920	\$1,079,248 19

Water Debt.

Water loan bonds have been issued on funded debt account to the amount of \$1,017,000; the last of these bonds was paid in October, 1920, and there is now no water-works debt.

Water Works Income from 1898 and its Distribution.

The water income and its distribution from 1898 to 1920, inclusive, is shown in the following table:—

Total water income, years 1898 to 1920, inclusive	\$5,400,199 18
Distribution:—	

Water Works Account.

Water Works Construction, Renewal, Maintenance, Operation and Misc. Accounts	\$1,351,054 17
Water bonds	274,000 00
Interest	86,575 00
Metropolitan Water Assessments	2,143,799 90
Maintenance Water Works buildings	5,849 33
	<hr/>
	\$3,861,278 40

Other Municipal Accounts.

Various municipal departments through specific appropriations and general revenue account	\$1,538,920 78
	<hr/>
	\$5,400,199 18

Water Distribution System — Construction

STREET MAINS.

Approximate number of feet of street mains in the city, January 1, 1920, (including hydrant branches and blow-offs)	541,645
Feet of street mains laid in 1920	1,095
Feet of hydrant branches laid in 1920	114
Feet of blow-off branches laid in 1920	13
	<hr/>
Total feet of pipe laid	1,222

Feet of pipe removed or replaced	974
Net increase in feet of pipe	248
Total approximate feet of pipe in the city	541,893
Total pipe mileage, approximately	102.63

The sizes and lengths of pipe laid and discontinued are as follows:—

Size	Feet Laid	Feet Discontinued	Size	Feet Laid	Feet Discontinued
1"	.	179	4"	21	72
.	.	.	6"	391	655
.	.	.	8"	.	50
.	.	.	10"	62	.
2"	139	18	12"	609	.

The pipes constructed and replaced during the year are as follows:—

	Size of Pipe	Feet Laid	Feet Discontinued	Size Discontinued
Constructed:—				
Mystic Avenue	6"	17		
Windsor St.	6"	220		
Do. Con. with private pipe	6"	6		
Replaced:—				
Congress Place	12"	9	9	6"
Linden Place	2"	139	139	1"
Linehan Court	6"	32	32	1"
Linwood Pl.	4"	8	8	1"
Linwood St.	12"	600	604	6"
	6"	4		
Poplar St., East	10"	36	30	4"
			6	6"
Poplar St., West	10"	24	18	4"
			6	6"
Hydrant branches, blow-off pipes and waterpost connections		127	122	
		1,222	974	

Hydrants, Gates Etc.

Number of fire hydrants in city January 1, 1920	1,177
Number set during year	23
Number removed during the year	21
Net increase in number of hydrants	2
Total number of public fire hydrants	1,179
Number of private fire hydrants, January 1, 1920	64
Number set by private companies during the year	0

Total number of private fire hydrants receiving their supply from the city mains		64
Number of gates in city, January 1, 1920	1,856	
Number set during the year for streets	6	
Number of section gates set	0	
Number set on hydrant branches	24	
Number set on blow-off branches	2	
Number set on car-sprinkler connections	0	
	<u>32</u>	
Number of street gates removed	6	
Number of waterpost gates removed	2	
	<u>8</u>	
Net increase in number of gates	24	
Total number of gates in city		1,880
Number of check-valves in city		8
Number of blow-offs in city January 1, 1920	183	
Number added during the year	2	
	<u>185</u>	
Total number of blow-offs		185
Number of waterposts in city January 1, 1920	74	
Number removed during the year	2	
	<u>72</u>	
Total number of waterposts		72
Number of drinking fountains in city		8
Number of car-sprinkler connections in city		17

Water Services.

Number of services in city January 1, 1920		13,544
(approximately)		
Number laid during the year	28	
Number permanently discontinued	18	
	<u>10</u>	
Net increase in services		10
Total number of water services in city		13,554
Amount received for services laid in 1920		\$1,905.10
Number feet service pipe in city January 1, 1920 (city and private) approximately		467,177
Number feet laid during the year	1,214	
Number feet discontinued	845	
	<u>369</u>	
Increase in feet of service pipe		369
Total feet service pipe (city and private) (approximately)		467,546
Total service mileage (approximately)		88.55

Size, number and length of services installed in 1920:

15- $\frac{5}{8}$ "-485'	4- $\frac{3}{4}$ "-340'	3-1"-214'	1-2"-33'	4-4"-112'	1-6"-30'	
Number of fire services installed during 1920 (Included in above)					4	
Location					No.	Size
Beacon St. — Bailie Basket Co.					1	6"
Fitchburg St. — The Great Atlantic & Pacific Tea Co.					2	4"
Horace St. — Norton Tallow Co.					1	4"

Water Meters.

Number of water meters in city, January 1, 1920	10,319
Number installed during the year, new	160
Number reset	123
	<hr/>
	283
Number removed on account of permanent or temporary discontinuance of water and for substitution of other meters	133
	<hr/>
Net increase in number of operating meters	150
Number of motor registers in service	3
Total number of meters and registers	10,472
Per cent. of all services metered	77.26

Operating Meters December 31, 1920.

Size	$\frac{5}{8}$ "	$\frac{3}{4}$ "	1"	1 $\frac{1}{2}$ "	2"	3"	4"	6"	Total
No.	10052	273	87	15	26	8	6	2	10469
Motor and elevator registers									3
									<hr/>
									10472

The meters installed in 1920 were classed as follows:—

Applications of property owners	32
New services	45
General installation	83
Reset	123
	<hr/>
Total	283

Meters were removed for the following causes:—

Vacancies and temporary non-use of water	60
Services permanently discontinued	13
Replaced by other meters	60
	<hr/>
Total	133

Meters installed yearly on old and new services under the State Compulsory Meterage law, which requires complete meterage of city by the year 1928:—

Year	Average installation required on old services	Meters set on old services	Set in excess of requirements	Total excess	Meters set on new services.
1908	411	755	344	344	147
1909	411	637	226	570	201
1910	411	501	90	660	169
1911	411	528	117	777	200
1912	411	423	12	789	236
1913	411	432	21	810	255
1914	411	422	11	821	231
1915	411	439	28	849	217
1916	411	434	23	872	203
1917	411	163	248 (less)*	624	154
1918	411	82	329 (less)*	295	39
1919	411	166	245 (less)*	50	23
1920	411	115	296 (less)*	246†	45

* On account of war-time conditions of labor and material.

† Deficiency.

The following table shows the progress of meter installation of Somerville by years and the results therefrom in water consumption:

Year	Population	Number of Services	Number of Meters	Per Cent Metered	Per Capita Consumption (Est.)
1897	58,000	9,601	.....	.....	88
1898	59,000	9,806	143	1.5	88
1899	61,000	10,053	226	2.25	88
1900	62,000	10,291	202	2	88
1901	64,000	10,520	224	2	88
1902	66,000	10,710	269	2.5	88
1903	68,000	10,854	647	6	88
1904	69,000	11,059	1,272	11.5	89
1905	70,000	11,279	2,092	18.5	89
1906	71,000	11,489	2,829	24.5	89
1907	72,000	11,662	3,455	29.5	90
1908	74,000	11,817	4,333	36.5	89
1909	76,000	12,018	5,155	43	84
1910	78,000	12,149	5,817	48	80
1911	79,000	12,357	6,533	53	74
1912	80,000	12,596	7,171	57	79
1913	82,000	12,827	7,856	61	72
1914	85,000	13,034	8,499	65	73
1915	87,000	13,233	9,155	69	67
1916	90,000	13,420	9,763	72.75	69
1917	91,000	13,509	10,028	74.23	73
1918	91,000	13,514	10,116	74.86	80
1919	92,000	13,544	10,322	76.21	69
1920 Census	93,033	13,554	10,472	77.26	77

Summary of Pipes and Fixtures of the Water System

December 31, 1920.

Feet of main pipe (approximately)	541,893
Feet of service pipe (approximately)	467,546
Service connections (approximately)	13,554
Public fire hydrants	1,179
Private fire hydrants	64
Gates	1,880
Check valves	8
Meters	10,472
Motor registers	3
Waterposts	72
Car-sprinkler connections	17
Blow-offs	185
Drinking fountains and troughs	8

WATER ASSESSMENTS AND CONSUMPTION.

The annual assessments paid by this city as its proportionate part of the cost and operation of the Metropolitan water works are given below:—

Year	Sinking Fund	Maintenance	Interest	Maturing Bonds	Total
1898.....	No division	made			\$14,250 19
1899.....	"	"			20,975 58
1900.....	"	"			28,689 24
1901.....	\$12,491 73	\$12,033 79	\$32,291 24		56,816 76
1902.....	19,014 85	12,955 64	30,427 40		62,397 89
1903.....	15,748 56	12,763 10	48,776 77		77,288 43
1904.....	16,404 42	15,393 87	54,938 64		86,736 93
1905.....	21,358 11	13,666 71	55,535 91		90,560 73
1906.....	22,345 50	17,412 51	57,402 07		97,160 08
1907.....	25,365 30	18,880 01	62,089 30		106,334 61
1908.....	24,865 73	15,221 12	68,604 23		108,691 08
1909.....	24,812 23	21,220 56	66,540 41		112,573 20
1910.....	25,018 52	18,212 28	66,825 45		110,056 25
1911.....	25,424 55	19,573 82	69,849 26	\$246 66	115,094 29
1912.....	24,469 82	16,111 70	68,205 16	445 46	109,232 14
1913.....	24,930 94	20,691 19	70,206 83	491 92	116,320 88
1914.....	14,190 98	22,488 71	73,138 81	180 63	109,999 13
1915.....	14,164 65	21,376 07	74,111 12	1,129 50	110,781 34
1916.....	13,249 71	21,643 98	74,058 98	1,515 62	110,468 29
1917.....	13,364 71	28,110 19	75,117 17	1,833 60	118,425 67
1918.....	14,193 89	29,185 04	79,975 44	2,004 18	125,358 55
1919.....	13,765 81	33,723 64	78,335 58	2,257 87	128,082 90
1920.....	12,559 45	37,814 68	74,903 80	2,227 81	127,505 74
					<hr/> \$2,143,799 90

There has been credited to the city by the commonwealth as its proportion of the amounts received from entrance fees, water supplied outside the district, and water furnished to water companies the sum of \$9,056.10.

The daily consumption of water in Somerville, as recorded by the Venturi meters, operated by the Metropolitan water works, is shown below by months for the year 1920:—

Month	Gallons per day	Gallons per capita	Month	Gallons per day	Gallons per capita
January	8,574,600	92	July	7,052,700	75
February	8,320,200	89	August	7,031,600	75
March	7,869,700	85	September .	6,763,100	72
April	6,862,200	74	October	6,761,800	72
May	6,782,700	73	November .	6,636,600	71
June	6,858,900	73	December ...	6,636,300	70

The consumption for the year was:—

Low-service system	2,058,666,000 gallons
High-service system	568,240,000 gallons
Total consumption	2,626,906,000 gallons
Average daily consumption	7,177,300 gallons
Average daily consumption, per capita, for Somerville	77 gallons
Average daily consumption, per capita, for Metropolitan district	105 gallons

The following table shows the daily per capita consumption of water in the cities and towns in the Metropolitan Water District for the year 1920, as registered by the Metropolitan meters.

City or Town	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Arlington	57	59	54	50	55	54	66	77	57	53	49	48	56
Belmont	54	55	57	60	51	52	57	70	54	50	47	46	54
Boston	148	147	134	119	114	122	122	122	120	121	117	116	125
Chelsea	94	90	85	77	74	72	75	74	75	69	65	66	76
Everett	96	92	89	81	80	80	82	85	84	85	87	86	86
Lexington	63	62	70	62	64	67	74	84	68	66	61	57	66
Malden	58	58	57	55	55	56	58	64	60	55	53	40	57
Medford	49	48	46	42	45	46	48	44	42	42	40	40	44
Melrose	64	64	67	59	57	58	63	67	61	59	55	54	61
Milton	44	46	48	44	45	49	47	43	45	49	48	43	46
Nahant	123	119	95	74	122	169	281	272	205	127	78	66	145
Quincy	105	103	93	89	88	92	95	98	94	90	86	85	93
Revere	73	72	66	60	63	69	80	78	68	63	62	59	68
Somerville	92	89	85	74	73	73	75	75	72	72	71	70	77
Stoneham	129	131	127	99	91	92	98	102	84	85	80	83	100
Swampscott ..	63	65	67	66	73	89	112	113	96	80	72	70	81
Watertown	97	105	98	95	94	96	99	101	88	71	65	65	89
Winthrop	56	56	56	50	52	54	70	71	59	52	49	48	56
Met. Dist.	123	121	112	100	96	102	104	105	101	101	97	96	105

The district, in order of consumption, beginning with the lowest, stands as follows for the year 1920:—

City or Town	Total per Day	Gallons	Per Cent.
		Per Capita per Day	Services Metered
Medford	1,739,700	44	100
Milton	430,900	46	100
Belmont	591,400	54	100
Arlington	1,055,600	56	100
Winthrop	876,400	56	100
Malden	2,793,300	57	97
Melrose	1,108,100	61	100
Lexington	424,300	66	100
Revere	1,975,900	68	79
Chelsea	3,316,400	76	99
Somerville	6,636,300	77	77
Swampscott	657,200	81	100
Everett	3,455,200	86	68
Watertown	1,911,700	89	100
Quincy	4,472,500	93	90
Stoneham	660,100	100	99
Boston	94,297,400	125	74
Nahant	192,600	145	75
Total District	127,265,500	105	74

Construction — Maintenance — Operation.

Substantially the same conditions in building costs prevailed as during the previous year and but little call has arisen for extension of the water distribution system.

The only construction work of importance was the installation of a 6" main in the unpiped portion of Windsor street, in anticipation of the laying of permanent paving.

The right to lay a water pipe in Linden Place having been granted to the city by the abutting owners a 2" pipe was installed in place of the existing service pipe which was badly corroded and unserviceable.

In anticipation of the permanent paving of a portion of Linwood street the old 6" main was replaced with a 12" pipe between Congress place and Dix place, and side street branches, hydrant branches and service pipes in that section of the street were renewed.

A blow-off was constructed in Linwood street at the crossing of Poplar street; also one in Union square westerly from Stone avenue.

By order of the Board of Aldermen the large fire hydrant which has stood in the middle of Union square for many years was removed to make way for a monument to the veterans of the World War; a smaller hydrant has been substituted for the

one removed and has been installed in the sidewalk westerly from Stone avenue.

Several fire hydrants have been broken by motor cars and trucks and bills for replacement have been rendered and collected.

Service installation has reached a very low point, only twenty-eight having been laid during the year; ten old ones were discontinued leaving a net increase of but ten services. Installation was in the following class of premises:

Church	1	Office building	1
Factories	2	Residences	5
Factory fire pipes	2	Stores	4
Garages	5	Warehouse; service and fire pipes combined	2
Gasoline filling station	1	Yards and shops	4
Laundry	1		

The service maintenance account is yearly growing as the older pipes become filled up with sediment and rust and during the summer season it requires two gangs to keep up with the demands for attention.

During the year we attended to and improved 1,185 cases of deficient service.

On account of inability to obtain the proper quality of labor we were obliged to slow down on water meter installation and at the end of the year we faced a deficiency of 246 in the number required for the city's installation under the State Meterage Act. Steps have been taken, however, to remedy this situation and before the end of another year we shall have caught up with our quota.

Water income for the year has shown a substantial increase, amounting to \$262,666.34 as compared with \$248,544.27 the previous year.

Department accounts show all bills contracted for payment during the year as settled and substantial unexpended balances at the closing of the books.

Labor

The only change in the wage rate was that of May 2 when wages were advanced by the mayor 25 cents a day, making the rate for common labor \$4.00 a day and for skilled labor \$4.10 a day; the same advance was granted to the foremen and meter readers.

Pensions

Two names have been added to the pension list during the year, viz: Patrick J. Bergin to date from May 20th at rate of \$12.30 a week and John Brady to date from November 17 at

rate of \$12.00 a week. There are now six pensioners on the water department list.

Water Debt

A noteworthy event of the year was the extinguishment of the water debt, the last of the water loan bonds having been paid in October.

Bonds were issued at intervals from 1869 to 1896, the total amounting to \$1,017,000; since the latter date the entire cost of maintenance and extension of the water-works system has been paid from the water income, together with the maturing bonds, interest charges, Metropolitan water assessments and other accounts.

Shop Improvements

I sincerely hope that some action may be taken during the coming year toward improving the working conditions at our shop. None of the changes that I recommended last year have been carried out and we are still handicapped by lack of proper facilities to carry on our necessary and ever-increasing repair work; this can and should be remedied at an early date.

Respectfully submitted,

FRANK E. MERRILL,

Water Commissioner.

STREET	DESCRIPTION	PIPES		GATES.		HYDRANTS		BLOW-OFFS.		WATER POSTS.		
		LAID.	REMOVED.	SET.	REMOVED	SET.	REMOVED	SET.	REMOVED	RE- MOV'D	RE- MOV'D	
		Size.	Feet.	Size.	Feet.	Size.	Kind.	Size.	Kind.	Size.	No.	No.
Union Square	Gate on hydrant branch: North side of Union Square, 64 ft from Stone Ave. 4 ft out from hydrant											
	Blow-Off: 52 ft west from west line of Stone Ave. and 23 ft 6 in south from north line of Union Square.	4"	4	6" Ren.								
Webster Street	Hydrant replacement: 25 ft east from Cross Street			4" Smith								
	Gate on hydrant branch: 25 ft east from east line of Cross St., 2 ft 6 in. out from hydrant			6" Ren.								
Washington Street	Hydrant replacement: 42 ft east from Durant Street			6" Rell.								
	Gate on hydrant branch: 42 ft east from east line of Durant St. in sidewalk 1 ft 6 in. back from hydrant			6" Ren.								
Windsor Street	Hydrant: 35 ft north from Cambridge city line at dead end of Windsor St. main	6"	25	6" Smith	8							
	Gate on hydrant branch: 35 ft north from Cambridge city line, 4 ft out from hydrant											
	Hydrant removal: 150 ft south from Glass House Court (Boynton Yard)	6"	18									
	Hydrant: 214 ft south from Glass House Court (Boynton Yard)			6" Ren.								
	Gate on hydrant branch: 214 ft south from south line of Glass House Court (Boynton Yard) 3 ft. out from hydrant											
	Street main: From connection with 6 in. main at point 250 ft south from south line of Glass House Court (Boynton Yard) to dead end, at point 35 ft north from Cambridge city line											
	Street main: Connecting with old Middlesex Paper Co.'s pipe running through private land to Conlon Court	6"	220									
		6"	6	6" Smith								
		1222	974	32	8	23	21	2				2

Feet of pipe laid: 4" and under; 6"; 8"; 10"; 12" Total
 160 391 62 609 1222
 Feet of pipe discontinued 269 655 50 2 974
 Gates set 4 26 2 1 2
 Gates discontinued 5 2 1 1 1
 Hydrants set 23 14
 Hydrants discontinued 6 14

Key:
 Ren. — Rensselaer Valve Co.
 Smith — A. P. Smith Mfg. Co.
 Ch. — Chapman Valve Mfg. Co.
 Cof. — Coffin Valve Co.
 Hol. — Holyoke (Norwood Eng. Co.)
 Co. — Corey (Rensselaer Valve Co.)
 Mat. — Mathews (R. D. Wood & Co.)
 B. M. — Boston Machine (Discontinued type)
 Big — Bigelow
 G — Gate type.
 C — Compression type.

SUMMARY OF STATISTICS.
FOR THE YEAR ENDING DECEMBER 31, 1920.

In form recommended by the New England Water Works Association.

SOMERVILLE WATER WORKS
SOMERVILLE, MIDDLESEX COUNTY, MASS.

General Statistics.

Population, census 1920; 93,033; present, estimated 94,000.
Date of construction: Commenced in 1868.
By whom owned: City of Somerville.
Source of supply: Metropolitan water system.
Mode of supply: Water is delivered into the city's mains, under both high and low pressure, by the Metropolitan Water Works.

Statistics of Consumption of Water.

Census population, 1920, 93,033.
Population on lines of pipe, Dec. 31, 1920, 94,000.
Population supplied, Dec. 31, 1920, 94,000.
Total consumption for the year, 2,626,906,000 gallons.
Average daily consumption, 7,177,300 gallons.
Gallons per day to each inhabitant, 77.

Statistics Relating to Distribution System, 1920.

MAINS.

Kind of pipe, cast iron.
Sizes, from 4-inch and under to 20-inch.
Laid 1,222 feet; discontinued 974 feet; net extension, 248 feet.
Total now in use, 102.63 miles.
Number of hydrants added during year (public, 2; private, 0), 2.
Number of hydrants (public and private) now in use, 1,243.
Number of stop gates added during year, 24.
Number of stop gates now in use, 1,880.
Number of blow-offs, 185.
Range of pressure on mains, 35 pounds to 100 pounds.

SERVICES.

Kind of pipe: Lead; wrought iron — lead-lined; wrought iron — cement-lined; cast iron.
Sizes, one-half to eight inches.
Extended 1,214 feet; discontinued 845 feet.
Total now in use, 88.55 miles.
Number of service taps added, 28; discontinued, 18; net increase, 10.
Number now in use, 13,554.
Number of meters added, 283; meters and motor registers discontinued, 133; net increase, 150.
Number now in use, 10,472.
Percentage of services metered, 76.26.
Percentage of water receipts from metered services, 84.
Number of motors and elevator registers added, 0; removed, 0.
Number now in use, 3 (included in number of meters).

FINANCIAL STATISTICS. EXPENDITURES.

REVENUE.

From Water Rates:—					
Fixture rates	\$40,416 38				
Meter rates	215,906 50				
Total from consumers	\$256,322 88			\$61,306 77	
From other sources:—					
Water service assessments	1,905 10				
Labor and materials	4,438 36				
Special:—					
Miscellaneous accounts				4,438 36	
Total					\$65,745 13
Interest on bonds					80 00
Payment on bonds					2,000 00
Water Works Buildings					986 64
Water Works Construction:—					
Mains				\$2,423 72	
Services				1,881 78	
Meters				1,745 90	
Total construction					\$6,051 40
Unclassified expenses:—					
Metropolitan water assessment					127,505 74
Balance:—					
Ordinary				\$60,297 43	
Total balance					60,297 43
Total	\$262,666 34				\$262,666 34

Disposition of balance: applied to municipal purposes.
 Cost of works to date \$1,079,248 19
 Bonded debt at date None

REPORT OF THE SEALER OF WEIGHTS AND MEASURES.

OFFICE OF SEALER OF WEIGHTS AND MEASURES,
City Hall Annex, Somerville, January 1, 1920.

To His Honor, the Mayor, and the Board of Aldermen:—

The following report of the sealer of weights and measures for the year 1920 is respectfully submitted:—

During the past year, a great many inquiries have been received from the citizens of our city, indicating their interest relative to matters of weights and measures, and numerous complaints have been investigated and adjusted satisfactorily between the parties concerned. Two cases have been prosecuted and convictions obtained.

The total tests as shown in the following table are less numerous than last year owing in a great extent to the fact that many of the old measures and even balances and weights are being discarded for the modern computing scale.

Particular attention has been paid to gasoline and oil pumps as these need more attention than any other measuring device.

ANNUAL REPORT.

Work of Weights and Measures Department for 1919.

Number of scales sealed	1,665	
Number of weights sealed	3,781	
Number of dry measures sealed	64	
Number of liquid measures sealed	4,948	
Number of oil and gas pumps sealed	176	
Number of yard sticks sealed	141	
Number of miscellaneous sealed wood baskets	34	
Total		10,809
Number of scales adjusted	37	
Number of weights adjusted	55	
Total		92

Number of scales condemned	5	
Number of weights condemned	23	
Number of dry measures condemned	3	
Number of liquid measures condemned	45	
Number of yard sticks condemned	0	
Number of Gas pumps condemned	0	
	<hr/>	
Total		76
Number of scales and weights out of use non- sealed	14	
Number of inspections in stores and street	343	
	<hr/>	
		357
		<hr/>
		11,334

BENJAMIN S. ABBOTT,
Sealer of Weights and Measures.

REPORT OF THE LAW DEPARTMENT.

To the Honorable, the Mayor, and the Board of Aldermen of
the City of Somerville:

The annual report of the law department for the year ending December 31, 1920, is as follows:

A petition and bill were presented to the legislature for changing the boundary line between Somerville and Medford. The city governments of the two cities were unable to agree upon the changes to be made and no act was passed by the legislature.

Hearings were held before a committee of the legislature and before the Middlesex county commissioners in regard to the proposed widening of Bridge street in Cambridge. The cost was estimated at several hundred thousand dollars and no decision could be reached as to where the cost should fall and no definite action was taken. It seems to me unfair that any special burden should be placed on the city of Somerville for this improvement.

An act was secured making more clear the law relative to the protection of persons furnishing materials or labor for public works. Chapter 210 of the Acts of 1920.

I acted for the prosecution in a number of cases in behalf of the board of health and the inspector of milk.

A claim before the industrial accident board was tried and a decision was given in favor of the city, but the contractor who employed the claimant paid him a substantial sum of money at my suggestion. A hearing which lasted five days was held in the Somerville police court on an appeal by a fireman who had been discharged by the city government. His discharge was sustained by the court. Claims for injuries received by reason of defects in public ways were settled for an amount considerably less than the average in former years.

Very respectfully,

FRANK W. KAAAN,

City Solicitor.

REPORT OF CHIEF ENGINEER OF FIRE DEPARTMENT.

Somerville, Mass., January 31, 1921.

To His Honor, the Mayor, and the Board of Aldermen,

Gentlemen, — Herewith I have the honor of submitting, for your information, the annual report of the fire department for the year ending December 31, 1920:—

Alarms of Fire.

Number of bell alarms	240
Number of still alarms	448
Total alarms	688
Number in excess of 1919	26
Value of buildings at risk	\$653,945 00
Insurance on buildings	411,650 00
Damage to buildings	74,396 00
Value of contents	303,825 00
Insurance on contents	229,975 00
Damage to contents	61,832 95
Total value at risk	957,770 00
Total insurance	641,625 00
Total damage	136,228 95

List of Probable Causes.

Accidental	5
Automobiles	13
Bonfires	15
Candle dropped in bale of oakum	1
Carelessness with matches	5
Careless meter man	3
Children playing with matches	18
Cigar or cigarette thrown on awning	4
Cigars, cigarettes and pipes	15
Closet fires	5
Clothing hanging too near stove	3
Decorations on Christmas tree	2
Defective chimneys	9
Defective stovepipe	5
Dump fires	4
Electric car	3
Electric wires	3
False alarms	46
Filling gas tanks on automobiles	5

Firecrackers	2
Fire in Boston	3
Fire in Cambridge	2
Fire in Medford	2
Grass fires	14
Hot ashes in wooden receptacles	6
Incendiary	6
Smoke from Chimney	4
Smoking in bed	4
Spark from forge	3
Spark from furnace	5
Spark from Locomotive	4
Spark on roof	5
Spontaneous Combustion	5
Thawing water pipes	3
Unknown	4
Wood near stove	2
Wires on trees and poles	2

	Engine 1.	Engine 2.	Engine 4.	Engine 6.	Hose 3.	Hose 5.	Hose 7.	Hose 8.	Ladder 1.	Ladder 2.	Ladder 3.	Totals
Bell alarms responded to	182	121	115	31	96	82	95	71	100	96	44	240
Still alarms responded to	55	52	18	76	51	43	53	43	21	2	34	448
Miles traveled	444	204	301	102½	196	239	197	201¾	119	170	81	2,255¼
Feet of 2½ in. hose used	14,050	21,200	8,000	14,600	7,250	15,650	7,500	7,000	...	...	...	95,250
Feet of chemical hose used	11,750	...	...	1,750	6,750	12,550	6,250	5,000	...	...	2,000	46,050
Feet of ladders used	...	...	...	24	...	140	...	126	2,169	1,077	945	4,481
Chemical extinguishers used	20	15	9	2	...	41	14	8	23	...	12	144
Gallons of chemical used	2,450	...	...	636	870	1,875	1,000	575	...	...	...	7,406
Times on duty at other stations	...	1	...	...	...	3	...	1	...	...	...	5
Times responded out of town	12	7	...	13	12	5	...	16	2	...	...	67
Rubber covers used	2	...	...	...	...	...	3	...	11	15	3	34

On February 2nd. the two-platoon system was inaugurated in compliance with the Act of the Legislature, Chapter 132 Acts of 1919, by the voters at the election November 2nd., this necessitated the addition of thirty men to the permanent force that the minimum efficiency may be maintained. During the year one (1) permanent man resigned, one was discharged, one (1) callman was advanced to the permanent force, one (1) resigned and two (2) placed on the pension roll. The membership of the department now consists of one-hundred and ten permanent men and five (5) callmen classified as follows,—

Manual Force.

- 1 Chief Engineer,
- 1 Deputy Chief,
- 1 District Chief,
- 7 Captains,
- 1 Master Mechanic,
- 11 Lieutenants,
- 3 Enginemen,
- 85 Permanent men,
- 5 Callmen.

Apparatus.

- 1 Second size, horse drawn steam fire engine,
- 1 Third size, horse drawn steam fire engine,
- 2 Horse drawn combination chemical and hose wagon,
- 1 Horse drawn hose wagon,
- 1 Horse drawn combination chemical and ladder truck,
- 1 Horse drawn ladder truck,
- 1 Motor driven ladder truck,
- 4 Motor driven combination chemical and hose wagons,
- 1 Second size tractor drawn steam fire engine,
- 1 Motor driven 900 gallon pumping engine and hose wagon,
- 1 Motor driven 750 gallon pumping engine and chemical,
- 1 Motor driven supply and wrecking wagon,
- 1 Automobile, chief's car,
- 1 Automobile, deputy chief's car,
- 1 Automobile, district chief's car,
- 1 Automobile, Master Mechanic's car,
- 1 Horse drawn chief's buggy,
- 1 Horse drawn relief ladder truck,
- 3 Horse drawn exercising wagons,
- 1 Supply wagon.

Horses.

There are nineteen (19) horses in the department, two (2) have died and two (2) have been purchased during the year. Six of the horses located at Engine No. 6 Station will be im-

mediately disposed of inasmuch as this station has been fully motorized. No more horses will be purchased unless some unforeseen accident arises.

Hose.

The amount of serviceable hose is 8,850 feet of two and one half inch double jacket, rubber lined, cotton hose and 1,750 feet of three quarter inch chemical hose. There has been purchased 500 feet of two and one half inch hose, and 1,150 feet condemned. As stated in my previous reports, there should be at least 12,000 feet of two and one half inch hose in the department, at least 2,000 feet should be purchased this year.

Brief Resume.

The average loss has been \$11,350. a month, being \$5,000 a month more than the previous year. The months of January and February totalled one half of the entire year's loss.

The following table gives the losses by months, —

January	.	.	.	.	.	.	.	\$37,838	69
February	.	.	.	.	.	.	.	29,365	00
March	.	.	.	.	.	.	.	1,467	00
April	.	.	.	.	.	.	.	27,992	00
May	.	.	.	.	.	.	.	12,981	00
June	.	.	.	.	.	.	.	1,493	50
July	.	.	.	.	.	.	.	1,163	50
August	.	.	.	.	.	.	.	2,908	00
September	.	.	.	.	.	.	.	1,315	00
October	.	.	.	.	.	.	.	6,951	00
November	.	.	.	.	.	.	.	8,784	26
December	.	.	.	.	.	.	.	3,970	00
									\$136,228	95

There have been twenty fires with an insurance loss in excess of \$1,000. as follows, —

January 5, 7:35 A. M. Box 225, 37 Union Square, the Bacon Hall building owned by Herbert Jay; occupants involved, H. G. Applin and W. N. Casey; damage to building \$950. to contents \$76. the probable cause, steam pipe and rubbish.

January 5, 8:17 P. M. Box 443, a second alarm was sounded for this fire, 2 College Circle, commercial building owned by E. S. Sparrow, the occupants, Baker School Supply Co. and others, damage to building \$4,250. to contents \$5,835. Cause, spontaneous combustion.

January 7, 8:40 A. M. Box 337, Incinerator owned by the City of Somerville, occupied by D. DeStefano Co. damage to building \$2,500. to contents \$3,400. Cause, spark in waste paper.

January 15, 10:53 P. M. Box 225, 285 Washington Street, wood working mill owned and occupied by Davenport-Brown Company, damage to building \$200. to contents \$4,115.79 due to water damage from sprinkler system. Cause, spark falling into sawdust.

January 19, 11:38 A. M. Box 28, 33 Laurel Street, dwelling owned and occupied by Andrew McLaughlin, damage to building, \$3,800. to contents \$850. Cause, overheated heater.

January 22, 4:35 P. M. Box 15, a second alarm was sounded for this fire, 48 Washington Street, New England Vinegar Works owned and occupied by Arthur E. Rowse, damage to buildings \$2,281. to contents \$8,980.15. Cause, careless smoker.

February 1, 12:22 A. M. Apartments and store at 245-247 Highland Avenue owned by Thomas J. Conroy, occupants, L. M. Copeland et al. damage to building \$452.63; to contents, \$5,627. Cause, defective heater.

February 17, 10:55 P. M. Box 24, Columbia Street, Storage warehouse and stable owned by J. P. O'Neil, occupied by Consolidated Paper Bag Co., damage to building \$800. to contents \$5,000. Cause, careless smoker.

February 20, 8:12 P. M. Box 423, 233b Highland Avenue, stores and apartments owned by Mrs. Mary Reid, occupied by owner et. al. damage to building \$2,300. to contents \$440. Cause, lamp igniting draperies.

February 27, 7:36 A. M. Box 116, a second alarm was sounded for this fire, 106-118 Broadway, block of dwellings owned by Joseph Cohen and others; occupants Emanuel Horne et. al. damage to buildings \$7,927.70. to contents \$1,780. Cause, overheated stove.

April 1, 2:51 P. M. Box 225, a second alarm was sounded for this fire, 37 Union Square, Bacon Hall Building owned by Herbert Jay, occupied by Garhart Dental Specialties Co. and others; damage to building \$18,774. to contents \$6,418. Cause, defective chimney connection.

April 6, 8:09 P. M. Box 25-225, 6 Union Square, Storehouse and offices owned by Charles H. Brigham; occupied by Brydle Building Material Co. damage to building \$1,500. to contents \$2,800. Cause, careless smoker.

April 23, 8:50 P. M. Box 448-452, Elevated Railroad car park at Clarendon Hill, owned by B. E. Ry. Co. damage to cars and snow plow \$1,800. Cause, electric wires.

May 1, 3:32 P. M. Box 42, 29 Kent Street, Chemical &

Coloring Works owned and occupied by W. F. Beattie, damage to building \$2,000. to contents \$10,000. Cause, defective motor in boiler room.

August 10, 1:55 A. M. Box 42, 1 Beckwith Circle, Apartment house owned by Jacob Leventhal, occupants Daniel O'Keefe et. al. damage to building \$1,300. to contents no claim. Cause, overheated gas stove.

October 17, 10:13 P. M. Box 217, Cummings School building on School Street owned by the City of Somerville, damage to building and contents \$3,285. Cause, spontaneous combustion.

October 20, 7:09 A. M. Box 431, 44 Lexington Avenue, dwelling owned by E. O. Russell and occupied by owner and another, damage to building \$1,134. to contents \$251.40. Cause, hot ashes in wooden receptacle.

November 7, 8:00 A. M. Box 336, 140 Central Street, dwelling owned by Charles F. Maguire M. D. occupants George Simpson et. al. damage to building \$5,800. to contents \$1,600. Cause, cloths in hot water boiler closet.

December 19, 9:54 A. M. Box 431, 50 Lexington Avenue, dwelling owned by Charles E. Byrnes, occupied by owner and another, damage to building \$1,198. to contents \$276. Cause defective stove pipe.

December 29, 5:30 P. M. Box 446, 141 Orchard Street, dwelling owned by Henry S. Wilkins, occupants Carl C. Rideout et. al. damage to building \$1,435. to contents \$141. Probable cause, careless smoker.

False Alarms lead the list of all causes for calling out the apparatus, each year this class of alarms increases in number, some immediate steps should be taken to apprehend and prosecute this class of criminal offenders; the detailing of a man to follow up each case, as it occurs, would be profitable inasmuch as more than 75 % of the damage to apparatus occurs when answering false alarms and this is not inconsiderable. Every self respecting citizen, having his community's interest at heart, should lend assistance in every possible way to gain and give information leading to the capture of the false alarm ringers, one never knows, when the department is responding to a useless alarm, how soon his own home and property needs that very apparatus to save his possessions from destruction.

Defective Chimneys and Connections, This class of fires can be eliminated entirely by the employment of a little time or money in having the chimneys cleaned each year. This character of fire is one of the hardest that the department has to cope with inasmuch as chimneys are invariably constructed

in or near the center of the building, inclosed in lath and plaster and timbers, thereby causing considerable damage to the interior walls and ceilings in their extinguishment.

Hot Ashes In Wooden Receptacles, Again hot ashes, in improper receptacles, come to the forefront as one of the useless causes of fire alarms, the small expense needed to procure proper metal barrels is insignificant when compared with the usual loss incident to fires caused by the use of wooden boxes or barrels; as I have urged in many previous reports, I again ask that an ordinance be passed prohibiting the use of anything other than metal receptacles.

Children Playing With Matches, Again fatalities have attended this class of fires; on March 20th. three small children, left alone in their home, got possession of matches left in a most favorable place for such purposes and set fire to their bedding and clothing resulting in most painful burns from which two of them died and the third maimed for life. Everything possible has been said by department chiefs, newspaper articles and fire prevention papers and notices to warn careless and negligent parents of this ever present danger, yet in our commadity alone we have been called, not counting the many times it has occurred without our knowledge or notice being given, twenty-eight times this past year. Daily we are being solicited to save the lives of innocent children the world over, here is the opportunity to also do some home missionary work.

Recommendations.

During the year contract have been made to purchase motor apparatus to complete the motorization of six of the eight stations; on December 13th. an Auburn Roadster was put into service for the use of the district chief and on December 31st. a triple combination Seagraves pumper was assigned to Engine No. 6 Station; on or about February 1, 1921, a Seagraves city service truck will replace Ladder No. 3 at Engine 2 Station. There are but two stations wherein the equipment is not motorized and it is my recommendation that these two stations be given consideration the coming year; four more pieces will fully equip the department with motor apparatus.

Engine No. 4 Station, located at the corner of Highland Avenue and Grove Street, has been built forty-eight years, and is in such a condition and of such a type as to be totally unsuited for continued use as a fire station, more especially when

motor apparatus is installed. This is a most ideal location and the lot most suitable for the erection of an up-to-date station, I urge this matter be given serious consideration at the very earliest favorable moment.

In Conclusion.

I wish to express my thanks to His Honor the Mayor and to the Board of Aldermen for their confidence and attitude in matters pertaining to the discipline and efficiency of the department.

I commend those officers and members whose loyalty and interest has made it possible for the department to maintain its usual standing and efficiency.

Respectfully submitted,

SEWALL M. RICH,

Chief Engineer.

REPORT OF THE CHIEF OF POLICE.

January 31, 1921.

To the Honorable, the Mayor, and Board of Aldermen of the City of Somerville:—

Gentlemen;— I respectfully submit the annual report of the Somerville police department for the year ending December 31, 1920.

Arrests

Whole number of arrests made		1,637
With and without warrants	994	
On summons and notification	643	
		1,637
Males	1,526	
Females	111	
		1,637
Americans	1,176	
Foreign Born	461	
		1,637
Residents	877	
Non-residents	760	
		1,637

1. — Crimes and Offenses Against the Person.

Assaults		2
Assault, indecent	1	
Assault with dangerous weapon	3	
Assault and battery	90	
Assault and battery on officers	2	
Intimidation of employees	3	
Kidnapping	1	
Manslaughter	1	
Rape	1	
Rape, attempt	2	
Rape, accessory to	2	
Robbery	2	
Threats	5	
Throwing missiles	3	

2.— Crimes and Offenses Against Property.

Breaking and entering	42
Breaking and entering, attempt	1
Breaking and entering railroad car	1
Breaking and entering railroad cars, attempt	2
Breaking glass	26
Concealment of leased property	1
Destroying electric lamps	19
Destroying electric lamps, attempt	9
Injury to personal property	3
Injury to railroad signal	1
Larceny	122
Larceny, attempt	7
Larceny in building	1
Larceny from person	4
Receiving stolen goods	17
Trespass	101
Trespass, wilful	11
Unlawfully riding freight car	2
Unlawfully taking horse	3
Unlawfully using registered bottles	15

388

3.— Crimes and Offenses Against Public Order, Etc.

Absent without leave from United States Army	2
Adultery	4
Bastardy	15
Capias	5
Carrying firearms without licence	4
Contempt of court	5
Cruelty to animals	5
Default	18
Deserters from United States Army	2
Deserters from United States Navy	2
Desertion of wife	1
Disturbing public assembly	1
Disorderly house, keeping	2
Disturbing the peace	4
Dog keeping, unlicensed	1
Drunkenness	270
Drunkenness, common	2
Fornication	3
Fugitives from justice	3
Giving false alarms of fire	3
Idle and disorderly	8
Indecent exposure of person	2
Lewdness	9
Lewd cohabitation	8
Lewd and lascivious	2
Lottery, promoting	4
Neglected children	9
Neglect to support	56
Peddling, unlicensed	1
Polygamy	1
Safe keeping, contempt of court	1

Safe keeping, demented	15
Safe keeping, escape from Industrial School	1
Safe keeping, escaped insane inmates	2
Safe keeping, escaped from Lyman School	1
Safe keeping, escaped from Middlesex County training School	1
Safe keeping, infirm	2
Safe keeping, insane	5
Safe keeping, feeble minded	3
Safe keeping, prisoners for out of town officers	2
Safe keeping, runaway children	19
Safe keeping, State ward	1
Stubbornness	10
Suspicious person	1
Straggler from United States Navy	1
Unlawfully having shot gun	1
Vagrants	3
Violation of city ordinances	74
Violation of health regulations	5
Violation of labor laws	20
Violation of liquor laws	17
Violation of Lord's Day	64
Violation of milk laws	21
Violation of motor vehicle laws	349
Violation of parole	2
Violation of pool room laws	2
Violation of terms of probation	20
Violation of school laws	25
Violation of weights and measure laws	11

1,131

Recapitulation.

(1) Crimes and Offenses Against the Person	118
(2) Crimes and Offenses Against Property	388
(3) Crimes and Offenses Against Public Order, etc.	1,131

Total number of arrests made	1,637
Bailed to appear at other courts	14
Cases in which nolle prosequi was entered	43
Contempt of court	5
Defaulted	15
Delivered to Jail, Superior Court, bail surrender capias, etc.	6
Delivered to police court, violation of probation, etc.	23
Released by probation officer, drunkenness, etc.	15
Surrendered to other officers, institutions, etc.	96
Dismissed by court	1
Pending cases	2

220
1,417

Number of cases held for trial

NOTE, — Three hundred and seventy-eight of the above number of cases were juveniles and delinquents.

Miscellaneous Reports.

Abandoned automobiles	38
Abandoned motorcycle	1
Accidents reported	554
Accidental shooting	1
Amount of property stolen	\$35,172 10
Amount of stolen property recovered	24,494 17
Amount of property damaged	176 70
Amount of property lost	1,674 10
Amount of property found	277 68
Assaults	11
Assault and battery	7
Attempts to break and enter	67
Attempts to commit larceny	13
Attempts to commit suicide	6
Attempts to rob	3
Breaking and entering, false alarms of	2
Broken rail, Boston Elevated Railway	1
Buildings broken and entered, nothing stolen	53
Building collapsed	1
Buildings dangerous from snow and ice	3
Buildings found open	363
Burglary, false alarms of	5
Cats killed	2
Cellar flooded	1
Cruelty to animals	3
Dead animals found	13
Defective bridges	12
" building	1
" catch basins	54
" chimney	1
" coal hole	1
" curb stone	1
" drinking fountains	4
" electric lamps	4
" electric light switch	1
" fences	8
" fences, lighted	2
" gas gate boxes	2
" hydrants	12
" man holes and covers	5
" poles	4
" police signal service	15
" sewers	4
" sidewalks	384
" sidewalk, lighted	1
" signs and sign posts	90
" stand pipe	1
" streets	116
" street, lighted	1
" tree guards	3
" voting list board	1
" water gate boxes	21
" wires	60
Demented person	1
Disturbances	28
Disturbances suppressed	3

Dogs killed	26
Dogs reported mad	2
Dogs vicious	5
Electric lamps broken	12
Feeble minded boy cared for	1
Fire, alarms given for	4
Fire, danger of	1
Fires extinguished without alarm	3
Fire, false alarms of	35
Fire, needless alarm for	1
Fires reported	170
Gaming	1
Gas leaks	7
Gas poisoning	1
Houses unoccupied	44
Indecent exposure of person	8
Larcenies, no value given	132
Larcenies	423
Lost children	310
Lost children, found	310
Malicious mischief	26
Missing persons	74
Missing persons, found	28
Murder	1
Neglected children	1
Obstructions on railway	2
Obstructions on sidewalk	7
Obstructions on sidewalks, lighted	2
" in streets	31
" in streets, lighted	4
Panes of glass broken	127
Permits to labor on the Lord's Day	83
Persons bitten by dogs	9
Person helped home	1
Person shot	1
Pole dangerous	1
Property damaged and destroyed	76
Property lost, no value given	69
Property found, no value given	86
Rescued persons from fire	3
Robberies	8
Robbery, attempt	1
Runaway children	29
Runaway children, found	29
Runaway horses	7
Runaway horses, stopped	4
Runaway team	1
Runaway team stopped	1
Sidewalks dangerous from snow and ice	204
Steps dangerous	2
Steps dangerous from snow and ice	2
Stray bullets fired	2
Stray cats	6
Stray cows found	2
Stray dogs	106
Stray dogs found	46
Stray horses	8
Stray horses found	9

Stray teams	6
Stray teams found	10
Streets dangerous from snow and ice	34
Street lights reported	4,179
Streets and sidewalks flooded	27
Strike	1
Subways, flooded	2
Sudden deaths	10
Suicides	6
Summonses served for witnesses and defendants to appear in court at other places	623
Suspicious persons	107
Threats	3
Trees, dangerous	36
Trespass	29
Trespass, wilful	26
Unlawful appropriation of horses	2
Unlocked United States mail box	1
Violation of Board of Health regulations	11
Violation of city ordinances	156
Violation of Lord's Day	1
Violation of motor vehicle laws	17
Walking on railroad track	1
Water pipes, leaking	115
Windows broken	42

Motor Vehicle Report.

An officer was detailed to investigate, card index and file all transfers of motor vehicles and stolen ones reported.

Number of licenses granted by License Commission for the sale and transfer of automobiles and motorcycles.

First class	6
Second class	42
Third class	9
Total	57

Two licenses were revoked during the year by the Commission.

Number of sales and transfers made by the fifty-seven dealers	3,175
Number of individual sales	1,114
Number of stolen motor vehicles reported, by the several Police Departments, Insurance Agencies and Detective Bureaus in the United States and Canada	5,947
Number of motor vehicles reported recovered by same	1,410
Number of index cards printed and filed	19,410

OFFICIAL ROSTER OF DEPARTMENT.

Chief of Police.

Charles A. Kendall.

Captain.

Eugene A. Carter.

Lieutenants.

Charles E. Woodman

John A. Ray.

James M. Harmon

Inspectors.

Thomas Damery

Michael T. Kennedy

Sergeants.

William G. Kenney

Frank H. Graves

James M. Lynch

Ernest Howard

Robert T. Blair

Thomas P. Walsh

Patrolmen.

- | | |
|-------------------------------|----------------------------|
| 1 — Edward M. Carter | 39 — Walter C. Oesting |
| 2 — Francis A. Perkins | 40 — John L. Cameron |
| 3 — Theodore E. Heron | 41 — Francis P. Higgins |
| 4 — Daniel G. Simons | 42 — John J. McCahey |
| 5 — Samuel Burns | 43 — Alexander Morrison |
| 6 — John A. Dadmun | 44 — Daniel J. Powers |
| 7 — George L. Rice | 45 — Jeremiah O'Connor |
| 8 — Myron S. Gott | 46 — Charles E. Wilson |
| 9 — Charles W. Reick | 47 — William J. Warner |
| 10 — Frank C. Hopkins | 48 — Timothy Buckley |
| 11 — Hudson M. Howe | 49 — John J. Killourhy |
| 12 — Sanford S. Lewis | 50 — Charles J. Sharry |
| 13 — Henry A. Sudbey | 51 — Thomas M. Sharry |
| 14 — Thomas F. McNamara | 52 — Michael J. O'Loughlin |
| 15 — Louis F. Arnold | 53 — Charles W. Shepherd |
| 16 — Charles S. Johnston | 54 — John F. Cruise |
| 17 — Claude L. Crossman | 55 — John J. Shay |
| 18 — John J. Cummings | 56 — Edward G. Butman |
| 19 — Edmund J. Keane | 57 — John P. L. O'Keefe |
| 20 — Denis Neylon | 58 — Alfred E. Robitaille |
| 21 — Denis Downey | 59 — Allan S. Burns |
| 22 — Edward M. Davies | 60 — William H. Donovan |
| 23 — George A. C. Peters | 61 — George R. Allan |
| 24 — Louis J. Belzarini | 62 — Jeremiah Keniry |
| 25 — Walter Reed | 63 — James Murray |
| 26 — Dennis G. Mulqueoney | 64 — Charles J. Fulton |
| 27 — Patrick J. Doolin | 65 — Edward F. Culliton |
| 28 — Edward J. Hopkins | 66 — Alfred J. McFadden |
| 29 — Walter L. Groves | 67 — James A. Fitzpatrick |
| 30 — Frederick G. Jones | 68 — Elmer E. G. Raymond |
| 31 — Joseph A. Dwyer | 69 — Frank J. Roche |
| 32 — Augustine J. Fitzpatrick | 70 — Augustine F. Sharry |
| 33 — Patrick McGrath | 71 — Daniel M. O'Connell |
| 34 — Bernard McCabe | 72 — Chester C. F. Warner |
| 35 — Harry C. Young | 73 — George D. MacDonald |
| 36 — Robert D. Dewar | 74 — Charles F. Lacey |
| 37 — Peter Moore | 75 — William E. Dwyer |
| 38 — Albert C. Hawes | 76 — Charles H. McAvoy |

Reservemen.

77 — James F. Holmes	80 — Patrick J. Lyons
78 — Earle W. Elliott	81 — Alfred S. Macomber
79 — Michael J. Dowd, Jr.	

Chauffeurs and Patrol Drivers.

James W. Lundergan	James H. White
John H. McKenzie.	

Matron.

Mrs. Mina T. Weeks.

Assistant Matron.

Mrs. Katherine Woods.

Pensioners, Retired On Half Pay.

John E. Fuller,	Mar. 23, 1906	Frederick H. Googins,	Mar. 12, 1915
Ira S. Carleton,	May 9, 1907	Robert R. Perry,	Apr. 14, 1916
James J. Pollard	Feb. 27, 1908	Jacob W. Skinner,	Dec. 31, 1917
Melville C. Parkhurst,	Oct. 31, 1908	Elmer E. Drew,	July 25, 1918
Herbert Hilton,	Dec. 21, 1911	Ernest S. Goff,	July 11, 1919
Ezra A. Dodge,	Mar. 14, 1914	Charles W. Allen,	Mar. 26, 1920
George H. Carleton,	Mar. 27, 1914	Jotham Chisholm,	Apr. 23, 1920

CHANGES IN FORCE.**Appointments.**

James F. Holmes, appointed, reserveman, Apr. 22, 1920.
 Earle W. Elliott, appointed, reserveman, Apr. 12, 1920.
 Michael J. Dowd, Jr., appointed, reserveman, Apr. 10, 1920.
 Patrick J. Lyons, appointed, reserveman, Apr. 10, 1920.
 Alfred S. Macomber, appointed, reserveman, Apr. 10, 1920.

Promotions.

Reserveman, Daniel M. O'Connell, promoted to patrolman, Jan. 10, 1920.
 Reserveman, Chester C. F. Warner, promoted to patrolman, Jan. 10, 1920.
 Reserveman, George D. MacDonald, promoted to patrolman, Jan. 10, 1920.
 Reserveman, Charles F. Lacey, promoted to patrolman, Apr. 10, 1920.
 Reserveman, William E. Dwyer, promoted to patrolman, Apr. 10, 1920.
 Reserveman, Charles H. McAvoy, promoted to patrolman, Apr. 10, 1920.

Retirements.

Patrolman, Charles W. Allen, placed on pension roll, Mar. 26, 1920.
 Patrolman, Charles W. Stevens, placed on pension roll, Mar. 29, 1920.
 Patrolman, Jotham Chisholm, placed on pension roll, Apr. 23, 1920.

Deaths.

Retired patrolman, Charles W. Stevens, died May 31, 1920.
 Patrolman, George L. Smith, died Sept. 27, 1920.

Police Signal Service.

Number of on duty calls made by the patrolmen	263,467
Telephone calls made by the officers and patrolmen	44,151

"White" Combination Automobile Service.

Number of runs made in conveying prisoners to station	15
Number of prisoners conveyed	17
Number of sick and injured conveyed	15
Number of miles run in conveying prisoners to station	40.1
Number of miles run in conveying sick and injured	40.4
Number of miles run in conveying prisoners to and from jail	11.6
Number of miles run elsewhere	282.9

Total number of miles run during the year 375.0

"Reo" Combination Automobile Service.

Number of runs made in conveying prisoners to station	378
Number of prisoners conveyed	465
Number of sick and injured conveyed	363
Number of miles run in conveying prisoners to station	769.8
Number of miles run in conveying sick and injured	1,200.7
Number of miles run in conveying prisoners to and from jail	305.7
Number of miles run elsewhere	708.9

Total number of miles run during the year 2,985.1

Touring Car Reports.

Number of prisoners conveyed to station	7
Number of sick and injured conveyed	6
Number of prisoners conveyed to and from jail	4

Horse Drawn Patrol Wagon, Ambulance and Pung Reports.

Number of runs made in conveying prisoners to station	13
Number of prisoners conveyed	21
Number of miles run in conveying prisoners to station	25
Number of sick and injured conveyed	285
Number of miscellaneous runs	7

REPORT OF POLICE MATRON.

January 31, 1921.

To Charles A. Kendall, Chief of Police.

Dear Sir:—

I herewith submit my report as matron for the year ending December 31, 1920. The following females and minors were committed to my care, charged with the following offenses, etc.

Accessory before the fact, rape	1
Adultery	3
Assault and battery	7
Breaking glass	3
Demented	6
Default warrants	7
Disturbing the peace	2
Drunkenness	12
Failure to grant right of way	1
Failing to stop automobile after causing injury	1
Fornication	1
Idle and disorderly	6
Injury to personal property	1
Insane	1
Keeping disorderly house	1
Keeping intoxicating liquors	1
Larceny	7
Lewd and lascivious cohabitation	5
Lewdness	3
Lost children	53
Neglected children	5
Not stopping automobile on signal	1
Received stolen property	3
Runaways	3
Safe keeping	3
Stubbornness	2
Threats	2
Trespass	9
Vagrancy	1
Violation of board of health rules	1
Violation, city ordinance	1
Violation of parole	1
Violation of probation	1
Violation of school laws	3
Total	158

I have reported at police station each morning and attended sessions of the juvenile court looking after minors who have been in court.

Respectfully submitted,
 MRS. MINA T. WEEKS,
Matron.

Conclusion.

To His Honor the Mayor, Charles W. Eldridge for his continued fairness and sound judgment on all matters concerning this department, members of the board of aldermen, court officials, heads of other city departments for their co-operation, press representatives, and to members of this department for their fidelity to duty, my most sincere thanks are due,

Respectfully submitted,

CHARLES A. KENDALL,

Chief of Police.

REPORT OF THE CITY CLERK.

OFFICE OF THE CITY CLERK,
January 1, 1921.

To the Honorable, the Mayor and the Board of Aldermen:—

Gentlemen:— The following is respectfully submitted as the forty-ninth annual report of the City Clerk of the City of Somerville, and is for the year ending December 31, 1920.

The receipts and payments were as follows:—

Receipts.

Balance from year 1919, being for dog licenses issued in December, 1919:—		
5 males at \$2.00	\$10 00	
1 female at \$5.00	5 00	
1 spayed at \$2.00	2 00	
	\$17 00	
Less city clerk's fees paid to the city treasurer, 7 at \$.20	1 40	
		\$15 60
For dog licenses issued in 1920:—		
631 males at \$2.00	\$1,262 00	
156 females at \$5.00	780 00	
86 spayed at \$2.00	172 00	
3 kennel at \$25.00	75 00	
		2,289 00
For hunting and fishing licenses issued in 1920:—		
396 resident hunters at \$1.00	\$396 00	
3 alien hunters at \$15.00	45 00	
251 resident fishermen at \$.50	125 50	
3 alien fishermen at \$1.00	3 00	
2 non-resident fishermen at \$1.00	2 00	
		571 50
Recording mortgages, assignments, etc., 941 papers	\$914 60	
Certificates of marriage intentions,—		
1292 licenses and 2 duplicates at \$1.00	1,294 00	
Furnishing copies of records	273 55	

Licenses: —

Auctioneers, 27 licenses at \$2.00 . . .		54 00
--	--	-------

Billiard and pool tables and bowling alleys: —

28 licenses for 95 tables and 70 alleys, including 2 tables granted in 1919, at \$2.00 . . .	\$330 00	
1 license for 2 tables granted in 1920 and paid in 1919 at \$2.00 . . .	4 00	
	<u> </u>	326 00

Drain layers, 3 licenses at \$1.00 . . .		3 00
--	--	------

Engines and motors, —

35 licenses for 62 motors, 4 boilers and 1 portable gas engine at \$1.00 . . .	\$35 00	
2 licenses for 3 motors, paid in 1919 . . .	2 00	
	<u> </u>	33 00

Garages,

249 licenses, including 6 granted in 1919, at \$2.00 . . .	\$498 00	
6 licenses paid in 1919 . . .	12 00	
	<u> </u>	492 00

Gasoline tanks, — 29 licenses at \$1.00 . . .		29 00
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Hackney carriages, — 11 licenses at \$1.00 . . .		11 00
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Innholders and common victuallers, —

3 victuallers' licenses, including 1 granted in 1919 at \$2.00 . . .		6 00
--	--	------

Intelligence offices, — 2 licenses at \$2.00 . . .		4 00
--	--	------

Junk and second hand licenses, —

22 licenses, including 2 granted in 1919, at \$25.00 . . .	\$550 00	
43 licenses, including 2 granted in 1919, at 10.00 . . .	430 00	
	<u> </u>	980 00

Lord's day, sale of ice cream, confectionery, soda water and fruit, on,— 96 licenses, including 1 granted in 1919, at \$5.00	480 00	
Second hand motor vehicles, — 26 licenses, including 8 granted in 1919, at \$10.00	260 00	
Slaughtering, — 7 licenses at \$1.00	7 00	
Street Musicians, — 5 licenses for 5 persons at \$.50	2 50	
Wagons, — 80 licenses for 107 wagons, including 1 granted in 1919, at \$1.00	107 00	
Wagon stands, — 6 licenses at \$1.00	6 00	
Permits for projections over sidewalks, — 28 permits, for 4 awnings, 18 signs, 2 swing arms, 1 post and sign, 1 post and clock and 2 barber poles, including 4 permits granted in 1919, at \$1	28 00	
Filing certificates, under Acts of 1908, Chap. 502, — 2 at \$.50	1 00	
Interest on deposits	7 45	
Notices of hearings (public service corporations)	12 91	
Repairing and sale of junk badges	7 50	
Sale of old ballots	42 60	
Sale of stationery and postage	5 46	
Witness fees	60	
Optometrists' registration, 6 at \$.50	3 00	
Physicians' registration, 5 at \$.25	1 25	
		5,392 42
Total receipts		\$8,268 52

Payments.

To Joseph O. Hayden, county treasurer, June 1 and December 1, receipts for dog licenses from December 1, 1919 to November 30, 1920, both inclusive:—		
626 males at \$2.00	\$1,252 00	
157 females at \$5.00	785 00	
85 spayed at \$2.00	170 00	
3 kennel at \$25.00	75 00	
		\$2,282 00
Less city clerk's fees, 871 at \$.20	174 20	
		\$2,107 80

To the Commissioners on Fisheries and Game, for licenses for hunting and fishing in 1920, —

396 resident hunters at \$1.00	\$396 00	
3 alien hunters at \$15.00	45 00	
251 resident fishermen at \$.50	125 50	
3 alien fishermen at \$1.00	3 00	
2 non-resident fishermen at \$1.00	2 00	
	<hr/>	
	\$571 50	
Less city clerk's fees, 655 at \$.15	98 25	
	<hr/>	473 25

To the city treasurer, monthly: —

City clerk's fees for issuing and recording dog licenses, 876 at \$.20	\$175 20	
City clerk's fees for issuing and recording fishing and hunting licenses, 655 at \$.15	98 25	
All the receipts above specified, except for dog licenses and fishing and hunting licenses	5,392 42	
	<hr/>	5,665 87
Total payments		<hr/> \$8,246 92

Balance, January 1, 1921, being for dog licenses issued in December, 1920: —

10 males at \$2.00	\$20 00	
2 spayed at \$2.00	4 00	
	<hr/>	\$24 00
Less city clerk's fees paid to the city treasurer, 12 at \$.20	2 40	
	<hr/>	\$21 60

The decrease from previous years in amounts received as fees for licenses as innholders and common victuallers, to keep open places of business on the Lord's Day for sale of ice cream, confectionery, soda water and fruit, and as dealers in second-hand motor vehicles, is due to the change in June of the municipal board having control of such licenses.

At the city election in 1919 it was voted to authorize the granting of licenses for the sale of intoxicating liquor. Because of such vote and in accordance with the provisions of law, a licensing board was appointed. This board has the power of granting the various classes of licenses above referred to and collects the fees therefor.

Licenses and Permits.

Besides the licenses mentioned in the foregoing list of receipts, licenses and permits have been granted by the Board of Aldermen, without charge, as follows:—

Children under fifteen to take part in entertainments	8
Newsboys	7
To give band concerts (one permit for three concerts)	1
To hold political meetings in streets and squares	1
To hold religious services in streets and squares	1
To install branch single track railway across street	1
To locate World War memorial tablet in square	1
To move buildings through streets	3
To parade in streets, with music, etc.	2
To suspend wire across street	1

Births.

1920.

Number of births reported by physicians and midwives for 1920.

Males	1152
Females	1003

A canvass of the city is at present being made under the direction of the city clerk as required by section 5, chapter 29, of the Revised Laws, to ascertain the facts required for record relative to children born during the year.

As the information derived from such canvass will not be available in time sufficient for its incorporation in this report, a statement in full of the births of 1919 will be given in the city clerk's report for the year 1921.

1919.

The following is a statement in full of the births for 1919.

Number of births (exclusive of still births) in Somerville in 1919 registered	1889
Less than previous year	92
Males	935
Females	954
	<hr/> 1839

Born of American parents	745	
Born of foreign parents	741	
Born of American father and foreign mother	185	
Born of foreign father and American mother	209	
Born of American mother and father of unknown nationality	8	
Born of foreign mother and father of unknown nationality	1	
	<hr/>	1889
Number of still-births in Somerville in 1919 as registered		53
Number of births in other places in 1919 registered		531
		<hr/>
		2473
Number of cases of twins		31

Marriages.

Number of intention certificates issued in 1920		1292
More than previous year		66
Marriages registered		1352
More than previous year		125
Both parties American	847	
Both parties foreign	215	
American groom and foreign bride	131	
Foreign groom and American bride	159	
	<hr/>	1352 couples
First marriage of	2357	
Second marriage of	330	
Third marriage of	15	
Fourth marriage of	2	
	<hr/>	1352 couples

Deaths.

(Exclusive of still-births.)

Number of deaths in Somerville in 1920		1137
Less than previous year		63
Males	526	
Females	611	
	<hr/>	1137
Under ten years of age	238	
10 and under 20 years of age	29	
20 and under 30 years of age	53	
30 and under 40 years of age	60	
40 and under 50 years of age	82	
50 and under 60 years of age	161	
60 and under 70 years of age	163	
70 and under 80 years of age	215	
80 and under 90 years of age	118	
90 years of age and over	18	
	<hr/>	1137
Age of oldest person deceased 95 years		
Born in Somerville	237	
Born in other places in the United States	490	
Of foreign birth	408	
Birthplace unknown	2	
	<hr/>	1137

Number of deaths in January	121
Number of deaths in February	198
Number of deaths in March	104
Number of deaths in April	80
Number of deaths in May	90
Number of deaths in June	61
Number of deaths in July	78
Number of deaths in August	64
Number of deaths in September	70
Number of deaths in October	81
Number of deaths in November	95
Number of deaths in December	95

 1137

The number of still-births during the year was sixty-five. In addition to the above 260 deaths which occurred elsewhere were recorded in Somerville, almost the entire number of persons deceased having been residents of this city.

ASSESSED POLLS AND REGISTERED VOTERS.

WARD	Pct.	As- sessed Polls, April 1, 1920	REGISTERED VOTERS.									
			Dec. 3, 1919 Men	Dec. 3, 1919 Women	Re- vised Lists of July 24, 1920 Men	Re- vised Lists of July 24, 1920 Women	Add- ed in Aug. & Oct. 1920 Men	Add- ed in Aug. & Oct. 1920 Women	Oct. 13, 1920 Men	Oct. 13, 1920 Women	Voted Nov. 2, 1920	
Ward 1	Pct. 1	1,580	750	53	682	47	114	391	796	438	1,072	
" 1	" 2	1,103	552	35	501	30	99	294	600	324	795	
" 1	" 3	563	279	31	265	29	24	132	289	161	372	
" 1	" 4	603	224	46	200	43	10	61	210	104	260	
		3,849	1,805	165	1,648	149	247	878	1,895	1,027	2,499	
Ward 2	Pct. 1	961	384	5	346	4	33	150	379	154	454	
" 2	" 2	1,762	806	11	738	10	126	455	864	465	1,121	
" 2	" 3	742	377	5	340	4	36	186	376	190	459	
		3,465	1,567	21	1,424	18	195	791	1,619	809	2,034	
Ward 3	Pct. 1	1,398	907	119	842	106	94	617	936	723	1,471	
" 3	" 2	1,289	749	111	722	101	89	523	811	624	1,275	
		2,687	1,656	230	1,564	207	183	1,140	1,747	1,347	2,746	
Ward 4	Pct. 1	1,433	778	53	708	48	135	539	843	587	1,263	
" 4	" 2	1,375	712	88	671	87	122	482	793	569	1,212	
		2,808	1,490	141	1,379	135	257	1,021	1,636	1,156	2,475	
Ward 5	Pct. 1	1,521	818	181	777	163	169	667	946	830	1,636	
" 5	" 2	1,164	688	123	652	104	109	446	761	550	1,180	
" 5	" 3	997	600	160	566	137	82	312	648	449	953	
		3,682	2,106	464	1,995	404	360	1,425	2,355	1,829	3,769	
Ward 6	Pct. 1	1,144	1,005	223	588	166	85	356	673	522	1,040	
" 6	" 2	1,336	820	63	614	75	120	361	734	436	1,001	
" 6	" 3	987	805	65	496	37	115	443	611	480	1,006	
" 6	" 4	1,298	.....	.....	762	62	148	542	910	604	1,383
		4,765	2,630	351	2,460	340	468	1,702	2,928	2,042	4,430	
Ward 7	Pct. 1	1,131	773	49	727	43	114	543	841	586	1,339	
" 7	" 2	1,375	742	70	715	64	152	601	867	665	1,435	
" 7	" 3	1,561	892	62	816	53	160	629	976	682	1,510	
" 7	" 4	1,116	680	43	628	32	127	530	755	562	1,227	
" 7	" 5	830	469	30	424	27	164	368	588	395	915	
		6,013	3,556	254	3,310	219	717	2,671	4,027	2,890	6,426	
City	.....	27,269	14,810	1,626	13,780	1,472	2,427	9,628	16,207	11,100	24,379

ELECTIONS.

The following is a statement of the votes cast, in the several wards of the city, for the candidates for the various offices, and on various questions, at the state election held November 2, 1920.

CANDIDATE.	PARTY.	WARDS.							Total.
		1	2	3	4	5	6	7	
PRESIDENTIAL ELECTORS.									
Marcus A. Coolidge, et als.	Democratic	731	1147	800	436	862	1000	1137	6113
Peter O'Rourke, et als.	Socialist Labor	8	8	8	6	12	11	15	68
John J. McEttrick, et als.	Socialist	53	69	41	53	75	96	110	497
Charles Sumner Bird et als.	Republican	1638	730	1861	1946	2754	3221	5096	17246
Blank		69	80	36	34	66	102	68	455
GOVERNOR.									
Channing H. Cox	Republican	1515	555	1815	1899	2688	3228	5280	16980
Walter S. Hutchins	Socialist	24	25	25	27	47	59	62	269
Patrick Mulligan	Socialist Labor	12	21	40	6	18	19	21	137
John J. Walsh	Democratic	822	1248	757	452	906	982	870	6037
Blank		126	185	109	91	110	142	193	956
LIEUTENANT GOVERNOR.									
Marcus A. Coolidge	Democratic	627	941	610	362	660	762	717	4679
David Craig	Socialist Labor	11	11	8	8	17	14	48	117
Alvin T. Fuller	Republican	1459	737	1594	1654	2322	2850	4368	14984
Thomas Nicholson	Socialist	15	19	17	26	45	49	53	224
Robert M. Washburn	Independent	221	85	367	300	552	564	982	3071
Guy A. Ham							1		1
Blank		166	241	150	125	173	190	258	1303
SECRETARY.									
Frederic W. Cook	Republican	1722	848	2055	1985	2959	3451	5542	18562
Edward E. Ginsburg	Democratic	531	833	496	303	563	654	531	3911
Anthony Houtenbrink	Socialist Labor	19	10	8	7	12	14	21	91
Edith M. Williams	Socialist	30	30	30	26	46	75	77	314
Blank		197	313	157	154	189	236	255	1501
TREASURER.									
George H. Jackson	Citizen	48	52	63	44	55	90	119	471
James Jackson	Republican	1448	457	1752	1818	2560	3121	5162	16318
Louis Marcus	Socialist	42	28	23	26	53	56	56	284
Patrick O'Hearn	Democratic	763	1204	759	444	918	939	808	5835
Albert L. Waterman	Socialist Labor	12	12	20	8	12	20	27	111
Blank		186	281	129	135	171	204	254	1360
AUDITOR.									
Alonzo B. Cook	Republican	1498	551	1757	1837	2648	3159	5174	16624
Alice E. Cram	Democratic	722	1093	748	448	842	934	854	5641
Stephen J. SurrIDGE	Socialist Labor	19	9	16	9	12	14	25	104
Herbert H. Thompson	Socialist	28	35	18	29	41	70	57	278
Blank		232	346	207	152	226	253	316	1732

CANDIDATE.	PARTY.	WARDS.							Total.
		1	2	3	4	5	6	7	
ATTORNEY GENERAL									
J. Weston Allen	Republican	1483	513	1780	1852	2609	3155	5236	16628
Morris I. Becker	Socialist Labor	13	9	7	5	12	17	23	86
John Weaver Sherman	Socialist	34	40	29	32	52	76	77	340
Michael L. Sullivan	Democratic	755	1180	742	441	890	921	786	5715
Blank		214	292	188	145	206	261	304	1610
CONGRESSMAN, 9TH DISTRICT									
Maurice F. Ahearn	Democratic	891	1364	961	554	1083	1131	1055	7039
Charles L. Underhill	Republican	1427	455	1635	1773	2477	3049	5003	15819
Joseph H. Soper							1		1
Blank		181	215	150	148	209	249	368	1520
COUNCILLOR, FOURTH DISTRICT									
John C. F. Slayton	Republican	1656	769	1969	1983	2850	3383	5449	18059
Joseph F. Cotter							1		1
Blank		843	1265	777	492	919	1046	977	6319
SENATOR, THIRD MIDDLESEX DISTRICT									
Charles M. Austin	Republican	1717	799	1995	2020	2958	3430	5481	18400
John M. Webster				1					1
Arthur D. Healey				2		2	9		13
M. J. Diggins				1					1
Blank		782	1235	747	455	809	991	945	5964
REPRESENTATIVES, 23RD DISTRICT (3)									
William J. Bell	Republican	1548		1855	1939	2865			8207
Harvey E. Frost	Republican	1541		1838	1820	2631			7830
Patrick Henry Ryan	Independent	575		491	387	836			2289
Walter H. Snow	Republican	1429		1748	1752	2538			7467
Blank		2404		2306	1527	2437			8674
REPRESENTATIVES, 24TH DISTRICT (3)									
E. Agnes Blood	Democratic			1231			1132	1128	3491
Warren C. Daggett	Republican			669			3068	4942	8679
Peter F. Donnelly	Democratic			1088			894	771	2753
Wilbur F. Lewis	Republican			409			2800	4805	8014
John M. Woods	Republican			582			3004	4765	8351
Blank				2123			2392	2867	7382
COUNTY COMMISSIONERS, MIDDLESEX COUNTY									
Alfred L. Cutting	Republican	1593	682	1858	1883	2765	3196	5113	17090
Walter C. Wardwell	Republican	1576	790	1932	1861	2770	3243	5164	17336
Joseph Vigilanti							1		1
Blank		1829	2596	1702	1206	2003	2420	2575	14331

CANDIDATE	PARTY	WARDS.							Total
		1	2	3	4	5	6	7	
SHERIFF									
John R. Fairbairn	Republican	1615	898	1889	1853	2740	3237	5193	17425
James J. Murphy				1					1
Blank		884	1136	856	622	1029	1193	1233	6953
<p>SHALL AN ACT ENTITLED "AN ACT TO REGULATE THE MANUFACTURE AND SALE OF BEER, CIDAR AND LIGHT WINES," AND IN WHICH IT IS PROVIDED THAT ALL BEVERAGES CONTAINING NOT LESS THAN ONE HALF OF ONE PER CENT AND NOT MORE THAN TWO AND THREE FOURTHS PER CENT OF ALCOHOL BY WEIGHT AT SIXTY DEGREES FAHRENHEIT SHALL BE DEEMED NOT TO BE INTOXICATING LIQUOR, WHICH ACT PASSED THE HOUSE OF REPRESENTATIVES BY A VOTE OF 121 IN FAVOR AND 67 AGAINST, AND PASSED THE SENATE BY A VOTE OF 26 IN FAVOR AND 6 AGAINST, AND WAS THEREAFTER VETOED BY HIS EXCEL-LANCY THE GOVERNOR, AND FAILED OF PASSAGE IN THE SENATE OVER THE SAID VETO BY A VOTE OF 14 IN FAVOR AND 22 AGAINST, BE AP-PROVED?</p>									
Number of "Yes" votes		1161	1187	1029	842	1291	1621	1807	8938
Number of "NO" votes		1000	454	1428	1370	2024	2220	3904	12400
Blank		338	393	289	263	454	589	715	3041
<p>TABULATION OF ABSENT VOT-ER BALLOTS</p> <p>(Tabulated from precinct records of election).</p>									
Number of votes cast		11	3	17	6	25	11	44	117
Number rejected as defective									
Number rejected as not a voter		1							1
Number rejected, voted in person							1		1

Liquor License Question.

The following is a statement of the votes, during the several years of its submission to the people, on the question of granting licenses for the sale of intoxicating liquors, in this city, together with the number of registered voters and the estimated population for each year:—

YEAR.	YES.	NO.	BLANK.	REGISTERED VOTERS.	ESTIMATED POPULATION.
1881	979	1,222		3,678	26,000
1882	627	1,159		3,778	26,500
1883	767	1,343		4,407	27,000
1884	806	1,709		4,470	28,000
1885	428	1,604		3,969	*29,992
1886	214	1,321		4,089	32,000
1887	555	2,427		4,574	34,000
1888	744	2,456		5,399	36,000
1889	635	1,706	335	5,286	39,000
1890	999	2,282	409	5,556	*40,117
1891	1,054	2,598	279	5,938	43,000
1892	1,427	3,288	347	7,587	46,000
1893	1,547	2,654	218	7,943	48,000
1894	1,098	2,869	246	8,007	50,000
1895	1,854	4,708	459	8,410	*52,200
1896	1,466	3,680	332	9,379	54,000
1897	1,626	3,815	486	8,925	56,000
1898	1,595	3,501	486	8,657	57,500
1899	1,892	3,340	374	8,838	60,000
1900	1,660	3,427	321	9,620	*61,643
1901	1,579	3,295	374	9,499	63,500
1902	1,645	3,242	360	10,100	65,000
1903	2,248	4,410	550	11,346	67,000
1904	2,022	4,338	447	11,682	69,500
1905	2,483	4,660	531	11,340	*69,272
1906	2,193	5,204	582	11,571	70,000
1907	1,735	4,591	459	11,558	74,000
1908	1,780	4,760	491	12,777	75,500
1909	1,830	4,601	530	12,479	75,500
1910	1,544	3,968	365	12,522	*77,236
1911	2,193	4,841	492	13,226	80,000
1912	2,421	6,182	546	13,854	81,000
1913	2,348	6,431	550	13,417	82,000
1914	2,178	5,535	488	13,404	85,000
1915	1,705	5,262	379	13,805	*86,854
1916	1,100	4,158	271	14,500	88,000
1917	1,291	3,457	232	13,826	90,000
1918	690	1,935	161	13,477	90,500
1919	2,777	2,297	261	14,810	91,000
1920				27,307	*93,033

*Census.

ORDINANCES.

Somerville, January 1, 1921.

The following ordinances have been adopted since the printing of the annual reports for the year 1919:—

Ordinance No. 91.

An Ordinance Relative to the Fire Department.

Be it ordained by the Board of Aldermen of the City of Somerville, as follows:—

Section 1. Section 1 of Chapter XVIII of the Revised Ordinances of 1911 is hereby repealed and the following substituted in place thereof:

Section 1. The fire department shall consist of a chief engineer, a deputy chief, two district chiefs, a master mechanic, and as many other officers and members as the board of aldermen shall from time to time determine. The two district chiefs shall each perform the duties of a captain.

Each engine company shall consist of not more than fourteen men and shall be organized as follows: Captain, lieutenant, hosemen, and, if the engine is operated with steam, an engineman and an assistant engineman or if motor driven, drivers or operators.

Each hose company shall consist of not more than ten men and shall be organized as follows: captain, lieutenant, drivers or operators, and hosemen.

Each ladder company shall consist of not more than sixteen men and shall be organized as follows: captain, lieutenant, drivers or operators, and laddermen.

When two or more companies are housed in the same station, one only of such companies shall have a captain, and he shall have the authority and responsibility and perform the duties of that office with reference to all of such companies, except that, when in attendance at alarms or fires and in going to and returning from the same, such authority, responsibility and duties shall devolve, with reference to all such companies other than his own, upon their respective lieutenants.

Sect. 2. Section 3 of said chapter is hereby repealed and the following substituted in place thereof: Sect. 3. The chief engineer and deputy chief shall also be fire wards of the city.

Sect. 3. Section 4 of said chapter is hereby repealed and the following substituted in place thereof: Sect. 4. The chief engineer shall have the sole and absolute control and command over all members of the department and all other persons present at fires, and shall take prompt measures to arrange the engines and other apparatus in the most advantageous manner, and issue such orders as he may deem necessary. In case of the absence of the chief engineer at a fire, the deputy chief, and if he is not present the district chief or in his absence the officer designated to act in that capacity, shall during such absence, have and exercise all the power and authority of the chief engineer, and shall perform the duties of his office; and if the

engineer or no chief be present, the captain who first arrives with his apparatus at a fire shall exercise such authority until the arrival of a superior officer, and until the arrival of one of said officers such authority is to be exercised by the lieutenant who first arrives with his apparatus.

Sect. 4. Section 5 of said chapter is hereby repealed and the following substituted in place thereof: Sect. 5. Whenever it shall be determined at any fire, by the officer in command, to be necessary to pull down or demolish any building in order to prevent the spreading of fire, the same may be done by his order, in accordance with the statute in such case made and provided.

Section 5. Section 7 of said chapter is hereby repealed and the following substituted in place thereof: Sect. 7. The members of the uniformed fire-fighting force shall be divided into two bodies or platoons, which shall be designated as a day force and a night force, and the day force and the night force shall alternate on tours of duty every third day. The hours of duty of the day force shall be from eight o'clock ante meridian to six o'clock post meridian, and the hours of duty of the night force shall be from six o'clock post meridian to eight o'clock ante meridian; provided, that on every third day for the purpose of alternating the day force with the night force and vice versa, the number of hours of duty herein stated may be exceeded, but one force shall be at liberty at all times except in case of a conflagration, the officer having charge of the fire-fighting force shall have full authority to summon and keep on duty any or all of the members of the fire-fighting force while the conflagration continues. The members of the fire department shall be entitled to fourteen days' vacation each year, without loss of pay. Members absent from duty on account of injury caused while in the performance of duty, and such injury being certified to by the city physician, shall receive full pay for a period not exceeding sixty days, provided however that the chief engineer of the fire department, with the approval of the city physician and mayor, may grant such extension of time as may be deemed necessary. A substitute in the fire department incapacitated on account of injury caused while in the performance of duty in said department, and such injury being certified to by the city physician, shall receive pay equal to that paid to a member of the department during his first year, for a period not exceeding sixty days, provided however that the chief engineer of the fire department, with the approval of the city physician and mayor, may grant such extension of time as may be deemed necessary. Members of the department absent from duty on account of sickness, and such sickness being certified to by the city physician, shall be entitled to full pay for not more than twenty days' absence on any one occasion, provided however that the chief engineer of the fire department, with the approval of the city physician and mayor, may grant such extension of time as may be deemed necessary. No pay will be allowed under this ordinance if the sickness or injury is feigned, simulated, exaggerated, or arises from carelessness, improper or vicious conduct, excessive indulgence of appetite or other bad habits, or from improper practices, or if the sick or injured person shall fraudulently, by concealment, false statement, or otherwise seek to deceive or mislead the attending physician or surgeon in relation to his case, or if he refuses or neglects to conform to the instructions of the attending physician or surgeon. At the discretion of the chief engineer of the fire department any member shall be entitled to full pay during absence not exceeding three days for the purpose of attending a funeral in his immediate family.

Section 6. Ordinance No. 63 is hereby repealed.

Sect. 7. This ordinance shall take effect upon its passage.

Approved August 2, 1920

Ordinance No. 92.

An Ordinance Relative to Street Railways.

Be it ordained by the Board of Aldermen of the City of Somerville, as follows:—

Chapter XXV of the Revised Ordinances of 1911 entitled "Street Railways" is hereby amended by adding the following thereto.

Sect. 1. No person shall use or cause or allow to be used any portion of a public street as the terminal of a route for a street railway car unless permission therefor has been granted by the board of aldermen to the street railway corporation operating said car.

Sect. 2. No person shall cause or allow a street railway car to remain standing in any public street for the purpose of using said street as the terminal of a route for such car unless permission therefor has been granted by the board of aldermen to the street railway corporation operating said car.

Sect. 3. Whoever violates any provision of this ordinance shall be subject to a penalty not exceeding twenty dollars for each offense.

Sect. 4. This ordinance shall take effect fifteen days after its passage.

Approved January 4, 1920

In submitting this, my final report, I wish to express to his honor, the mayor, the board of aldermen and all departmental officials and employees of the city my appreciation of the uniform kindness and courtesy that has been extended by them throughout the whole of my official service. It is my opinion, if I may be permitted to record it herein, that Somerville has been unusually fortunate in the character and ability of its mayors and aldermen throughout its existence as a city and that its government always has been and I sincerely trust always may be carried on with the purpose expressed in the preamble of the constitution of our Commonwealth, — "to furnish the individuals who compose it with the power of enjoying in safety and tranquility their natural rights and the blessings of life."

FREDERIC W. COOK,

City Clerk.

Standing Committees of the Board of Aldermen.

ELECTRIC LINES AND LIGHTS — Aldermen Robertson, Shay, Berry, Haley and Phelps.

FINANCE — The President, Aldermen Allen, Berry, Donnelly, Heald, Hodgdon and Mason.

LEGISLATIVE MATTERS — Aldermen Harris, Dearborn, Smith of Ward 4, Smith, of Ward 5 and Burns.

LICENSES AND PERMITS — Aldermen Dearborn, Heald, Abbott, Donnelly, Smith of Ward 5, Burns and Smith, of Ward 4.

PUBLIC PROPERTY — Aldermen Berry, Bell, Locatelli, Coldwell and Hodgdon.

PUBLIC SAFETY — Aldermen Bell, Abbott, Dearborn, Robertson and Smith of Ward 4.

PUBLIC SERVICE — Aldermen Shay, Robertson, Bell, Mason, Haley, Nichols and Phelps.

PUBLIC WORKS — Aldermen Locatelli, Allen, Shay, Harris, Phelps, Coldwell and Nichols.

School Committee.

Chairman, HERBERT CHOLERTON.

Vice-Chairman, WILLIAM M. MORRISON.

Members.

Charles W. Eldridge, Mayor (ex-officio) 47 Highland road.
Richard L. Rice, Pres. Board of Aldermen, (ex-officio) 296½ Broadway

WARD ONE.

Francis J. Fitzpatrick 76 Broadway
William T. McCarthy 38 Pearl street

WARD TWO.

Daniel H. Bradley 19 Concord avenue
Christopher J. Muldoon 88 Concord avenue

WARD THREE.

Charles W. Boyer 104 Summer street
Oscar W. Codding 59 Vinal avenue

WARD FOUR.

Frank M. Hawes 257 School street
Edward I. Tripp 21 Wigglesworth street

WARD FIVE.

Harry M. Stoodley 283 Highland avenue
Miss Minnie S. Turner 64 Hudson street

WARD SIX.

Walter I. Chapman 18-A Central street
William M. Morrison 97 Rogers avenue

WARD SEVEN.

Herbert Cholerton 94 College avenue
Paul O. Curtis 41 Mason street

Superintendent and Secretary — CHARLES S. CLARK.

Assessors.

FRED E. WARREN, Chairman (term expires 1923.)
 WINSOR L. SNOW (term expires 1921).
 HARRY VAN IDERSTINE (term expires 1923).
 J. ROBERT FENELON (term expires 1922).
 DAVID B. ARMSTRONG (term expires 1921).

Assistant Assessors.

FRED B. CLAPP.	JOHN M. NANGLE.
JOHN S. MCGOWAN.	LEONARD C. SPINNEY.
LAWRENCE J. WARD.	SAMUEL C. WISWALL.

Board of Health.

ROBERT M. LAVENDER, Chairman (term expires 1922).
 WARREN C. BLAIR (term expires 1922).
 JOHN E. GILLIS, M. D., (term expires 1921).
Clerk—LAURENCE S. HOWARD.
Agent—GEORGE I. CANFIELD.
Medical Inspector — FRANK L. MORSE, M. D.
Inspector of Animals and Provisions—CHARLES M. BERRY.
Inspector of Milk and Vinegar—HERBERT E. BOWMAN.

Licensing Board.

EUGENE M. CARMAN, Chairman (term expires 1926).
 WILLIAM H. SMITH (term expires 1924).
 WILLIAM J. SHANAHAN (term expires 1922).

Overseers of the Poor.

FRED E. DURGIN, Chairman (term expires 1923).
 MICHAEL COLL, Vice-Chairman (term expires 1921).
 HENRY F. CURTIS (term expires 1922).
Agent — WILLIAM E. COPITHORNE.
Warden City Home—J. FOSTER COLQUHOUN.
Matron City Home — CATHERINE COLQUHOUN.

Planning Board.

WILLIAM F. RILEY, Chairman (term expires 1921).
 DAVID J. KELLEY, Secretary (term expires 1924).
 HARRISON L. EVANS, (term expires 1920).
 PAUL R. VALENTINE, (term expires 1922).
 GEORGE J. RAUH, (term expires 1923).

Registrars of Voters.

EDWIN D. SIBLEY, Chairman (term expires 1921).
 DOUGLASS B. FOSTER (term expires 1923).
 CHARLES LEO SHEA (term expires 1922).
 FREDERIC W. COOK, City Clerk.

Public Library Trustees.

THOMAS M. DURELL, Chairman (term expires 1922)
 J. FRANK WELLINGTON (term expires 1923).
 FREDERICK W. PARKER (term expires 1921).
 WILLIAM L. BARBER (term expires 1922).
 CHARLES L. NOYES (term expires 1923).
 HERBERT E. BUFFUM (term expires 1923).
 GILES W. BRYANT (term expires 1921).
 DAVID H. FULTON (term expires 1921).
 FRANK M. BARNARD (term expires 1922).
Librarian and Secretary—GEORGE H. EVANS.

Recreation and Playground Commission.

CHARLES S. CLARK, Chairman (term expires 1921)
 GEORGE L. DUDLEY, Secretary (term expires 1922).
 ERNEST W. BAILEY (term expires 1922).
 JOHN F. COLQUHOUN (term expires 1922).
 FRANCES M. WEEKS (term expires 1921).
 ELIZABETH MONGAN (term expires 1921).
 Vacancy

City Clerk.

FREDERIC W. COOK.
Assistant City Clerk—JASON M. CARSON.

City Treasurer and Collector of Taxes.

JOSEPH S. PIKE.

City Messenger.

FRED E. HANLEY.

Mayor's Secretary.

LEON M. CONWELL.

City Solicitor.

FRANK W. KAAAN.

City Auditor.

HOWARD E. WEMYSS.

City Engineer.

ERNEST W. BAILEY.

Commissioner of Streets.

ASA B. PRITCHARD.

Commissioner of Public Buildings and Inspector of Buildings.

GEORGE L. DUDLEY.

Commissioner of Electric Lines and Lights.

WALTER I. FULLER.

Water Commissioner.

FRANK E. MERRILL.

Superintendent of Sanitary Department.

EDGAR T. MAYHEW.

Clerk of Committees.

RICHARD A. KEYES.

Chief of Police.

CHARLES A. KENDALL.

Chief Engineer of the Fire Department.

SEWALL M. RICH.

City Physician.

C. CLARKE TOWLE, M. D.

Inspector of Plumbing.

DUNCAN C. GREENE.

Inspector of Milk and Vinegar.

HERBERT E. BOWMAN.

Inspector of Animals and Provisions.

CHARLES M. BERRY.

Inspector of Petroleum.

SEWALL M. RICH.

Sealer of Weights and Measures.

BENJAMIN S. ABBOTT.

Fence Viewers.

CHARLES M. BERRY,
HOWARD LOWELL,

Agent of Military and State Aid and Soldiers' Relief and Burial Agent.

BENJAMIN S. ABBOTT.

Constables.

MAURICE F. AHEARN.
CHARLES M. AUSTIN.
CHARLES W. F. BENNETT.
GEORGE H. CARLETON.
EUGENE A. CARTER.
WINSLOW W. COFFIN.
WILLIAM E. COPITHORNE.
ALBION B. CROCKER.
WARREN C. DAGGETT.
THOMAS DAMERY.
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