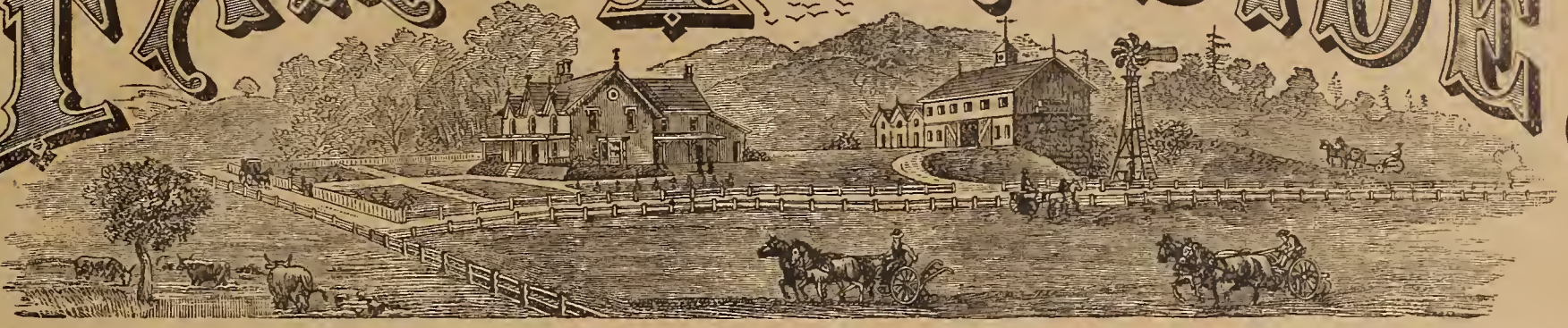


FARM AND FIRESIDE



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THE Senate elections committee recently reported a resolution proposing an amendment to the Constitution providing for election of United States senators by direct vote of the people. This action indicates a willingness on the part of the Senate to comply with the wishes of the people. Under our form of government, senators represent states; but the nearer they are to the people the better. The report contains strong arguments in favor of the change, and shows that the adoption of the amendment would not only remove a popular prejudice now increasing, but also tend to elevate the character, advance the dignity and increase the usefulness of the Senate. If Congress passes the resolution, the people will approve heartily.

SINCE the fourth of March, 1893, the interest-bearing debt of the United States has been increased \$262,000,000 by the sale of thirty-year bonds. In that period of time the interest will amount to considerably more than the principal. In other words, the recent bond issues will cost the taxpayers about \$550,000,000.

In cities and counties all over the land there is an alarming increase in bonded indebtedness due to the growing practice of raising money for nearly every public improvement by the sale of bonds. In some cases this is necessary and expedient, but it is more often done when it could and should be avoided. Few people seem to realize that the plan of issuing bonds largely increases the cost of the improvements to the taxpayers. Long-time bonds double the actual cost of the improvements, and the improvements are sometimes worn out before they are paid for. After a municipality once becomes involved in a heavy debt, it is difficult for it to get out, and it hands down an increasing burden from one generation to another.

"Unnecessary taxation is unjust taxation" is an old but sound maxim. It applies most forcibly to the plan of raising money for public use by long-time bonds, whenever not absolutely necessary, whether adopted by city, county, state or nation.

During the past three years the expenditures of the government have exceeded its revenues by more than \$130,000,000. There is no probability of sufficient revenue without a change in the revenue laws now in force. The group of senators stubbornly standing in the way of necessary amendments to the revenue laws is imposing on the country unnecessary and unjust

taxation, for the administration will continue to make up the deficit and pay the bills of the government with money raised by bond sales that more than double the cost to the people.

IN an address on electric-railway extension before the Ohio agricultural convention, Hon. Martin Dodge said:

"I am contending for a new and universal system of transportation upon the common roads of this country without the aid of animal-power, mainly for the following reasons:

"First of all, it is impossible ever to secure either cheap or rapid transportation by horse-power. The average prevailing rate to-day is twenty-five cents a ton a mile, and no amount of expenditure of public money for public roads can reduce this very much, because the power itself is both weak and costly, and the amount of power required for moving vehicles over the best road is five to eight times that which would be required to move the same load over smooth steel rails.

"In thesecond place, a changed system has become a matter of necessity more than a matter of choice, because already by steamships and steam-cars and electric-cars, in some places, the rates of transportation have been so reduced that those not enjoying such rates are unable to compete with those who do enjoy them, and as a result the competition is so uneven that those who are without the cheap means are being gradually crushed out and exterminated by the competition. No one can long compete on such unfavorable terms as the horse-power gives in comparison with the electric-power. The effect of this competition has already manifested itself in the falling prices of land remote from easy means of transportation, and the diminishing number of people in the rural districts that are dependent upon horse-power as a means of moving their product.

"Another reason why I favor this system is because it will build up a competition to the steam-roads. The two-cent rate which the people have been so long resolving in favor of will not only be attained by this competition, but a one-cent rate is now within sight and within reach if we build up and encourage by a liberal policy the electric-car service according to the principles for which I am contending. Actual experiment has already shown in many places that upon the short haul electric-cars can carry and do carry their passengers for one cent per mile, and often less."

THE Ohio agricultural experiment station recently issued a bulletin advising farmers of the character of a fertilizer now on the market under the name of "Natural Plant-food." From examination and analyses, the station concludes that this so-called natural plant-food, offered at about \$17 a ton at the seaboard, is the soft phosphate of Florida, which costs about \$7 a ton. Its composition is not different from that of finely ground, raw phosphate rock, or "floats." Field tests of "floats" give it a fertilizing value of about \$5 a ton.

THE following report of relief work, from the committee of Americans at Harpoot, will be of special interest as showing the methods pursued in distributing the funds contributed from this country:

"We are spending a good deal of money here in relief work, and we aim to set forth the needs of this district and what we are doing with the money received. To say nothing of Diarbekir and its villages, there are about two hundred villages which have been ravaged and which look to us for relief; 100,000 persons for whom we have special care are needy and suffering. Turkish official relief is without system, and is a farce. No one not actually in the midst of it can comprehend the desolation about us or the degree of suffering. Every place we help is required to prepare a careful list of the most needy, giving the number of adults, and children under ten years, in each family. This list is submitted to a central committee of nine or ten of our most reliable and sharpest business men for scrutiny. Any person able to squeeze through the winter without starving is stricken from the list. To as many as possible of the needy, work is furnished, both to men and women, in the city, that they may support themselves. Daily rations of bread—two cents' worth for adults and one cent's worth for children—are given to more than 1,600 in the city, mostly refugees.

"Misses Seymour and Bush give their whole time to a labor department for women. Three hundred and thirty are sewing and ten more knitting; other hundreds would be glad to secure work, but here, as in every other department, only those who are in absolute need are employed. Over four thousand suits, consisting of shirt and drawers, have been made and distributed, while there are other thousands who have not had a change of underclothing since the massacre, several months ago. Two hundred and eighty-one mattresses and three hundred and ninety-five quilts, some of them newly made and some bought second-hand, have been given out. The need for bedding is very great, but cannot be met. Many would be glad of a piece of matting or carpet to lie upon, or a piece of bagging to put over them.

"We have appointed Armenian committees in every place, but in some places, as Palu, Choonkoosh and Malatia, they have been afraid to touch the money. The people in Malatia are beginning to work in a quiet way. Arabkir, like Malatia, suffered more than Harpoot. * * * A difficult problem has been what to do for Palu, with its forty-five villages. They have had awful treatment from the Turks and Kurds, and no one is willing even now to distribute funds, because it will imperil their lives. * * * This work which has been providentially thrown upon us is laborious and exhausting. What wears upon us most, and is the greatest tax upon our strength, is the sight of the appalling wretchedness and misery which we can do so little to alleviate. The majority of the 15,000 who were killed were men with women and children dependent upon them. Here are penniless, half-naked women and children, many of them from houses that have been burned, many of whom have been in comfortable circumstances, and some of the better class, now wandering about in search of food."

WITH THE VANGUARD

THE Ohio legislature has enacted a law levying an excise tax on the gross earnings of electric-light, gas, natural-gas, pipe-line, waterworks, railway, street-railway and messenger companies. Mr. Goodale, the author of the law, claims that it will add about \$500,000 annually to the revenue of the state. It is estimated that the gross earnings of the railway companies in Ohio amount to \$60,000,000, and the gross earnings of quasi-public corporations other than railroads to \$40,000,000. The revenue raised under this measure all goes directly to the state; the state will secure needed revenue without the intervention of the counties.

The Goodale law is a measure of indirect taxation. What it takes from corporations the corporations in turn take from their patrons. Whenever a state or municipality taxes a franchise or privilege, it collects from the holders of the franchise something they collect from their patrons. The passengers on a street-railway indirectly pay the tax on the franchise. This system of taxation has apparent inequalities, but its advantages seem to outweigh them, and it has become a favorite form of taxation in a number of states. The tax is easily collected and not felt to be burdensome by those who really pay it.

Although true in general that the patrons of companies operating under taxed franchises ultimately pay the tax, an important point must not be overlooked. Until the term of an existing franchise expires, the tax will come out of the earnings of the company without affecting the patrons. For instance, a street-railway is allowed, under its charter, to charge a certain fare,

FARM AND FIRESIDE

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FARM AND FIRESIDE.

Springfield, Ohio.

The Advertisers in this Paper.

We believe that all the advertisements in this paper are from reliable firms or business men, and do not intentionally or knowingly insert advertisements from any but reliable parties; if subscribers find any of them to be otherwise we should be glad to know it. Always mention this paper when answering advertisements, as advertisers often have different things advertised in several papers.

Plant

Potatoes.

There was an overproduction of potatoes last year, and prices yet remain low. This will have the effect of reducing the area planted this year. Many farmers who planted largely for market last year will plant only enough for home use this year. Excess of production will not occur, and prices will again be such as make potato-growing profitable. This year is the opportunity of the growers who have the land best adapted to the crop, and who will use improved potato machinery and follow the new methods of culture, by which the cost of production is reduced to the minimum.

Irrigable

Lands.

In all parts of the country are tracts of land from a few square rods to many acres in area that are favorably located for irrigation. These tracts should and will be the first ones utilized for irrigation in the eastern states. They are especially adapted to many garden crops. In the following letter from Mr. Peters, of New Jersey, is described an ideal tract of land for this purpose. He writes:

"I have a piece of ground lying in a long strip. On the lower side flows the north branch of the Metedeconk river. On the upper side flows a small, never-failing stream. The land was formerly used as a cranberry-bog. The soil is muck, one to one and one half feet deep, under which is a stratum of coarse, white gravel, through which the water passes so freely that it was very difficult to overflow it as a cranberry-bog. Dams and cross-ditches are all there. By placing boards across the small stream it can be raised in two or three hours to fill the cross-ditches, or even flow over the top of the ground, if desired.

"I propose to plow it early, give it a good coat of lime, put on about forty tons of good stable manure to the acre, and 1,500 to 2,000 pounds of fertilizer containing about three per cent nitrogen, eight to ten per cent phosphoric acid and ten to twelve per cent potash. Then I will plant about one half acre in celery, six by twelve inches, and one acre in cabbage, cauliflower, Brussels sprouts, etc. On some knolls where

the muck changes to a black, sandy loam I will plant onions, carrots, parsnips, salsify, spinach, peas, etc.

"Do you think my chances of getting the ground sweet enough to succeed the first year are good? What would you suggest as an improvement to my plan either in crops or fertilizer? I have had very little experience with low lands. I am accustomed to trucking on upland, but drought in summer damaged my crops very much. I wish to irrigate, and have chosen this fifty-acre plot as an ideal piece for the purpose. I shall use but two or three acres the first year for truck. Would you advise plowing a few acres of it, giving it a coat of lime and some commercial fertilizer and sowing millet, and following that with some grasses fit for a meadow?"

This tract of land is adapted to the best system of irrigation known—subirrigation. It is not necessary to overflow it or do any surface irrigation. Simply maintain a supply of water in the porous subsoil. If the water-level is three or four feet below the surface, and the surface is kept properly cultivated during droughts, the growing crops will never suffer from lack of water. The remarks on soil acidity on this page will apply to this muck land. The plan proposed is an excellent one. Its details can be modified as practical experience teaches. It is wise to apply the plan only to a small portion of the tract at first. More can be learned about the best methods of cultivating and irrigating this particular tract of land from one year's practical experience with it than from a large volume on the subject; but do not fail to get the latest books on onion and celery culture, particularly as it is proposed to follow the new methods.

That portion of the tract not used this year for gardening may be sown with millet. After the millet is harvested, harrow, and sow a mixture of redtop, bluegrass and timothy for a meadow. Then each year take from the meadow-land what is desired to add to the garden.

NOTES AND COMMENTS.

Acid Soils. Lime is often spoken of and employed as a fertilizer. Undoubtedly, it has an indirect value in providing plants with the foods they require, but in most cases, I believe, the beneficial effects observed from its use are due rather to the action of lime in sweetening sour soils. Many soils are too acid for the best production of crops, and the use of air-slaked lime in correcting this condition has often marked beneficial results. If we have soils suspected of acidity, we want to make sure, of course, that such a condition exists before we apply the remedy. To make a telling test, we have only to spend a few cents in the nearest drug-store for a piece of blue litmus-paper.

Tests for Soil Acidity. A recent bulletin (No. 34) of the Rhode Island experiment station (Kingston) gives the following directions for making the test: "A few tablespoonfuls of soil are put into a glass or cup, and moistened with sufficient water to make a mixture of the consistency of thick paste; then a piece of blue litmus-paper half an inch wide and two and one half inches long is introduced into this mass after it has stood for ten or fifteen minutes. After having remained in contact with the moist soil for two or three minutes, it is carefully removed, rinsed with water and allowed to dry. If, after drying, a red color still persists instead of the original blue, there is evidence that the acid condition is not caused by carbonic acid, but rather by organic acids or acid salts, and the necessity for liming is thus made evident. The fingers should never be applied to the end of the litmus-paper which is introduced into the soil, for they always impart to it a red coloration; and if care were not taken in this particular, the change in color caused by the finger-touch might be attributed to the soil itself. This holds true both during the insertion and the removal of the litmus-paper. A spoon or a knife-blade, or anything of that kind, may be used for parting the soil and for tucking the ends of the litmus-paper down into it, after which the soil may by this means be pressed about the paper."

Crops Ben-

efited by Lime.

Every farmer, however, who has had some experience with lime and observed the results from its application, knows that different crops are differently affected by it. The Rhode Island station, on the farm of which some sour soils are found, also comes to the conclusion, after three years' experiments in this line, that some plants grow as well and some even better upon the acid soil than they do after liming, while others are a practical failure without lime. It would be folly to apply lime to the crops that do not want it, as much as to neglect the application of so cheap and effective material for crops which will do materially better with it. Among the plants most benefited by liming such soils, the Rhode Island station finds the following: Spinach, lettuce, gumbo, beets of all kinds, salsify, celery, onions, parsnips, clover, timothy, Kentucky blue-grass, muskmelon, tobacco, cauliflower, cucumbers, sorghum, martinia, peppers, peanuts and barley. Among those benefited by liming, but in a less degree, are rape, garden-peas, kohlrabi, Brussels sprouts, wax-beans, buckwheat, rutabagas, spring wheat, white carrots, kale, sweet corn, oats, dandelion, and apparently certain of the grasses. Among those plants which have shown little or no benefit from liming are millet, common white bean, yellow carrot, Indian corn, watermelon and lupine.

Bogus Agri-

cultural News.

If anybody wants reliable information about agricultural or horticultural matters, he should not look to the political papers for it. My indignation and disgust are frequently aroused on reading occasional news notices upon agricultural topics in even the best and usually best-informed political city papers, and I often feel tempted to write to them, calling attention to their gross errors. In one of the recent Buffalo dailies I saw an article about growing herbs and preparing them for market. It was well written up, and contained some good advice, but the author evidently had no personal knowledge of herb-growing. If he had the least idea of the nature of caraway, for instance, he would not have grouped this annual with perennials, like sage, etc., for which he advised the purchase and planting of roots or sets, rather than the use of seed.

Pot-herbs.

It is true that the majority of our sweet or pot herbs are perennials, and that a quick start can be had from setting roots or plants. But all of them are also easily grown from seed, and most of them as annuals. Dill is an annual, and needs no especial care after seed is sown. Indeed, it is weedy in its nature, and where plants are once grown and allowed to ripen seed, a new crop of seedlings will come up year after year. Caraway is a biennial meadow weed, and also propagates itself from seed without much trouble. By sowing seed in early spring, it can also be grown as an annual in this country; or seed may be sown in autumn for the next year's crop. Anis is another annual of easy culture. Sage is probably the most important, from a commercial point of view, of all these pot-herbs. Before engaging in its culture as a crop for pocket-money, however, I would look about me for chances of sale at remunerative prices, and then start in by growing plants from seed. By sowing seed early under glass, and transplanting into warm, well-enriched soil in early spring, a crop can be grown even the first year.

The Climax

Capped.

Occasionally the horticultural fads of the daily press are "too ridiculous for anything." Take this, for instance: "Mr. (name and address given) has an apple-tree that was bought for a Golden Russet, and the first year it bore beautiful russets. The next year it bore Sheep Nose apples. The next year it bore an early sweet apple. This year it was laden with a beautiful, large, red winter apple, of which no one knows the name." Now, all this might be possible. I have repeatedly grafted a number of different kinds of apples into one tree, and sometimes harvested a crop of, say Seek-no-Farthers from one side of a tree, while not an apple was on the other side; and the next year a crop of Greenings from the latter side, while the Seek-no-Farther part of the tree bore not an apple. But the

report headed this explanation by saying that the different apples appeared all over the tree, not only on certain limbs. I wonder if all the news one finds in political papers is as reliable as this item?

What's in a Name?

Probably a Freeman or Early Ohio potato by any other name would cook as dry and mealy and taste as good. A Carman No. 3 by the name of Elberto, or a Rural New-Yorker No. 2 by the name of Rural, would yield just as well and probably become just as popular. Yet I am looking for more in a name. I do not only want good taste in the potato or vegetable itself, but also in the selection of its name. Originators and introducers have been sinning fearfully in this respect; indeed, their offenses against good taste and tact are often rank. I don't think, either, that all the good and pretty names are already monopolized by earlier comers. What a pretty and appropriate name, for instance, was "Peach-blow" or "(Early) Rose," or "Hebron," or "Ohio!" No objection can be raised against "Burbank," or "Freeman," or any other bearing the originator's name. I did not exactly like "White Elephant," or "Irish Daisy," or "Great Divide," or "Rural New-Yorker No. 2." Mr. Manle's new "Early Thoroughbred" may be a wonderful yielder, but it's a pity he has given it that name. Mr. Manum, of Vermont, however, puts everything in that line in the shade. He has a new potato for which he claims enormous yielding qualities, and which he therefore has burdened with the name "Enormous." It may be a wonderful potato, but I will not grow it; at least not right away, until the name has been popularized, if it ever is. And then I shall be tempted to tell my friends, when they visit my potato-patches and ask about these enormous tubers, that it is the "Norma" or "Enos," or something of that sort. Under ordinary conditions, I think, the name of the originator, or of the locality of its origination, would be the most natural and proper to be given to a new variety of fruit or vegetable.

One-cent Letter Postage.

The National Board of Trade is bent on securing for the country the doubtful benefits of one-cent letter postage. If that combine of city people succeeds in this undertaking (and as it will have strong support of influential express companies, they are likely to succeed), the farmer can whistle a long time for the reforms in postal matters which are to his advantage, especially the long and urgently needed parcel post, and with it any considerable extension of the rural free mail delivery. But the city advocates of the one-cent letter postage have the start of us rural people, anyway; they are organized, and in union there is strength. The protests against measures which are solely for the interest of city people, as well as the demands for those which will do rural people any good, come singly and feebly. The good book advises us to ask, that we may receive. But the trouble with country people is that they do not ask with voices loud and concerted enough to be heard by our powers that be. Unless we bestir ourselves, it is reasonably certain that the cities will again carry off the plum, while the farmer gets left. The reduction of letter postage to one cent per ounce would mean a loss of revenue of many million dollars. It hardly yet seems time for the innovation. On the other hand, it is high time for us to get relief from the oppression of express companies. Their rates for longer distances are extravagant, often exorbitant—regular cut-throat rates, fixed on the plan of "what the traffic will bear." A few days ago I sent to the manufacturers of a feed-cutter for a simple wheel, weighing a few pounds. The manufacturers charged \$1.75 for the repairs, and the express charges were 75 cents more, making a thing worth a few cents per pound cost me \$2.50. Might as well buy new machines as to buy repairs for an old one, no matter how good the latter may yet be. In short, express companies have not yet discovered that the prices for all produce in recent years have gone down to a mere fraction of what they used to be, and that a dollar to-day is worth as much as two were ten years ago. The transportation charges are held up to the highest notch right along. The United States mail department alone can come to our aid by giving us a cheap parcel post on the plan of those existing in all civilized European countries. T. GREINER.

Our Farm.

FARM THEORY AND PRACTICE.

COMMERCIAL FERTILIZERS.—A vast sum of money is expended annually for commercial fertilizers, and their use is growing. They contain available plant-food, and that is needed. It does not follow, however, that all the money or half the money put into fertilizers is invested to the best advantage. A fertilizer is valuable to its user, not according to the number of pounds of available nitrogen, phosphoric acid and potash it may contain, but according to its ability to increase yields. A fertilizer containing a less quantity of one of these elements might produce equally good results, because that one element might be abundant in the soil. As the selling price is based upon the quantity of these elements contained in the fertilizer, an excess of one element causes a waste of money.

FARM TESTS.—No manufacturer or experiment station can determine, with any certainty, what the needs of our particular soil may be for the production of any crop. They can only guess at it, as is proven by the wide variation in the analyses of the special fertilizers put upon the market by manufacturers. The farmer can determine this matter only by experiment in his fields, and the rational thing to do is to use the three elements in various combinations upon different plots. In this way, and in no other, can he determine just how many pounds of potash, of phosphoric acid and of nitrogen can be applied to his land with the most profit.

HOME MIXING.—In order to make satisfactory tests of the needs of his soils, the raw materials should be bought and mixed by the farmer at home. He can thus make sure of the composition of his fertilizers, and can vary the composition as he chooses. The raw materials are offered on the market, and no more knowledge of chemistry is needed to buy and compound a fertilizer than to select a fertilizer by its printed analysis. On this point, Bulletin No. 113 of the New Jersey station well says: "That the farmer may have this knowledge yet to acquire is no argument why he should never acquire it; nor does the use of ready-mixed fertilizers relieve him of the necessity of acquiring it. As a matter of fact, he needs this knowledge in the purchase of a fertilizer in the market just as much as in the preparation of one at home."

THE RAW MATERIALS.—The materials may be bought in the open market of any reputable dealer, with a guarantee of their composition. The buyer knows how many pounds of nitrogen or of phosphoric acid or of potash he is buying in one hundred pounds of raw material, and in the composition of his fertilizer he puts just as many pounds of each element as he thinks best for trial. No tools are required for the mixing, except a shovel and a sieve. Place the raw materials upon the barn floor, making a pile by thin layers of each element used, just as one proceeds in mixing ground feeds. Then use a shovel, turning the pile over until the mixing appears fairly complete. Running the mass through a sieve, after using a shovel, secures sufficiently perfect uniformity for practical purposes.

THE FINANCIAL GAIN.—The report quoted above says: "The making of home mixtures has been practised for years by a number of the best and most businesslike farmers of the state—men who know that the value of a fertilizer depends upon the kind and form of the nitrogen, phosphoric acid and potash contained in it, and not upon the name of the brand. These men, if using manufactured brands, would be likely to know how to buy and to get the best, yet they continue to get the raw materials and do their own mixing. It is their experience that it is the best method, and that it pays. If the consumer knows what he wants, buys what he needs, and pays cash, he will find that the cost of plant-food will be considerably reduced, and that his returns will be largely increased, notwithstanding the method of purchase. Farmers must remember

nitrogen, phosphoric acid and potash in it that makes a fertilizer.

"2. The cost per pound of this nitrogen, phosphoric acid and potash depends less upon where it is bought than upon how it is bought.

"3. Fully one fourth of the cost of the average commercial mixture goes to pay for mixing, bagging, credit and commissions.

"4. All of this, and \$3.06 per ton besides, is saved by buying raw materials, paying cash and mixing at home."

GETTING OUT OF AN OLD RUT.—Private experiments confirm the results stated here. The saving is large, and it is time to get out of the habit of buying mixed fertilizers by the brand, and to know that the needs of soils are supplied exactly, and at the lowest cost. It is especially important that the needed elements be supplied in their proper proportion, and without any waste, and the tests can be made satisfactorily only by home mixing. If the mixed fertilizer supplies just what is needed, it costs, upon the average, thirty to forty per cent more than a similar home-mixed fertilizer would cost. Too much money has been wasted in the past. Those who use fertilizers must put questions to their soils respecting their needs, and do this in an intelligent manner, so that the soils can answer these questions. How many pounds of each element does that field require for the production of a certain crop? How can I get the needed quantities of each element most cheaply? Those are the questions, and through home mixing will they be solved, in large degree.

HOME-MIXED FERTILIZERS.

The home mixing of fertilizers is receiving much attention from farmers generally throughout the country. There are good fertilizers in the market, and there are also poor ones. The experiment stations have been of great service to farmers in analyzing fertilizers and making known their ingredients. But good as the fertilizers may be, it has been proved that the farmer may save twenty-five to forty per cent if he will mix his own fertilizers.

In some places, a number of farmers have clubbed together and sent one of their number to a fertilizer-factory to learn the process of mixing fertilizers; but while a mixer from a factory might do the work quicker, and perhaps at first more thoroughly, yet any man of sense, with a barn floor, or a bin like a mortar-bed, and a shovel, may mix his fertilizers satisfactorily. The agent of commercial fertilizers may claim that thorough mixing is indispensable, and that it cannot be done so well by hand as by machinery. But it has been found by actual experiment that fertilizer ingredients placed in corn-hills without mixing (so placed that they did not come in contact) gave as good results as the thoroughly mixed fertilizer. It is reasonable to suppose that if plant-food be supplied the plants will find it, and help themselves to that part that agrees with them.

If several farmers can join forces and buy ingredients in large quantities, so much the better; but whether they buy singly or together, a great saving may be made, and they will have the satisfaction of knowing that they have a fertilizer worth what they paid for it. The average cost of mixing fertilizers is about one dollar a ton.

In response to a former article in the FARM AND FIRESIDE on fertilizers, several letters were received asking for exact formulas. I am now able to give several formulas that may be relied upon. All have been used, and found to give as good (in some places better) results as fertilizers bought.

Formula for potatoes and vegetables:

Blood, bone and meat.....	750 pounds
Dissolved bone-black.....	750 "
Muriate of potash.....	200 "
Sulphate of potash.....	200 "
Nitrate of soda.....	100 "
Total.....	2,000 "

Another:

Muriate of potash.....	319 pounds
Nitrate of soda.....	178 "
Dry ground fish.....	382 "
Tankage.....	306 "
Dissolved phosphate rock.....	382 "
Dissolved bone-black.....	178 "
Fine ground bone.....	255 "

Another:

Dissolved phosphate rock.....	850 pounds
Nitrate of soda.....	150 "
Muriate of potash.....	800 "
Cotton-seed meal.....	700 "

Formula for onions:

Muriate of potash.....	400 pounds
Dissolved phosphate rock.....	550 "
Tankage.....	500 "
Fine ground bone.....	200 "
Nitrate of soda.....	350 "

Formula for Indian corn:

Dissolved bone.....	920 pounds
Nitrate of soda.....	330 "
Tankage.....	550 "
Muriate of potash.....	200 "

Another:

Muriate of potash.....	360 pounds
Dissolved bone-black.....	1,090 "
Nitrate of soda.....	550 "

Another:

Nitrate of soda.....	200 pounds
Tankage.....	700 "
Double superphosphate.....	700 "
Muriate of potash.....	400 "

Formula for millet and Hungarian:

Dissolved phosphate rock.....	900 pounds
Nitrate of soda.....	200 "
Muriate of potash.....	300 "
Cotton-seed meal.....	600 "

Formula for barley:

Dissolved bone.....	930 pounds
Muriate of potash.....	220 "
Tankage.....	380 "
Nitrate of soda.....	470 "

Formula for spinach, lettuce and cabbage:

Muriate of potash.....	370 pounds
Nitrate of soda.....	220 "
Dissolved phosphate rock.....	590 "
Cotton-seed meal.....	540 "

Formula for asparagus:

Nitrate of soda.....	370 pounds
Muriate of potash.....	630 "
Fine ground bone.....	1,000 "

Formula for fall seeding:

Nitrate of soda.....	50 pounds
Muriate of potash.....	200 "
Dissolved phosphate rock.....	400 "
Fine ground bone.....	700 "
Tankage.....	650 "

Formula for top-dressing or for winter rye:

Nitrate of soda.....	300 pounds
Dissolved phosphate rock.....	1,480 "
Muriate of potash.....	220 "

To mix fertilizers, the ingredients should be spread in layers one upon the other, making each layer of uniform thickness; then, with a shovel work across the bed both ways until the whole is thoroughly mixed. The mixing should not be done long before the time of using, to prevent loss of nitrogen and perhaps a change in the form of phosphoric acid.

GEORGE APPLETON.

DAIRY ECONOMIES.

Economy of fertilizing elements in the manure and the greater economy of health-promoting conditions to the stock call loudly for a reform in methods among dairymen in managing the barn cellar, and the manure that goes into it. The manure from the grain-fed cows is rich in nitrogen, and manures rich in soluble nitrogen decompose more readily than those which are deficient in this element. Urine decomposes much more rapidly than solid excrement. The amount of moisture in manure is an important factor in the fermentative process. One important value of the barn cellar is its conservation of better forms of animal excreta; but without proper care in the use of absorbents the ends desired to subserve are defeated by the loss of ammonia in the rapidly decomposed manure. The strong, pungent odor of ammonia in the cow-stable on entering it in the morning indicates the lack of proper absorbents behind the cows. The use of litter absorbs the liquid manure, and goes a little way toward preventing immediate decomposition; but when pitched into the cellar with the solid droppings, effects the rapid decomposition of the deposit by the loose condition of the manure, admitting the air and inducing a high temperature which expels, through chemical changes which take place, the nitrogen in the form of ammonia. Litter is essential to the comfort of the animals, but the absorbents of greatest value are those which absorb and preserve the volatile elements of the manure. Gypsum is the ideal absorbent.

Have the feed ground fine for dairy cows. There is no economy in feeding whole grain, or that which is coarsely ground, to neat stock. And there is an advantage in feeding mixed foods to increase the flow of milk. The agricultural chemist admits that the stomach of an animal beats the chemist's apparatus in the digestion of food, and that by skilfully mixing foods more

will be digested than if one kind is fed alone. Part of the success of feeding economically depends upon mingling two or more foods. Whole corn, or the same simply "cracked," or oats or wheat fed whole to a cow will be voided in considerable quantity with the kernels undigested.

Dairying fits in as the under hold with a large class of farmers. There are almost numberless instances of farmers who have made dairying a splendid success. How have they done it? You talk with these men, and they will tell you with cows of high producing capacity; a form of high feed producing capacity; and as you look these men over, you will see that these two requisites are backed up by a dairyman of capacity and good, practical dairy sense.

It is generally conceded by scientists that the German milk ration is too narrow for American use. Prof. Woll, of Wisconsin, has made some experiments along this line, and thinks our standard ration should be about 25.6 pounds of air-dried matter, 2.2 pounds of protein, 13.3 pounds of digestible carbohydrates, .8 pounds of digestible fat, making a total of 16.3 pounds of digestible matter, with a nutritive ratio of 1:6:9 pounds. This could be obtained in corn silage, 40 pounds; clover hay, 8 pounds; wheat-bran, 6 pounds; corn-meal, 3 pounds. This would give less fat and slightly more carbohydrates than the ratio above, about 1:7:4. A ratio that comes nearer my idea is 10 pounds of English hay, 8 pounds of clover hay, wheat-bran, 6 pounds; oats, ground, 6 pounds; cost, 16½ cents; nutritive ratio, 1:6:6. Total organic matter, 24.62; total digestible matter, 15.31. The quality and condition of the food has much to do with its digestibility and nutritive value. The chemist's work gives us average results; the good judgment of the feeder must determine the condition, quality and value of the fodders he has. They may be average, or they may be better or worse. Other factors in dairy economies are proper care of the cows, shelter, comfort, pure water and cleanliness.

L. F. ABBOTT.

Maine.

Women

Who are nervous, weak, worn out with local troubles find pure blood, nerve strength, and perfect health in Hood's Sarsaparilla.

We do not say the above to raise false hope. It has been the experience of many, very many women in those intensely trying periods which demand and consume so much

Nervous

force—those special physical trials we delicately indicate by merely using the words—Maid, Mother, Matron.

Like a confidential friend we suggest the use of Hood's Sarsaparilla, a reliable blood purifier and tonic; it has helped many others and will help you.

"I was in poor health five years, broken down in strength, and appetite all gone. Local troubles and other weaknesses intensified my misery. Nervous sick

Headaches

dizziness, heartburn and pains in my back made me think I should never be well again. A friend prevailed upon me to try Hood's Sarsaparilla. I soon began to improve, and in six months it restored me to better health than for years. I have found Hood's Sarsaparilla a grand medicine for all troubles peculiar to

My Sex

I am now strong and healthy and can do a good day's work. I stand by Hood's Sarsaparilla, for it cured me after other medicines failed." MRS. LUE DIER, Carlinville, Illinois. This and many similar cures prove that

Hood's Sarsaparilla

Is the One True Blood Purifier. All druggists, \$1. Prepared only by C. I. Hood & Co., Lowell, Mass.

Hood's Pills are purely vegetable, carefully prepared.

Our Farm.

Orehard and Small Fruits.

CONDUCTED BY SAMUEL B. GREEN.

PRUNING AND TRAINING GRAPE-VINES ON THE MUNSON TRELLIS.

This trellis consists of three No. 11 galvanized wires drawn horizontally, reasonably tight, parallel with each other, and supported by posts no wider apart than twenty-four feet, and at varying distances from the ground, according to climate. Where the mildews and rots prevail, the wires should be about five feet from the ground. In the arid and other regions, where the fungous diseases

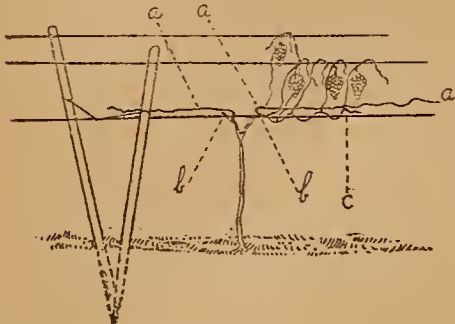


FIG. 2.

do not prevail, they may be as low as three feet. Here in northern Texas five feet has proved to be the best distance, all things considered, and the trellis, after eight years of testing with thousands of vines—including hundreds of varieties and every class of vines—along with the various other systems commonly in use, has far excelled them all in several points, and in satisfactory results, as to convenience in getting from row to row, pruning, spraying, cultivating, gathering, and maintaining the vines in best condition every way, and in getting the largest average crops at least expense.

The supports at each twenty-four feet—between vines, not at them—may consist of one strong post, with cross-bar two feet long spiked on at the top. The lower center wire should be eight or nine inches lower than the upper wires, and pass through the posts.

In Fig. 1 the two vines are shown twelve feet apart, pruned, and tied to and along the lower wire. The object of having the middle lower wire, and tying only to that, is that when the young shoots start they ascend, come up between the two outer wires, and as they lengthen, lean against them and take hold of them with their tendrils, and thus keep from being blown off by wind, or knocked off by the horse in cultivation.

Where light cedar, bois d'arc or other durable stakes can be had cheaper than the heavy posts with cross-bar, I have found two, set or driven in the place of the one, answer every purpose, with the advantage that there are no cross-bars to be coming loose, and be knocked off by the animal in plowing. The two are set flaring at the top, and are united at nine inches of top by a cross-wire which supports the middle (lower) wire, if one is used. The upper wires are stapled on top of the posts.

Strong, deeply set, well-braced (by tamping around with stones, if to be had) posts must be used at the ends of the rows, in order to bear the extra strain.

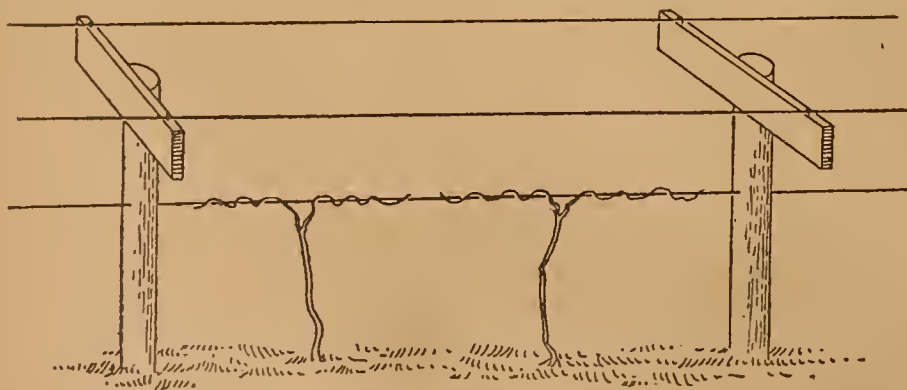


FIG. 1.

Pruning is done in the early winter months, and consists in simply cutting away all the wood except two to four canes of the last summer's growth, accordingly as the vine is very vigorous, moderately vigorous or weak. For example, a Herbermont vine four years old, with twelve feet space between the vines, as this variety needs, can readily fill four canes four to six feet long each, and mature the crop as easily

as a Delaware vine, with eight feet distance, can fill and mature two canes three feet long each.

Vines in Fig. 1 are shown as two or three years old, pruned and tied. Vine in Fig. 2 shows right-hand side in partial fruit, with foliage removed. The shoot, *a a*, starting from near the crotch, and not allowed to bear fruit, but to grow its full extent along in the trough-like space between the two upper wires and above the middle wires, is intended to bear a crop the next season.

At pruning-time, the bearing wood is cut off at one stroke of the shears at *b*, just beyond where shoot, *a*, starts, and *a* is headed back to a point, *c*, at one cut, and this completes the pruning of that side of the vine. Then the vine cut off is taken hold of by the left hand and lifted somewhat, while the right hand runs the shears along the wires, clipping loose at a few strokes wherever ties and tendrils hold, until all are free from the vine—a thing quickly done by one accustomed to the work; and then the tyers follow, with two, three or more ties, with jute twine—the cheapest—when the work is complete, and looks as shown on the left side of the vine, Fig. 2, *a* showing the new arm pruned and tied in place.

If a vine is strong enough, it is made to push out three or four shoots near the crotch, which are not allowed to bear, but to make wood only during the season in which they grow, and in pruning, the two on each side are tied together along the lower wire, if the vine has been allowed four canes, or arms.

Other pruning necessary for best results is "summer pinching," which consists in rubbing off all eyes that start, when not over an inch long, below the crotch, and just before the flowers open to pinch off the very tips of all shoots bearing. This will cause better setting of crop, more certain starting of all live, bearing buds, and the pushing of the shoots for bearing next season, from which all flower-clusters should be pinched. In about a week a second pinching is necessary to check all wood growth on bearing shoots. This tipping is done very rapidly by using a light, short, sharp butcher's knife, and is accompanied by a quick, short stroke.

This trellis will readily support two vines, eight feet apart between each pair of posts. Strong growers should be twelve feet apart; weak, eight feet.—Prof. T. V. Munson, in *Texas Farm and Ranch*.

INQUIRIES ANSWERED.

Pruning Fruit-trees.—W. F. D., New Richmond, Pa. If only a small amount of wood is to be removed, I like to prune in June, as the wounds heal over very quickly when the trees are growing fast. The growth of the preceding year may be cut off at almost any time, without causing injury. In pruning any kind of fruit-tree, all wounds over three fourths of an inch in diameter should be protected. For this purpose grafting-wax is best, but a heavy coating of white-lead paint is generally enough. Do not prune your apple-trees more than is necessary to keep them in good form, and to keep out sprouts and badly interlocking branches; and this is not much if attended to at the right time. Many a good apple orchard has been seriously injured by heavy pruning. Pear-trees need only enough pruning to keep them in good shape. If the work is attended to yearly, little need be done but to shorten the center twigs of the preceding year which may have a tendency to shoot up too tall. After the trees commence to bear heavily they seldom need much pruning. Peach-trees should be pruned

to keep them in form, but from one third to one half the new growth should be cut back yearly in order to thin the fruit. This may be done the latter part of winter, or, better yet, when the trees are in flower, when just how much should be cut for this end can be readily seen. It is a good plan to scrape the rough, loose bark off of old apple and pear trees, but be careful to not go too close to the new bark. Under this rough, loose bark many insects lay their eggs, and it is better removed.

THE NEW MYSTERY.

WISE MEN CALL IT "X," BUT IT IS NATURE'S A. B. C.—NATURE HELPS ALL WHO WILL LEARN HER LESSONS.

The scientific world is wild over the mysterious new light which penetrates and photographs the inside of the human body. This wonderful light is produced in a glass tube like an electric light. It is composed of beautiful, violet-colored rays, which, being unknown, are called "X rays." Wise men are asking, "What are they? What will they do? What will they not do?" Edison believes they will kill the germs of disease. At Columbia College for one hour the professors were even asking: "Will these wonderful X rays restore life?"

Yet all this mystery is only the A. B. C. of Nature. For countless ages the little fire-fly has been carrying about with him a light which the Nineteenth Century scientists cannot duplicate. The climbing morning-glory picks out the sun-rays which will feed its life and beauty, more accurately than could be done by the learned chemists of a hundred universities. A summer storm throws away enough electricity to light a dozen States. In a common lump of coal, Nature packed away heat, light, oil, medicine and dye-stuffs before man was created, which he is just beginning to discover.

There is nothing new about Nature's forces; they are always the same and always ready at hand. Nature has abundant means to help and benefit mankind, but she doesn't force her benefits on man; he must investigate and find them out for himself and learn how to use and combine them to produce definite results. That is genius.

James Watt had the genius to believe that fire and water would move the world. He harnessed them to his machinery and



produced a steam engine. Benjamin Franklin believed that a vast store-house of electricity was hidden in the clouds, and investigated until he tapped them with his kite. The same investigating and combining genius led Morse and Edison to perfect their great inventions; and in the field of surgery prompted Dr. Morton to use ether as an anæsthetic, and Doctor Pierce to produce his Golden Medical Discovery for the cure of throat and bronchial affections and consumption.

No invention of modern times has been of greater benefit to humanity than Dr. Pierce's "Discovery." It has made the cure of consumption not only possible, but probable, in all its earlier stages. It has cured thousands of consumptives whose cases were supposed to be hopeless. It reaches and overcomes lingering coughs, chronic bronchial affections, and those obscure, wasting diseases and nervous "run-down" conditions which baffle the doctors and seem beyond the reach of medicine.

The peculiar power of Dr. Pierce's "Discovery" is that it makes healthy, red, rich blood. It increases the red corpuscles which form the nourishing, life-giving element in the blood. It enables the blood-making glands to pour a steady supply of rich nourishment into the circulation, which is rapidly carried to every part of the body, feeds the lungs, purifies the skin and kidneys, tones the stomach, vitalizes the nerves, and builds up fresh, healthy tissue and solid flesh.

In consumption, the delicate lung tissues are starving for healthy blood, and nothing else will restore them. Blood starvation

and blood poisoning are the real causes of all throat and bronchial troubles, scrofulous diseases, skin and kidney complaints, and bilious, nervous and digestive disorders.

Every organ of the body is constantly calling for nourishment, but in disease it receives instead only poison. Weak, impure, watery blood is poisoning every part with which it comes in contact. The "Golden Medical Discovery" purges away these poisonous elements and quickens the torpid liver to filter out impurities. The result is a complete rejuvenating of the system and the disappearance of all that lassitude, weariness, mental depression and incapacity which is commonly recognized as "liver complaint."

For weak, nervous, debilitated conditions and digestive difficulties, Dr. Pierce's "Discovery" is the most effective remedy ever invented. It gives the nervous system new power and vitality, tones the stomach and assimilative functions, and promotes fresh, vigorous, full-blooded, muscular energy. Its nutritive properties far exceed those of cod liver oil or any extract of malt.

Corpulent people find the "Discovery" a specially valuable tonic and alterative, because it does not increase adipose tissue, nor add one ounce of superfluous weight. It will not make flabby fat. It only builds up solid flesh to the standard of health.

For nearly thirty years Dr. Pierce has been chief consulting physician to the Invalids' Hotel and Surgical Institute of Buffalo, N. Y., the model sanitarium of this country. During this time he and his staff of specialists have treated many thousands of cases of chronic diseases. Probably no physician living has had a more extended practical experience with intricate and obstinate chronic diseases; and no physician has a wider reputation as an educated and skilful specialist. His "Golden Medical Discovery" is based upon vast experience and careful study.

It is a thoroughly scientific combination of Nature's most powerful and effective alteratives. It is not a patent medicine, and not to be associated with the empirical compounds of those who are almost wholly ignorant of *Materia Medica*, and utterly inexperienced in adapting medicine to the cure of disease.

Many of Dr. Pierce's prescriptions have become standard remedies throughout the civilized world. His "Favorite Prescription," for the cure of woman's ailments, is recognized as the most effective specific of its kind ever invented; and his "Pleasant Pellets," for the relief and cure of obstinate constipation, are universally accepted as the most perfect remedy for this complaint.

It is well known that certain druggists who think more of their own profit than of their customers' health are quite ready to substitute some other remedy in place of Dr. Pierce's medicine. This sort of imposition is justly resented by intelligent people as a reflection upon their own judgment and knowledge of what they desire.

One of the most interesting and instructive books ever published is Dr. Pierce's free book, the "People's Common Sense Medical Adviser," a large volume of one thousand and eight pages, with over three hundred illustrations and colored plates. It is a complete medical library in one volume, giving the fullest information about the human body in health and disease; discussing physiological subjects in perfectly plain and chaste language, and giving many valuable receipts and prescriptions for home-treatment of simple diseases. More than half a million copies were sold at \$1.50 each, the profit on which enables Dr. Pierce to distribute the present edition absolutely free to anyone who will cut out this little NUMBERED COUPON printed here, and send it with twenty-one cents in one-cent stamps (to pay the cost of mailing only), to the World's Dispensary Medical Association, at Buffalo, N. Y., of which he is President. The book is bound in heavy paper covers. If you want a French-cloth, embossed binding, send ten cents extra (thirty-one cents in all) to defray the expense of this handsomer and more durable cover.

COUPON No. 239

TRIBUTES TO LINCOLN.

No man could have endured so much without some recreation, and that humor was to him what a safety-valve is to an engine.—Hannibal Hamlin.

They all knew Mr. Lincoln's characteristic clemency, and that the terms of the peace he was intent on were exceedingly mild.—Gerrit Smith.

Our Farm.

NOTES FROM GARDEN AND FIELD.

DAMPING OFF.—A reader in Alabama tells me about his trouble with cabbage-plants in seed-bed. The same cold-frame has been used for growing cabbage-plants for a number of years. The great enemy to all seedling plants is the disease known as "damping off," which is caused by a fungus, and often destroys whole beds and flats of seedlings. We have sometimes lost a large proportion of onion seedlings from just this cause. Prof. T. B. Galloway gives the following account of it: "Its first appearance is indicated by a slight paleness and drooping of the seedlings. If these be carefully removed, it will be seen that the root, either throughout its whole length or in portions, is beginning to shrink and decay, and that the root-hairs are destroyed. Later, if the plant is not vigorous enough to resist the fungus and to put forth secondary roots, the disorganization of the tissue extends to the stem, resulting ultimately in the toppling over of the plant and its thorough decay, although in some instances the plant remains green for some days after falling. This extends from one plant to another, until only a few or none of the seedlings in a bed may be left."

Recent investigations seem to disclose the fact that the fungus gains entrance to the plants through the roots, and suggest, as proper means of prevention, the use of soil that is free from the fungus, or a treatment of the soil used for killing the fungus-germs if present in it. The soil may be placed in the warm and close atmosphere of the greenhouse for awhile, and kept well watered until the fungus-spores have supposedly begun to sprout, when the soil should be exposed to a very hot and dry atmosphere for awhile, so as to kill the tender fungous growth. I have tried watering the soil with a solution of copper sulphate, a pound to two hundred gallons of water, and thought it afforded protection. Usually, if excessively high temperature and close, moist air are avoided, the disease will give little trouble.

Of course, we may use the same cold-frame or hotbed for starting seedling plants year after year, without fear, so long as we use new, uninfected soil every season. It would only be a wise precaution to spray the frame, inside and outside, after the old soil is all taken out, with a strong solution of iron or copper sulphate, or any other strong fungicide, and then to put in the new soil made from old, decayed sods, perhaps with the addition of a quarter, more or less, of clean, clear sand. Mr. M. Garrahan, of Pennsylvania, who grows celery and cabbage plants by the million, writes me on this subject, as follows: "I find if seedlings are grown in fresh (new) soil, sown in rows say three inches apart, and if the watering is done by letting the water trickle in a gentle stream between the rows, keeping the foliage dry if possible, then lightly cultivating between the rows occasionally, there is not much danger from damping off, provided the temperature is not too high. It is a nice point to decide just when to apply water, and how much; but I find it best to water only in clear weather, and keep rather dry."

The chief point about the fight against this as well as other fungous diseases is to surround the plants with natural and congenial conditions, in order to make them rugged and enable them to withstand disease attacks. The plants the vitality of which is weakened by excesses in tenperature, moisture, etc., are just the ones to fall easy victims to plant diseases.

OATS AND PEAS.—From a reader in Ohio comes the inquiry, "How many bushels of peas should be shown on five acres, and what kind would be best for the purpose? He wants to cut the crop for hay. I think highly of peas and oats for feeding green, but much less favorably of the crop for hay. We plant the ordinary Canada field-pea, which we buy of neighboring growers, who make a specialty of growing field-peas, at about one dollar per bushel. Usually, we sow one and one half bushels to the acre before plowing, and the oats at nearly the same ratio after plowing.

EXTRACTS FROM CORRESPONDENCE.

FROM GEORGIA.—In response to the extract from my letter which was published in your paper December 15, 1895, I have received so many inquiries from all parts of the country that I find it quite a task to give to each one a separate answer. I therefore ask you to publish the following, which I hope will not fail to furnish the information desired by all who have written to me. While what I shall here write applies more particularly to Pulaski county, it is none the less true of most of the counties of central-southern Georgia. All the lands here were originally in timber—that is, had a forest growth upon them—and those that have not been prepared for cultivation have more or less timber on them now. We have no plains or prairies in this state. In some sections the land is hilly, while in others it is level, hills and levels being often found in the same vicinity. The lands are not generally stony, though in some localities they appear so. Land titles here are generally good, and there is very little litigation in the courts of this county growing out of contested titles. The land as originally surveyed was laid off in lots 1,000 yards square, each lot containing about 206½ acres, and farms are seldom found containing less than that quantity, while many farms are made up of several such lots. Improved farms in this county can be bought at from \$5 to \$10 an acre, much depending on the character of the improvements, convenience to markets, etc. By improved lands I mean such as are in cultivation, with buildings and other improvements upon them. We have both red and gray soils; the former is regarded as the best, but both will produce well if properly cultivated. For certain crops, as sugar-cane and sweet potatoes, the gray soil is equal to, if not superior to the red. Our chief farm products are cotton, corn, oats, sugar-cane and sweet potatoes. These are found on almost every farm, and are cultivated more from habit than anything else, to the neglect of many other products that could be grown more profitably and with less care. Our fruits are peaches, pears, plums, apples, figs and pomegranates, with a variety of berries. I have never seen timothy this far south, nor will red clover grow here. It is said, however, that crimson clover and alfalfa grow to perfection. We also have a variety of native and imported grasses which flourish in great luxuriance. With these, and with our southern cow-pea and Spanish ground-pea, either of which can be grown on the same land at the same time with our corn, without additional expense save the cost of the seed and the hire of a boy to drop them, what need have we for more? We rarely fail to have rain enough, and in good time. Our average annual rainfall is about fifty inches. Such a thing as a failure in a summer crop is unknown. Our winter oats are sometimes cut off by late spring frost, and the same is true of early fruits. We have oak, hickory, poplar, ash, pine and other valuable timber. The trees of many of the varieties named often grow to immense size. Lumber of the best quality, at the mill, is worth \$7.50 per thousand feet; shingles of good quality, pine or cypress, are worth \$1.50 to \$2 per thousand. Horses, hogs, cattle and sheep do well; many of the latter live in the woods the year round, without being fed or sheltered. Horses sell at from \$50 to \$150; good cows, \$40 to \$60. The price of produce fluctuates considerably. Corn and oats usually range from 60 cents to \$1 per bushel; hay and fodder, from \$12 to \$20 per ton; sweet potatoes, 50 cents per bushel; syrup made from sugar-cane, 40 cents per gallon. We seldom have a killing frost before the tenth of November, and our fruit-trees usually bloom by the first of March. The average temperature for the winter months is about 50 degrees. The coldest day the past winter the mercury stood at 23 degrees at six o'clock A. M. In summer it gets up into the nineties, and very rarely reaches 100 degrees. Our state taxes are usually about \$5 on the \$1,000, and those of the county about the same. Yellow fever is unknown in Georgia, except in the towns and cities on the coast. The country in the interior is generally healthful. We have but few perpetual springs of good water in this section, but have good water in wells dug from 25 to 50 feet deep. Artesian water from flowing wells can also be had at a depth of from 300 to 500 feet. In this county we have two railroads and a navigable river; so we are in direct communication with markets far and near. There are saw and grist mills wherever needed in the country. Much of the manual labor on the farms is done by white people. There are schools taught by competent teachers in every community where there are children enough to justify it; tuition for five months is paid from the public fund; that for the remainder of the year is paid by the patrons. Teachers are examined and graded by a competent board of education, and licensed accordingly. Renters can get improved farms for \$1.50 per acre in money, or for one third of the crops raised on the land; and where stock, feed and improvements are furnished them, for one half of all crops made. J. B. M.

Hawkinsville, Ga.

FROM OREGON.—Oregon is a large state. The part east of the Cascade mountains is all plateau, and has large tracts of land that are good for nothing but grazing. The western one third has many large and small valleys, and is well watered. We have little snow during the winter, but plenty of rain, and, of course, muddy roads with the rain. This is a

good country, everything considered, but we have our drawbacks. The drawback affecting the immigrant most of all is the "land-shark." He gets an option on a farm, and the man who buys from him has to pay, in some cases, five dollars an acre more than if he bought of the owner. There is one remedy that I can see, and it would be a great help to all persons who wish information about any part of this country. There is in the employ of the United States statistician a responsible man in every township, who furnishes statistics to the government. If the government published a list of these agents and a set of rules governing the correspondence, it would knock the teeth out of the "land-shark," and save many a poor immigrant from being fleeced. I. L. K.

FROM ARKANSAS.—Prairie Longue, twenty miles east of Little Rock, is a well-timbered prairie region. As a farming, stock-raising and dairying country I think it unsurpassed. Prospectors from the northern and western states are pleased, and are buying homes. Land is cheap, though advancing. Unimproved timberland is worth five dollars per acre; prairie land ten dollars per acre. Prices vary according to quality and location. Fruit and vegetables are grown in abundance. We never fail to make crops. There are drawbacks to this country; so there are in every state in the Union. If there were any to make it more undesirable than elsewhere for a home, I would name them. If the reader of these few lines desires a delightful home in the great Southwest, where school and church privileges are abundant, market facilities good, and the people kind and hospitable, let him visit this section of Arkansas, compare its desirability with that of localities elsewhere, and the ultimatum of his judgment will be, "Just what I've been looking for." I am not a land agent, but a farmer, a Buckeye, who came here from the North ten years ago. Prosperity has attended my efforts. Come and be convinced. I write this solely in the interest of those desiring a mild climate and good, cheap homes. N. T.

Carlisle, Lonoke county, Ark.

FROM MISSOURI.—The winter here was very mild, and farm work was pushed, there being but very few days when outdoor work could not be done comfortably. This county is rapidly going to the front in the fruit industry. Within the last three years tens of thousands of acres have been purchased and put into orchards of apples, peaches, plums, etc. We now have some of the largest orchards in the world. Fruit-raisers are coming from California, Georgia and Florida, and going into the business. The inducements are cheap land, good market, good water, soil and health. Good fruit land can be bought for three to five dollars per acre. Population of the county, 30,000; West Plains, 3,000, with four newspapers, eight churches, three ward schools, one high school and one non-sectarian college. E. F. H.

West Plains, Howell county, Missouri.

FROM KANSAS.—I have lived here in Gove county for five years. This is a great stock country. There was not a day last winter that cattle and horses could not get grass. The climate is very healthful and especially good for weak lungs. We had fair crops last year. For a person with small means this is a grand country. If a man has a good team and five hundred dollars cash he can find no better place. D. H.

Oakley, Kan.

FROM OKLAHOMA.—Land can be bought at from \$400 to \$3,000 per quarter-section. We need another railroad to St. Louis and Kansas City, so we can get cheaper rates to ship our grain, cotton and cattle. Guthrie has a population of about 8,000 people. It has electric lights, two flouring-mills, ice-plant, water-works, two wholesale houses, three banks and four good brick school-houses. Oklahoma has good prospects for the future. A. C. M.


CHEAP EXCURSIONS TO THE WEST AND NORTHWEST.

On March 10 and April 7, 1896, the North-Western Line (Chicago & North-Western R'y.) will sell Home Seekers' excursion tickets at very low rates to a large number of points in Northern Wisconsin, Michigan, Northwestern Iowa, Western Minnesota, Nebraska, North Dakota and South Dakota, including the famous Black Hills district. For full information apply to ticket agents of connecting lines or address C. Traver, T. P. A., Marine National Bank Building, Pittsburg, Pa.; D. W. Aldridge, T. P. A., 127 The Arcade, Cleveland, Ohio.

450,000 TREES
200 varieties. Also Grapes, Small Fruits, etc. Best root-od stock. Genuine, cheap. 2 sample currants mailed for 10c. Dec. price list free. LEWIS ROESCH, Fredonia, N. Y.

WILSON'S 1896 SEED CATALOGUE, PLANT, TREE and SEED Live Stock Annual.
The most reliable work of the kind published. Guaranteed Garden, Flower and Field Seeds. Choice Roses and Rare Flowering Plants, Spring Blooming Bulbs, Fruit Trees, Small Fruits, Thoroughbred Land and Water Fowls, Registered Pigs, German Hares, etc. Catalogue free. SAMUEL WILSON, Mechanicsville, Pa.

TREES
Pear, Cherry, Apple, Grapes, Currants, Japan Plums, German Prunes. All Guaranteed free from disease. Send for Ill. Catalog. **PEACHES**
ROGERS NURSERY CO., Box 300, Moorestown, N. J. CROSBY & CHAMPION



Avoid Complications

As you would avoid a plague. A complicated grain harvester is a plague. Truer words were never written than those of the late Dr. Holmes, when he said "The more wheels there are in a watch or in a brain, the more trouble they are to take care of." The simplicity of McCormick Harvesting Machines has won for them thousands of friends. The new Open Elevator is the simplest of harvesters and is not subject to the disorders and disarrangements resulting from the complicated construction of so many so-called grain cutting machines. There's nothing complicated about McCormick Mowers, either. They need oiling occasionally, but they don't bind, clog-up and "go to smash," after the manner of the ordinary mower. Same is true of the McCormick Corn Harvester. Its construction embodies the only correct principle—the only principle that will work in a Corn Harvester.

The new McCormick Light-Running Open Elevator Harvester and Binder, the McCormick No. 4 Steel Mower, and the McCormick Corn Harvester are unequalled for capacity, light-draft, efficiency of service and long life. Built, sold and guaranteed by the McCormick Harvesting Machine Co., Chicago.

Agents everywhere.

ROSES your selection 5 cts., mine lower. ED. NIXON, Chattanooga, Tenn.

GRAPE VINES.
Largest Stock in the World. Small Fruits. Introducer of unrivalled new Red Jacket Gooseberry & Fay Currant. Catalogue free. Geo. S. Josselyn, Fredonia, N. Y.

STARK TREES TESTED 70 YEARS
BEARFRUIT Salesmen and club makers wanted for GOLD plum, etc. Stark, Louisiana, Mo., Rockport, Ill.

SEEDS All Varieties. Catalogues FREE
J. CHAS. McCULLOUGH Second & Walnut Sts. CINCINNATI, OHIO.

SEEDS 4 TRIAL PACKAGES FREE
Superior Seeds at one-half what you usually pay. Faxon Squash, grand winter sort, better than Hubbard. White Wonder Cucumber, best all around sort. 400 sorts Choice Annual Flowers, mixed. Beautiful Home Mixed Sweet Peas, 50 new sorts. These 4 packages free with our Wholesale Catalogue to all who wish to test superior seeds and are interested enough to send stamp for postage. Address J. J. BELL, Binghamton, N. Y.

SEEDS FOR GARDEN AND FARM
1 pkt each for 20c coin or stamps. BEANS, Bush Lima; W. BELOS, Green and Gold; SALSIFY Vegetable Oyster; TOMATO, Ponderosa; PANSY, SWEET PEA; and these
SAMPLES OF FARM SEEDS.
MANGEL, Gate Post; CORN, Pride of Columbia; CORN, Diamond Dent; RAPE, Dwarf Essex; OATS, Mexican Gray; VETCHES, FREE, with order if you name paper 1 pkt KAFFIR CORN. Send for our 100 Page Free Catalogue. W. W. Barnard & Co., 186 Kinzie St., Chicago.

TREES GROW WHILE YOU SLEEP,
before you know it your reward comes in fruit & shade. Begin NOW by writing for our low prices. Flower City Nursery Co., 12 Emerald St., ROCHESTER, N. Y. Remember we pay the freight.

Our Farm.

THE POULTRY YARD.

Conducted by P. H. Jacobs, Hammonton, New Jersey.

A HOUSE FOR CONFINED FOWLS.

YARD for high flyers and a house that is partially self-cleaning are plainly shown in Fig. 1. The roosts are so arranged that the droppings fall into a trough outside, from which they are easily removed, while the nests are under the roosts. The hens go around the nests and enter from the back side, at B, Fig. 2, and also B, Fig. 3. This is a preventive of egg-eating. The eggs can be removed from the nests by a small door in front. The floor under the roost is an incline, as is shown at C, Fig. 2; the roosts are shown at E E, the nests at D, the dust-box at P, the ventilator at R, and the box for holding droppings from the incline board at K, W showing the water-trough. The house may be twenty by fourteen feet, or of any size. A description is unnecessary, as the illustrations make it plain. The yard is shown with a high fence of iron; pickets may be used if desired, and may be of any preferred depth. Wire netting may be used on the outside of the windows, so as to open the windows on warm nights by sliding them to either side.

MISTAKES WITH EGGS.

Some of the most careful poultrymen are the ones who send stale eggs to market. During some seasons a visit to any store or market where eggs are sold will convince the most skeptical that the merchants have great difficulty in securing strictly fresh eggs. Purchase a few dozens and take



FIG. 1.

them home for examination, and the result will probably be that some of them are unsuitable for use. Now, this condition of the egg market in summer is one that has always existed, and is due to a lack of system in managing. If the hens are compelled to lay in the poultry-house, and the eggs collected daily, there would be less liability of stale eggs finding their way into the basket of fresh eggs; but when eggs are picked up in the fence-corners, in the horse-troughs, under the barn, or from other places than the poultry-house, the chances are always

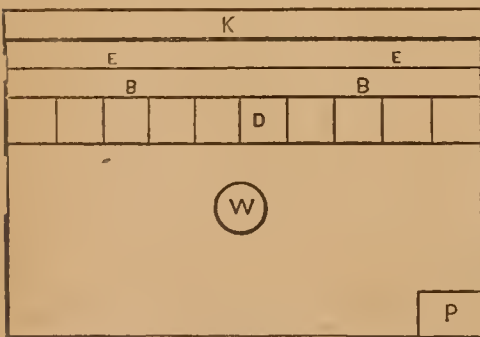


FIG. 3.

favorable to mistakes. And if one bad egg is found in a hundred, the whole lot is then injured in reputation to a certain extent, and cannot be graded as "strictly" fresh eggs. The eggs in market are largely sold on "confidence" in their quality, and no mistakes can be allowed, as customers will always be suspicious of the merchant or farmer who allows a bad egg to be sold by him.

"BROWN'S BRONCHIAL TROCHES" are the simplest, quickest and most effectual remedy for Bronchitis, Asthma and Throat Diseases.

KNOWING HOW TO PROVIDE.

Beginners with poultry are ever willing to do their part to attain success, and it is seldom that an enthusiastic and determined novice will allow any details of management to be overlooked, yet they unfortunately meet with disaster and lose interest in poultry, because they have failed to do the right things when they should have been done. Some are prone to estimate on what is possible with a certain amount of

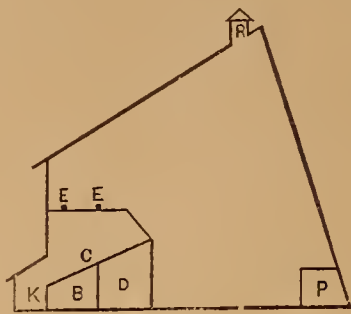


FIG. 2.

capital in a given period of time, basing their hopes on the bright side, never thinking of the dark side at all. Many are the letters that come to us from those who desire to give up their positions in the city to live in the country, inquiring how much profit should be expected from several hundred hens, provided the proper care and attention be bestowed. But it is this "proper care and attention" in which they fail, for while they mean well, they must first find out what really should be done in the matter of giving "proper care and attention." Some of the most experienced and careful breeders of pure-bred fowls, who attend the shows and exhibit birds that win the highest prizes, seldom have very large flocks. They make poultry pay because they receive high prices for birds and eggs, but with all their experience they

will not venture in the poultry business on a wholesale scale. They know all about "proper care and attention," but they also know that with large flocks they incur heavy risks, despite the best they can do, and that some contagious disease may sweep away all their capital in a few days. If the flocks are small they can superintend the work, but when they have so large a number as to be compelled to hire assistance they are liable to loss at any time. The servant-girl problem is an easy one compared with that of securing experienced assistants on a poultry-farm, for the ordinary farm-hands know as little about poultry as a city resident, and the care of poultry has been given over to women and children on most farms so long that even experienced farmers who turn their attention to poultry as a business find that they have much to learn. There is but one resource for the beginner, which is to commence at the bottom and get into the business gradually. There is no other way of succeeding, as experience is everything.

MOVING SITTING HENS.

It seems impossible to compel a persistent sitter to leave her nest when the desire is to "break her up," but when she is given a new location she apparently concludes not to sit at all. When the hens become broody, they should be removed to some place away from the layers. To do this, let it be done after dark. Take the hen and nest to the new location, and, if possible, have the surroundings as near like the place she was removed from as can be arranged. Give her two or three wooden eggs, and do not give her the eggs for incubation until assured that she has become contented. Do not use glass or porcelain eggs, as they are intensely cold to a hen

when she goes on the nest, and may cause her to abandon the nest altogether. Soap-boxes may be used, and no nest should be fastened to the house.

CONVERTING WASTE FOODS INTO EGGS.

A flock of hens is capable of saving certain portions of crops that cannot be sold to advantage, such as immature, small potatoes, etc. There is always on the farm a lot of valuable refuse which cannot be saved except by the use of poultry. It is true that the pig is also serviceable in that respect, but the hens give more immediate returns, supplying eggs daily and bringing in cash when there are no returns from other sources. In keeping a flock of fowls, the object should be to feed nothing to them that can be sent to market, as long as there is something unusable that will answer the purpose. Economy adds to the profit, and one of the chief purposes in keeping a flock is to utilize the waste products.

INQUIRIES ANSWERED.

Scrofulous.—H. W., Alliance, Ohio, writes: "I have a hen with sores over her whole body, and lumps appear as large as a hickory-nut. Otherwise she is fat and in good condition." REPLY:—It is probably scrofula or some impurity of the blood, resulting from rump at some time. She should be destroyed. Geese.—Mrs. A. B. C., Pullman, Wash., writes: "How should geese be mated, and do they require care with goslings? Can clipped bones be fed them?" REPLY:—One gander and two females is the rule in mating. They will care for the goslings better than can the owner, if given plenty of food and shelter. Bones, meat, clover hay or other food may be allowed. Canker.—R. C. M., Beaver, Pa., writes: "Some of my chickens have a disease in the mouth. They cannot eat, and are falling off in flesh." REPLY:—It is probably canker. Give a pinch of chlorate of potash sprinkled in the throats once a day, and add a teaspoonful of the chlorate to every quart of drinking-water. Vertigo.—G. B., Washington, Pa., writes: "What is the matter with a hen that has a red comb, but at times topples over and cannot walk?" REPLY:—It is vertigo; the hen perhaps being very fat, due to overfeeding. Remove her from the male, and omit grain from her food.

PROPHECY AND FULFILLMENT.

When the first London bridge was proposed, boatmen prophesied with doleful certainty that the river would rise up in its anger and destroy the city. But it didn't. When the American colonists asserted their independence, George III. prophesied that they would be whipped into silence a week after the British troops landed. But they were not. When the American constitution was adopted, the crowned heads of Europe dubbed it a rope of sand and predicted that the first wave of political strife would wash it away. But even the fiercest waves have not succeeded in fulfilling that prophecy. When the Deering Harvester Co., of Chicago, first adopted the wonderful roller bearings in its binders and mowers, competition vigorously prophesied that the improvement would fall flat and possibly ruin the great firm. But it didn't. Several of the firms that made such predictions are now in the receivers' hands, while the roller bearings are urgently demanded in every quarter of the globe. And this reminds us of a prediction which has come true. On page 24 of a handsome pamphlet called "Why Bonanza Farming Pays," issued in 1894, the Deering Company made the following prophecy: "With the bicycle as our guide we were the first to apply such bearings to harvesting machines in a practical way. Remember the date—the year of our Lord 1892. As it is impossible to patent the application of a principle we shall, no doubt, be imitated. Not only this, but, judging from the past, there will be certain unscrupulous people who, in time, will claim to have been the original inventors of this device."

This prophecy has been wonderfully verified. After three most vigorous annual campaigns against the roller-bearing idea, one firm at least has fallen in behind and begun the manufacture of machines with imitations of the Deering roller bearings. The idea has taken such firm hold of the farmers that we predict that it will be only a very few years that every class of machine or vehicle depending on horse power will have to be fitted with roller or ball bearings in order to find sale on American farms.

Watch the progress of events, to see whether our prophecy shall be verified.

Advertisement for 'MY HUSBAND' sewing machines, listing various models and prices, and providing contact information for Cash Buyers' Union.

Agents! We send samples of this Chopping Knife, FREE, yes free postpaid, also other new fast selling articles, just out. Immense sellers. Big pay. Write at once, a postal will do. The Randall Mfg. Co., Corning, N.Y.

J. D. SOUDER, Telford, Pa., all var. of Poultry, Pigeons, Eggs, \$1.00 p. 15, 4c. for fine cut. cir. free.

EGGS Black Javas and Silver S. Bantams. Circulars free. S. J. FOSTER, Sharpsburg, Pa. Mention Farm and Fireside when you write.

INCUBATORS 2c. stamp for \$6.00 catalogue. Address, S. Howard Merryman, Bosley, Md.

SUNNYSIDE FARM, NATRONA, PA. Leghorns, B. Mi-norcas, W. norcas, S. S. Hamburgs, Red Caps, Wyandottes, B. P. Rocks, Lt. Brahmas. CATALOGUE FREE. Eggs \$1 and \$2 PER 13. Box 10. E. T. Anderson & Co., Props

LICE, MITES and FLEAS on poultry and stock easily and thoroughly removed. No dusting, greasing, dipping or banding. Great seller. Agts. wanted. Our 16-page circular tells all about it. LEE & SON, Exeter, Neb

FREE CAT. of 22 varieties Pnre-bred Fowls. 32 prizes won at one show. Eggs booked now for hatching. Scientific Poultry Yards, W. E. SENNEFF, Prop., Dixon, Ill.

TOULOUSE Geese, Bronze Turkeys, P. Ducks, B. P. Rocks, W. and B. Leghorns, W. and S. L. Wyandottes, W. H. Turkeys, Lt. Brahmas, W. B. and P. Cochins. Fine stock for sale. P. B. McCORMAC, New Concord, O

PRIZE WINNING POULTRY Cochins, Brahmas, Lang's, Wyand's, P. Rocks, Adalms's, Leghorns, Minorcas, P. Ducks, 19 varieties, 6 Buff Breeds, Buff Eggs \$1.50 per 13, others \$1. Illus. cat. free. DAVIS BROS., Box 1009, Washington, N. J.

Advertisement for 'Incubators and Brooders' with a small illustration of a brooder, highlighting features like hot water and pipe systems.

Advertisement for 'BEEKEEPERS SEND FOR CLEANINGS IN BEE CULTURE', offering a sample copy of a magazine and catalog of bee supplies.

Advertisement for 'NEW MAMMOTH POULTRY GUIDE' showing a colored plate of chickens in natural colors, with details about the book's content and price.

Advertisement for 'SHOEMAKER'S POULTRY BOOK' with 96 pages, printed in 6 colors, detailing bird eye view of a large poultry farm and various diseases.

Advertisement for 'EGGS AND FOWLS FOR SALE' of all leading varieties, including details about annual shows and state fairs.

Advertisement for '2000 PREMIUMS' at 10 State Fairs in 1895, featuring a record egg and fowl for sale.

Advertisement for 'NEW CATALOGUE FOR 1896' printed in colors, offering the best and finest illustrated poultry catalogue ever printed.

Advertisement for '200% More Eggs' when hens are fed on 'GREEN CUT BONE' using 'MANN'S BONE CUTTER'.

Advertisement for 'HATCH CHICKENS BY STEAM' using the 'Excelsior Incubator', highlighting its simple, perfect, and self-regulating features.

Advertisement for 'THE IMPROVED VICTOR INCUBATOR' which hatches chickens by steam and is absolutely self-regulating.

Advertisement for 'INCUBATORS, BROODERS, VEGETABLE and CLOVER CUTTERS, BONE and GRAIN MILLS', offering a complete line of poultry supplies.

Advertisement for 'Buy Direct' from the maker, offering a difference of 40 per cent. in your favor for various items like carriages and bicycles.

Advertisement for 'Binghamton Carriage and Cycle Co.' located in Binghamton, N. Y., offering a variety of carriages and bicycles.

Our Fireside.

THE TWILIGHT HOUR.

Her little feet have wandered all the busy, tired day
Along the paths where sunbeams with the shadows
love to play.
And now, at night, she comes to me, my sleepy little
fay,
To rest within my arms awhile till she is tucked
away.

Her little hands are pliant now, they yield to my
caress,
And drooping lids to dreamland's charms would will-
ingly confess,
Yet closer to my breast she sinks, her thoughts are
far away
Across the borderland where she will soon be tucked
away.

Ah! little life, my load of care slips down when you
appear,
Your golden locks light up my life with very precious
cheer—
I wonder if you think or know how rich I count each
day
When all my hopes and all my love with you are
tucked away!

—Chicago Inter-Ocean.

BEN DALTON'S FARM.

A Story of Rural Life.

BY JOHN E. MUSICK.

Author of "The Columbian Historical
Novels," "Back to the Old Farm,"
"Helen Lakeman," "Orland
Hyde," etc., etc.

CHAPTER IX.

A FEARFUL RESOLVE.

WHEN Ben Dalton came to himself he was lying on a bed in a strange room. Below he could hear the roar of grinding wheels on the stone pavement. The room was small and the walls bare, but the bed on which he lay was clean and neat. At first he was at a loss to know where he was. He turned to the window and gazed out upon a crowded street.

"I am in the city!" he at last said. "Why, how did this happen? Can it be possible that I remained here all night, and left Lizzie alone at the farm?"

He started up from the bed, but found his head almost bursting, and dropped back on his pillow again.

"My God! what ails me?" he ejaculated. "How did I come here, and what is to come of all this?"

Then by dim degrees he recalled the past—the race-course, losing his money and his stock, crop and farm all in a short time.

"Oh, I am ruined, I am ruined! I can never go home again and meet my wife and child with the knowledge that I have ruined them. I have spent their money. I have stolen from them what was their own!"

He wrung his hands, he beat his breast and tore his hair. For half an hour he was like a maulac, and raved. At last he began to settle back into that melancholy which men in desperate circumstances so often do. He was considering what would be the easiest means of committing suicide. He had come to that terrible condition when life was unbearable.

Suddenly there came a loud rapping on his door. He covered his head for a moment, as if he was determined not to see any one.

"Ben Dalton, Ben Dalton!" cried a voice from without, "open the door at once."

"Great God! it is Mr. Johnson, my neighbor," he thought. "What am I to do?"

He staggered to his feet and opened the door. There stood the old farmer, his face serious and grave.

"Thank God, Ben, I have found you at last!" he gasped. "I hunted for you all last night, while your child lay in spasms, and may be dead by this time. Your wife, poor thing, is like one distracted, and we couldn't find you nowhere. Where have you been?"

"I don't know," Ben answered. "I awoke and found myself here; that is all I know."

"Say that you fainted and was brought here."

"I suppose I did."

"Well, I have brought my horse and buggy with me. Come, and I will take you home in it."

Ben thought that he had reached the darkest possible part of his life. Had he been condemned to be hanged, and had he been led to the scaffold to suffer death, he could not have felt worse than he did at that moment. He managed to ask:

"Has a doctor been sent for?"

"Yes, two of the best doctors in the city have been with the babe all night. Your wife cannot survive much longer unless there is a change for the better in the child, and you are found," the kind old farmer explained, as they were whirled from the city. "Oh, Ben, we heard the most terrible stories about you being taken suddenly ill and robbed."

"How did you ever find me there?" he asked.

"I met a tramp who stopped at my house a few days ago for some bread, and he told me where you were. He said he was by you when you fainted, and had you carried to the hotel. No doubt the rascal robbed you, and I am going to have him arrested."

"No, no, Mr. Johnson, don't do that. He did not rob me. Bad as he may be, he is innocent of that offense."

"Then who did?"

"I robbed myself. I lost everything on the races."

"Well, Ben, don't, for heaven's sake, let your wife know it."

"She must know it some time."

"But not now, not now. It would kill her."

"Mr. Johnson, would it not be better if both she and the child were dead than have such a wretched husband and father as I am?"

"No, no, Ben. You can reform; you must."

"But all is lost. There is nothing to reform for."

"Your wife and child."

Ben heaved a sigh. He saw in his mind's eye a terrible career for himself, a slaving, toiling man; a woman bending over the wash-tub; a child ragged and uneducated. Nothing better could be hoped for, and he thought that death would be preferable to either.

"God help me!" he mentally ejaculated a dozen times on that terrible journey. He was

several people, kind, sympathizing neighbors, present. His babe, pale, but still breathing, lay in his little cradle-bed, his eyes closed, and all the merry smiles gone from his face. His wife, almost as feeble as her child, lay on the bed at his side.

"Oh, Ben, Ben, my own darling husband! where have you been? Oh, that long, long night! I prayed for you to come."

Ben made no answer; he could not speak. Tears were raining down his cheeks, and he fell on his knees at the side of his wife, and clasped her in his arms.

Mr. Johnson came forward with the story the kind-hearted tramp had invented. Mr. Johnson did not believe it, but he told it, and for the time being it passed current for truth. Ben received the sympathy of all, and the love of his wife would have caused her to have forgiven him, even if she had known the awful truth. The day passed some way; just how Ben lived through it he knew not. Little Harry lingered between life and death for several days. All that medical science could do to save him was done, and passing the critical point, the doctors began to express some hope. With the recovery of the babe, the mother also regained her health. She knew nothing of Ben's losses, and he feared that if she did know the truth, she would die.

"If we could only have got Harry home before he had those spasms, mama could have prevented them," she said one day.

Suddenly he started up, as a new idea entered his mind.

"I will do it," he said. "Friends or devils may put such notions in my head, but it may be an example to keep others from that which has been my ruin."

CHAPTER X.

THE LAST RACE—CONCLUSION.

Ben had made up his mind to make one more stake. As it was to be his last, it should be a great deal. If he were lucky, he would come back to his wife and child with enough money to keep them for some time. Then he should give up gambling forever, and make a desperate start to be a man. He had got the money at the race-course, and he would take it there to dispose of it.

It was a delightful morning in the latter part of September when he bade his wife and child a sad adieu. They never knew how sad that adieu was, and the wife little dreamed how the heart of that faithful but weak husband was wrung as he left his humble little home and set out on foot and alone for the city. His spirit was crushed, and he had scarce a hope of ever seeing wife and child again. If he was lucky, he would return and give up gambling; but if he lost—well, he had decided what he would do. Perhaps he would go back to her, anyway, but he would know nothing of it. He had a revolver in his pocket, and he might use it, or might not. But he thought the chances of the papers recording another suicide were excellent.

When he reached the turnpike, he met many acquaintances going to town, and one of them asked him to ride in his wagon. He inquired after Ben's family. There had been some very damaging rumors afloat about the young farmer of late. Some had said that he had not been robbed, as reported, but that he had been guilty of gambling.

He reached the city about ten o'clock, and wandered about until noon, and then went to a cheap restaurant, where he bought a meal, which he said would probably be his last, and then wandered down toward the race-track.

"I wish Jack was here," he said, as he strolled along. "Jack seems to be my mascot. With him everything succeeds; without him everything fails. He is like all other mascots—gone when wanted. Well, I have my choice—either to go on the road as a tramp, or fill the grave of a gambler."

He was hurrying down the street, when he suddenly met Bob Walters face to face.

"Why, hello, Ben! Where have you been keeping yourself for the last few days? You are the most singular person I ever saw. You made the wildest breaks of any man I ever knew, the other day. I did not watch you close, and you must have got the hot end of the poker, from what I heard. By jove! you look as glum as a funeral procession. What's up?"

Dalton glanced up resentfully. Then, after a moment's silence, with a feeble attempt at a smile, answered:

"Nothing at all. Everything's down with me."

"Traveling in bad luck, eh? I was afraid so. What have you been playing?"

"Oh, all the winners; only I've played them on their off days."

"That's bad. It's queer how luck goes. You ain't broke, are you?"

"No; I thought I was until I fished up a ten-dollar bill in one of my vest pockets."

"Going to blow it in to-day?"

"Yes," with another sickly smile.

"What are you going in?"

"Oh, my sporting blood is good to the last. I always favor the big spurts. I'll wait for the Ambiguity."

"Who will you play?"

"Firefly, if she isn't withdrawn. If she lauds me anything at all, it'll be a big pile. I'm through with the favorites."

Bob gave a long whistle of surprise, which he followed up with:

"Firefly? You're crazy! The mare's kneesprung and aged. Why, she'll go at fifty to one. Look here, old boy, don't throw off your last gold that way. Take a tip from me, and put it on Masquerade. She won't give much odds, but then she's a dead-gone sure go to-day. Blacksmith is her only live competitor, and, as I happen to know, he is under the weather. Joe Stallings and two veterinarians were up all night with him."

But Dalton only shook his head. "No," he said, "I have always lost on tips; besides, I'm to make big money to-day, or nothing at all."

Ben and Bob boarded a car, and were whirled along the dusty street toward the race-track. All the way out the successful gambler tried in vain to persuade his obstinate companion to place his money on some other than the very animal which had not the slightest show of winning. At last, when the gate was reached, he exclaimed, in disgust:

"You are the most pig-headed cuss I ever struck. Go inside now, and throw your ten dollars to the devil."

He started to leave Dalton at the gate, but came back after he had gone a dozen paces, and, with an anxious expression on his brow, said:



LAI'D THE DEED IN HIS WIFE'S LAP.

in a condition in which he could lay no plans and calculate nothing on the future. All he could hope for was that the parties who had won his farm and his crop and stock would wait a few days until his family recovered and he had secured them some means of shelter. His state of mind was beyond the powers of description. Had he dared, he would have left the country and gone tramping with Happy Joe. Sometimes he felt a strong inclination to leap from the buggy, run to the woods, and dash his brains out against a tree. The keenest tortures a fiend could invent would be mild compared to what he suffered.

At last the home was reached. What a desolation it seemed! He saw two or three old ladies standing in the front yard near the gate, talking in low, earnest tones. He looked to see if the little white crape was tied on the door-knob. No, it was not there. They had not put it up yet. He did not know whether he was glad or sorry. He did not know whether he wanted his wife and child dead or living.

The doctor came out with his medicine-case in his hand. He did not speak to him. Mr. Johnson said something, but Ben did not hear the answer. He stood a moment at the door, with such a whirlwind of emotion surging in his breast that his head swam, and had he not caught at the side of the door he would have fallen. His self-accusing conscience, added to the pain in consequence of his dissipation, made it the keenest torture to him.

At last, somehow, he never knew how, he found himself in his house. There were

"Well, my dear, it is over now, and let us not think any more about it."

"And I can go to my mother's?" she asked.

He could hardly restrain himself now. He seemed to have come to the point where human endurance gave out, but for her sake he must make some answer. What he said he never knew; fortunately, Lizzie's attention was called to the sleeping babe, and she remarked that the bloom was coming back to his little pale cheek.

"He will soon be well, Ben. Thank God! Oh, God is good to us to spare our little boy! Ben, did you pay Mr. Wood?"

"It is all settled, my dear," he answered. "And as soon as you are well enough I will explain it all to you. You must not think of business now."

In a few days both wife and child began to recover, and Ben began to seriously consider what he should do. It would be but a short time until the man who had won the bond to the deed would demand possession. He must go somewhere, but where should he go? He felt that he was ruined beyond all hope of reparation. Had it not been so cowardly, he would have committed suicide.

One day while searching through his pockets he found a ten-dollar bill which had escaped his attention. It had been thrust carelessly in his pocket on the day he lost all, and forgotten, or it, too, would have gone. He took it out and looked at it earnestly.

"This, too, should have gone," he thought. "It was won on the race-track, it belongs there, and should have gone with the rest."

"See here, I'll be hanged if I want to see you go broke altogether. Take this as a loan from me, and put it in some of the other races. Maybe it will bring you enough good luck to get back your other ten. But mind you, not a cent of it in the Ambiguity!"

The big-hearted fellow darted away, and Ben glanced in an absent-minded, uninterested sort of a way at the fifty dollars which had been thrust into his hand. It was too late to return this, even if he had so desired, so he put it in his pocket and sought out the book-makers.

For the Ambiguity, Firefly was selling at the odds of fifty to one. He placed his ten dollars without hesitation. Then he swept his eyes over the other lists, but could not make up his mind on the moment what to do with Bob's loan. He walked hesitatingly along the line of book-makers, scanning the blackboards closely. At the very last booth one of the lists was being changed as he came up. It was that of the Ambiguity. Dalton waited interestedly until the alterations had been made. The odds on Firefly had been changed to sixty to one.

The temptation was too great for him to withstand. At these figures the fifty dollars would realize three thousand—enough, with the winnings of the ten dollars, for him to buy back the bond, pay off the remainder on his farm, more than replace the stock, and send Lizzie on her visit. He forgot the stipulation upon which the money had been advanced, or, if he did remember it, decided that it would be no worse to swindle a friend than his wife and child, which he had done. He paid no attention to the fact that odds like this were almost certain indications that Firefly could not win. He pressed forward into the crowd around the booth, waving the fifty dollars in his outstretched hand. As he did so, he discovered the tramp holding aloft a ragged ten-dollar bill and shouting, "Firefly!"

The Ambiguity was the third of the day's races. With white, eager face, his eyes roaming from one to the other of the restless, stamping steeds on the track, his body leaning nervously forward across the seat in front, Ben waited anxiously for the horses to start. As he watches, he half audibly groans:

"O God, let me win this time, and I will be a man in the future and never enter a race-track again! Just for Lizzie's and Harry's sake let Firefly win!"

The horses line up. The tumultuous roar of voices from the packed stands falls into a subdued murmur. A moment or two of feverish expectancy, and then they are off. A false start! Back they come again, accompanied by the confused babble of people's tongues. Another false start, and still another. But finally the dozen horses pass the starter in an almost perfect line. The flag drops. They are off in earnest now.

A scurrying of hoof-hammerings passes the stand. Through the dust-clouds is seen a glimmering of shining horse-flesh and brightly flashing colors worn by the jockeys, and then down the track toward the first turn the confused mass goes. The murmur of the people's voices swells into a thunderous shout that surges from one end of the big stand to the other. "Blacksmith! Blacksmith!" everybody yells. "Blacksmith leads! Blacksmith by the neck! Blacksmith by a length!"

O'Doyle is urging the noble favorite on. His little body is curved along the animal's neck. One hand softly pats its glossy side. The turn is made, with Blacksmith well in the lead, the others following in a confused bunch.

But now like a hurricane Masquerade dashes away from the group and starts after the flying leader. After that the group begins to separate, the laggards to fall behind. Away they go toward the half-mile post, the two leaders almost together, the rest drawn out in a long, bunchy line.

Most of the people on the stand are clamoring and shouting; many sit with clinched hands and bated breath; a number stand up in the seats and wave their hats to and fro.

Ben Dalton clutches at the sleeve of his neighbor, who is following the movements of the now distant figures through a field-glass. "Who is in the rear?" he asks, faintly.

"Firefly," he answers.

Then Ben murmurs, "Lizzie, Harry, God, good-by!"

"No, I am mistaken," says Ben's neighbor.

"Firefly is third from the last, and, as I live, is improving her position."

The animals are changing positions all the time. Masquerade rushes to the front, and Blacksmith, who is going poorly, drops back to struggle with another horse for second place. He falters and balks badly. The little mass of red and orange that represents O'Doyle is seen to use the whip freely. A few seconds later and the favorite is entirely out of the race, for half a dozen of the second-rate horses have galloped by as if he was standing still. Jennie Wren, Bonnie Bess, Select Knight and Hamlet are struggling hard to overtake the big mare who has usurped the lead. The flying animals are like scurrying specks away over on the distant side of the oval. It is almost impossible to make out the jockeys' colors.

"Firefly is running like the devil," Ben's neighbor exclaims, while still watching the race through his glass. "She is pushing past the stragglers like a whirlwind."

That sickening dejection which he had all along felt suddenly gave way to hope. He im-

pulsively grasps the glasses which the stranger has lowered, and places them to his own eyes. It takes him but a moment to realize that the animal on which he has risked fortune, life and his eternal soul is indeed making a wonderful spurt. As he watches, she comes with mad strides up the line and dashes out into the opening behind the four leaders.

On, on they go; another turn is made, and they begin to come nearer the people. The jockeys' colors are becoming more discernible every second. Masquerade still leads, but is followed by Hamlet, Bonnie Bess and Jennie Wren. Then comes Firefly, almost up to the last of the four, and going stronger than any of the others—going so strongly, in fact, that in a twinkling she closes in on Jennie Wren, struggles with her a second, and drops her astern to draw up on Bonnie Bess and Hamlet. Up, up she comes, with foam-covered coat and gigantic strides, the little dark-faced rider, Riley, clinging with difficulty to her back. Inch by inch, foot by foot she gains with a steadiness that is phenomenal. Her neck breaths Hamlet's flank. She continues to gain until Hamlet and Bonnie Bess are left in the rear, and only Masquerade lies between her and victory.

Order and decorum are lost sight of by the mass of human beings in the grand-stand. Everybody is standing in the seats. Arms, hats and canes are brandished excitedly in the air. The roar from the many thousand throats is like the breaking of a stormy sea upon a rocky coast. Dalton completely loses his head, and pushes his way through the crowd down the aisle. He jumps on a seat in the front row and clings to the person already standing thereon. In the mad excitement that prevails he is scarcely noticed.

The last turn is made and the home-stretch entered, with Masquerade and Firefly only a few feet apart. The other horses are all practically out of the race. Both jockeys use their whips and spurs cruelly. Both animals strain and pant and struggle to increase their speed. But the wonderfully long strides, which nobody had ever before imagined her capable of, are bringing Firefly nearer and nearer to her black-coated rival. They flash past the grand-stand. The finish is only a couple of hundred feet away. Firefly plunges into the dust raised by the leader's hoofs; she swerves a little to one side, and her nose breathes her adversary's flank. Riley shouts at her, lashes her, sinks his sharp spurs into her reeking sides in a last supreme effort. She shoots her head further forward than ever, gives a mighty bound, pushes her nose ahead of her adversary, and crosses the line a winner.

There was a wild shout. A man had fainted. He was carried from the grand-stand and given air, and soon recovered.

Ben Dalton hunted up the man who held his bond for the deed that very afternoon, bought it back, paid the balance on the farm, and that night when he went home laid the deed to it in his wife's lap, while with tears trickling down his cheeks he told her how near they had been to ruin.

"But it is all right now, Lizzie," he concluded. "The farm is saved, you and Harry are saved, and I am saved, for I swear, so help me heaven, never again to enter a race-track."

"Amen!" echoed a voice at the window, and looking around, he saw Happy Joe. "I, too, have retired on six hundred dollars, and with a decent suit of clothes, shall seek employment as clerk in some store or office. You will never see Happy Joe again, but Mr. Joe Powers, the clerk, perhaps merchant, in time to come. I, too, have sworn off."

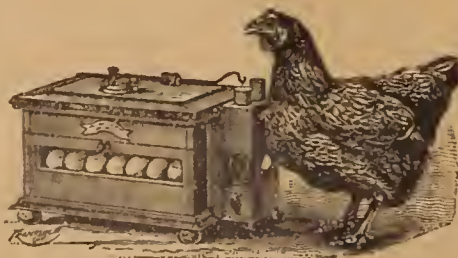
Ben Dalton kept his oath, and so did Happy Joe. Lizzie went to spend a month with her parents, and her husband accompanied her. He is now a well-to-do farmer; Harry is a young man, with brothers and sisters, and they have never been inside a race-track, and have no inclination to go.

Mr. Joseph Powers is a prosperous merchant, and no one would ever think he had been a wandering vagabond. He also avoids the race-course.

Jack Ralston is in an insane asylum, and Bob Walters was killed in a gambling-den.

Ben Dalton's farm has been improved and enlarged until it is one of the most beautiful in the country, and the owner says it could not be bought for a gold-mine.

THE END.



"THE WOODEN HEN."

The illustration shown herewith is small in size, but really large when we consider that the "Wooden Hen" is no larger than a live hen, yet has double the capacity. It weighs only 15 pounds, has a capacity of 28 eggs, and while not a toy, is just as amusing, besides being instructive as well.

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LINCOLN AS AN ELECTION CLERK IN NEW SALEM.

New Salem, founded in 1829, by James Rutledge and John Cameron, and a dozen years later a deserted village, is rescued from oblivion only by the fact that Lincoln was once one of its inhabitants. His first sight of the town had been in April, 1831, when the flatboat he had built and its little crew were detained in getting their boat over the Rutledge and Cameron mill-dam on which it lodged. When Lincoln walked into New Salem, three months later, he was not altogether a stranger, for the people remembered him as the ingenious flatboatman who a little while before had freed his boat from water (and thus enabled it to get over the dam) by resorting to the miraculous expedient of boring a hole in the bottom.

Offutt's goods had not yet arrived when Mr. Lincoln reached New Salem; and he loafed about, so those who remember his arrival say, good-naturedly taking a hand in whatever he could find to do, and in his droll way making friends of everybody. By chance a bit of work fell to him almost at once, which introduced him generally and gave him a chance to make a name in the neighborhood. It was election-day. The village schoolmaster, Mentor Graham by name, was clerk, but the assistant was ill. Looking about for some one to help him, Mr. Graham saw a tall stranger loitering around the polling-place, and called to him:

"Can you write?"
 "Yes," said the stranger, "I can make a few rabbit-tracks."

Mr. Graham was evidently satisfied with the answer, for he promptly initiated him; and he filled his place not only to the satisfaction of his employer, but also to the delectation of the loiterers about the polls, for whenever things dragged, he immediately began "to spin out a stock of Indiana yarns." So droll were they that years afterward men who listened to Lincoln that day repeated them to their friends.—*McClure's Magazine.*

SOMETHING FOR GIRLS.

I am not one of those people who fancy it a dreadful thing for boys and girls to be friends. Why should there be any question on the matter? I am sorry when I notice, as I do once in awhile, a tendency on the part of a girl to blush and simper and look conscious when boys are around. This is very silly indeed, and no sensible girl does it. Boys and girls should be comrades, and should meet and know each other in a simple, natural fashion, as brothers and sisters do. And if, as is often the case, the sons and daughters of certain families are in school together, side by side in recitations, there is all the more chance for their having fun when school is over. Jack is apt to be polite to Jill if she has helped him out in his arithmetic. Do you remember Whittier's pretty stanzas about the school-house and the little scene he recalls?—

I'm sorry that I spelt the word,
 I hate to go above you.

Never, dear girls, indulge in anything which has an air of mystery in your dealings with boy friends. Let the walks and talks and drives be open and under the eye of your older friends, and you will find that the breezy bright companionship of a clever boy will be a thing worth having.

Sisters should look out for their brothers in countless little ways. A sister can make home so pleasant and cheery that her brother will prefer it of an evening to any other place. She may take pride in having her brother's escort when she goes about, and even if she does not particularly care to go somewhere when he proposes it for amusement, she will oblige him if she is the loving and unselfish sister I have in mind, and sacrifice her own inclination to keep him company.—*Harper's Young People.*

YOUNG WOMAN, BEWARE.

Breach of promise suits brought by men against women are becoming common. Evidently, the emancipated woman is not doing her duty by her weaker and less capable brother. She wins his affections, and then casts him off on a cold world without any visible means of support. It is not uncommon for women to be rich in their own right nowadays. Many women earn fine incomes. These self-supporting women have not yet developed, along with other things masculine, the old, fine, manly sense of responsibility toward the loving and dependent. Will woman be in all respects the equal of man until she learns this lesson?

In the good time coming a young woman will consider it dishonorable to enter into a matrimonial engagement with a young man whom she has not the ability to support. Some of the half emancipated girls are so thoughtless! They lur a youth on to propose, well knowing that their salaries are barely sufficient to gratify their own feminine fancies. Or even heiresses will wed a young, poor man, only to grow tired of him presently, when his charms begin to fade. Then he is divorced and forced to return to the ribbon-counter and work for a living.

They manage those things better on the Continent. There the custom allows a poor but honest prince to compel the American mil-



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lioness to settle a suitable marriage portion on him before he consents to accept her hand. Our own men can make a similar custom here if they will be equally firm. They owe it to themselves to do so. Young love is very beautiful, no doubt, but no true woman will think of marrying until she is able to support a husband.—*Buffalo Express.*

PEOPLE WHO DISTURB US.

"One of the men we meet who disturb us," said Mr. Glimby, "is the man who doesn't turn out; we meet him on muddy crossings and in snowy paths where the snowfall has not yet been cleared away. He may be merely thoughtless, or he may be simply selfish, or he may be a brute; he is more or less disturbing."

"Of course, we have our own responsibility to bear at this meeting, and we should not only be unselfish about it, but we should have our wits about us, too. Obviously, the conditions being alike, each should turn out to the same extent. That might result in each getting one foot muddy or snowy, but that would be the fair thing to do. In some circumstances you would turn out altogether; you would do that for women and children, and for the infirm. If you had on overshoes, and you should meet a man who did not have them, you would turn out and give the whole path to him, and you might reasonably expect the same from him if the conditions were reversed."

"But you sometimes meet a man who stalks right along, holding the path, whatever the circumstances may be; you meet men who give way grudgingly, or as little as they can; you meet men who look to see whom they are about to meet, and who act accordingly; who, if you yield an inch, take all. And then you meet the man who seems to give no thought to it at all, but who simply follows the path."

"So far as I am concerned, these last disturb me but slightly, and that only because I hate to see anything done thoughtlessly or in the wrong way; I have no feeling toward them; but of all the rest my opinion is clear and well defined."—*New York Sun.*

NEW CURE FOR INSOMNIA.

Insomnia is such an obstinate trouble, and one which resists so many remedies, that a new one is always entitled to consideration. The *New York Advertiser* is responsible for the following:

"I have a new remedy for insomnia," said the nervous member as he entered the club-rooms this morning.

"If it is good, tell us about it."

"It is very simple. Just go to bed and take the most comfortable position for sleeping. Then slowly open and close your eyes. If after forty winks you are not asleep, then try forty more. The great difficulty with victims of insomnia is that they almost always fall to thinking of the events of the day. This may be prevented by persistent counting, but that is itself a mental effort, and wakes one up. Not so, however, with winking. I defy any one of you to think of anything else while you are engaged in this simple exercise."

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"When preparing food for a sick person, do not ask him if he is hungry, or what he would like to eat. The surest way of tempting the appetite is to bring to the sick-room some unexpected, daintily prepared dish, prettily served, and generally it will be eaten with a relish which would have seemed utterly impossible to the invalid had he been consulted beforehand. A small tray covered with the whitest of linen, the prettiest of china and the brightest of silver, a spoon for each separate dish, will appeal to the eye and imagination of the sick one, and he will be prepared to enjoy the food so attractively served. Further stimulate his appetite by dishing only a small supply of food, and he will be tempted to ask for more. Be careful that hot food is served hot, and cold food served cold, and do not let any food stand in the sick-room."

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 A special and unequalled offer for trial to gain new customers by a well-known Philadelphia firm of Seed-Growers. The most beautiful novelties that have been grown at our famous FORDHOOK FARM.
Burpee's GEM Collection contains one packet each of the new **Amaranthus, Coleus-Leaved**, with large leaves of brilliant colors; **Asters, Fordhook Favorites**, embracing only the finest varieties; **Balsam, Burpee's Defiance**, flowers as large and double as a "Camellia"; **New Helianthus, Double Multiflorus**, no one would believe a sunflower could be so beautiful; **Mignonette, Giant Galaxy**, large, fragrant flower heads; **Nasturtium, Fordhook Finest Tall Mixed**, including beautiful new hybrids of **Madame Gunter**; **Three New Pansies, Kaiser Frederick, Meteor, and Peacock**; **Three New Largest-Flowering Petunias**, Burpee's Defiance, Giant Emperor, and Giants of California in unequalled mixture; **Phlox Hortensiaeflora**, like the Hydrangea in its large, beautiful clusters of flowers, and **Ricinus Zanzibarensis**, with magnificent leaves four feet across.
 The ten packets named above purchased from us or any other seedsmen, would amount to \$1.20 at regular cash prices; we will, however, send all ten varieties, with full directions for culture printed on each packet—**The Complete COLLECTION for only 25 CENTS**, or five complete collections for \$1.00. We hope to make thousands of new customers, and guarantee perfect satisfaction to all.
 To every one who asks for **BURPEE'S FARM ANNUAL for 1896** we will also send, FREE, a handsome book of 184 pages, well known as "The leading American Seed Catalogue."
WRITE TO-DAY as this advertisement may not appear again and such rare flowers were never before offered for so little money. **W. ATLEE BURPEE & CO., PHILADELPHIA, PA.**

Our Mammoth New 1896 Flower Seed Offer.
A Magnificent FLOWER SEEDS Over 300 FREE Varieties
A WHOLE FLOWER GARDEN WITHOUT COST!
 An Unparalleled Offer by an Old-Established and Reliable Publishing House. The **LADIES' WORLD** is a large, 24-page, 65-column illustrated Magazine for ladies and the family circle, with elegant covers, printed in colors. It is devoted to Stories, Poems, Ladies' Fancy Work, Home Decoration, Housekeeping, Fashions, Hygiene, Juvenile Reading, Etiquette, Out-of-Door Recreations, etc. To introduce this charming ladies' magazine into 100,000 homes where it is not already taken, we now make the following colossal offer: Upon receipt of only **Thirty Cents in silver, stamps or money order** (the regular subscription price), we will send **The Ladies' World for the Remainder of this Year (April to December inclusive)**, and to each subscriber we will also send, **Free and post-paid, a large and magnificent Collection of Choice Flower Seeds, over 300 varieties, as follows:**
 1 Packet **Blood Red Castor Bean** (*Ricinus Sanguineus*). Very large, rapid growing, ornamental foliage plant of tropical appearance. Stems and leaves deep blood red. Height 6 feet.
 1 Packet **New Fireball Dianthus**. This beautiful new dwarf Pink is a distinct novelty. The plants are covered with brilliant, rose-red double flowers during the summer and through the fall.
 1 Packet **Venus Looking Glass** (*Spectularia Spectulum*). The name of this plant signifies "a mirror," indicating the unusual shining brightness of the lovely blue flowers. Grows about 3 inches high.
 1 Packet **Phlox Drummondii**. Lovely, brilliant flowers. Nothing can surpass them for beds, on account of their richness and variety of color, profusion and duration of bloom.
 1 Packet **Poppy**, mixed. A grand collection of this popular favorite, including the *Mikado, Cardinal, American Flag, Nephiste, Flag of Truce* and many other rare and beautiful sorts.
 And **Three Hundred Other Varieties**, including Californian Poppy, Forget-Me-Not, Love Lies Bleeding, Blue Love Grove, Mourning Bride, Virginian Stock, Nugget of Gold Marigold, Choice Pansies, Verbenas, Chrysanthemums, Finest Asters, Cypress Vine, Digtalls, Mignonette, Crimson Flax, Marguerite Carnation, Godetia "The Bride," Striped Petunia, Rose of Heaven, Youth and Old Age, etc., etc.
 Remember, thirty cents pays for the Magazine for the remainder of this year (April to December inclusive), and this entire magnificent Collection of Choice Flower Seeds (370 varieties), put up by a first-class Seed House and warranted fresh and reliable. No matter how many flower seeds you have purchased for this season, you cannot afford to miss this wonderful offer. We guarantee every subscriber many times the value of money sent, and will refund your money and make you a present of the seeds if you are not entirely satisfied. **This offer is reliable.** Do not confound it with the catchpenny schemes of unscrupulous persons. We have been established over 20 years, and refer to the Commercial Agencies as to our entire responsibility. **Write to-day.** Don't put it off! Six subscriptions and six Seed Collections sent for \$1.50.
 Address: **S. H. MOORE & CO., (Premium Seed Dept.), 27 Park Place, New York.**

CATALOGUE FREE
 Now is the time to buy a PIANO or ORGAN from the largest manufacturers in the world, who sell their instruments direct to the public at wholesale factory prices. Don't pay a profit to agents and middlemen. **TERMS** to suit all. No money asked in advance. Privilege of testing organ or piano in your own home 30 days. No expense to you if not satisfactory. Warranted 25 years.
REFERENCE Bank references furnished on application; the editor of this paper; any business man of this town, and to the thousands using our instruments in their homes. A book of testimonials with every catalogue. As an advertisement we will sell the first Piano in a place for only \$160. The first Organ only \$25.
 If you want to buy for cash, **Write Us.** **BEETHOVEN PIANO & ORGAN CO.,** P. O. Box 628 WASHINGTON, N. J.
BU DON T BUY UNTIL YOU

Our Household.

A BALLAD OF POVERTY.

She came into my house long since,
 And bade me let her stay.
 "I'm honest Poverty," she said,
 "Whom none should turn away."

I will but stay a year or so,
 While you are young and strong."
 I answered, careless, "Bide awhile;
 I shall not keep you long."

Oh, many years have passed since then,
 Yet still that wretched crone
 Doth dwell with me, nor do I dare
 To call my soul my own.

Now half the friends I used to love
 Will visit me no more;
 The stony glare of Poverty
 Affrights them from my door.

And when I venture to complain,
 Or mildly remonstrate,
 "'Tis wholesome discipline," she says;
 "Your pride has been too great."

O woful woman! Dost thou mean
 To dwell with me for aye?
 Old Age demands admittance now
 And will not go away.

He, too, must be my guest ere long;
 Old Age and Poverty—
 A precious pair to rule my hearth;
 Haste, Death, and set me free!

—Geraldine Meyrick.

COMMON SENSE IN THE WEDDING OUTFIT.

ALTHOUGH I have never been married, I have assisted at least a dozen friends in preparing their wedding garments, therefore my opinion should have the respect due to experience. I don't blame a girl if she insists on having a beautiful trousseau. She expects to be married only once, and it

the betrothed maiden that for once the savings bank must be freely drawn upon and the old tea-pot or the hidden stocking must be emptied. Don't suppose, however, that I think it a wise plan to buy underclothes in scores and dresses in dozens. What I call common sense rules the quality of the outfit rather than the quantity. The bride is the cynosure of all eyes—critical and sometimes unfriendly and jealous eyes. To be sure, she is as near the point of perfect happiness as mortals ever are, and therefore as nearly oblivious to adverse criticism; but with her sentimental sublimation she may as well combine that prosaic form of happiness which results from the consciousness of being well dressed.

It is said that a young man likes to have the approval of others set as a seal of wisdom on his choice of a sweetheart. It is the man past youth who chooses wholly with his own judgment, who cares little what others may say of the woman of his choice, because he has seen many women, he has learned discrimination; he says when he admires his wife, "She is admirable, I know."

There is no use to deny the fact that the time comes during the honeymoon when a man's eyes learn either one of two things; that his wife is stylish and compares favorably with other woman, or he sees the contrary. This opinion, favorable or otherwise, depends on her clothes. If I were a bride, I would have a becoming street suit, if all my expenditures had to begin and end in it. For that reason, if I could not well afford the white dress so much liked as the bridal garment facile princeps, and the handsome street suit besides, I should wear the latter during the marriage service. It is desirable to have at

bargains," old things "dyed" and "made over;" I wash my hands of such schemes. They have a place in domestic economy; but let it be a retired place, and do not for a moment suppose that such inferior articles can pass for more than they are.

The place where expense may be reduced is in the kind of things worn only at home, wrappers, dressing-sacks, etc. These may be home-made, but if of pretty, bright-

many of the colors launder well. A turnover collar of the goods trimmed with Valenciennes is also a pretty finish.

CHRISTIE IRVING.

SCHOOL LUNCHESES.

Checked toweling makes good school napkins. Each child should have one. With care, one will last a week, and not



LACE DOILIES.

colored material, the effect is agreeable. Besides, when the bride wears these garments, she has her husband to herself. She is not subject to comparisons; she can make herself so fascinating by means of pleasant talk and endearing ways that the lately captivated man is transported to the realm of adoration, he ceases to be a critic, he is only a lover. AUNT GRISELDA.

make much extra washing. Then insist on the children sitting in their seats, spreading napkin or paper on the desk in front, placing their dinner on it, and eating slowly. In some schools the teacher requires this, and it would be a sensible plan for mothers to ask for such a rule, in justice to the health of their children, that they may talk and laugh together as they eat, thereby promoting digestion; and if the dinner has reasonable variety and is neatly put up, they will not object to such a rule.

More fruit and less meat should be the

LACE DOILIES.

To those who cannot embroider, and who can sew, lace doilies commend themselves. Many beautiful patterns come for these, already stamped upon pink muslin, upon which the braid can be basted, and the joining done in needlework. They are all in white, and answer for many purposes.

L. C.

THE CROP THAT NEVER FAILS.

Imagine the consternation that would appear upon one's face if one should read as an item of news in the daily papers, "It is a noticeable fact that not a single child has been born upon the face of the globe during the past year." We might well think then that the end of the world was at hand. However, as there is no immediate cause for alarm, we are prepared to offer to our readers reliable and well-fitting patterns for the wardrobe for the many little ones who will need them. Thousands of garments have been made from these patterns and given supreme satisfaction. To our readers we offer, postage paid, this entire set of patterns (Premium No. 118), with full directions, for 50 cents; or with FARM AND FIRESIDE one year, 75 cents.

GIRLS' PRINCESS DRESS.

This neat costume is made of any suitable wool material in the skirt, which is carried up over the shoulders in bretelle effects.

A figured silk bodice can be worn with it for cool days, and a shirt-waist or white mull bodice upon warmer ones.

The shirt-waist still abides with us, and bids fair to be as popular as ever. Detachable collars and cuffs, either of the material or of pure white linen, are alike fashionable; but for those who cannot have them done up at a laundry, it is better to give a soft finish to the neck, as a crush collar, or one of embroidery insertion through which a ribbon is run.

Bishop-sleeves are the sleeves for all wash-goods. If you consider the pattern too voluminous, fold a large plait down the middle of the pattern and take out the extra fullness in this way. The dimity lawns make very comfortable waists, and

rule for most lunches. If possible, fruit should always be used, and mothers should arrange for this when putting up fruit in the fall. Rich cakes, pies and puddings should be seldom given, although plain sponge-cake, gingerbread or cookies, and custard, corn-starch pudding, tapioca, etc., may be used daily.



PATTERNS FOR LAYETTE.



GIRLS' PRINCESS DRESS.

is the great event of her life. The German name for wedding is hochzeit, which means "high time," and sacred scripture is full of such expressions as "a bride adorned for her husband," which express the highest degree of beautiful decoration. Even if economy or "saving" has been the family policy for years, I agree with the desire of

least one other dress so well made as to defy the most prying eyes of up-to-date critics. With these two suits should be faultless gloves, hat, shoes and other accessories. If at a season when a cloak is needed, this, too, must be of the latest cut and of a very good quality. There is a kind of "good management" which recommends "cheap

To vary the monotony of bread and meat, have plain sandwiches one day, and the next day spread the bread thinly with mustard or tart jelly, and put the meat between, cutting bread and meat as thin as possible. Or slices of cold meat may be put into a small dish and a bit of horse-radish, catchup or chilli-sauce added as a relish; or the meat may be chopped with cucumber pickle, moistened with a little melted butter and spread between the bread.

Fish forms an agreeable variety, and if it can be obtained should be used. Most persons like canned salmon or mackerel,



SMALL BOYS' EVENING SUIT.

and while they are not good if long exposed to the air, yet a can may be opened, the contents turned out and salted, enough for that day's lunch put into a closely covered jelly-glass, and the remainder put into a glass jar and sealed, without heating, and if put in a cool place, will keep two or three days.

Eggs are a nice change from meat, but should be boiled half an hour to be digestible, and salt must not be forgotten. Cheese is another good substitute for meat that should often be given. Beans are nutritious, and being about as good cold as warm, a cupful of them should go into the lunch once or twice a week. Corn, tomatoes, hominy and sweet potatoes are good cold, and if served attractively, may be added to the lunch-basket. A glass of cold slaw will be a pleasing change now and then, and there is nothing better for school-children than celery. In the spring, clabber cheese, radishes, onions and lettuce should not be forgotten. Stand the latter



LADIES' SHIRT-WAIST.

in a glass half full of water, and a saucer to cat it from, with sugar and vinegar for a dressing.

If the children are fond of milk, give them a good-sized bottle of it to carry to school, with a glass to drink from.

CLARA SENSIBAUGH EVERTS.

THE POSSIBILITIES OF THE CORSET-STRING.

The genius got hold of a corset-string the other day and the evolution was a "thing of beauty." Now, confess. Would you have even suspected that latent decorative possibilities were awaiting development from such insignificant unmention-

ables as commonplace corset-strings? An interview with the genius disclosed the following interesting description:

What you must have: Fifteen cents' worth of corset-lacings and two and a half yards of an inch-and-a-half ribbon, any color you wish. You can get corset-lacings in white, black and drab. Any pretty contrasting color in ribbon will do. The ribbon ought to cost you nine cents per yard, making a total cost of some thirty-eight cents. Cut off the brass ends, and begin to sew the corset-strings together in the form of a medallion, continuing until you have gone around six times. Then make a loop nearly two inches long. Continue these loops all around the medallion. You may weave them together or let them fall singly, just as you prefer. Braid three strings together, and sew around the edge. On the outer edge of the braid fasten a puff of the ribbon, then another braid; to this a circle of medallions without the loops, then another braid; to this sew a ruffle of ribbon. Only the upper edge should be gathered this time. On the outer edge of the ruffle, at regular intervals, tack ten more medallions having the loops attached.

If you choose to make your tidy oblong, you can easily do so by making the medallions oblong. But if you do, you should

IVORY SOAP

99 ⁴⁴/₁₀₀ PURE

An experienced laundress will tell you that shirts never look as white as when washed with Ivory Soap.

THE PROCTER & GAMBLE CO., CINTI

remember to make the loops shorter on the sides than on the ends.

These tidies are made of white and yellow, black and red, drab and crimson, black and green, and all combinations that good taste may suggest, one of the most effective being white and pink. Drab and pink and drab and Nile-green combine with artistic results, also.

Another pretty idea is to cover the ribbons with open insertion or rough lace.

So you see the humble corset-string, in the hands of genius, may be made to serve other purposes than its legitimate design.

Moral: "The first shall be last, and the last shall be first."

MARGARET M. MOORE.

SMALL BOYS' EVENING SUIT.

For a dressy evening suit for a small boy, nothing is prettier than velveteen knickers, with a blouse of white India silk or soft nun's veiling. Wide Valenciennes lace trims the collar and forms a cascade down the front. Black silk stockings and patent-leather slippers complete this very natty costume.

The Personal Side of

George Washington

It will be the man Washington—the son, the husband and neighbor—that will be presented in three popular articles by General A. W. Greely. No history will be interwoven. Washington will stand alone—not as a General, Statesman nor President, but as a man, showing his religious, moral and domestic side. One of the many features for 1896 in

The Ladies' Home Journal

One Dollar per Year

"Girls Who Have Push"

A twenty-eight-page illustrated pamphlet, tells the story of how forty bright girls won their college course and education in music, without expense. It will be mailed FREE to any girl sending her address to

The Curtis Publishing Company, Philadelphia

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Our Household.

HOME TOPICS.

CHICKEN PIE.—Some of the hens that began to lay early in the winter will stop about now, and will doubtless be nice and fat. If you have some which you do not care to keep over another season, they are just the ones to make good chicken pie, even if they are not young. Dress the fowl, joint it, and divide the breast. Put two thin slices of salt pork into a saucepan, and let them fry until brown; then take them out and put in the chicken. Stir the pieces about, and let them fry for five minutes, then add enough boiling water to nearly cover the chicken. Put on a tight cover, and set the saucepan where the chicken will simmer slowly for two or three hours, or until the meat will slip from the bones; add a little boiling water from time to time, if needed. When the chicken is tender, make a nice crust, using three cupfuls of flour, a heaping teaspoonful of baking-powder, half a teaspoonful of salt, half a teacupful of butter rubbed into the flour, and sweet milk to make a dough just soft enough to roll out nicely. Line the baking-dish with a thin layer of the crust. Remove the bones from the chicken,

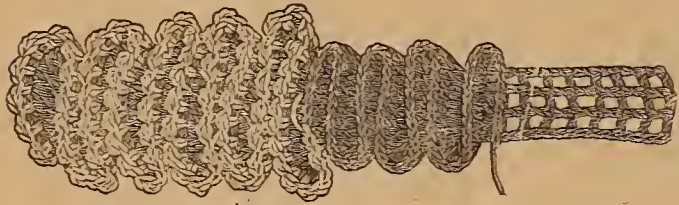
with the hoarse cough you so dread to hear.

A little boy of my acquaintance has been sick in bed with sore throat, just because he came home from school one bright sunny day recently, and, thinking summer had come, took off his coat and ran out to play.

Another thing, be sure to caution the children about sitting down on the ground before it is dry and warm. Many days after the sun shines warm and bright, and the air seems soft and balmy, the ground will still be cold and damp.

OILED FLOORS.—Besides looking better and being much easier kept clean, oiled floors will last much longer than without oil. If floors are not oiled, the repeated scrubbing that they must have will soon cause them to warp and splinter, and in time the floors be covered with seams and furrows. A thick coating of boiled linseed-oil is one of the best preservatives, and is easily applied. Have the floor perfectly clean and dry. Heat the oil in a tin pail set in a kettle of water. Never try to heat it without setting it in water, and be careful not to spill any of the oil on the stove, or a conflagration may ensue. When the oil is hot, take the kettle from the stove, and carry it, with the pail of oil in it, to the room where you wish to use it. Begin in one corner, and

Very often only one room is provided for at least half a dozen occupants—cooking, eating, sleeping and living room all in one, many times with no hint of a cupboard or a few shelves, while the outdoor conveniences are very meager. It some-



CROCHETED BORDER FOR CAP.

and put the meat into the crust, mixing the light and dark meat. Put over the chicken an even tablespoonful of butter cut into bits, a teaspoonful of salt and a quarter of a teaspoonful of black pepper, the broth in which the chicken was cooked, with a cupful of milk, heated, and thickened with a teaspoonful of flour. Over the top of the chicken put three hard-boiled eggs cut in slices, and then put on the top crust and prick it with a fork, so the steam can escape. This chicken pie is good either hot or cold.

apply the oil with a wide, flat brush, working as rapidly as possible, and rubbing lengthwise of the boards. The hot oil will sink into the boards very quickly, and a second coat may be applied in a few hours after the first one. It is well to put the last coat on late in the day or evening, and then leave the room undisturbed until morning, after which the room may be used at pleasure. MAIDA McL.

CROCHETED BORDER FOR CAP.

Crochet of split zephyr a foundation of squares sufficient in length to border the cap. With double crochet-stitch work up and down this framework two stitches in each square and five stitches in the top square to turn. Finish the ruche with crochet-silk the same shade as the zephyr, a chain of five stitches in each zephyr-stitch with a single stitch. This gives a pretty, fluffy finish to the border, which can also be used with good effect upon dressing-sacks of French flannel. M. E. SMITH.

KNITTED CAPE.

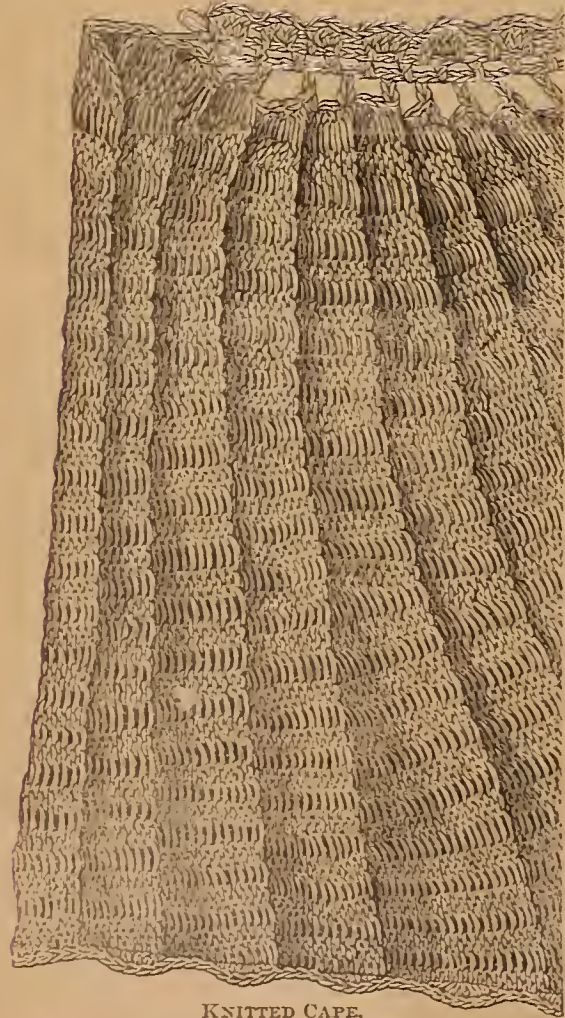
Two skeins of Pansy wool in any color, and two needles, No. 14.

Cast on 52 stitches. Knit six rows plain; purl six rows, until you have 82 ridges. Then drop every third stitch. Bind off very loosely, and then ravel back the dropped stitches.

Shape the cape about the neck with a small yoke in crocheting, also crochet shells all around it as a finish. Ribbons run through the openings make it very dressy. LIBBIE L.

BETTER TENANT-HOUSES.

Last August a ride through one of the prettiest, the most fertile, and consequently most wealthy sections of our good old Buckeye State brought me a great deal of enjoyment. Fat cattle, "all sleek and fair to look upon," grazing in abundant pastures, a field of crimson clover, stretching over many acres rich with their heavy yield, sending out to us a delightful odor, the pretty lawns and commodious houses, happy-looking families



KNITTED CAPE.

driving in their comfortable conveyances, all bespoke the prosperity of the community. In fact, it looked an earthly paradise, and suggested an ideal farm life.

But the tenant-houses scattered about over the various farms made a blur on the fair picture. It seems to an observer that these houses are not, as a rule, good enough.



YOUNG GIRLS' WAIST.

times happens—but I am glad to say the instances within my knowledge are rare—that even a garden-spot is denied and the raising of poultry not allowed. In truth, these things are not as they should be.

To promote a wholesome atmosphere, both moral and physical, there should be at least three rooms in every house. Huddle a family into one confused heap and draw your own conclusions. Unless the mother be vigilant and solicitous for her children, what of modesty or refinement can she hope to teach them?

In building tenant-houses, the farmer should not think that anything with a roof is good enough to live in. A house of two or three rooms can be made comfortable, provided closets are allowed for. One closet should serve as a receptacle for



STYLISH BODICE.

clothing, while the other should be fitted with shelves suitable for dishes and provisions. MARY D. SIBLEY.

BODICES.

The present skirt being so very plain, the adornment is put upon the bodice.

Long Vandykes of lace or jet are a favorite style, especially when the bodice is of a material different from skirt and sleeves.

For a young girl's waist, lace and ribbon are very much used. In our model a wide ribbon is used, from which a yoke can be formed in the back, and coming over the shoulders, two loops finish it in front.

"Index to Chimneys" tells what chimney is made for your burner or lamp; and your dealer probably has it.

Geo A Macbeth Co, Pittsburgh, Pa, wants to send you the Index—write for it.

Pearl glass, pearl top, tough glass.

Advertisement for hair pins featuring a cupid illustration and the text: 'Little Bo Peep (she fixed her sheep So fate could not abuse them—) Stuck Cupid Hair Pins in their tails, And then they couldn't lose them. It's in the TWIST. RICHARDSON & DeLONG BROS., Philadelphia, Pa. Makers of the famous DeLONG Hook and Eye.'

Advertisement for Chickering pianos featuring a portrait of David T. Haraden and the text: '71 Years. Great example of continued service in a distinguished house. DAVID T. HARADEN, 85 years of age, is now actively employed as librarian in the factory of CHICKERING & SONS, of Boston, manufacturers of'

Advertisement for Chickering pianos with the large text 'CHICKERING PIANOS' and a description of the pianos' quality and availability.

Advertisement for a Lightning Freezer featuring an illustration of people making ice cream and the text: 'It's fun—not hard work—to make ice cream in the LIGHTNING FREEZER—Runs Easy None makes it quicker. "Freezers and Freezing," with recipes by Mrs. S. T. Rorer, free. NORTH BROS. MFG. CO., Philadelphia.'

Advertisement for New Rags featuring the text: 'NEW RAGS or old rags colored with "PERFECTION" Dyes will make beautiful carpets and rugs, and are guaranteed not to fade. We will send you a package each of "PERFECTION" Turkey-Red, Black, Green, Medium Brown, Yellow, and Orange dyes, or six packages, any colors, for cotton or wool, for 40 cents. Single package, 10 cents. W. CUSHING & CO., Dept. 17 Foxcroft, MAINE.'

Advertisement for Wall Paper featuring the text: 'WALL PAPER! The Cut-Rate House sends 100 Spring Samples free for 2c. postage. Golds, 4c. roll up; Fine Gilt Parlor Styles, 7c. up; Embossed, 10c. up; 10% discount for Cash. 50c. secures large sample books for the trade. Increased discounts. Keim Wall Paper Co., 421 Elm St., Cincinnati, O.'

Advertisement for dyeing fabric featuring the text: 'You Dye in 30 minutes if you use Tonk's French Dyes. No other dyes like them. Dye cotton as permanently as wool. Our turkey red for cotton won't wash, boil or freeze out—all others will. Carpets, dresses, capes and clothing of all kinds made to look like new. No failures with Tonk's dyes; any one can use them. Send 40c. for 6 pkgs. or 10c. for one—any color. Big pay to agents. Apply now and mention this paper. FRENCH DYE CO., Vassar, Mich.'

Advertisement for The American Broiler featuring an illustration of a broiler and the text: 'The AMERICAN BROILER Will broil steak, chops, fish, etc., better than any other broiler made. Broils equally well over coal or wood, gas or gasoline; answers for all sized stove or range openings. Sent to any address, with full directions for use, express prepaid, on receipt of \$1.00. THE CINCINNATI STAMPING CO., 1113 Walnut St., Cincinnati, Ohio.'

Advertisement for a world's washer featuring an illustration of a washer and the text: 'EVERY WOMAN Can buy a WORLD'S WASHER on trial and no money paid until it is perfectly satisfactory. Washes easy. Clothes clean, sweet and white as snow. Child can use it. I pay freight. Circulars free. C. E. ROSS 10 Cleau Street, Lincoln, Illinois. Mention this paper.'

TOBACCO - TWISTED NERVES.

The Unavoidable Result of the Continued Use of Tobacco.

Is there a Sure, Easy and Quick Way of Obtaining Permanent Relief from the Habit?



Millions of men think they need stimulants, because their nerves are set on fire by tobacco. The persistent abuse to which the tobacco-user subjects his nerves cannot possibly fail to make weak the strongest man.

Gentlemen—The effects of No-To-Bac are truly wonderful. I had used tobacco for forty-three years, a pound a week. I used two boxes of No-To-Bac and have had no desire for tobacco since.

You say it is wonderful. Indeed, it is. No-To-Bac cured over 300,000 cases just as bad. You can be made well and strong by No-To-Bac.

1896 High Grade Bicycles. Shipped anywhere C. O. D. at lowest wholesale prices. \$100 Oakwood for \$57.50, \$85 Arlington for \$45.00, \$65 for \$37.50, \$20 Bicycle for \$10.75.

GENUINE POLICE SAFETY. The Only Genuine Automatic Revolver Ever Sold at \$2.45. We sold thousands last fall for \$2.75 and expect as many to see the 17% cut go back to old cost.

Climax Dish Washer. We lead them all. See our list of testimonials. Best Machine made. More of them being sold.

RIPANS TABULES. REGULATE THE STOMACH, LIVER AND BOWELS And Purify the Blood. RIPANS TABULES are the best Medicine known for Indigestion, Bilio-ness, Head-ache, Constipation, Dyspepsia, Chronic Liver Troubles, Dizziness, Bad Complexion, Dysentery, Offensive Breath, and all disorders of the Stomach, Liver and Bowels.

AMERICAN GOLD FILLED CASES. Warranted 20 Years, are the best for service money can buy. Return this adv. with order and we will send by express prepaid, this beautiful Filled, hunting case, full jeweled, Elgin style, stem wind and set watch which you can sell for \$25.00.

Our Sunday Afternoon.

LIFE'S MELODY.

What is it, when the days are dark and drear, This charm which brightens many a weary hour?

Like as a dewdrop to the heated flow'r It brings content, and when it doth appear, Hope lives anew, for all our thoughts of fear

Are lost: 'Tis surely heaven's own dower, This wondrous gift, possessed of wondrous power,

The tuneful soul, whose voice is kind and clear.

Gently it falls upon the heart of stone, Which softens 'neath its blessings manifold; It speaketh tender words of love alone,

This alchemist who turneth gray to gold; And even sorrows which we least condone Lose sadness in the promise life may hold.

—Adela Wilkins.

THE SOWER AND THE SEED.

THE sower has nothing to do but to keep on sowing good seed. He has nothing to do with making it grow. He could not make it grow were he to put all his strength on a single spot of ground or a single seed.

Men must be taken as they are. No man can tell beforehand whether the truth will take effect in the heart of this or that man. The day shall declare it. Many a truth spoken to an individual may seem to have sunk out of sight forever, and yet in after life be brought to mind and be of immense service, both to himself and to others with whom he may be associated.

THE SUNSHINE GIRL.

A fast young man decided to make a young lady a formal offer of his heart and hand—all he was worth—hoping for a cordial reception. He cautiously prefaced his declaration with a few questions, for he had no intention of "throwing himself away."

The young lady said that before she answered his questions she would assure him of some negative virtues she possessed. She never drank, smoked or chewed; never owed a bill to her laundress or tailor; never stayed out all night playing billiards; never lounged on the street corners and ogled giddy girls; never stood in with the boys for cigars and wine suppers.

LOOKING UPWARD.

The following advice, given to a young married woman who was visited by another older and more experienced one, may be helpful to some of our readers:

When the visitor rose to go, the hostess came with her to the door, and out upon the pleasant piazza, which, however, looked a little dusty in the corners.

"Oh, dear," said the young wife, "bow provoking servants are! I told Mary to sweep this piazza thoroughly, and now look how dusty it is."

"Grace," said the older woman, looking into the disturbed young face with kindly, humorous eyes, "I am an old housekeeper. Let me give you a bit of advice: Never direct people's attention to defects; unless you do so, they will rarely see them."

"Now, if I had been in your place and noticed the dirt, I should have said: 'How blue the sky is!' or 'How beautiful the clouds are!' or 'How bracing the air!'"

ENEMIES OF THE HOME.

Home is the garden of planting, the seed-sowing place, and every kind bringeth forth after its kind. Bad habits, coarse sayings, vulgar speech, drinking intoxicants, and irreligion in general are enemies of the home, and bring forth fruit after their own kind.

STOP AND THINK.

Does my life please God? Am I studying my Bible daily? Am I enjoying my Christian life? Is there any one I cannot forgive? Have I ever won a soul to Christ? How much time do I spend in prayer? Am I trying to bring my friends to Christ? Have I ever had a direct answer to prayer? Is there anything I cannot give up for Christ? Just where am I making my greatest mistake? How does my life look to those who are not Christians? How many things do I put before my religious duties? Have I ever tried giving one tenth of my income to the Lord? Is the world being made better or worse by my living in it? Am I doing anything that I would condemn in others?—Presbyterian Endeavorer.

ST. SEBASTIAN.

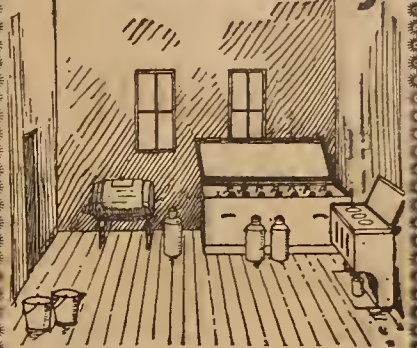
The legendary history of the saints and martyrs tells us that Sebastian suffered death in the reign of the Roman Emperor Diocletian. Having embraced the faith of the Christians, he sought in every way possible to propagate what he believed, and as a member of the imperial guard had many opportunities for this, until, falling under suspicion, he was summarily sentenced to be shot to death by a troop of archers.

CONSUMPTION CURED.

An old physician, retired from practice, had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all Throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints.

I believe, in all the annals of our race, Abraham Lincoln is the finest example of an unknown man rising from obscurity and ascending to the loftiest heights of human grandeur.—James Speed.

No Dirt In This Dairy



It is kept clean by a farmer's wife who is up-to-date and knows a good thing when she gets it. Every milk pail, churn, can, etc. is cleaned thoroughly, quickly and easily with

GOLD DUST WASHING POWDER.

the greatest enemy to dirt. Every farm-house kitchen should have it. Saves the farmer's wife many an hour's hard work. Put up in large packages at 25c. each. At all grocery or general stores.

GOLD DUST WASHING POWDER has an additional value to the farmer for destroying insects. Send us your name and address and we will mail you an important booklet containing recipes for making kerosene emulsions, for spraying crops and trees and livestock.

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PATENTS LEHMANN, PATTISON & RESBIT, Washington, D. C. Examination Free. Send for circulars.

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HIGH GRADE BICYCLES. We have no agents. Shipped on approval. \$100 wheels for \$59.75. \$75 wheels for \$47.50. All 1896 models, fully guaranteed. OHIO CYCLE CO., Mfrs., CANTON, OHIO.

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PARKER'S HAIR BALSAM. Cleanses and beautifies the hair. Promotes a luxuriant growth. Never Fails to Restore Gray Hair to its Youthful Color. Cures scalp diseases & hair falling. 50c. and \$1.00 at Druggists.

WHAT CAN YOU PAY For a Sewing Machine? All we ask for you to drop us a card letting us know you want a sewing machine, and we will make you the most liberal offer. NO MONEY IN ADVANCE—30 DAYS TRIAL IN YOUR OWN HOME. We manufacture the BEST and our highest priced machine is only \$22.50. Our lowest priced machine is most liberal. We have shipped hundreds of our Best High Grade Aival machines to introduce at \$2.18, \$2.22, \$2.36, \$2.44, \$2.66 & \$5.50 each. LET US MAKE YOU OUR BEST OFFER. Do not delay. Cut out this advertisement and send to us to-day. ELY MFG. CO., B 4 307 & 309 Wabash Ave., Chicago, Ill.

...AN... Agent Wanted. In every town and neighborhood to solicit subscriptions for Farm and Fireside. In connection with popular premiums. Liberal commission given. Write for terms and sample copies at once. Mast, Crowell & Kirkpatrick, Springfield, Ohio.

It afflicted with SORE EYES Dr. ISAAC THOMPSON'S EYE WATER

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Superior to all others for the following reasons:

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98¢ DOUBLE ACTION REVOLVER 22 or 38 Cal. shoots S. & W. Cartridges. 5-shot Octagon barrel, fitted, rebounding and all parts interchangeable. Length 6 1/2 inches. C. O. D. with our 400 page catalogue of Firearms in General 30c. on receipt of 25c. balance 25c. and charge post expense after full examination. By mail post paid \$1.15. ELY MFG. CO., 307-309 Wabasha St., Chicago

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GENTS OR LADIES SIZE
\$2.75

GET THIS OUT and send it to us with your name and address and we will send you this beautiful gold finished watch, by express examination. You examine it at the express office; and if you think it a bargain pay our sample price \$2.75 and express charges and it is yours. Its magnificently engraved and equal in appearance to genuine Solid Gold watch. A guarantee and beautiful gold plate chain and charm sent free with every watch, write today, this may not appear again; mention whether you want gents' or ladies' size—THE NATIONAL MFG. & IMPORTING CO., 334 Dearborn St., Chicago, Ill.

THE GREATEST OFFER IN THIS PAPER!

We want to secure 100,000 new subscribers to THE HEARTHSTONE, the largest popular priced family periodical in America, with the greatest circulation of any similar publication in the world. THE HEARTHSTONE is a welcome visitor in almost every nook and corner in the United States. Every number is bright, fresh and interesting. Every member of the family will enjoy it. In order to make THE HEARTHSTONE better known and give all an opportunity to enjoy its regular visits, we make the following extremely liberal offer: Upon receipt of only 10 CENTS we will send THE HEARTHSTONE until Jan. 1, 1897, together with THREE USEFUL AND PLEASING PREMIUMS as follows: THE PRINCESS STAMPING OUTFIT, A SLENDIB COLLECTION OF FLOWER SEEDS, comprising 300 varieties, and THE LADIES' MANUAL OF FANCY WORK.

The Princess 25 Cent Stamping Outfit

Consists of floral design for Collar for Babies' Dressing Sack, floral design with word "Baby" for Carriage Cover, etc.; bowknot design with motto for Veil Case; Greek Border, 4 1/2 inches wide, for Table Covers, Portieres, etc.; corner design, of Spider Web and Mistletoe, 12 x 12 inches, very handsome; fruit design, Cherries, border 2 inches, for cut out work; design for watch, 7 inches; design for Vegetable Dolly, Baked Potatoes, 3 1/2 inches; design for Hot Corn Cloth, 6 1/2 x 7 1/2 inches; handsome border for Flannel Embroidery, 1 inch wide; Brownie design, Policeman; two choice dolly designs, 4 1/2 inches; Bowknot border, 1/2 inch wide, very pretty; choice conventional design, 4 1/2 inches, see illustration; clover design for Scatter Work Splashes, etc., and several other designs for all kinds of work. This is not a useless collection of patterns too small for practical use on cheap brown paper, but all are large, desirable and useful, well perforated on first-class linen bond paper.

The Gem Collection of Flower Seeds

Includes Sweet Peas, Pansies, Phlox, Pinks, Petunias Morning Glory, Asters, Nasturtiums, Balsams, Mignonette, Larkspur, Poppies, Oxalis, Candytuft, Cosmos, Giant Corn-cobs, Verbena, Chrysanthemums, Zinnias, etc., etc. These are first-class seeds from one of the best known houses in the world, and the collection comprises over 300 Varieties.

The Ladies' Manual of Fancy Work

Splendidly illustrated with over 100 Engravings, is an entirely new book, just published, and embodies all the latest ideas in needlework, crochet, knitting and embroidery. It contains designs and directions for making nearly fifty different patterns of knitted laces, many charming crochet patterns, also instruction for making many useful articles of wearing apparel and numerous articles for home decoration, among which are Tidies, Chair-Scarfs, Dollies, Purses, Table Mats, Shopping Bags, Lamp Shades, Shawls, Afghans, Toilet Sets, Counter pans, Sofa Cushions, Chair Covers, Pin Cushions, Dressing Slippers, Babies' Socks, etc., etc. Full and complete instructions accompany each design, together with an explanation of the terms used in knitting and crocheting, etc.

We agree to send everything above-mentioned together with THE HEARTHSTONE until Jan. 1, 1897, for the trifling sum of Twelve Cents. We guarantee four times the value of the money. This is the most liberal and legitimate offer ever made! Send a silver dime and one two-cent stamp; or six two-cent stamps. Satisfaction guaranteed or money refunded. Address THE HEARTHSTONE, 26 Reade Street, New York, P. O. Box 1195.

Our Farm.

PEACH CULTURE ON THE WEST FLORIDA HIGHLANDS.

Peach culture on the West Florida Highlands is an infant industry that is rapidly assuming commercial proportions. Much has been learned during the past five or six years regarding the proper location of an orchard, methods of cultivation, fertilization, and the best varieties for shipping to Northern markets.

Open pine lands, with clay four or five feet below the surface, are admirably adapted to peaches. The altitude of this section is about the highest in the state.

Clean culture is generally given orchards for the first two years after planting. In this latitude young peach-trees grow during eight months in the year, if they are given thorough culture, and can be made large enough to bear a bushel of fruit the third summer. As the trees get older, they are cultivated each season until the fruit matures, and beggar-weed is allowed to grow during the fall, to be turned under in the winter.

As to commercial fertilizers, blood and bone and potash have been generally used, and my own observation leads me to apply more and more potash to bearing trees. In fact, I think potash should form a liberal portion of the fertilizer from the beginning. The trees should be filled full of it; I think it tends to make healthier wood and hardier fruit.

What varieties are best adapted to our wants is, perhaps, the most important question to be solved. The earliest peach to ripen is the Sneed. Its fruit matures in less than sixty days from bloom, and usually ripens about the middle of May. It is a cling, of medium size, with yellow skin and bright red cheeks. It is a very handsome peach, and brings fancy prices. Next to ripen is the Alexander, well known to all fruit-growers; ripens about the last ten days of May. This is followed by Early Tillotson, Mountain Rose, Fleitas (or Yellow St. John), Early Crawford and Foster, all ripening during June.

About the first of July the famous Elberta ripens, and all others give way to this wonderful peach, which is certainly the acme of perfection. Crates of select Elbertas, each fruit weighing eight to twelve ounces, are sold in New York at almost incredible prices. The Elberta constitutes about one half the entire planting, and is considered the best money-maker. With this peach the shipping-season practically closes.

SWEET POTATOES FOR MARKET.

Col. S. S. Harvey, of Quintette, Escambia County, writes as follows:

As a matter of interest to many of your readers, allow me to call their attention to the market prices of sweet potatoes at various Northern markets. While I am satisfied that the ordinary yams we have been in the habit of raising are a good paying crop, there is one variety of the sweet potato not raised generally in our section or state that at all times sells for considerably more than any other variety in all Northern markets; in fact, nearly double the price of other sweets. That is the "Jersey Sweet." Without doubt it is the "aristocrat" of sweet potatoes, as the pompano is of fish, as the Bartlett is of pears. It has a subtle flavor no other of its kind possesses.

But the important point is its selling qualities. It will produce in quality about the same as our best, and sell for at least seventy-five per cent more in any of the Northern markets. On the twentieth day of August last I dug a row and shipped them, in a car-load of pears, to Chicago. There were five boxes of them (the ordinary pear-box), and they sold for six dollars and seventy-five cents. That was about two dollars and twenty cents per bushel here, boxed.

It would pay, at those prices, to give especial attention to early sweet potatoes and to Jersey Sweets. I know that many of our people are looking for a crop that will pay while their fruit-trees are growing, and I think here is a crop that will fill the want.

Recent Publications.

FIRST PRINCIPLES OF AGRICULTURE. By Edward B. Voorhees, director of the New Jersey agricultural experiment station, and professor of agriculture in Rutgers College, New Brunswick, N. J. A text-book on agriculture, the purpose of which is to state in logical order the elementary principles of scientific agriculture, and to show the relation of these scientific facts to farm practice. It treats of soils, their formation and methods of improvement by cultivation and fertilizers; of farm animals; of the composition of feeds and fodders; of the principles of breeding; of the products of the dairy, etc. 12mo, 212 pp. Cloth. Introductory price, 72 cents. Published by Silver, Burdett & Co., Boston, Mass.

CATALOGUES RECEIVED.

George S. Josselyn, Fredonia, N. Y. Descriptive catalogue of American grape-vines and small-fruit plants. Specialties: Campbell's Early grape and Red Jacket gooseberry.

John C. Bridgwater, Mt. Juliet, Tenn. Descriptive price-list of sweet-potato plants of best varieties.

Holmes & MacKubin, Philadelphia, Pa. Annual catalogue of seeds for the farm and garden, thoroughbred stock and garden implements.

P. Emerson, Wyoming, Del. Nursery and seed catalogue. Specialties: Ridgely chestnut, crimson clover, cow-peas and winter oats.

H. L. Bennett & Co., Westerville, Ohio. Descriptive circulars of stump-pullers, tile-ditching machine and low-down farm-wagon.

Homer City Incubator Co., Homer City, Pa. Descriptive catalogue of incubators and brooders.

Chas. H. Sumner, Sterling, Ill. Fruit report and price-list.

Aspinwall Manufacturing Co., Jackson, Mich. Illustrated catalogue of the Aspinwall potato machinery—planters, cutters, sprayers and sorters.

H. R. Cotta, Freeport, Ill. Northwestern Nursery catalogue of fruit and ornamental trees and small fruits.

J. Chas. McCullough, Cincinnati, O. Annual catalogue of choice seeds, bulbs and plants and improved implements.

Acme Harvester Co., Pekin, Ill. "Harvester Hints," a beautiful catalogue, describing a full line of grain and hay harvesting machinery—binders, headers, sweep-rakes, stackers, etc.

Cushman Cow Milker Co., Waterloo, Iowa. Descriptive circular of a new milking-machine.

Fred E. Young, Rochester, N. Y. Catalogue of fruit and ornamental trees, small fruits, etc.

D. M. Ferry & Co., Detroit, Mich. Ferry's Seed Annual for 1896. A complete catalogue of choice farm, flower and garden seeds of best varieties, and a handy manual for the cultivator.

DON'T ALLOW YOURSELF to trifle with a Cold, and so encourage the development of some latent Pulmonary and Bronchial disease, which often ends fatally. You had better cure your Cough or Cold by promptly resorting to Dr. D. Jayne's Expectant, an old-time remedy for all Coughs, Lung and Throat affections.

GOOD COUNSEL.

Young men of an inventive turn of mind should be constantly on the alert, observant in everything. Note where a saving of time or material can be effected by improved methods. If you cannot make two blades of grass grow in the place of one, invent some method to do certain things quicker and better than by present methods. Time is money, and any method by which time is saved has a commercial value. If the operation is performed better and quicker, the commercial value of the method or means enhances accordingly. The simplest inventions are of the most value, comparatively. A recent report from the patent-office states that the majority of successful patents were for articles that retailed for one dollar or less.—Rural Mechanic.

Baco-Curo The only scientific cure for the Tobacco habit.

Baco-Curo Cures when all other remedies fail. (Write for proofs.)

Baco-Curo Does not depend on the will power of the user. It is the Cure. Vegetable and harmless.

Baco-Curo Directions are clear: "Use all the Tobacco you want until Baco-Curo notifies you to stop."

Baco-Curo Is the Original Written Guarantee Remedy that refunds your money if it fails to cure.

Baco-Curo Does the Curing. Its Competitors do the Blowing.

Investigate Baco-Curo before you buy any remedy for the Tobacco Habit.

The U. S. Courts have just decided that

BACO-CURO

Is what it Pretends to be A CURE.

WHICH DO YOU WANT? A CURE OR A SUBSTITUTE? One box \$1.00; three boxes (and guaranteed cure) \$2.50, at all druggists, or sent direct on receipt of price. Write for free booklet and proofs. EUSKA CHEMICAL & MFG. CO., LaCrosse, Wis

BIG MAIL IF YOU WANT TO RECEIVE Lots of Letters, Papers, Cards, Magazines, Novelties, etc. FREE send us 10c. and we will put your name in our Agents Directory, which we send to manufacturers, publishers and supply houses. You also get our new 64-col. Illus. Magazine to Jan. 1897, on trial, all for 10c. Don't miss this chance. Address at once LANE PUB. CO 18 Federal St., Boston, Mass.

25c. Samples FREE.



of this great remedy mailed FREE. Send 10c. in stamps to pay postage and packing. "DROPS" is the name and the dose. 300 Doses \$1.00, or 6 large bottles for \$5.00. Will not bring the dead back to life, but absolutely cures RHEUMATISM, NEURALGIA, CATARRH, ASTHMA, NERVOUSNESS, HEADACHE, TOOTHACHE, BACKACHE, EARACHE, SCIATICA, LUMBAGO, GRIPPE, MALARIA, PARALYSIS, NUMBNESS. Satisfaction guaranteed. Cures all pain instantly. A household remedy. Sold only by us and agents. \$1.00 bottle is far cheaper for those at a distance. 100 per cent. profit to agents. N. B.—After 10 days, price of Samples will be 25 cents. Write direct to-day.

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FREE SPRAY PUMP to one person in each place. We mean it. If you mean business and want agency send 10c. We will send a complete pump that will do the work of a \$10 spray. A. SPEIRS, B 86, North Windham, Maine.

SPRAYING
Will Produce PERFECT FRUIT
We tell you all about spraying and care of fruit in our 32-pg. illustrated book—free. Our Pumps and Nozzles win highest honors in every test. The Dering Co., Salem, O. W. Acts, Henion & Hubble, Chicago

SPRAY YOUR FRUIT
trees, vines, lawns, flowers, chickens, and kill the insects with the Improved "DAISY" Sprayer. Very durable, guaranteed, and lasts for years. 150,000 sold in ten years; has rubber hose and throws constant stream 50 feet. Latest recipes for killing insects. No. 1, heavy tin, brass valve, \$1.65; No. 2, iron, brass valve, \$2.25; No. 5, heavy brass (6nc), \$3.00. Express prepaid. Agents wanted. Catalogue free. W. M. Johnston & Co., 5 Eagle St., Canton, O.

"UP-TO-DATE" SPRAY PUMPS
EXPRESS PAID. Satisfaction Guaranteed or Money Refunded. Endorsed by Leading Entomologists. 60,000 in use. We are U. S. Headquarters for Spray Pumps, and Insecticides. Catalogue, Spray Calendar, and full Treatise on Spraying, FREE. **\$17** SPRAYING OUTFIT **\$5.50** EXPRESS PAID, FOR P. C. LEWIS MFG. CO., Box 33 Catskill, N. Y.

THE PEPPLER SPRAYER
Six Row
For Trees, Potatoes and Vineyards, Has the Largest Sale of any Horse Power Sprayer in the World. POSITIVELY THE BEST ON EARTH. WARRANTED. Catalogue free. Address THOMAS PEPPLER, P. O. Box 150. Hightstown, N. J.

Alabama Homes For particulars write THE THOMAS T. MURFORD LAND CO., Uniontown, Ala.

DAKOTA IMPROVED LAND First-class, and cheap. Write for description. David Greenway, Dartford, Wis.

ROSES, SEEDS and BULBS AT LITTLE PRICES.
A FINE ROSE Seeds, 50 kinds, 10 cts. Gem Collection Flower Seeds, 1 pkt. each, Asters, Balsams, Pansies, Petunias, Pinks, Phlox, Mignonette, Morning Glories, Sweet Alyssum, and Sweet Peas. 10 pkts., only 12 cts. 4 Bulbs Spanish Iris 10 cts, 5 Hybrid Gladioli, 10 cts, 3 lovely Tuberoses, 10 cts, the 12 for 25c. Catalog with every order. ALFRED E. CONARD, Box 11, West Grove, Pa.

A BARCAIN COLLECTION OF Flower Seeds.
10 Choice Annuals, (everybody's favorites), all new fresh seeds, sure to grow and bloom this season. Pansy, 40 colors and markings; Phlox, 20 colors; Verbena, 18 colors; Pinks, 10 colors; Petunia, 10 colors; Asters, 12 colors; Balsam, 8 colors; Sweet Peas, 12 colors; Mignonette and Sweet Alyssum. FOR 12 CENTS in stamps and the name and address of two of your friends who grow flowers, I will send, postpaid, the complete collection, one pkt. each, of the ten varieties, (enough for any ordinary garden.) Miss C. H. LIPPINCOTT, 319 and 323 Sixth Street S., MINNEAPOLIS, MINN.

SWEET CORN
VAUGHAN'S EARLY WHITE COB CORY
grown in the North, is 3 full days the earliest SWEET CORN grown. It heats all the crack earlies, no matter what their names are. Pkt., 10c.; quart, 30c., postpaid; peck, 70c.; bushel, \$2.55, by freight.
CHOICE SWEET CORNS.
Pt. Pt. Qt. Peck Bu.
Early Champion..... 10c 20c 35c 75c \$2.50
Moore's Early Concord 5c 15c 25c 65c 2.25
Old Colony..... 5c 20c 35c 65c 2.00
Country Gentleman 10c 20c 35c 85c 3.00
Hickox..... 5c 15c 25c 65c 1.75
Stowell's Evergreen 6c 15c 25c 60c 1.60
Late Mammoth..... 5c 18c 30c 65c 2.00
One packet World's Fair Sweet Peas and Pansies, mixed, and our complete 116-page Catalog for 1896—a mirror of American Horticulture—free with every order if you mention this paper.
VAUGHAN'S SEED STORE
CHICAGO: 84 and 86 Randolph St.
NEW YORK: 26 Barclay St.

Queries.

READ THIS NOTICE.

Questions from regular subscribers of FARM AND FIRESIDE, and relating to matters of general interest, will be answered in these columns free of charge. Querists desiring immediate replies, or asking information upon matters of personal interest only, should inclose stamps for return postage. The full name and post-office address of the inquirer should accompany each query in order that we may answer by mail if necessary. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Queries should not be written on paper containing matters of business, and should be written on one side of the paper only.

Onions on New Ground.—M. L. Youba, Ohio, writes: "Is it advisable to plant onions in new ground?"

REPLY:—Yes, if the soil is suitable. It should be rich, mellow and free from weeds.

Shavings for Manure.—J. B., Canton, Ohio. The baled shavings of saw and planing mills are very largely used for bedding. I prefer manure where straw has been used, but would not object to this "sawdust" manure, especially if allowed to heat and rot for awhile before being applied to the land.

Best Grass to Mix with Clover.—F. W., Agnewville, Va. The best grass to sow with common red clover for hay is orchard-grass. They ripen at the same time. The orchard-grass prevents the clover from lodging. One bushel of orchard-grass seed with six pounds of red clover is sufficient for an acre.

Peas and Oats.—F. S., Seymour, Iowa. Peas and oats make a good crop even for the grain. Surely, we can produce a larger amount of grain on the same area by planting the two together than by planting each separately. The crop when ripe can be cut with a mower and reaper, loaded and mowed away loose.

Tobacco as Insecticide and Fertilizer.—W. P., Catonsville, Md., writes: "Please tell me if tobacco dust is a good fertilizer and if tobacco ashes are a good insecticide." REPLY:—You have it turned around. Tobacco dust is a good insecticide and tobacco ashes are a good fertilizer, being rich in potash.

Broom-corn.—M. S., Calvert, Ala., writes: "At what time should broom-corn be planted, and when is it harvested?"

REPLY:—The proper time is a little later than the time for planting corn. Brush that cures to a light-green color commands the best price in the market; therefore, it should be cut before the seed ripens. The proper time is when the seed has begun to form.

Alfalfa.—W. R. S., St. George, W. Va. You can obtain alfalfa-seed from any good seedsmen. See our advertising columns, and send for catalogues. The price of seed is subject to market fluctuations. Alfalfa will do well in your state, if sown on the proper soil. It requires a deep, porous, well-drained subsoil. It prefers a light, calcareous loam, but will do well on a clay loam if the subsoil is right. Sow about twenty pounds of seed to the acre on land thoroughly prepared, and clean and free from weed-seed.

Concrete Walls.—J. U., Alma, Cal. Make the walls twelve or fourteen inches thick. Begin below the frost line. Erect scantlings as a guide for the boards forming the box, or mold. To one part of the best hydraulic or Portland cement add three parts of clean, sharp sand, perfectly free from loam or clay. Mix thoroughly, add water, and make a thin mortar of the sand and cement. Pour it into the molds and bed the stones in it, being careful not to have them touch the sides of the box. After the wall has been hardened, raise the boards and build up another layer. Ram the concrete solid in the mold. Do not make too much mortar at a time.

VETERINARY.

Conducted by Dr. H. J. Detmers.

To regular subscribers of FARM AND FIRESIDE, answers will be given through these columns free of charge. Where an immediate reply by mail is desired, the applicant should inclose a fee of one dollar, otherwise no attention will be paid to such a request. Inquiries should always contain the writer's full address. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Subscribers may send their veterinary queries directly to Dr. H. J. DETMERS, 1315 Neil Avenue, Columbus, Ohio. NOTE.—Parties who desire an answer to their inquiries in this column, must give their name and address, not necessarily for publication, but for other good reasons. Anonymous inquiries are not answered under any circumstances.

"Lumpy or Stringy" Milk.—You ask what is good for a cow that gives lumpy or stringy milk. I have to answer, frequent and thorough milking.

Balky Horse.—X. Y. Z., Michigan. Balkiness is much more of a vice than of a disease, and can be overcome only by judicious handling. In most cases, perhaps, it is incurable; therefore, to sell a balky horse, more or less worthless, for a good one is fraud.

Possibly Some Deformity.—A. L. L., White Birch, Wis. The queer actions of your pig will probably not find an explanation until the latter is thoroughly examined by a competent veterinarian, or until the same is butchered and a post-mortem examination reveals the cause.

Lice on Horses.—W. S. L., Atlantic, Pa. Wash your horses two or three times, three days apart, with a five-per-cent solution of Pearson's creoline in warm water, or with a tobacco decoction, but at the same time clean the premises, the stable, etc., in a thorough manner, and then feed plenty of good oats and attend to grooming, and the lice will disappear.

Gave Soda to His Horse.—J. L. A., Mukerkes, Oregon. The soreness in your horse's mouth has probably been produced by the soda you gave him. Sponge the sore parts in the mouth with water slightly acidulated with hydrochloric acid; but do not use any more acid than is needed to give the water a barely perceptible sour taste, and do not use it as concentrated as you used the soda.

Trouble with Milk Cows.—M. C. McC., Richmond, Ind. In fresh cases of garget, the only rational treatment consists in frequent and thorough milking. External applications are not only useless, but in most cases injurious, and applications of camphor invariably decrease the secretion of milk, and if repeated or used very strong will have the effect of stopping it altogether; hence, they are indicated only where it is intended to make a cow dry. A decrease in the secretion of milk may also be produced by the quality of the food. In your case I would advise you not only to milk three times a day, but also to feed boiled, steamed or ground oats until the cows can go to pasture. Beets, kale (not cabbage) if available, and juicy food in general, will also have a good effect.

Coughing.—W. P., Mesa, Col. Coughing is a very common symptom present in or attending most diseases and morbid conditions of the respiratory organs; indeed, in all which cause, directly or indirectly, any irritation of the larynx. It is, therefore, utterly impossible to have any diagnosis upon only one such a common symptom, especially if unqualified. Please do not ask for anything that is impossible.

Capped Knee in a Cow.—E. M., Milan, Mo. A capped knee of two years' standing in a heavy cow (Hereford) is a serious thing to interfere with. My advice would be to leave it alone. It can be removed only by a surgical operation, and this performed, the wound, by the pressure upon the knees produced by the manner in which cows lie down and get up, may become more serious than the original tumor.

Can't Get Her Fat.—E. M., Lone Dell, Mo. If you cannot get your mare fat, I cannot help you; and as you do not state any particulars, I can neither assign a cause nor suggest a remedy, because there are too many possibilities, and the causes of unthriftiness are indeed too numerous to state them. If you think your mare is sick, and the fault is not with the food and keeping, have the animal examined by a competent veterinarian.

A Hair-eating Cow.—A. H., Union Bridge, Md. Hair-eating in cattle is not as common as wool-eating in sheep, but there can be no doubt that the causes (an unsuitable composition of the food) are essentially the same. To give daily for three or four days a subcutaneous injection of muriate of apomorphine, .20 gram (about three grains) each time, and then change the food, and, if possible, the locality, constitutes the treatment.

Probably Lousy.—B. B., Mountain Home, Idaho. If your horse is not lousy, I cannot advise you. Examine the same outdoors in bright sunlight, and I hardly doubt you will find the lice. If you do, wash the horse three times—once every three days—with a five-per-cent solution of creoline in water, but at the same time do not neglect to thoroughly clean the stable, currycomb, brush, blaukets, etc.; otherwise all your efforts will be in vain.

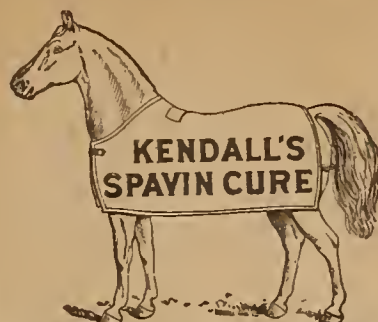
An Attack of Colic.—M. E. H., Plainview, Neb. Your horse had an attack of colic, probably brought on by the treatment he received and by being fed immediately after that run at a four-minute gait. If horses come home overheated, they should be rubbed dry and be walked about until the distribution of the blood in the organism has become adjusted again, and they should not be fed until this has taken place.—I cannot tell you the cause of stiffness in your pigs. There are too many possibilities.

Stiffened Pigs.—F. E. H., Chesaning, Mich. If your pigs are stiffened in the hind quarters, have no appetite, and if one, as you say, has died, there is a possibility that you may have to do with cases of swine-plague. Still, stiffness in hogs may be produced by many different causes, and without further particulars it is hard to tell what may be the cause in your case. If you had made a post-mortem examination of the dead pig and had noted the morbid changes, everything, very likely, would have found its explanation.

Swine-plague.—A. R. W., Decatur, Ind., and C. B. M., Ruth, Kan. Your pigs have swine-plague, or so-called hog-cholera. Nothing can be done for very young pigs, nor for those five months old, if so severely diseased as you say they are. All you can do is to separate the hogs, or pigs, yet healthy and not yet infected from the diseased ones, and to take them to a non-infected place, and exclude all communication whatever with the sick animals. Cremate all dead ones, and thus prevent an infection of the whole neighborhood.

Stringy Milk.—S. J. C., Stanleyville, Ohio. Your statement leaves me in doubt whether you have a case of garget or of stringy (ropy) milk proper. In either case, however, it will be safe to resort to frequent and thorough milking.—If you want a magnifying-glass, go to an optician; and if you desire a microscope, there are a good many first-class optical establishments in the United States—for instance, Bausch & Lomb Optical Co., Rochester, N. Y., Joseph Zeutmayer, Philadelphia, Pa., and a good many others—who will sell an outfit for from \$25 to \$1,000 and upward.

Actinomyosis.—O. N., Painesville, Ohio. What you described in your letter of inquiry is probably actinomyosis. If the tumors are movable and not in the bone, a cure will be effected by the treatment repeatedly recommended and described in FARM AND FIRESIDE. If, however, the morbid changes have their seat in the bone, and the disease is actinomyosis, there will be no prospect of recovery. Probably the morbid process originated in the frontal sinus, and since the tumors are only small, it is barely possible that the whole thing is nothing more nor less than a tooth-fistula. The case, above all, needs examination.



THE MOST SUCCESSFUL REMEDY

FOR MAN OR BEAST. Certain in its effects and never blisters. Read proofs below.

KENDALL'S SPAVIN CURE

BLUEPOINT, L. I. N. Y., Jan. 15, 1894. Dr. B. J. KENDALL CO.—I bought a splendid bay horse some time ago with a spavin. I got him for \$30. I used Kendall's Spavin Cure. The spavin is gone now and I have been offered \$150 for the same horse. I only had him nine weeks, so I got \$120 for using \$2 worth of Kendall's Spavin Cure. W. S. MARSDEN.

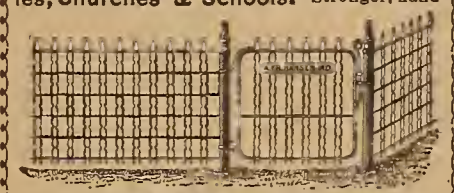
KENDALL'S SPAVIN CURE

SHELBY, Mich., Dec. 16, 1893. Dr. B. J. KENDALL CO.—I have used your Kendall's Spavin Cure with good success for Curb on two horses and it is the best liniment I have ever used. AUGUST FREDERICK.

Price \$1 per Bottle. For sale by all Druggists, or address DR. B. J. KENDALL COMPANY, ENOSBURGH FALLS, VT.

The "HARTMAN" Steel FENCE

Is intended for Lawns, Parks, Cemeteries, Churches & Schools. Stronger, hand-



somer and CHEAPER than either wood or iron. Does not mar but rather adds beauty to the lawn or garden. When set with our Self Anchoring Steel Posts it's a thing of beauty. Several heights, several widths of pickets. Write for circulars & prices. HARTMAN MFG. CO., Ellwood City, Pa. 271 Broadway, New York. 1315 Manhattan Bldg., Chicago.

Galactorrhoea.—L. W., Layton Corners, Mich. The continual dropping of milk out of the teats of your cow is probably due much more to a want of sufficient contractility of the tissues, especially of the teats, than to too much pressure from within. You may wash the teats with astringent decoctions—for instance, of oak-bark from two-year-old twigs—or even carefully inject some astringent fluid into the teats. If this does no good, you may try elastic rings; or, to be more particular, slip a broad rubber band or (perhaps better) a rubber cup shaped like a rubber nipple over the end of each teat. That the pressure must not be too great may not need any mentioning.

An Old Fistula.—C. F. C., Jameson, Mo. The treatment of an old fistula, no matter where situated, is always a tedious one, and it almost invariably meets with failure unless all the peculiarities of the case receive strict attention. It is, therefore, advisable to intrust the treatment to nobody but a competent veterinarian, and all I can do, without incurring the risk of causing disappointment and possibly doing more harm than good, is to give only such general rules as apply to all cases: (1) Any and all fistulous canals must be thoroughly explored by careful probing, so as to find out their extent and termination. (2) A dependent, or lower, opening must be provided for each of them, either by making a new opening or by splitting open the whole fistulous canal. This, of course, depends upon the parts affected and upon the peculiarities of the case. (3) The callous walls of each fistulous canal must be destroyed, either by means of caustics (sulphate of copper is suitable in many cases), with a surgical knife or with a red-hot iron. (4) As soon as the whole of each canal has thus been changed to a fresh wound, from which all exudates can escape without any impediment, these wounds can be brought to healing in the same way as any other wound, by antiseptic dressings, scrupulous cleanliness and suitable protection.

Potatoes,

Tomatoes, Melons, Cabbage, Turnips, Lettuce, Peas, Beets, Onions, and all Vegetables, remove large quantities of Potash from the soil. Supply

Potash

in liberal quantities by the use of fertilizers containing not less than 10% actual Potash. Better and more profitable yields are sure to follow.

Our pamphlets are not advertising circulars booming special fertilizers, but are practical works, containing latest researches on the subject of fertilization, and are really helpful to farmers. They are sent free for the asking.

GERMAN KALI WORKS, 93 Nassau St., New York.



WANTED AGENTS

The Handy Thill holdback book. Needed by every one driving a single vehicle. 20c brings sample pair to any one by return mail. Special inducements to all answering this. Big profits. Exclusive territory. C. D. DANIELS, Madison, O.

Mention this paper.

SOLD!

UNDER A POSITIVE GUARANTEE



to wash as clean as can be done on the 75,000 in use. washboard and with much more ease. This applies to Terrill's Perfect Washing Machine which will be sent on trial at wholesale price; if not satisfactory money refunded. Agents Wanted. For exclusive territory, terms and prices write PORTLAND MFG. CO., Box 4, Portland, Mich.

Probably Rachitis.—G. M. B., Dover, N. J. The cause of the paralytic and other symptoms shown by your pigs is not to be found so much in the pen as in the food they receive. I would, therefore, advise you to change their food, and to give them something that is sufficiently rich in phosphates and in lime salts. Similar symptoms like those you describe may also be produced by trichinosis. This becomes probable if there are trichinuous rats on the premises. You can ascertain the facts if a pig dies or is killed and you have portions of the muscles, say diaphragm and psoas muscles (tenderloin), microscopically examined. The prevention in such a case would consist in killing all the rats and in burning their carcasses.

Result of Dehorning.—U. G. S., De Graff, Ohio. In cattle, the frontal sinuses, or cavities, extend into the processes for the horns; consequently, if the latter are sawed off, the frontal sinuses will be opened and their lining membrane will be apt to become inflamed and suppurating, as appears to be the case with your cow. This can only be prevented if the whole operation is performed in a strictly aseptic manner, and the opened cavity is immediately protected by an antiseptic dressing. You may succeed in stopping the supuration and in bringing the wound to healing if you first inject warm water into the frontal sinus until it flows off through the opening in the process for the horn and from the nose. This done, inject an antiseptic—perhaps a one-and-one-half-per-cent solution of carbolic acid in water of a temperature of 98° Fahr. That the solution, as well as the water first injected, must be absolutely clean is self-evident. This done, close the wound with absorbent cotton saturated with a two-per-cent or three-per-cent solution of carbolic acid, or dusted over with iodoform, and then keep the cotton in place and protect the whole by means of a bandage. To make the latter more secure and more impervious, you may give it a coat of tar after it has been put on.



"For that leaky, dripping roof, Use Neponset Water-proof."

Cover and sheathe your barns, sheds, henhouses—all your outbuildings—greenhouses—hotbeds—with NEPONSET. With it you can erect excellent buildings at low cost, and costs very much less than shingles. 500 square feet only \$5.00—tacks and tin caps included. Send for a sample.

Neponset Black Building Paper for inside lining. Better than tarred paper; odorless, clean, economical.

We will send you Free of expense Samples and Particulars.

F. W. BIRD & SON, Sole Mfrs. East Walpole, Mass.

NEPONSET Red Rope Water-Proof FABRIC.

For Roofing and Side Covering.

FLORIDA.

SOME VERY INTERESTING LETTERS.

TALALA, IND. TER.
EDITOR FARM AND FIRESIDE,
Springfield, Ohio.

Gents:—I have been quite interested of late in reading the advertisements in your paper of Florida. Of course, I could not help but think that you had things concerning that country considerably exaggerated, so myself and wife just took a trip down there to see for ourselves, and to our surprise we found everything just as you have represented, if not better. Of course, we found Florida like all other states—found some poor country; but the Tallahassee country we just thought the most delightful country that we ever saw.

I am now fifty-four years old, and have followed farming all my life, and I think I know good land when I see it, and I will just say to all the readers of your valuable paper that I don't think I ever found a better country for a poor man (or rich one, either) to make a living in than Leon or Wakulla Counties. I would say the land is very productive, capable of raising anything that a farmer wants to raise. The country is rolling, with fine springs of pure running water the year round. I did not taste a bit of bad water while there, and a more healthful and delightful climate is not to be found any place on this earth, and a more clever, hospitable class of people are not to be found than we found in and around Tallahassee. In fact, we just fell in love with the country and all the people, so much so that we purchased a tract of land six miles from Tallahassee, and are going there to spend the rest of our days.

(Signed) W. F. HIATT AND WIFE.

LAKE BLUFF, ILL., Feb. 24, 1896.
TO THE CLARK SYNDICATE,
Tallahassee, Florida.

Gentlemen:—Since our arrival home, with a foot of snow and twenty degrees below zero to greet us and give us a cold welcome, we have had every chance to be more and more favorably impressed with the beautiful and delightful climate and country we left when we came away from Leon County, Florida, in general, and Tallahassee in particular. I have for many years been anxious to visit the South, and especially Florida, but never got started till this winter, when, in company with my wife, we made the trip.

I will not attempt to describe the intervening country from Illinois to Florida, for it would not be as interesting, perhaps, as a description of the particular section of country that we thought fine enough to locate our future home in. I will frankly say that we left here with no thought of purchasing a home in the South, but when we got to Tallahassee and noted the beautiful country surrounding it for miles in every direction, we saw a fine chance for live, energetic men to invest in land at a very reasonable price. This truly is the land of no winters, where flowers are in bloom twelve months in every year. Fruit of nearly every kind grows to perfection, where the gardener can make a fortune; where the farmer can raise larger crops than his Northern cousins can, acre for acre, with less work and expense; where the dairyman can get better returns from his cows, better prices for his products, and have his cows in prime form all the time, with no biting frosts and sleety snow to face when caring for them; where the stockman can raise as fine Berkshire hogs as in Illinois, and no cholera to guard against and with less expense; where poultry of every kind will thrive and do splendidly in spite of every negligence on the part of the owner; where sheep are healthy, and a big paying industry; where lumber and building material are to be had for half of what it costs in Illinois; where a climate prevails the entire year that can't be beat in the world; where the mercury never forces the top or bottom out of the thermometer, as it so often tries to do in Illinois; where tornadoes and droughts are unknown, and, in short, where a man with snip and enterprise can make a better living, and make it far easier, than in any Northern state, unless he is in some sort of occupation like manufacturing ear-muffs for home consumption. Here is everything in one's favor. Health, happiness and long life can reasonably be expected here, with a better assurance of enjoying them than in any state in the Union. I have been in

nearly all the states, and never found one so nearly the ideal state for home life, if the climate, soil and general environments can make a happy home. But such a land is Leon County, Florida, with the best of water for stock and house.

I must hasten on, or some of my Northern friends will think I am employed by the land commissioner of Florida to extol the good qualities of that state, but this is not so; I am simply giving my honest convictions as I have them. We were so well pleased that, in spite of the fact that we had no thought of buying land when we left home, we have bought our future home in Tallahassee; not so large an investment as many are daily making, for tens of thousands of acres are being bought every month by Northern and Eastern and even Western men. Our patch consists of about ninety acres known as Magnolia Grove, half a mile from the state capital of Florida, where is located one of the best state institutions in America. Some hundreds of students are here preparing for a life of usefulness. I can also say with pleasure that the Clark Syndicate deserves to succeed in their endeavor to build up the South, for in this age of deceptive advertising it is gratifying to do business with a company that will not lie for the sake of selling its lands, but adheres strictly to facts. Such a company is the Clark Syndicate. Its officers and managers are perfect gentlemen in every sense of the word, doing all in their power to make people enjoy their visits, sparing neither time nor expense in administering to the comfort and adding to the pleasures of the visitors.

Whatever influence we may have with our Northern friends will go in favor of Leon County, Florida, and the Clark Syndicate. Also, if any one desires additional information as to Leon County, soil, water, climate, crops, schools, churches, or anything that we are able to give, it will be cheerfully given, as far as we are well enough informed to do so. Yours truly,
(Signed) MR. AND MRS. B. J. CLOES.

TALLAHASSEE, FLA., Feb. 28, 1896.
FARM AND FIRESIDE,
Springfield, Ohio.

I planted one hundred acres of my farm in Leon County, Florida, in oats during February, A.D., 1895. In June I harvested the crop, which averaged forty bushels to the acre; then turned under the stubble and harrowed thoroughly. In September and October I cut an average of two and one half tons of hay per acre (beggard-weed and crab-grass). Am now selling this hay at twenty dollars per ton, and my books show orders for ten tons ordered at this price to-day. I will have no difficulty in disposing of the entire crop at this price. I feed a great many horses and mules, both on my plantation and at my livery-stables, and can say from experience that the hay above mentioned is in every way equal to the very best timothy ever brought to this market.

Yours very truly,
(Signed) T. J. ROBERTS.

EXCURSIONS TO FLORIDA.

We have monthly excursions to Tallahassee, Florida. Usually, these take place on the first or second Tuesday of the month. We make the very low round-trip rate from Chicago of \$32.80, and from Cincinnati of \$25.90. We leave Chicago over the "Big 4" route, and Cincinnati over the "Queen & Crescent," on the Limited Florida Train, passing by daylight through the beautiful scenery of the Blue Grass region and the famous battle-fields in the neighborhood of Chattanooga. In fact, we make almost an entire daylight ride from Cincinnati to Florida, giving one a most excellent opportunity to see the country.

If you cannot come to Chicago or Cincinnati and join our excursion, go to your nearest ticket agent and get through rates from him on the special excursion days. Then, if you will advise us when you leave, we will have our manager at Tallahassee meet you at the depot. He will show you every courtesy and attention, and arrange free transportation for you over our own railroad lines while you are visiting Tallahassee.

People wishing to go from the East can make the trip via the Clyde Steamship Line from New York or Philadelphia, and the fare for the round trip (first-class) is \$46.70. The round-trip fare from Boston via the Savannah Steamship Line is \$49.50. This price includes meals and berth on board steamer to Jacksonville, Florida, and from there it is only a short ride to Tallahassee.

Address all inquiries to
CLARK SYNDICATE COMPANIES,
Care of FARM AND FIRESIDE,
1643 Monadnock Block, Chicago, or
108 Times Building, New York City.

Our Miscellany.

THE poorest man is not the one who has the least, but the one who wants the most.—*Ram's Horn.*

HIT takes mighty good eyesight to see de debil t'rough a wall oh money.—*Arkansaw Thomas Cat.*

AT one of our public schools, a bright girl read a composition on boys. It was as follows: "The boy is not an animal, yet they can be heard to a considerable distance. When a boy hollers, he opens his big mouth like frogs; but girls hold their tongues till they are spoke to, and then they answer respectable and tell just how it was. A boy thinks himself clever because he can wade where it is deep, but God made the dry land for every living thing and rested on the seventh day. When the boy grows up he is called a husband, and then he stops wading and stays out nights; but the grew-up girl is a widow and keeps house."—*San Francisco Ware.*

A NEW bunco game, new at least in the neighborhood where it is being successfully worked, is costing the farmers and country storekeepers of Lane county, Oregon, a good deal of money. The swindler claims to be a Treasury detective looking for counterfeit coin. He asks the farmers and storekeepers to submit their coin for his inspection. He puts on the silver dollars a chemical solution which turns them black, declares them spurious, and takes them with him. He also impressively warns his victims that they are liable to arrest for having counterfeit money in their possession, and causes them to keep very quiet about the matter, thus helping him along in his work of bunco.

OF all the sovereigns of the world, the Shah of Persia is said to possess the largest treasure in jewels and gold ornaments, it being valued at \$60,000,000. The chief object of value is the old crown of Persian rulers, in the form of a pot of flowers, which is surmounted by an uncut ruby the size of a hen's egg. The diamonds in another symbol of his rank are said to weigh almost twenty pounds. There is also a jeweled saher valued at \$1,600,000. Another thing that the Shah prizes is a silver vase ornamented with 100 emeralds, whose equals, it is said, are not to be found in the world. In the collection there is a cube of amber, which tradition says fell from heaven in the days of Mahomet, and insures the possessor against bodily harm.

THE not uninteresting distinction is claimed for the town of Deseronto, in Canada, where there are several extensive lumber-mills, of being partially lighted by gas made from sawdust. In carrying out this plan, as stated, the sawdust is charged in retorts which are heated by wood fire, the gas from the retorts passing into a series of coils, and thence into the purifiers, which are similar to those used for coal-gas. Lime is the principal purifying agent employed, and when it passes out of the retorts, the gas possesses an odor much less disagreeable than that of ordinary lighting-gas, and resembles somewhat that of the smoke from a fire of green wood or leaves. The works in use are small, turning out daily about nineteen thousand cubic feet of gas, for the production of which quantity some two tons of sawdust are required, and a man and boy furnish all the labor that is needed for the purpose. The gas in an ordinary burner gives an illumination of about eighteen candle-power, and the best quality comes from resinous woods.—*New York Sun.*

REMARKABLE PROPOSITION.

We will give all the following free: 77 complete interesting novels, 160 varieties choice fresh flower seeds, 57 magic tricks and games, 186 puzzles, 20 pieces of music. All free if you send 20 cents, stamps, to pay for trial subscription to our new magazine. Address FIRESIDE GEM PUB. Co., Waterville, Maine.

GENIUS.

Men give me some credit for genius. All the genius I have lies in this: When I have a subject in hand, I study it profoundly. Day and night it is before me. I explore it in all its bearings. My mind becomes pervaded with it. Then the effort which I make the people are pleased to call the fruit of genius. It is the fruit of labor and thought.—*Alexander Hamilton.*

HOW I MAKE MONEY.

The times are hard, but there always seems to be opportunities for those who are willing to work. In the past month I have made \$175 above all expenses selling a self-heating Flat Iron for the Climax Mfg. Co., 45 Starr Ave., Columbus, O., and I have attended to my regular business besides. I never saw anything that gave the satisfaction that this iron gives. One should not complain when he can make from six to ten dollars a day, right at home. I have not cauvassed any, so anxious are people for this iron that they send after them; any lady or gentleman can do as well as I am doing, for anyone can sell what everybody wants to buy. I think we should inform each other through the newspapers of opportunities like these, as there are many willing to work if they knew of an opening. If you will call at the Climax Mfg. Co. office you can see this iron before you buy; if you can't call write for particulars; after you have tried the business for a week publish the results for the benefit of others. MATTIE B.

ADVANCE OF SCIENCE.

Burgling Bill (in a husky whisper)—"Here's de safe. Got de putty, an' de dynamite, an' de jimmy all ready?"
Chris, the Cracksman—"Jimmy, nothin'! Git out o' de way. I'm goin' to shoot an X ray troo de combination."—*Chicago Tribune.*

FOR ST. PAUL AND MINNEAPOLIS.

The "North-Western Limited," sumptuously equipped with buffet, smoking and library cars, regular and compartment sleeping cars, and luxurious dining cars, leaves Chicago via the North-Western Line (Chicago & North-Western R'y) at 6:30 P. M. daily, and arrives at destination early the following morning. All principal ticket agents sell tickets via this popular route.

PRECOCITY.

"Jabber's son, they say, could talk when only two weeks old."
"That's nothing. The Bible says Job cursed the day he was born."—*Judge.*

FREE TREATMENT MORPHINE, OPIUM HABITS.

TO THE EDITOR:—To prove that we have a painless and certain cure for opium and morphine habits, will send free sample treatment to any person honestly desiring to be cured. Golden Specific Co., Cincinnati, Ohio.

FILL YOUR TEETH Dr. Truman's Crystalline STOPS PAIN & DECAY.

RUBBER GOODS OF EVERY DESCRIPTION BY MAIL. Send for catalogue. A. U. BETTS & Co., 75 Water St., Toledo, Ohio.

SALESMEN wanted to sell to dealers; \$100 monthly and expenses; experience unnecessary; enclose stamp. ACME CIGAR COMPANY, 96 Fifth Ave., Chicago

WANTED—Good man, each territory. Some ability, good references, habits, etc. Moderate pay first year. Address with stamp, F. Squaw Co., Cincinnati, Ohio.

FREE PORTFOLIO, 16 BEAUTIFUL VIEWS. Plates to produce the Series cost \$12.00. Send 20 cts. in stamps for a subscription to our Magazine, and we will mail you the PORTFOLIO FREE. HOUSEHOLD QUEST, 358 Dearborn St., Chicago.

600 SECOND-HAND BICYCLES ALL MAKES AND MODELS at your own figure. Best new makes at greatly reduced prices. Agents wanted. Big money. Send at once for descriptive bargain list. G. R. Mead & Prentiss, Chicago.

Buy our "ECLIPSE" Roofing Paint and "ECLIPSE" Painted Steel

ROOFING

ABSOLUTELY GUARANTEED FOR 5 YEARS. Write CURTIS STEEL ROOFING CO., 73 Styler St., Niles, O.

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And STEREOPTICONS, all prices. Views illustrating every subject for PUBLIC EXHIBITIONS, etc. A profitable business for a man with a small capital. Also, Lanterns for Home Amusement. 265 page Catalogue, free. McALLISTER, Mfg. Optician, 49 Nassau St., N. Y.

ENGINES UPRIGHT and HORIZONTAL, From 3 H. P. Up.

Prices Low. Terms Liberal. Send for Pamphlet and state wants to JAMES LEFFEL & CO., Springfield, Ohio.

BOILERS

WE WILL GIVE a beautiful picture, size 16x22 inches, in rich colors and gold, absolutely free to any person who will promise to show it and try to get orders at 25c. each. When you have taken 6 orders we will send six pictures on credit, which you deliver and get paid for; you send us one half the money and keep the other half for your trouble. Send 12c. to pay postage & adv'tg. Home Art Picture Co., Chicago, Ill.

DO YOU INTEND BUILD TO

SEND YOUR NAME AND ADDRESS AND GET OUR BOOK "SLATE ROOFS" WHY THEY ARE THE BEST AND CHEAPEST. MAILED FREE. Bangor Excelsior Slate Co., Easton, Pa.

THE EXCELSIOR CARPET STRETCHER and TACK HAMMER.

Great preventive of profanity. A child can manipulate it. SIMPLE, STRONG and COMPACT. Post-paid for 65 cents stamps. Live agents make big money. Outfit free with first order for one dozen or more. R. MONTROSS, Sole Mfr., Galien, Mich.

WALL-PAPER

Samples mailed free from the largest concern in U.S. Prices 30% lower than others. PAPERS from 2 1/2c. to \$3 1/2 a Roll—8 Yards. DEALERS can have large books by express with TRADE DISCOUNTS. A MILLION ROLLS—An Unlimited Variety. 982-984 Market St. 415 Arch St. PHILADELPHIA. KAYSER & ALLMAN

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WARRANTED FOR 20 YEARS IN DUEBER CASE! A Genuine ELGIN, WALTHAM or HAMPDEN, finely jeweled movement, in a finely engraved, Dueber Solid Gold Stiffened, Gents fullsize, Hunting case for \$5.65 makes a serviceable, accurate timepiece, far below actual value. You know these movements, and that "Dueber" are Not Cheap Gold Filled Cases. Ladies size Springfield or Trenton movements for \$4.50. In order to sell these elegant watches in every locality we will send by express C.O.D. allow examination and if as represented pay agent. Order at once. This watch cannot be sold by dealers for less than \$15. This offer will not be made again. NATIONAL JOBBER CO., 47 Mason's Temple, Chicago

CANCER

and Tumors scientifically treated and cured. No knife. Book free, 25 years experience. Dr. L. H. Grady, 118 W. 7th St., Cincinnati, Ohio.

Smiles.

A ROMANCE OF TO-DAY.

"Where are you going, my pretty maid?" "Into 'society,' sir," she said.

JED SPILKINS' TANDEM.

Jed Spilkins owned a "trottin' boss" that used to go so fast It fairly took your breath away to see him flying past.

Jed "felt his oats" immensely as he drove about the town; He knew there wasn't anywhere a nag he couldn't down.



One day a fellow on a wheel came riding through the place, And Jed, he ran against him, and he bantered him to race.

For weeks Jed didn't show himself, and everybody said That his defeat so worried him it sort of turned his head;

For Jed (I hope the reader won't presume I'd tell a lie) Was one of the immortal few that were not born to die;

ANOTHER OF LINCOLN'S JOKES.

THIS is a brand-new Lincoln story, and true: President Lincoln reached Meade station, near Petersburg, soon after a serious battle, in which about 2,000 confederates were made prisoners.

"Mr. Lincoln," said Gen. Meade, "I guess Ruggles did not overestimate the number of men captured."

EQUAL TO THE EMERGENCY.

A hardware salesman recently attempted to get up a flirtation with a dining-room girl at the Morton house. She paid no attention to him until he called her to his side and said: "You remind me of my sister."

IN 19—.

"Do you know—" He blushed coyly, then hid his face behind his hair. "This is leap-year, and I am half tempted to take advantage of one of its privileges?"

SUPERFLUOUS HAIR.

I have a sure, quick remedy To prove it, I will send a \$1.00 bottle, sealed, free. Address Mrs. J. De Vere, P. O. Box 494, Philadelphia, Pa.

BUSINESS IS BUSINESS.

Helen—"Have you made a leap-year proposal to Jack yet?" Ethel—"Yes, indeed."

RIGHT WAY UP.

Cholly Chumpleigh (reading)—"In time of distress, many a careful housewife goes down into her stocking—" Tottie Twinkletoes (interrupting) — "How silly! Of course she does. Do you suppose she stands on her head when she puts them on?"

LITTLE BITS.

The average man loves industry. It nearly kills him to see other people so inactive.—Cleveland Plain Dealer.

"Mama," observed Edith, complacently surveying herself in the mirror, "how much prettier God makes folks now than he used to!"

Friend—"I see you are advertising your soap more extensively than ever." Soap man—"Yes, we've hired an extra poet laureate."

She—"I wonder what makes the Mediterranean look so blue?" He—"You'd look blue if you had to wash the shores of Italy!"

First westerner—"Did ye hear that Tornado Pete committed suicide?" Second westerner—"How did he do it?"

She—"What do you mean, sir, by kissing me? What do you mean?" He—"Er—nothing."

Citizen—"Colonel, I want to ask you about that Patrick Henry you were alludin' to in your speech—the one that said 'Give me liberty or give me death.'"

She—"All we can do is to take a trip to Nice."—Fliegende Blätter.

"Just to think of it!" she said, proudly, as the voice of her son rose above all the others in the college yell.

"Just to think of what?" asked her husband. "Hiram and all those other boys conversing in Greek just as natural and easy as if it was their natural tongue."

It was a stormy night, and the thunder now and then made the little girl timid. Mama told her it would not hurt her, that God would stay with her, then kissed her as she sleepily turned in her little bed.

"Please, mama, you come and stay up here with God, and let me go down with papa."

"I observed, Brother Rockworthy," said the Rev. Dr. Fourthly, "that when I spoke in my sermon yesterday of the evils of gambling in stocks, and expressed the hope that no member of my congregation ever frequented places where such gambling was made a business, you slapped your thigh emphatically. I am glad if the sentiment met your approval."

"Why—aw—the fact is, doctor," replied Brother Rockworthy, "I—I suddenly remembered where I had left my umbrella."—Chicago Tribune.

"Every man has his price," sententiously announced the philosopher of the all-night drug-store, where the street railroad franchise was being discussed.

"Well," said the wit of the establishment, "I wish somebody would discover my price and offer it to me."

"My boy," solemnly remarked the perfumery drummer, who had not spoken before that evening, "there is no smaller coin made than a cent." And for several seconds there was no sound heard save the drip, drip of the real mineral-waters from the hydrant.—Buffalo Express.

St. Vitus' Dance. One bottle Dr. Fenner's Specific cures. Circular, Fredonia, N. Y.

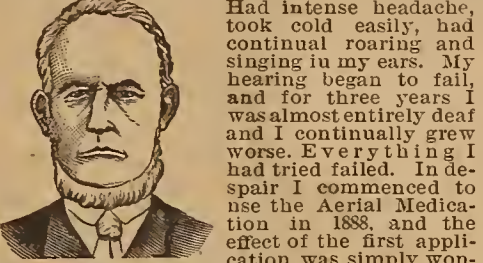
This is how a high-school girl recently parsed the sentence, "He kissed me:" "He," she began, with a fond lingering over the word that brought the crimson to her cheeks, "is a pronoun, third person, singular number, masculine gender, a gentleman and pretty well fixed, universally considered a good catch. 'Kissed' is a verb, transitive, too much so, regular every evening, indicative mood, indicating affection, first and third persons, plural number, and governed by circumstances. 'Me'—oh, well, everybody knows me." And she sat down.

It appears to thoughtful minds that God called Abraham Lincoln to rise from the log cabin in the wilderness to take the helm of the new American nation in its crisis hour.—C. A. Payne.

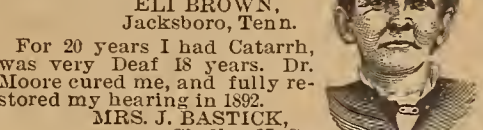
Alcock's Porous Plaster. If you want a sure relief for pains in the back, side, chest, or limbs, use an Alcock's Porous Plaster. BEAR IN MIND—Not one of the host of counterfeits and imitations is as good as the genuine.

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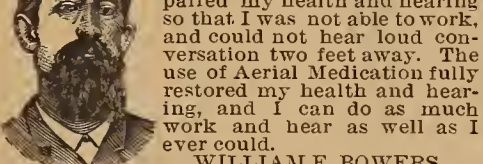
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For 20 years I had Catarrh, was very Deaf 18 years. Dr. Moore cured me, and fully restored my hearing in 1892.



Thirty years ago I had risings in my ears which developed into one of the worst cases of Chronic Catarrh, and gradually impaired my health and hearing so that I was not able to work.



Medicines for 3 Months' Treatment Free. To introduce this treatment and prove beyond doubt that it will cure Deafness, Catarrh, Throat and Lung Diseases, I will, for a short time, send Medicines for three months' treatment free.

J. H. MOORE, M. D., Cincinnati, Ohio. N. B.—This offer will expire May 1st, 1896.

AGENTS, perfumes, etc., on credit. 150 per cent Profit. Ex. Pd. Terms free. HERBENE CO., Box 64, Station L, New York.

WILL YOU distribute Circulars and samples? No canvassing salary and expenses to travel. Include stamp THE CO-OPERATIVE CO., 517 6th Ave., New York.

MEN and BOYS wanted to distribute circulars, samples of tobacco, medicines, newspapers, etc. \$3 to \$5 a day; no canvassing, hustlers wanted. Send 2c stamp. CIRCULAR ADV. CO. Kans. City, Mo.

LADIES MAKE BIG MONEY selling our Mackintosh Skirt and other new goods. Fresh territory. Be first. Catalog free. LADIES SUPPLY CO., 3118 Forest Ave., Chicago.

AGENTS to sell cigars to dealers; \$18 weekly, experience not required. Samples free. Reply with 2-cent stamp. NATIONAL CONSOLIDATED CO., Chicago, Ill.

\$95 WEEKLY \$5,000 yearly, no experience required, failure impossible; our scheme a new one: particulars free. Address S.S. Ware Co., Box 5308, Boston, Mass.

\$50 a week. 10 fast sellers; agents wanted; catalogue free; write Brewster Mfg Co., Holly, Mich.

\$525 Agent's profits per month. Will prove it or pay forfeit. New Articles just out. \$1.00 sample and terms free. Try us. CHURCH & SON, 28 Bond St., N. Y.

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COINS If you have any rare American or foreign coins or paper money issued before 1878, keep them and send two stamps for Illustrated Circular No. 20. Fortune for somebody. Numismatic Bank, Boston, Mass. Coin Dept. K. K.

WOULD YOU Like a permanent position and \$150 monthly, if so write us at once. We will send you full particulars Free, or a valuable sample of our goods in Sterling Silver upon receipt of Five Two-cent stamps for postage, etc. Address Standard Silver Ware Co., Boston, Mass.

CENT for a postal card is all it will cost you to write us for the best selling specialty ever offered. They are used every day by everybody in every household. We pay express, give an elegant premium and instruct you free. Any lady or gent can make \$4 a day easy. If you want the job, write at once. PEOPLES MFG. CO., 103 Valpey Bldg., Detroit, Mich.

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WE TRUST YOU with seven (7) of the beautiful oil painting oleographs, most of them 22x28 inches, all ready for framing. Price is \$1, but do not send money until you get the pictures. Send 17 cents for postage and expense. You agree to send balance (\$3 cents) or return all pictures. Agents write. New England Art Co., Dept. 25, Fairfield, Me.

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FREE We will send one of these finely engraved Silver Plated belt pins FREE to each and every person who cuts out this advertisement and sends it in a letter with name & address to LYNN & CO., 48 BOND ST., NEW YORK.

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ON 30 DAYS' TRIAL. THIS NEW ELASTIC TRUSS Has a Pad different from all others, is cup shape, with self-adjusting Ball in center, adapts itself to all positions of the body, while the ball in the cup presses back the intestines, just as a person does with the finger. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Send by mail. Circulars free. C. H. EGGLESTON & CO., 1208 MASONIC TEMPLE, CHICAGO.

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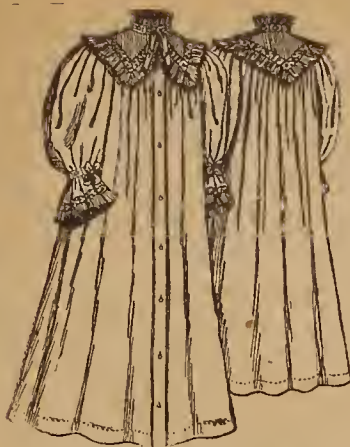
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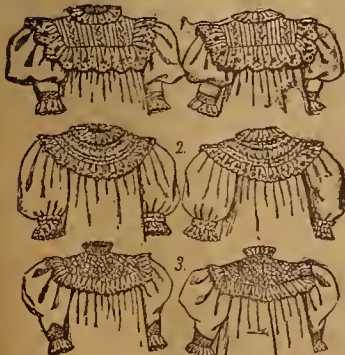
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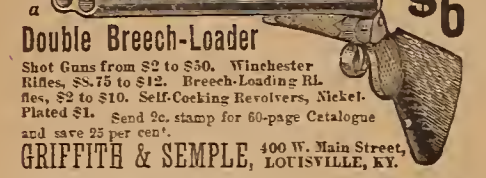
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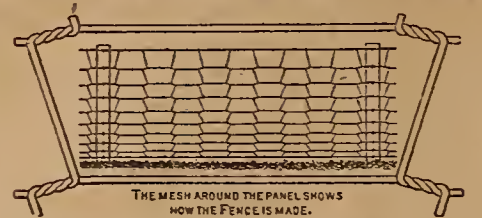
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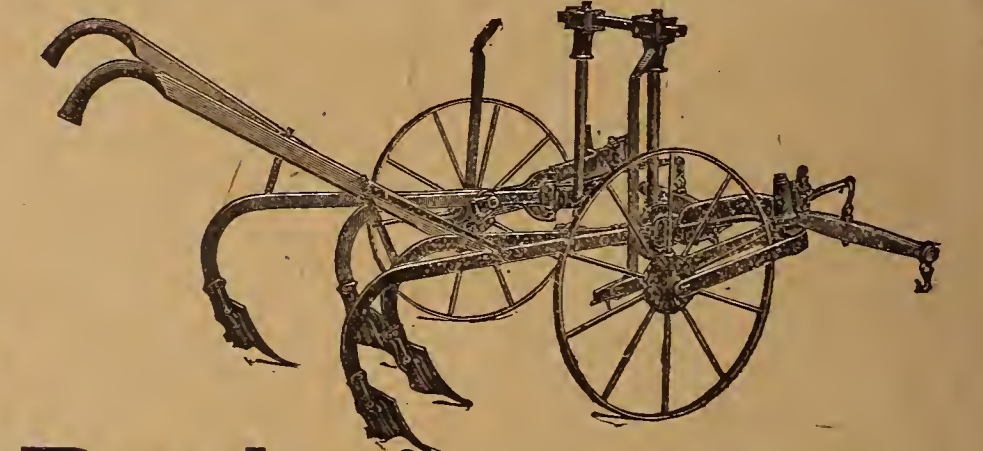
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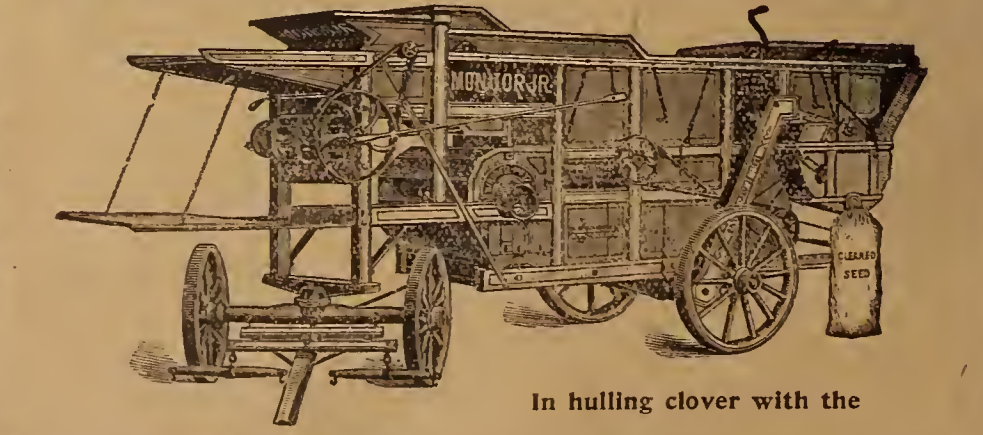
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I received the teaspoons in due time, and I am sure they are handsome and nice. I kindly thank you for them. I do not know how it is that you can give such lovely presents, for I think the magazine worth double the price you ask for it.
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FOR 35 CENTS we will send this paper the remainder of this year and any one of the following premiums:

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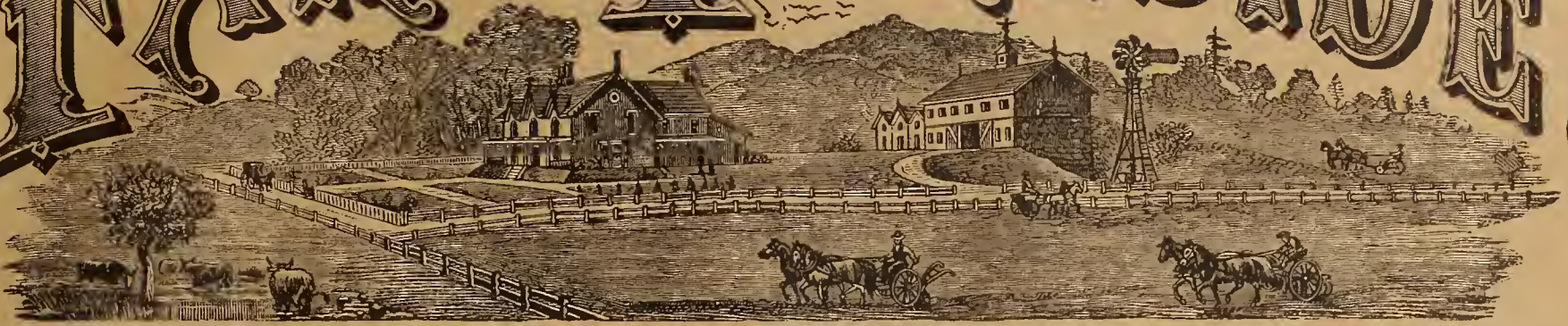
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A RECENT publication of the Department of Agriculture gives the principal statistics relating to the dairy industry of the United States, and makes the following estimate for 1895:

"At the close of the year 1895 the cows which may properly be regarded as dairy animals constitute about one third of all the neat cattle in the United States, and are about 17,000,000 in number. Dividing these roughly according to their principal products, it may be considered that 11,000,000 cows are primarily butter-producers, 1,000,000 cows produce all our cheese, and the milk from 5,000,000 cows is consumed by the families of their owners, or on the farms where produced, or is sold to be consumed as milk, fresh or condensed. These estimates, with products and values added, may be tabulated as follows:

Cows.	Product.	Rate of product.	Total product.	Rate of value.	Total value.
11,000,000	Butter.....	125 pounds	1,375,000,000 pounds	20 cents	\$275,000,000
1,000,000	Cheese.....	280 "	280,000,000 "	8 "	22,400,000
5,000,000	Milk.....	350 gallons	1,750,000,000 gallons	9 "	157,500,000

"This gives the grand total value of the dairy products of the country as \$454,900,000. If to this be added the skim-milk, buttermilk and whey, at their proper feeding value, and the calves yearly dropped, the annual aggregate value of the products of our dairy cows exceeds \$500,000,000. This is regarded as a conservative estimate, and does not include the manure product, which has a very large but quite uncertain value.

"If the value, per head, estimated for cows in this country, namely, \$22 to \$25, is accepted, these animals produce nearly fifty per cent more than their own value, annually. But there is an old farm rule, which has reasonable basis, that a cow is worth whatever she will produce in a year, including her calf. At this rate the average value of the dairy cow in the United States must be about \$30.

"The foregoing estimates are based upon an average yield of 350 gallons, or about 3,000 pounds, of milk yearly by each cow. This is rather more than shown by the census tables, but those exclude the large number of town cows, which would materially raise the average milk product.

"Assuming that the different products of the average dairy cow in America do not exceed much, if at all, the foregoing estimates, it is evident that the average cow of the country is far below a standard which is desirable and entirely practicable. The tables show that there has been a gradual improvement in the average cow product, especially during the last two or three decades. But the progress is by far too slow.

"A very good annual average yield of milk is 5,000 pounds, instead of 3,000, and 200 to 225 pounds of butter per cow, instead of 125 pounds. Many herds kept in a plain, practical farm fashion attain still better results. There are manifestly many cows in the country, probably some millions, that do not produce the value of their annual cost, however cheap and wastefully poor their keeping may be. It is apparent that if but two cows were kept,

in place of every three of the existing average quality, the aggregate products of the dairy industry of the country would be increased more than ten per cent, while the aggregate cost to their owners ought to be less, and probably would be.

"Every possible influence should be exerted to induce dairy-farmers to weed out their herds and keep fewer cows, and better ones. At least, the average quality of cows kept for dairy purposes should be brought up to a respectable and profitable standard. For the present, the cow-owner may reasonably require something over two gallons of milk per day for four months, then two gallons a day for the

next four, and at least two months more in milk during the year, with constantly decreasing yield. This provides for an annual average yield of 5,000 pounds of milk, or about 575 gallons, which is a fair ideal standard for the dairy cow in the United States."

It is a problem how the farmer who keeps the average cow and other average and unprofitable stock and raises average crops manages to eke out an existence at all.

THERE is a movement under the auspices of the Tariff Commission League to hold a national convention of the advocates of the removal of the tariff question from partizan politics. It is one thing to get from a commission of fair-minded men a just and comprehensive tariff scheme, but another to get a Congress that will accept it and enact it into law without amending it to death. The commissioners appointed in 1882 by President Arthur were men of high standing, familiar with the diversified interests of the country, and represented different parts of the country and both leading political parties. In presenting their report they said: "In performance of the duty devolved upon them, all the members of the commission have aimed, and, as they believe, with success, to divest themselves of political bias, sectional prejudice, or consideration of personal interest. It is their desire that their recommendations shall serve no particular party, class, section or school of political economy."

In his "Recollections," Senator Sherman, referring to these commissioners, says: "They transmitted their report to the speaker of the House of Representatives on December 4, 1882. It was a clear and businesslike statement of their action, accompanied by schedules of duties on imported goods recommended by them, with suggested amendments to existing customs laws, with testimony taken by

them, and with tables and reports covering, in all, over twenty-five hundred printed pages. It was by far the most comprehensive exposition of our customs laws and rates of duty that, so far as I know, had ever been published. It was quickly printed for the use of the finance committee of the Senate, before whom the bill to reduce internal taxation was pending. If the committee had embodied in this bill the recommendations of the tariff commission, including the schedules without amendment or change, the tariff would have been settled for many years. Unfortunately, this was not done, but the schedules prescribing the rates of duty and their classification were so radically changed by the committee that the scheme of the tariff commission was practically defeated. Many persons wishing to advance their particular industries appeared before the committee, and succeeded in having their views adopted. The Democratic members seemed to take little interest in the proceeding, as they were opposed to the adoption of the tariff as part of the bill.

"When the bill was reported to the Senate it was met by two kinds of opposition—one the blind party opposition of free-traders, led by Senators Beck and Vance, the other (much more dangerous), the conflict of selfish and local interests, mainly on the part of manufacturers, who regarded all articles which they purchased as raw material, on which they wished the lowest possible rate of duty or none at all, and their work as the finished article, on which they wished the highest rate of duty. In other words, what they had to buy they called raw material, to be admitted without protection, and what they had to sell they wanted protected. It was the combination of the two kinds of opposition that made the trouble.

"The Democratic senators, with few exceptions, voted steadily and blindly for any reduction of duty proposed; but they alone could not carry their amendments, and only did so when reinforced by Republican senators, who, influenced by local interest, could reduce the duty at their pleasure. In this way, often by a majority of one, amendments were adopted that destroyed the harmony of the bill. In this way, iron ore, pig-iron, scrap-iron and wool were sacrificed in the Senate. They were classed as raw materials for manufacturers and not as manufactures. For selfish and local reasons, tin plates, cotton-ties and iron and steel rods for wire were put at exceptionally low rates, and thus were stricken from the list of articles that could be manufactured in this country. This local and selfish appeal was the greatest defect of the tariff bill. I do not hesitate to say that the iron and wool sections of the bill, as it passed the Senate, were unjust, incongruous and absurd. They would have reduced the iron and steel industries of the United States to their condition before the war, and have closed up two thirds of the furnaces and rolling-mills in this country. They were somewhat changed in committee of conference; but if they had not been, the only alternative to the manufacturers would have been to close up or largely reduce the wages of labor."

WITH THE VANGUARD

DEPRESSION in agriculture affects every other great industry in the country. Low prices for farm products lessen the farmer's ability to purchase the products of manufacturers. On the other hand, depression in manufacturing lessens the ability of those employed therein to purchase full supplies of both manufactured and farm products. In brief, the industries of the country are so related that an injury to one is an injury to all. Agriculture, manufacturing and mining go hand in hand. Only when each is prospering can the country be in its most prosperous condition, and the basis of all prosperity is prosperity in agriculture.

"There is depression in agriculture," says the assistant secretary of agriculture, "because there is depression in every other business. The farmer is no worse off than other workers. The farmer is in a very prosperous condition, considering his investment. The forty-four per cent who are farmers feed the fifty-six per cent who are not, and have some \$400,000,000 worth to export. The poorest of deserted farms would give a living if rightly managed. The American farmer must change his way of doing business, and put more brains into his work. He has robbed nature's bank of natural fertility, and must go slow while building the account up. Fortunately, he has nature to help him. No other business has the same help. I made a comparison of the producer of the crude material, as grain, and the manufacturer of it into beef and pork and butter, and found that it was the manufacturer that made the money. Farmers need to become manufacturers."

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When money is received, the date will be changed within four weeks, which will answer for a receipt.

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The Advertisers in this Paper.

We believe that all the advertisements in this paper are from reliable firms or business men, and do not intentionally or knowingly insert advertisements from any but reliable parties; if subscribers find any of them to be otherwise we should be glad to know it. Always mention this paper when answering advertisements, as advertisers often have different things advertised in several papers.

Grass and Pork. Bulletin No. 40 of the Utah experiment station treats of the value of grass and its relation to exercise in the production of pork. Results of experiments in hog-feeding, extending over two years, are reported as follows:

- With full grain rations.
- With part grain rations.
- Without grain.

The bulletin gives tabulated records of the experiments, with comments thereon, and illustrations showing the appearance of some of the animals after ninety-one days of four different systems of feeding. The most important conclusions reached are the following:

1. Pigs allowed to run at large over eighteen acres of good pasture and fed a full ration of grain made the most rapid growth and required the least grain for one pound of gain.

2. Pigs confined in movable pens in the pasture grew more slowly than those running loose, and required an increase of 20 per cent of grain to make one pound of growth.

3. Pigs at pasture, fed under three different conditions, gained 92.5 per cent more, and ate but 2 per cent more, than the pigs getting grass and otherwise similarly fed, but confined in pens. The grain required to produce one pound of gain was increased 40 per cent with those in pens over those at pasture.

4. Pigs fed but part rations of grain at pasture made satisfactory gains. Those at pasture getting the three fourths grain ration gained more than those fed a full grain ration and grass, either in the yards or in the pens.

5. Pigs pastured without grain made about the same growth for three seasons in succession, this averaging .36 of a pound per day.

6. As nearly as can be judged, exercise alone increased the gain 22 per cent, and the amount eaten but 1.5 per cent, but decreased the amount required for one pound of gain 22 per cent.

7. Grass, when cut and fed green to pigs, whether fed in pens or yards, or with full or part grain ration, or without grain, proved to be of very little value.

8. Pigs confined in pens and fed on grass alone, mostly lucerne, for ninety-one days, lost over a quarter of a pound per day.

9. The average of the pigs fed on grass gained a little more than those without

the grass, but not enough to pay for the extra feed in the grass.

10. With the pigs confined in the hog-house pens, the grass proved beneficial, while with those in the yard it proved detrimental, the latter requiring more grain to make a pound of pork with the grass than without it.

11. Pasturing either with full or with part grain rations appeared to be by far the cheapest and best way of making pork.

NOTE.—The grass is a mixture of eight varieties, in which lucerne constitutes at least one half.

Cutworm Destroyer. The California Fruit Grower recommends the following: Mix three pounds of pure Paris green with an ordinary grain-sackful of wheat-bran. This mixing may be done dry, taking great care that the Paris green is equally distributed throughout the bran, or the green may be dissolved in water and the bran stirred in, making a uniform mixture. Three pounds of sugar, or as many pints of molasses, may be added as an appeal to the sweet tooth of the worm to take a fatal ration of the mixture. Put a handful of the mixture on a piece of board or strong paper, at the base of each tree, plant or vine, and the cutworm will be practically harmless—for he will soon be dead.

Wheat Crop of the World. In the crop report for March, 1896, the United States Department of Agriculture presents the following estimates of the wheat crop of the world for 1891 to 1895:

1891.....	2,424,102,000	bushels
1892.....	2,471,555,000	"
1893.....	2,552,663,000	"
1894.....	2,690,588,000	"
1895.....	2,566,164,000	"

The total world's product increased from 1891 to 1894, which gave the largest crop ever harvested. In 1895 the crop declined, but it still exceeded that of every year prior to 1894. The report says that the wheat crop of 1895 fell short of that of 1894 in each of the six continents except North America, where the increase was chiefly due to the rapid development of Manitoba's wheat-fields. Another striking feature is the steady decline of wheat-growing in Great Britain and Ireland. In 1895 the United Kingdom produced only slightly more than one half as much wheat as in 1891. The Argentine wheat extension appears to have come to a standstill, and in most European countries a considerable decline in the total crop of 1895, as compared with 1894, is noticeable.

Flour from the Sorghums. The great increase in production of non-sweet sorghums in the trans-Missouri territory, and their heavy yields of seed or grain, are causing not a little interesting investigation as to what various uses it can be put, and this is especially true in Kansas, where a probably larger acreage of these crops is grown than in all the rest of the world. Within the past year considerable attention has quietly been given to testing its milling and culinary qualities, and one roller-milling company, at Marquette, McPherson county, Kansas, reports to Secretary Coburn, of the state board of agriculture, having ground not less than 1,000 bushels of Kafir and Jerusalem corn for household uses.

From their experience, these millers find that the Jerusalem corn "mills" to much the better advantage; and although the flour as at present made has not the extreme whiteness of that from wheat, Secretary Coburn vouches that it makes delicious biscuits, muffins and griddle-cakes while the millers claim the Kafir flour is not quite so desirable for bread, but makes an excellent pancake flour.

Important developments in the adaptability of these new grains for milling and food purposes seem likely in the near future. It is said that when ground on rolls by a gradual reduction process, the bran is readily separated, but the difficulty of ridding the flour of its dark specks, so formidable from the cook's standpoint, has not yet been overcome. The product of these grains is on the market to some extent as "Kafir meal," "Kafir flour," "Kafirina," "Kafir Graham," etc., and challenges comparison with any of the

so-called "health" flours, at one half or one third their prices.

SECRETARY OF KANSAS STATE BOARD OF AGRICULTURE.

Chinch-hug in Ohio. Bulletin No. 69 of the Ohio agricultural experiment station, Wooster, dealing

with the chinch-bug, warns farmers to be on their guard against a visitation of this pest this season, so that if present the fact may be learned before too late, as was in many instances the case last year. The station hopes to be able to aid farmers in case of further trouble, if the amount asked for by the department of entomology to cover expense is allowed by the present legislature; and it is hoped that it will do so, and therefore it is necessary for farmers to watch their fields closely, especially if there is but little rainfall during May and June. Attention is called to the fact that large numbers of bugs are wintering over in the fields, very few of the young of the fall brood having died from the effects of winter, and have survived the weather, so that there is likely to be an abundance of old bugs to deposit eggs. If there are frequent drenching rains during the hatching season, the most of their young will be killed; but if the opposite is the case, trouble is feared.

NOTES AND COMMENTS.

Growing and Breeding Varieties. In some respects, the farmer and gardener can assume the functions of a creator. By the exercise of judgment and skill we can produce new types and forms of animals and plants, and develop breeds and varieties in certain well-defined or desired directions. We can create (if that term is permissible) types of cows that will excel in milk or butter production, or types of hens that will be known for great layers, etc. We also can "create" new varieties and forms of fruits, flowers, etc. The undertaking of producing new things is always interesting, whether we can show remarkable results or not. In some lines the task is an easy one, and yet it has its charms. New varieties of potatoes, for instance, are readily produced, the only trouble being to get the true seed of just such varieties as one may want; and still more, to get the crosses that may seem



SWEET-PEAS—CUPID.

desirable. Frequently, in this as with other plants, we have to depend more or less on accidental crosses and sports.

When we work with definite achievements and aims in view, the production of new varieties and strains, however, demands a great deal of painstaking care, and skill besides, and frequently it offers perplexities and trials. As an instance, I will quote from an account about breeding sweet-peas, written by Mr. Waldo Rohnert (of the firm of C. C. Morse & Co., of California) for Bulletin No. 111 of Cornell University experiment station: "Eight or nine years ago the sweet-pea was little known as a garden flower. It then had little merit to attract public attention. At that time, Mr. Eckford had done considerable work, and his efforts and perseverance were becoming apparent. From the ordinary type and colors he has improved the flower to its present high standard. Cross-fertilization and selection, keeping the size, form, substance and color constantly in mind, have had a wonderful effect. We depend somewhat upon sports for new varieties, however. As each variety is

brought up to the grandiflora type, its liability to sport is also increased. * * * The professional growers of sweet-pea seed have a good deal of trouble to contend with, in the matter of keeping their stock pure."

Monstrosities Not Wanted. In the same bulletin which sings the praises of the sweet-pea, Prof. Bailey calls attention to the tendency to develop the sweet-pea beyond its characteristic limits of simplicity and daintiness. "The most apparent fault with some of the novelties, if one may judge from the pictures of them, is their arrogant size; but, fortunately, I have never seen such peas in the garden. If I were really assured that I should raise such amazing flowers as I see in the catalogues, I should certainly never buy the seed from them. * * *

But I do not desire to complain of the trade cuts, for I know what a powerful magnifier a silver dollar is when placed behind a flower; so I simply make allowances, and buy. If I get the color, and the shape, and the texture, the degree of bigness is a trifling matter. Another heresy in sweet-peas is the desire for a double flower. The form of the pea-flower is its peculiar beauty. The broad, trim standard is the most perfect surface for the display of color, and an effective shield and foil for the contrasting pigments of the wings and the keel. When that simple standard is displaced by two or three, and the shield becomes shapeless and contorted and contrary, the flower is no longer the sweet-pea of the dear old gardens, but is apt to be a mussy and impudent thing. We want not bigger flowers and more petals, but we want more sweet-peas; that is, we want more productive plants, if that is possible, and more flowers in the cluster. * * * But let us keep to the sweet-pea type. Those contrary individuals who are always trying to grow tomatoes on potato-plants, and strawberries on blackberry-bushes, would leave the world a better legacy if they were to grow more tomatoes on tomato-plants, and better strawberries on strawberry-plants."

New Creations. Quite interesting and instructive, as having some bearing on all creative efforts of this kind, is what Prof. Bailey has to say on

the methods of obtaining new sweet-peas: "The process is simple enough, but, like most simple things, it is hard to learn and harder to perform. The most important part of the process is a well-laid plan of action on the part of the operator. He must determine what improvement the plant needs. Then he must study the plant closely to learn its habits of variation, and how it adapts itself to the different conditions in which it is grown. He will then put himself in sympathy with the plant, simply trying to improve or augment the little differences which appear, and not set himself squarely against the line of evolution of the plant by attempting the impossible. He has a picture in his mind of a deep, clear pink flower. Very well. He goes through the rows of his pink-flowered varieties, and marks those plants whose flowers are nearest his ideal. The seeds of these plants are separately saved, and sown. Among the offspring he again selects, and he again sows, taking care that his stock does not become crossed with some other type. Presently the new color is obtained; the seeds have got into the habit of 'coming true, and the brood is given a new name and introduced to the trade." Prof. Bailey has much more to say on the same subject, but I will leave it to those interested in it to secure a copy of the bulletin. My intention in giving these extracts was to induce others to experiment a little on these lines of bringing out new things, whether they be new varieties of potatoes, of tomatoes, of strawberries, of grapes, of peaches, or of flowers. The field is limitless, and so are the opportunities. The young people will be easily interested in this work, and if more of us engage in it, and learn to create new things, the better will be the outlook for coming improvements in vegetables, fruits and flowers.

T. GREINER.

Our Farm.

FARM THEORY AND PRACTICE.

AVERAGE YIELDS.—Probably there ought to be room on this earth for the average man; but as a matter of fact it is growing cramped. The average man is a fellow who does not know as much as he should, and who does not do his work as well as he knows how. The result is that when he is a farmer, he grows, according to our crop reports, twenty-four bushels of corn per acre, twelve bushels of wheat, less than one hundred bushels of potatoes, and other crops with proportionate yields. At prevailing prices, these yields per acre give no profit at all, and the only hope of the individual farmer rests upon larger yields than the average. As times have tightened, not a few have imagined that more land must be plowed, and an effort was made to keep farm sales up to a fair figure by increasing acreage. Those who keep accurate farm accounts know that this is not the road to success. We want to keep nearer shore now. Fertilizers and labor must be concentrated upon fewer acres, usually, and the tendency to "spread oneself" must be checked. We want more careful and paying work. Old wastes must be stopped. I would like to be helpful by pointing out some of the mistakes of rather careless farmers.

THE VERY BEST SEED.—In what words may the importance of having the very best seed be impressed upon all? Much has been written on this subject, and yet the loss from poor seed amounts to many millions of dollars annually. Some variety of corn, of potatoes, of wheat or oats, will probably give you a better yield than any other variety. If a neighbor has a variety of corn that will produce five bushels of shelled corn per acre more than your old variety under equal conditions, then are you paying a rental of five bushels per acre to ignorance or carelessness. While your potato-vines were blighting last summer, a neighbor may have been growing on similar soil a variety that resists blight in great degree. Many new varieties of vegetables and grains are not as valuable as old ones, but our experiment stations and progressive farmers are culling out the best all the time, and the man who does not read up on varieties, watch his neighbors' experiments, and stand ready to test an approved new variety by the side of his old one, is too careless of his interests to be a winner. Notwithstanding this, many pretty good farmers will cling to seed of an old variety that is not yielding as well as other varieties on similar soils.

CARE OF SEED.—The greatest mistake, and the most common, is that of using seed that is not choke-full of vitality. Many do not realize that seed may germinate and yet be poor seed. Seed-corn that has been properly ripened and cared for germinates under bad conditions in the spring, and it grows despite obstacles. Poorer seed may germinate under favorable conditions, but it is slow about it, and there is less vitality in the plants. We cannot get a full crop without good seed, and it is disheartening to have an imperfect stand of plants or a stand of imperfect plants, as is so often seen, especially in the case of potatoes. Big yields are not gotten from a small number of extraordinary hills, but from a fair yield from every hill. A pound of potatoes from a hill is a very small yield, and three pounds is not an extraordinary amount, but if we have ten thousand hills on an acre, and get only one pound from each hill, we have 166 bushels of potatoes per acre—nearly double the average yield. Yields are low because many hills do no good at all. So it is with corn. It is the missing hills or stalks, or the weak stalks, that cut yields.

DOING ONE'S BEST.—There is an expression often used that it is difficult to understand. Men will say, when urged to take a farm paper, "Oh, well, I don't do as well as I know how." That expression puzzles one. Very few of us are farming for our health—we want a living out of the business, and as good a one as we can get. If it pays to get the best seed; if it pays to prepare ground well; if it pays to break the crust on the corn or potato field after a

rain; if it pays well in cash, pays well for the labor, then that is the most natural thing under the sun to do. If these things do not pay for the labor, it is good farming not to do them. It is profit that we are after. Who cares for a theory in farming that does not pan out in cash? It takes cash to pay taxes, and to supply the necessities and luxuries of this life. If it is profitable to do these things that all of us say should be done, that means that the labor is well invested. Wherever we can invest labor profitably, we want to do just that thing. Where labor cannot be invested to advantage, it is bad farming to put the labor. Does that man deserve to win who fails to do as well as he knows?

STUDY IS NEEDED.—The mistake of the man who gets no more than our very low national average yields is that he is not a careful, conscientious student of his business. This is a rather unpalatable fact, plainly stated. I am not saying that the man who obtained no profit from farming last year is a careless man. There is little profit in our best years of late, so far as my observation and experience goes. But that is all the more reason for striving to get fairly good yields, and to get out of the class that produces those very low average yields. It cannot hope to keep even with the world in good years at present prices. The chances of success lie open only to those who study their farms and crops. There should be careful study of our station reports and farm journals, in order that we may know more about varieties, about fertilizers, about implements for cheapest tillage, and about new crops. Then we want to learn to measure our fields by bushels rather than acres, to treat each hill as an individual that should do its share, to concentrate our effort on fewer acres, to do our best all along the line, and to keep near shore until the clouds roll by. It is a good time to do a little well. DAVID.

SHEEP IN THE SOUTH.

When the Spanish government owned and occupied some part of the lower South, if her citizens ever brought any of their famous Merino sheep with them, it is not recorded in the history of those times. And since then there is no record of this having been done by anybody up to current date. Yet a few sheep have been there for some scores of years. Inquiry leads to the fact that from time to time, before the recent civil war, southern planters, visiting England, had occasionally brought with them a few English sheep, generally South-downs, with an occasional shipment of Shropshires.

The present so-called "native" sheep are descendants of these importations, with a very little admixture of various breeds from the northern states. The original importers gave their sheep fair attention so long as they lived, but when they passed away and the animals fell into other hands, they were generally neglected; and now, as a rule, they are turned on the range, and only brought up once a year to be shorn, or perhaps to get a mutton; and sometimes these are shot down in their tracks. That a few have cared for these animals properly are exceptions that only prove the rule. As a consequence of this general neglect, together with promiscuous breeding and inbreeding, flocks have reverted a long way toward the original wild type of sheep. Carcasses are light, and the percentage of wool lighter in proportion.

But these "natives" have just one valuable characteristic, and that is their hardiness, caused by this neglect. The annual rainfall there is enormous, amounting to as much as sixty inches. As sheep there seldom have shelter other than the forests furnish, they must endure it all. Now, if one thing injures sheep that have been well kept more than another, it is exposure to rains; but these have become so injured to this profuse precipitation that they come out of a rain-storm "smiling, as ducks come out of a mill-pond." The recent depression in cotton compelled southern farmers to diversify their products, and many look to sheep husbandry as a promising adjunct to farming. And now that their eyes are opened, they want a better class of sheep; and as the North is so convenient, where the best are in abundance, they are looking here for supplies. Inquiries by mail are going to northern sheep-breeders quite lively. Our thin-wooled

sheep will not endure the rains of the South. They have been tested time and again and found wanting. The proper way to build up flocks in the South is to use the native ewes as a foundation, for they are acclimated.

And now I expect to incur the criticism of northern breeders of certain classes of stock sheep. Feed costing very little in the South, it should be an object to grow as large sheep as possible, so that when a carcass of mutton goes to market there will be something of it worth handling. Wool is also an object; and then to cross upon those natives, policy dictates that the largest, thickest and heaviest woolled males be used, and this points distinctly to the large Merinos—those weighing around two hundred pounds—as the best sheep for that purpose. Small sheep may be just as profitable on high-priced lands as large ones, but not so where feed costs nothing. This recommendation is made on the grounds of general sheep husbandry as it now usually prevails in the South; but, of course, there are situations where it may be possible to do better with some other breeds. One of these situations is where shelter is provided, the animals housed from storms and fed and looked after as they are in the North, and where markets for young lambs are convenient. In such a situation, I say, some of the other breeds may be more profitable, but it is very doubtful. The present agitation of the sheep subject in the South is going to result in great benefit to both sections. Northern breeders of stock sheep will have a new market for their product, and the South will be benefited immensely by growing the amount of sheep there that can be done just as well as not. East of the Mississippi and south of Tennessee and Virginia there are less than four million sheep now. Ohio alone has about that number. That portion of the South should have twenty to thirty millions; and it will in time. There is no better sheep section in the world.

In correspondence with sheepmen all through the South, I was pleased the other day to "run right up against" a Florida planter. This gentleman shows how sheep are "handled" there. They are on the range the year round, and never get any dry feed, either hay, fodder or grain, yet "they are always fat." Some owners do not see their sheep for months, and still they do not stray far. They do not have to, for there is enough for them to eat everywhere. There are no particular sheep diseases in all the South; and, I may say, anywhere else where they can have access to pine browse. Pine is death to all internal sheep parasites. A profitable business could be done in Florida growing young lambs for the numerous winter resorts. This branch of the business is now almost wholly neglected. Sanatorium and hotel keepers cannot get this kind of lamb for their tables. I am not certain, but believe that according to the last census there were but about nineteen thousand sheep in all of Florida. If one does not desire to go so far south to locate, he can find good land very cheap all the way along up the sea-coast line to Virginia. Anywhere along this route he could ship dressed lambs in winter to Florida or New York. Farms are all the way from three to thirty dollars an acre. Cotton went down, slavery was abolished, and the present generation was left with too much land individually. When I contemplate so many good chances to secure a farm and a fortune, I almost wish I was a boy again. GALEN WILSON.

POINTS ON CORN CULTURE.

Before the planting season comes on, the soil should receive thorough preparation, and be made as mellow and fine as possible, for the crop will receive no nourishment from hard, dry clods; and besides, the crop will be much easier cultivated if in good condition. Harrow well, then cross-harrow, and if any clods remain, use a clod-crusher. The planting should be done, under ordinary circumstances, from the first to the tenth of May. After the corn is planted, if the soil seems to be very loose and light, roll the field with a good roller to settle the soil and retain the moisture.

When the corn comes up and is ready for cultivation, harrow with a fine-toothed harrow. If the season is dry, use the harrow as long as it can be done without injury. Then use a good cultivator and cultivate shallow, that the roots may not

be injured nor the moist soil from beneath turned on the surface to the wind and sun for evaporation. Deep cultivation in a dry season will turn the moist soil from beneath to the surface, to be dried up by the sun and wind, and the dry soil from the surface turned under takes up the moisture from beneath, and thus a great deal of moisture is lost which should go to the support of the crop.

If weeds and sand-briers make their appearance, use a weed-cutter, which can be made by any blacksmith. Take a piece of steel one and one half inches wide and one eighth of an inch thick, and length to suit the width of the rows, flatten it, and sharpen it at one edge, and make it so that it can be attached to your cultivator. I have tried this, and know by experience that it will do its work. This will cut the weeds off under the surface, and is much better than doing the work with a hoe. After each rain in the cultivating season, the crust should be broken with the harrow or cultivator as soon as the soil is dry enough to permit. The crust on the surface broken in this way acts as a mulch and prevents evaporation of soil moisture.

Level cultivation is the best way of cultivating the crop, and a majority of our farmers are adopting this method, for several good reasons: It is better for the crop while growing; the soil is much less liable to wash; it leaves the surface in much better condition for future crops, and the binder, mower and other machinery will be much less liable to wear and breakage, and will do better work than when on a rough, uneven surface.

The crop should be gathered as soon as it is safe to crib it away.

A very good time to select the seed-corn for the next crop is when the crop is being husked out. Select the best matured ears to be found.

Corn fodder makes very valuable feed for stock, and it is coming more into general favor. As soon as the fodder is cured sufficiently, it should be stored away in the barns to keep it bright and clean, for if it is exposed to the weather it loses a great deal of its feeding value. J. F. B.

Brown county, Ohio.

My

Nerves are weak, many people say, and yet they do not seem to know that they are literally starving their nerves. Weak, pale, thin blood cannot give proper sustenance—that is why you are nervous, tired, exhausted. The cure for this condition is to purify, vitalize and enrich your blood. Take Hood's Sarsaparilla fairly and faithfully, and the rich, red blood, which it makes, will soon feed the nerves the elements of true strength they require; they will cease their agitation and will resume their proper place—being under the control instead of controlling the brain and body. Read Miss Bartley's letter:

"I want to express my gratitude for what Hood's Sarsaparilla has done for me. My health has been very poor for three years, due to trouble with my

Kidneys

I was nervous, had pains in my back. I cannot tell what I suffered. My eyesight became affected and I was so despondent I did not have any interest in life. I had two physicians, but my complaints became worse. I was told that I was affected with Bright's disease. A relative urged me to try Hood's Sarsaparilla. I did so, and in a short time I began to notice a change in my condition. Things began to appear brighter, my eyes improved,

My Back

did not trouble me so severely. My appetite returned and I gained strength every day. I am now able to do my own work, and feel perfectly well. I cannot find words to express my gratitude for what Hood's Sarsaparilla has done for me, and I gladly recommend it." MISS ELLA BARTLEY, 213½ S. Grant Ave., Columbus, Ohio. Remember

Hood's Sarsaparilla

Is the One True Blood Purifier. All druggists. \$1. Prepared only by C. I. Hood & Co., Lowell, Mass.

Hood's Pills cure Liver Ills; easy to take, easy to operate. 25c.

Our Farm.

Orchard and Small Fruits.

CONDUCTED BY SAMUEL B. GREEN.

FRUIT NOTES.

THE experience of last year confirms my belief, hitherto expressed, that pears are among the most profitable of our orchard fruits.

Cherry-trees frequently do well planted in fence-corners, but, like other fruit-trees, do better when cultivated. Beyond trimming the small, tender branches of the trees while young to form a pyramidal head, the cherry-tree should not be pruned, especially the large limbs, as they rarely heal.

The New York *Rural World* tells its readers that apples of all sorts have been growing scarcer during the past few years, and that fine fruit is exceedingly hard to find in the largest markets.

It is no more unreasonable to expect blood from a turnip than abundant crops of good fruits from poor soil. Fruit trees and plants of all kinds are like animals—they must be fed if they are expected to be profitable. It is rarely that either of them fails to make ample returns, if they are given wise and faithful attention.

The fruit of the quince is in such great demand in all large cities that it should stimulate farmers and fruit-growers to greater efforts to succeed with the trees they set out. Quinces do best in deep, cool soil, though in dryish places they will do fairly well if mulched. To have the roots cool is a great step toward success.

While most varieties of fruit are produced year after year on the same fruit-spurs, the peach never produces fruit but once on the same wood, and that is on the wood grown the preceding year. We readily perceive that the peach must not only mature a crop of fruit each year, but also new wood and fruit-buds for the next year's crop.

Think of it, farmers! One thousand and ninety-five meals in a year, and yet no garden, no orchard! One thousand and ninety-five meals in a year, gotten up with an ingenuity that is marvelous, and without one complaint, notwithstanding the paucity of the materials. Don't we feel almost ashamed of ourselves?

There is plenty, and more than plenty, of wormy, knotty, scabby, bruised and decaying fruit grown and sent to market. This whole thing should be reformed or discouraged. There is plenty of demand for the best of fruits, honestly and carefully packed; and fair prices will ever await the man who meets this demand.

Experienced fruit-growers buy but few varieties of trees and vines, but the new beginners buy everything they hear about.

Hereafter I shall, for a few years, use most of the home-made manure on the orchard. The ground needs much feeding to produce a good crop of grass or hay, and a good crop of well-formed, large-sized apples, too, especially in a droughty year like last; and since superphosphates serve admirably on my land with wheat, clover and potatoes, I can thus save the manure to be used on my large orchard.

It is seed-growing that exhausts the vitality. There are no more seed in a large fruit than in a small one, and a large one does not take any more vitality out of a tree. If a Kieffer pear-tree has on it one thousand pears, and you take off five hundred of them, the remainder will weigh as much as the whole of them, and bring more money, without weakening the tree only half as much. Our rule for thinning peaches is not to leave one within four inches of another.

The man who owns a farm, or even a few square rods of land, and has not made among his New-Year's resolutions one to have more and better fruit in the future than he has had, should make such a resolve now, as it is not too late. Those who have now an abundance of very good fruit are more likely to have made such a resolve than those who have none, but the others can remedy their neglect now.

Even a few currant-bushes, gooseberry, raspberry or blackberry bushes alongside the fence, a pear or apple tree in a corner, plum or peach trees in the hen-yard, will in a few years yield returns, if properly cared for, that will well repay the outlay of time and labor necessary.—*Green's Fruit Grower.*

INQUIRIES ANSWERED

BY SAMUEL B. GREEN.

Haverland Strawberry Not Fruiting.—M. W. F., Paradise Valley, Pa. The Haverland is a pistillate variety of the strawberry, and should have some staminate kind near it. For this purpose try Beder Wood.

Black Walnut.—N., Madison, N. J. The age at which black walnut commences to bear varies with the soil and the source of the nuts planted; but, in my experience, where the trees have had plenty of light they commenced to bear in about eight or ten years from seed.

Coal Ashes and Hen Manure for Small Fruits.—W. H., Point Marion, Pa. Use about twice as much coal ashes as hen manure, and apply from sixty to one hundred bushels per acre. The coal ashes contain little or no plant-food, but are a good absorbent for the hen manure and help to make the sandy soil more retentive of moisture.

Strawberry Culture.—M. H., Jolon, Cal. It is generally considered prudent not to allow strawberries to bear the year they are set out, but if the plants are vigorous, I have never seen any serious injury come from allowing them to do so. If the plants are weak, all the flowers should be pinched off, and when planting on a large scale, this is the best plan.

Planting Cedar-trees.—L. S., Columbus, Kan. By cedar I suppose you mean the red cedar, and not the white cedar, or arbor-vitae. Red cedar transplants easily in the spring, at any time previous to its buds starting; and even after the new growth shows quite a little it can be moved, if carefully handled. In moving this and all other coniferous evergreens, great care should be taken to prevent the roots dying. They should never be allowed to even have the appearance of being dry.

Fertilizer for Fruit-trees—Best Soil for Turner Raspberry—Best Soil for Blackberries.—J. A. C., Auburn, Ky. Five cords of good stable manure and about 300 pounds of kainite—or, in place of the kainite, ten bushels of wood ashes—per acre would be a good fertilizer. If these cannot be obtained, use 500 pounds of ground bone or tankage per acre.—The Turner raspberry is a berry that is adapted to almost any kind of good land, but prefers a strong fruit soil (lime clay).—Blackberries will do well on a poorer soil than raspberries, but give better results on strong land.

Pollenizer for Bartlett Pear.—B. D. G., Parkersburg, W. Va., writes: "What pear should be grafted on the Bartlett, so its pollen will fertilize the Bartlett?"

REPLY:—It is probable that Angouleme, Clapp's Favorite or Anjou would furnish pollen at the right time for the Bartlett flowers. In selecting a variety for such a purpose, it is important that it come into flowering with the Bartlett. In the South, there is much greater difference in the time between the appearance of the flowers of different varieties than at the North, where most varieties flower at nearly the same period. The Le Conte and Kieffer pears bloom about ten days ahead of the Bartlett along the James river in Virginia, while in New Jersey there is only three or four days' difference. It is desirable to have several kinds mixed in orchards, although the greater part may safely be some one kind.

Strawberries Not Fruiting.—W. E., Veblen, S. D., writes: "Why do strawberries not fruit in South Dakota? The vines grow luxuriantly and bloom freely, but never bear."

REPLY:—In Dakota, as well as elsewhere, strawberries are liable to have their flowers frozen by late spring frost, and, of course, require good care; but I am aware that even when they have good care there are sections where they do not set fruit. I think this is probably due to the absence of bees when the flowers are open, more than to other causes. The more I study the strawberry the more firmly I believe that the pollen is entirely distributed by insects, the chief of which are several kinds of small wild bees. The keeping of a hive or two of bees would be a profitable occupation in more than one way, in your section, for fruit-growers. Then, again, strong southwest winds, so common in spring in the Dakotas, may sometimes blow away the pollen and keep away insects. On this account, as well as to protect the plants from the dry winds at the ripening period, I always recommend to seek for the strawberry-bed a location protected from the south by a wind-break of some sort, even if it is nothing more than a six-foot board fence.

Apple Seedlings—Apple and Pear Sprouts—Garber Pear.—B. H. S., Grahamsville, Ky. Apple-seed, when handled in a small way, should be mixed with moist sand, and kept in a cold place during the winter; but if dry, it will generally grow if mixed with moist sand in the spring, and exposed to frost after being fully soaked out. It is most likely to grow if frozen. After being frozen once or twice, bring the seed and sand into a warm place about two weeks before you will be ready to plant, and allow it to remain until the seed shows signs of starting, when it should be planted in well-worked, mellow soil, covering about one inch deep. It is customary to plant in rows three feet apart, so the seedlings can be cultivated with a horse-cultivator.—If the sprouts from the apple or pear roots are thrifty and are carefully taken up, they may make fairly good stocks, but should not be grafted until transplanted, unless they are located where you want them to remain. The trouble with them is that they generally have very poor roots. Seedling trees, however, are very much better for stocks.—The Garber pear is not entirely blight-proof, but belongs to a class of pears that has good resistant qualities against blight.

A NEW Botanical Discovery

Which Will Prove a Blessing To Humanity.

THE WONDERFUL KAVA-KAVA SHRUB.



The Kava-Kava Shrub (*Piper Methysticum*.)

Of Special Interest to all Sufferers from Kidney or Bladder Disorders, Bright's Disease, Dropsy, Rheumatism, Pain in Back, Female Complaints, and Irregularities, Blood Impurities, and other maladies caused by improper action of the Kidneys and Urinary Organs.

A Free Gift of Great Value to You.

A short time ago our readers were made aware of a valuable new botanical discovery, that of the Kava-Kava Shrub, or as botanists call it, *piper methysticum*, found on the banks of the Ganges river in East India. From a medical standpoint this is perhaps the most important discovery of the century. The use of the Kava-Kava Shrub, like other valuable medical substances, opium and quinine, was first observed by Christian missionaries among the natives of India as a sovereign remedy for Kidney diseases. Speaking of the use of the Kava-Kava Shrub by the natives of India, Dr. Archibald Hodgson, the great authority on these diseases says:

"Intense heat and moisture of this tropical climate acting upon the decaying vegetation renders these low grounds on the Ganges the most unhealthy districts found anywhere. Jungle fevers and miasma assail the system, and even the most robust constitutions yield to the deadly climatic influences. The blood becomes deranged and the Urine is thick and dark-colored and loaded with the products of disease, which the Kidneys are vainly endeavoring to excrete from the system. Under these conditions the other organs become affected, and life hangs in the balance. Then when all the remedies of modern medical science fail, the only hope and harbor of safety are found in the prompt use of Kava-Kava shrub. A decoction of this wonderful botanical growth relieves the Kidneys and enables them to carry off the diseased products from the Blood. The Urine becomes clearer, the fever abates and the intense suffering and nausea are alleviated. Recovery sets in and the patient slowly returns to health."

Of all the diseases that afflict mankind, Diseases of the Kidneys are the most fatal and dangerous, and this being the case, it is but natural that the discovery of the Kava-Kava Shrub—Nature's Positive Specific Cure for Diseases of the Kidneys—is welcomed as a gift to suffering humanity.

Alkavis, which is the medical compound of the Kava-Kava shrub, is endorsed by the Hospitals and Physicians of Europe as a sure Specific Cure for Kidney and Bladder Diseases, Diabetes, Bright's Disease, Brick-Dust deposits, Rheumatism, Liver Disease, Female Complaint, pain in back, and all diseases caused by impurities of the Blood, due to defective action of the Kidneys.

Rev. W. B. Moore, D.D., of Washington, D. C., editor of the "Religious World," writes of the wonderful curative effects of Alkavis: "For several years I was a sufferer from Kidney troubles, and could obtain no relief from physicians. I used various Kidney remedies, but with no success. I had given up all hopes of ever recovering my health, until hearing of the marvelous cures effected by your Alkavis, decided to try same. After using the first bottle I began to experience relief, and following up the treatment was permanently cured. I cheerfully recommend your excellent Alkavis to persons afflicted with Kidney and Rheumatic disorders as the best remedy known."

Mrs. James Young, of Kent, Ohio, writes that she had tried six doctors in vain, that she was about to give up in despair, when she found Alkavis, and was promptly cured of Kidney disease, and restored to health. Mrs. Alice Evans, of Baltimore, Md.; Mrs. Mary A. Layman, of Nech, W. Va., twenty years a sufferer; Mrs. Sarah Vunk, Edinboro, Pa.; Mrs. L. E. Copeland, Elk River, Minn.; and many other ladies join in testifying to the wonderful curative powers of Alkavis, in various forms of Kidney and allied diseases, and of other troublesome afflictions peculiar to womanhood.

Dr. A. R. Knapp, a well-known surgeon and physician of Leoti, Kansas, voices the opinion of the doctors and writes: "The case I ordered Alkavis for has improved wonderfully. I believe you have in Alkavis a complete specific for all Kidney troubles."

Mr. R. C. Wood, a prominent attorney of Lowell, Indiana, was cured by Alkavis of Rheumatism, Kidney and Bladder trouble of ten years' standing. He writes: "I have been treated by all our home physicians without the least benefit. My bladder trouble became so troublesome that I had to get up from five to twelve times during the night to urinate. In fact, I was in misery the whole time and was becoming very despondent. I have now used Alkavis

and am better than I have been for five years. I know Alkavis will cure bladder and kidney trouble. * * * It is a wonderful and grand, good remedy."

And even more wonderful is the testimony of Rev. John H. Watson, of Sunset, Texas, a minister of the gospel in thirty years' service, stricken down at his post of duty by Kidney disease. He says:

"I was suddenly stricken down on the 22d of June with an acute attack of kidney trouble (uric acid gravel). For two months I lay hovering on the border line of life, and with the constant care of two excellent physicians, I only received temporary relief. My family physician told me plainly the best I could hope for was temporary respite. I might rally only to collapse suddenly, or might linger some time. But the issue was made up, and as I had for years warned others to be ready, so now more than ever I must needs put my house in order and expect the end. Meantime I had heard of Alkavis and wrote to an army comrade (now principal of a college) who had tried it. He wrote me by all means to try it, as it had made a new man of him. At the end of two months, and then only able to sit up a little, I dismissed my physicians and began the use of Alkavis. In two weeks I could ride out in the carriage for a short time. The improvement has been * * * constant and steady. I am now able to look after my business. I feel I owe what life and strength I have to Alkavis. * * * I am fifty-five years old, have been a minister over thirty years, have thousands of acquaintances, and to every one of them who may be afflicted with any kind of kidney trouble, I would say, try Alkavis."

Another most remarkable case is Rev. Thomas Smith, of Cobden, Illinois, who passed nearly one hundred gravel stones under two weeks' use of this great remedy, Alkavis.

Church Kidney Cure Company, 418 Fourth Avenue, New York City, so far are the only importers of Alkavis, and they are so anxious to prove its value that they will send a Large Case by mail free to Every Sufferer from any form of Kidney or Bladder disorder, Bright's Disease, Rheumatism, Dropsy, Cystitis, Gravel, Female Complaints, and Irregularities, or other afflictions due to improper action of the Kidneys or Urinary Organs. We advise all readers to send their name and address to the company, and receive the Large Case by mail free. It costs you nothing, and you should surely try it.

WHY FAMILIES SHOULD SETTLE IN THE SOUTH.

In the early days of this country, before transportation facilities had become a great factor in its development, men were very doubtful as to the wisdom of settling in places remote from the markets of the country.

A farmer's life then was but another name for drudgery, hard, never-ending work, the results of which, in ninety cases out of a hundred, meant a bare subsistence, and very rarely anything beyond a mere living.

To-day, if the first cost of the land be low enough, and the right conditions of soil, climate, educational advantages and transportation facilities prevail, an intelligent, industrious farmer may establish himself and his family in a given locality in the South, and within a period of ten years own a good home, free and clear, educate his children, and have a comfortable sum in bank as against a rainy day.

Never in the history of this country have the opportunities been so favorable and the advantages so great as at the present time. Never in the history of the great Northwest were the opportunities so favorable for the settlement of industrious, frugal farmers and their families as they are to-day in the South.

See the great natural advantages of good soil and good climate, of good railroad facilities, good schools, good churches, and a good welcome by good people are united in one grand combination for the benefit of the new settler in the South.

The very best illustration of the absolute truth of the above statements may be found in the letters written to and published by this paper, from unprejudiced and unbiased persons—farmers of many years' experience in the West, who have been induced to visit the Tallahassee country because of what has been said by us in connection with the Clark Syndicate lands, and who, upon returning from that beautiful section, have given their unqualified indorsement and approval to all that we have published.

Farmers who want to settle in a country where land is cheap, where the climate is delightful, where health prevails, and railroad facilities, schools and churches are all that could be desired, should carefully read what has appeared in these columns, from time to time, with regard to the Tallahassee country and the lands of the Clark Syndicate Companies. Some recent letters will be found on page 14 of this issue.

I have not the ability to portray the character or recount the life of Abraham Lincoln. This will be done, and when it is done, the world will assign to Abraham Lincoln no inferior place among the greatest and the best of men.—W. H. Hornblower.

Our Farm.

NOTES FROM GARDEN AND FIELD.

TAR VERSUS BIRDS.—F. H. Brubaker, of Iowa, writes me on this subject, as follows: "I want to give you my way of preventing injury to seeds by birds, squirrels, mice, ants, etc. I simply coat the seed with kerosene-oil by pouring a small quantity over the seed, and stirring until all is coated. I have found that the oil does not injure corn, melon, cucumber, pumpkin, squash, peas and similar seeds, if put on the dry seed. The seed thus treated will run through a planter quite easily, as the oil makes them smooth." I cannot speak from practical experience in this matter, but think this plan is well worth trying.

IMPROVING TOMATOES BY SELECTION.—An inquirer wants to try to improve his tomatoes by selecting large, early ones. He is altogether on the wrong track. A variety or strain of tomatoes cannot be made earlier by selecting the largest ones. The right way to make an improvement in either direction is to select and breed from the plants which bear the earliest or largest tomatoes, respectively. The Livingstons have made all their beautiful varieties in this manner. They started with some small, smooth, early sort, like the Cherry or Plum tomato, planting a large patch. Then the selection commenced. Perhaps a plant was found among them bearing good, solid fruit of larger size. Seed was saved from this; then from the plants grown from this seed, the plant bearing the best fruit was again selected as a parent for another lot of seedlings, and so on.

STARTING TOMATO-PLANTS.—Then comes the question whether it is advisable to sow tomato-seed earlier than April 1st. "We can't risk tomato-plants outdoors before May 25th in this latitude." Now, that's my case. We usually have some frosty nights right at the end of May; and whoever thinks he can set tender plants in open ground, at least in exposed situations, before June, will usually find out his mistake, and often to his sorrow. And yet, we want tomatoes early. In fact, the tomatoes that ripen in July and August have for some years here been the only ones that could be sold at an exceptional price and a profit, if at all. If we start tomato-plants from seed sown April 1st, we cannot hope to have any considerable portion of the fruit ripen before September. Consequently, we are obliged to sow seed early in March, or even in February, and grow the plants so as to have them strong and stocky, by giving them only moderately rich soil and a moderate temperature, but plenty of room, then have them in bloom, and perhaps with fruit already set, at the time when we set them in open ground the latter part of May or first of June. Plants of this kind, too, are sturdy and hardy, and will pass unharmed the ordeal of a light frost which would kill the tender, forced plants started on or after the first of April, clear down into the roots. With such early and sturdy plants, too, we can afford to take some pains in protecting them, should a late frost occur, by means of a little marsh hay thrown over them, or in other ways.

CABBAGE-SOWING.—We have always had the best success with cabbages, and the largest and heaviest heads, on the most fertile soil. Cabbage needs plenty of quickly available plant-food, and we have never had the ground too rich for it, no matter how lavishly we piled on the old compost. Then, nitrate of soda, which promotes strong leaf growth and is about the most readily available of all nitrogenous manures, has almost always a very marked effect on the crop, and for this reason we have not omitted an annual application on the cabbage-patch for many years. Sometimes we just throw a handful around each plant; sometimes we sow a few hundred pounds per acre broadcast at or shortly after sowing the plants (or sowing the seed if we prefer the method of starting a cabbage-patch by sowing seed in the hill). A big crop of cabbages uses up some plant-foods, and might be called exhaustive. Yet, with the heavy manure applications and the thorough tillage, I would expect to see my land improve by growing cabbages on it.

T. GREIENR.

COME SOUTH.

The Louisville *Courier-Journal* falls in line and gives the following to its readers regarding our Southland: "Come South! Here the land is fertile, the elements less capricious, the heat less scorching, the cold less severe, the crops more abundant, the conditions of life easier. The profits of one year are not swept away by drought in the next. The gains of a short summer are not used up in food and fuel through a long, severe winter. There is more time for work and more opportunity for recreation. Land is cheap, and none is more fertile. It is not necessary to raise only cotton, or tobacco, or oranges, or watermelons. No spot on the earth's surface gives the tiller of the soil a wider choice of what his labor shall produce.

"The South is raising more wheat every year. It has magnificent corn land. Fruits of almost infinite variety reward intelligent labor by bountiful yield. Truck-farming brings fortunes. Cattle and hogs can be fattened at less expense than in more rigorous climates. The improvement of transportation facilities gives ready markets. Of nothing that contributes to successful agriculture is there a lack, and the section is nearer out of debt, and stood the strain of the panic better, than any other part of the United States.

"Farmers who are wise should lose no more of time and fortune in gambling with fickle chance for an occasional stake in the land where blizzards and simoons chase each other over the arid plains, and where the farmer is lucky if, year in and year out, he raises even the interest on his mortgage."

EXTRACTS FROM CORRESPONDENCE.

FROM SOUTH DAKOTA.—Some time ago, in an article in the *FARM AND FIRESIDE*, comparison was made between the profits of farming in Georgia and South Dakota and some other northwestern states. I will not question the truthfulness of what was claimed. Sometimes the omission of some of the facts in the case will mislead as to the final conclusion as surely as if falsehood had been stated. I will say I am very far from wishing to discourage any one from going to Georgia; it is a large state, with its resources but poorly developed, affording plenty of room and opportunity for the enterprising emigrant; nor do I wish to persuade any one to emigrate to South Dakota or elsewhere. If one looks, he will find by the United States census of 1890 that Georgia has a population of 1,837,353, and South Dakota 328,808—less than one fifth. The amount of labor expended on an acre of land is much less in South Dakota than in Georgia; hence, we find that South Dakota produces a larger amount per capita of agricultural products than Georgia. Georgia farmers get their work done for more than fifty per cent less than Dakota farmers, but that is no advantage to the state as a whole. Prices of farm products are much higher, but this is no advantage to the Georgia farmer on the large percentage of his crop he has to retain on his farm for home consumption. A ton of hay or a bushel of corn will do no more good to animals by being valued at high prices. Most of these things are consumed on the farm in Georgia. The same is true of the supplies consumed in the family—flour, meats, poultry, eggs, dairy products, etc. Georgia is a cotton state; South Dakota is a wheat state. Each raises a considerable amount of corn. I have no statistics at hand, save for the year 1895, a year in which South Dakota did not average much more than half her normal yield of corn. But even taking that unfavorable season for comparison, we find that South Dakota raised more corn to each inhabitant than Georgia. During the same year Georgia produced 6,679,048 bushels of oats. Had she produced as much to each of her inhabitants as South Dakota did, she would have produced in the neighborhood of one hundred million bushels, or more than fifteen times as much. Georgia produced (by estimate of the United States Department of Agriculture, December, 1895) 1,330,706 bushels of wheat; but had she produced as much wheat to each of her inhabitants as South Dakota did in 1895, which was rather an "off" year in this state, she would have had over one hundred and fifty million bushels, considerable more than all the production of all the southern states, in wheat. The comparison might be carried much further with other grains, hay, stock, etc., in the same direction. The fact is, we, like all the newer West, do our section an injustice by trying to cover too much territory for the amount of labor and capital at our command. Where else would a sane man attempt to farm four hundred acres without hiring any help? But such farming can be found. New England, with neither a corn soil nor corn climate, excels the rich corn lands of Illinois in bushels and money returns per acre. But no one will contend that New England is a better country for the corn-farmer than the Central-west. Again, in Georgia, as well as all the older states, the farmers spend millions

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of dollars in the aggregate for commercial fertilizers. The Georgia farmer would have still smaller crops if he did not purchase manure, while South Dakota need not, and does not, practically, spend a cent for commercial fertilizers. I am sorry to say we do not save a fourth of the barn-yard manure. I do not underestimate the great state of Georgia in her possibilities, resources, pleasant climate, timber, water, and many other attractions for the home-seeker. I wish right here to predict that South Dakota has a grand future before her in agricultural development that is not realized by even her own inhabitants. But it will take some time, labor, and, above all, brains to accomplish the end.

J. R.

Mound City, Campbell county, South Dakota.

FROM CALIFORNIA.—To tell a man living in the eastern states that we have strawberries all summer in the San Joaquin valley makes him think that we must have a wonderful climate. Now, if I am right, it is not the climate, although I have been repeatedly told so by Californians. It is the water, not directly from the clouds, for up to the middle of December we had not quite one half inch of water since the beginning of berry season last April. Our water comes from the mountains through irrigating ditches. Here in Fresno we have our regular spring crop as they do in Ohio, where I was born and reared. But before the first crop is gone we begin stirring the ground around, the plants, and by applying plenty of water we force a second crop to form which is just as nice as the first. We keep repeating this process after the second, third and fourth crops, and so on until the water gives out, which is about the first of October. Now, the object of this article is to show people that strawberries will bear all summer as well in Ohio as they do in the climate of California, providing they get all the water they want. I am not raising any of the ever-bearing kind, but simply the kinds you all have in the East, the Jessie, Haverland, Sharpless, etc. Now, if you would like to grow berries all summer long, don't sell out and go three thousand miles, as I did, but prepare to water your own little strawberry-patch. You can make it yield three times as much. You must use plenty of water and some manure, I top-dress, as there must be a new growth of roots as well as leaf with every crop. Farmers in the East, you must assist nature, and she will work as great wonders in your fertile soil as she has in the once-called desert of California, which is now the greatest garden spot in the world.

O. L. M.

Fresno, Cal.

FROM OKLAHOMA.—Wheat looks well. There will be a large acreage of castor-beans and cotton planted this season, as both do well here. Fruit bloomed heavily. People are coming from the North and East, buying homes while they might be had cheap.

Marena, Okla.

J. W.

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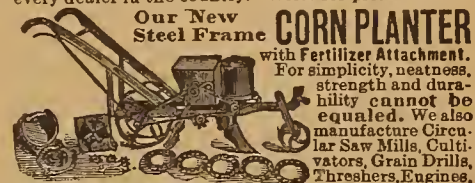
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Our Farm.

THE POULTRY YARD.

Conducted by P. H. Jacobs, Hammonton, New Jersey.

A PORTABLE FENCE.

WE are indebted to Mr. E. Hutchins, of Michigan, for a design of a portable fence in this issue. A portable fence saves time and labor, and permits of keeping the yard clean. By having a foot and one half or two feet at the bottom of the fence built of tight boards, to prevent the males from quarreling, the fowls may all be yarded on one side of the house, while a crop is growing for green food on the other side; and when a change of yard is required, it is the work of but a short time to remove the fence to the new and green yards, and the old yards are again in one field for renovation; or if but one set of yards is used, the fence may be removed while the plowing is being performed, and again set up as soon as the work of the team is done.

The fence may be of common plastering-lath, the same as any ordinary stationary fence is built, except the panels are not fastened to the posts. The main pieces for the panels may be of 1x6-inch stuff, and about 12 feet in length will be most convenient. The laths are nailed across the strips of boards so that they will project a foot above the top one and three inches below the bottom strip. Three inches on each end of the strips should be left without any laths nailed on. This is to rest on the triangular supports. The construction of these supports is shown in Fig. 1, and will hardly require any extended explanation. A convenient material out of which to make them is 1 1/2 x 3-inch stuff, but 2x4-inch will answer as well. These are halved together where they meet at the top, and a piece of 1x4 or 1x6 inch board nailed across near the bottom, with a notch cut in the upper edge. The bottom piece of the panel rests in this notch, and the top piece rests just above the cross at the top of the support. The projections on the lower side of the board crosspiece are to support the upper edge of the bottom boards of the fence. The fence can be made any height. One support holds one end of two panels, and the projecting ends lapping by each other in the supports. If there is danger of the fence being blown over by high winds, it may be supported by driving a piece of board into the ground by the side of the supports, at the foot of each, and driving a nail through the support; or a flat stake may be driven into the ground over the top of the support, in a standing direction. The former will be most secure, however. In setting up the fence, care should be taken that the fence may settle without resting on the bottom boards, otherwise it will tip to one side. The bot-

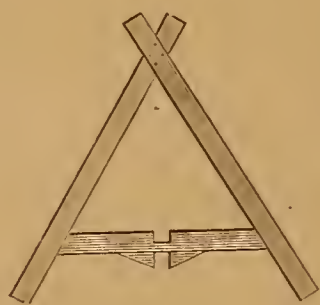


FIG. 1.

tom board may be omitted entirely, if desired, however, and the fence built on the full height of lath. But if one is located where there is great danger of the fence being blown down by high winds, he may still have a secure fence built with stationary posts and movable panels, as a team can work around posts without great inconvenience. Where round posts are used, they may be mortised, as shown in Fig. 2, using the same style of panels as described. The mortises are cut so that the projecting end of the panels will rest in the bottom of each when the fence is put up. Cleats may be nailed on each side of the posts at the bottom to support the bottom boards.

If flat, sawed posts are used, which are too narrow at the top to admit of mortises, hooks may be nailed on the sides, made of inch boards the same width of the posts, Fig. 3.

A fence of wire netting may be made so that the netting may be taken down by fastening a strip (about 1 1/2 x 2 inches is a good size) to the posts with two large screws, and stapling the netting to these

strips. When it is desired to take down the netting, the screws may be taken out, and the wire rolled up with strips fastened to it.

THE WORK OF EGG PRODUCTION.

An egg contains all the elements that assist in producing a chick, and it frequently happens that a hen will lay from four to seven eggs in a week. The work done by her, in proportion to her weight, therefore, is quite heavy.

When the matter is viewed from another standpoint, we may state that she produces one young every day, for the egg simply represents the reproduction of herself. It is true that the egg must be hatched by the application of warmth, but that may be done by an incubator, by some other hen, or in any way preferred. The point made is that the hen really gives birth to one young every day—a duty which devolves on no other creature on the farm outside of poultry. When we consider the

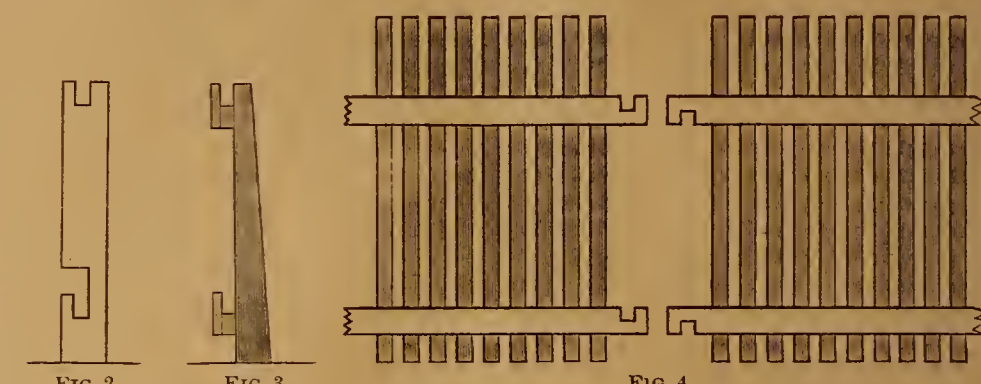


FIG. 2.

FIG. 3.

FIG. 4.

fact that the egg must be perfect, and that it consists of elements that are absolutely required in order to fulfil its mission, it is marvelous how the hens succeed in doing their work so well; not because of a lack of food, but from their inability to secure all of the several ingredients which enter into the composition of the egg.

Again, we may state that a hen weighing five pounds is capable of producing her weight in eggs every two months, which is another evidence of the great service she performs. When we look over the field and compare her with the large animals, the hen stands far ahead in her production, and is the most useful of all the stock on the farm.

When the hens receive nothing but grain, they are well supplied with the material that produces the yolk, but how can they secure sufficient nitrogen and lime? They must have those substances or there will be no eggs; and when a hen is laying every day she is compelled to have a full supply of egg-producing substances. Grain contains but little lime, and has an excess of starch and fat with its protein. A ration of lean meat, or of cut bone and meat, or linseed-meal and clover, as rations to supply deficiencies, will balance the grain and enable her to continue her work.

To make hens profitable, therefore, the farmer should study their requirements, and he can thus better understand how to keep them in laying condition.

GIVING TONICS.

It may be stated that a healthy fowl needs no tonics. The best way to use a tonic, if it must be given (and some persons use them whether necessary or not), is in the drinking-water. A teaspoonful of red pepper in a peck of food is sufficient, should it be used, but a better substance is a teaspoonful of tincture of iron in a gallon of drinking-water. If any of the birds are sick, use a teaspoonful of a solution of permanganate of potash to each half gallon of water until the whole flock is healthy again, as it will at least assist in preventing the spread of disease.

TO KEEP EGGS FOR HATCHING.

To keep eggs for hatching you have only to follow these rules: First, they must be kept in a cool place, as cool as possible. Second, they must be turned over twice or three times a week. Third, they should not be packed in bran, sawdust or other material, but simply laid on racks. Eggs kept in this way will be preserved for hatching at least a month. They have been kept six weeks in that manner.

"BROWN'S BRONCHIAL TROCHES" are unrivaled for relieving Coughs, Hoarseness and all Throat Troubles. Sold only in boxes.

INQUIRIES ANSWERED.

Feeding Meat.—H. W., Lavalette, W. Va., writes: "How should meat be fed, how much, and should it be raw or cooked?"

REPLY:—It is usually chopped fine, a pound of lean meat for sixteen hens, either raw or cooked, as preferred.

Tarred Paper.—N. F., Rubens, Kansas, writes: "I am informed that the odor of tarred paper is injurious to turkeys. Is it true?"

REPLY:—We have never heard of turkeys being injured from such cause.

Sore Heads on Turkeys.—Mrs. F. P., Mineth, N. Y., writes: "What will prevent sore heads and eyes on turkeys? We had a great many die from it last year."

REPLY:—Due to exposure to high winds during cold and damp weather. Give them shelter, and anoint heads and faces with vaseline, sweet-oil or ichthyol ointment.

Roup.—W. J. H., Helmich, Kau., writes: "I have chickens with swelled heads and running of the eyes. The mouth is frothy. What is the cause and what is the remedy?"

REPLY:—It is probably roup, due to exposure. Anoint face and heads with ichthyol ointment, and add a teaspoonful of chlorate of potash to every quart of the drinking-water.

Impurity in Breeds.—B. N. G., Parkersburg, W. Va., writes: "I bought eggs of rose-comb Brown Leghorns, and three fourths of the chicks had single combs. Was the breed pure?"

REPLY:—Every chick should rightly have a rose-comb, but even among the best flocks there will occasionally be some with single combs.

Snakes Killing Chicks.—M. A. H., Mountain Springs, Texas, writes: "Will you tell me how to manage so as to keep the snakes from killing our young chickens and eating the eggs?"

REPLY:—There is no method of protection, except to make the coops and poultry-houses secure against intrusion, and also keep the chicks away from tall grass or weeds.

Effects of Drafts.—W. B. R., Stroudsburg, Pa., writes: "What ails my poultry? Their heads are swollen, and especially around the eyes. It continues for some months at a time, and I have some that are not over the disease yet. What is the remedy, if there is any?"

REPLY:—Probably due to currents of cold air over them when on the roosts. Anoint heads and eyes with ichthyol ointment.

Canker.—Mrs. A. N., Chrissman, Texas, writes: "My chickens seem very stupid, the mouth is swollen, and a yellow coat is over the tongue and mouth. They are fat, and eat heartily for a week or two, then the mouth swells badly."

REPLY:—It is canker roup. Keep them warm and dry, and add a teaspoonful of chlorate of potash to every quart of the drinking-water.

Brown Leghorns.—E. S., Sandusky, Ohio, writes: "I have a Brown Leghorn cockerel, bred from choice stock, but I notice one of his wing-feathers is partly white. Is it a sign of impurity?"

REPLY:—The best strains of Brown Leghorns are liable to the defect. It does not denote impurity, but it is better to use a male free from white rather than to breed from one with the defect.

Leghorns.—T. E. N., Caldwell, Kansas, writes: "Is there any difference in the laying qualities of the several varieties of Leghorns? Also of Plymouth Rocks? Are White Plymouth Rocks non-sitters? Do single combs freeze easier than rose-combs?"

REPLY:—There is no difference, except in color. The White Plymouth Rocks are not non-sitters. Single combs are more exposed, and will freeze sooner than rose-combs.

Indigestion.—L. V. F., Shelbyville, Indiana, writes: "My fowls are well fed, but have bowel disease. Sometimes the crops seem to remain full, though they refuse grain. They do not lay, and when they were laying, some of the eggs had soft shells."

REPLY:—It is caused by feeding grain exclusively, the result being indigestion. Whenever a hen lays an abnormal egg—one of extra large size or with soft shell—it indicates over-feeding and indigestion.

LANDS FOR SALE.

AT LOW PRICES AND ON EASY TERMS.
The Illinois Central Railroad Company offers for sale on easy terms and at low prices, 150,000 acres of choice fruit, gardening, farm and grazing lands located in SOUTHERN ILLINOIS. They are also largely interested in, and call especial attention to the 600,000 acres of land in the famous YAZOO VALLEY of Mississippi, lying along and owned by the Yazoo & Mississippi Valley Railroad Company, and which that Company offers at low prices and on long terms. Special inducements and facilities offered to go and examine these lands both in Southern Illinois and in the "Yazoo Valley," Miss. For further description, map and any information, address or call upon E. P. SKENE, Land Commissioner, No. 1 Park Row, Chicago, Ill.; or G. W. MCGINNIS, Asst. Land Commissioner, Memphis, Tenn.

Our Fireside.

ACROSTIC.

BY ALDICE W. BLANCHARD.

FARM AND FIRESIDE! The very name calls up
A multitude of joys and of fondest
Recollections; and we ne'er forget the
Many happy days spent on the farm.

Now,

After many years of wandering, I
Never think of the good old farm without
Desiring to return.

The bright, red fire,

Flaming and crackling on the hearth, round which,
In perfect harmony, we gathered; the
Roasted pig on Christmas day; the winter
Evenings whiled away in pleasurable
Sports; the merry popping of the corn—these,
Indeed, have proved to be the happiest
Days of all. But now it is too late to
E'er go back, save in thoughts and pleasant dreams.
Sioux City, Iowa.

A FARM SKETCH.

BY JUN GALE.

LAKEVIEW, Oregon, is a busy town
nestling at the foot of a western
spur of the Blue-mountain range,
five thousand two hundred feet
above the level of the sea, and
one hundred and twenty miles
distant from the nearest railroad.

It is surrounded by a vast scope of rich agri-
cultural and stock-grazing country, which is
tributary to the town commercially and other-
wise.

Late in November last I had occasion to take
a trip from this town into the eastern foot-
hills of the Cascade mountains, a distance of
about one hundred and twenty-five miles.
Procuring for the trip a strong mountain-
buggy, and a team as nearly tame as could
be selected from a race of horses insane by
nature, I started upon my journey.

The country through which I passed for the
first two days was new and very sparsely set-
tled. Late in the afternoon of the third day,
now being well into the foot-hills of the Cas-
cades, I came around a mountain spur—a very
infant in comparison with other spurs that
lay ahead—and as I did so, saw in the distance
a dizzy, serpentine path apparently a foot in
width, crawling up and over a full-grown
mountain spur as if it were a thing of life.
Upon coming closer, I began to realize that
this narrow, winding path was really a road,
and that over it I must pass, or else turn
back, my journey unperformed. Remember-
please, that this was late into the third
one of a three-days' constant ride, and oh,
how tired of it I was! The last house that
I had passed was miles and miles behind.
No house or human being was visible ahead.
No man or boy, mountain-bred and used to
such a way, that I could hire to drive the
team, and let me walk up the one and down
the other side of this mountain spur to rest
myself. So I concluded to forego the refresh-
ing luxury of a walk, and drive the team
across in the usual way, as nearly as I could.

High up the ascent I stopped the team to let
them rest, and made some observations of the
various stages of improvement and decay
thereof upon the numerous ranches then
within my view. Some I noticed upon which
the buildings had been fairly good when new;
from these they graded down to the smallest,
rudest cabin. I saw no fruit-trees anywhere,
though farther on I learned that the soil and
climate were kindly to their growth and large
productiveness; but over all there seemed to
be that ever-working slow decay that always
travels hand in hand with those who lack the
intelligence of thrift and enterprise. Higher
up I went. Now the valley, hundreds of feet
below me, widened, was more thickly settled
and better improved; but throughout a notice-
able lack of the intelligent application of
labor to the end in view. The fact made man-
ifest, that among these ranches, few, if any,
studied or even read the literature pertaining
to their work. Too often, much too often,
the plow was left beside the furrow it had last
thrown up, weeks or months before; much
too often the reaper and the mower were left
unhoused upon the spot where their sickles
had made the last cut in the summer past.
How different farther on!

At last I begin to descend. Down, down,
into the low and gently undulating hills that
fringe the valley at its western end, and as I
come upon the crest of one of these—whoa!
What place is this? The house, the barns, the
fields, the yard and walks therein; the very
driveway leading to the barns, all seen from
where I sit, and all familiar as my childhood's
home, yet, until this moment, I have never
been upon this spot. I sit and study the scene
for many minutes, and then, like one who
sees before his startled eyes some well-remem-
bered object, I drive ahead, along the gently
winding road, to where it runs directly north,
and then again to where it turns directly west,
and there, in the angle formed by these, is
that which in seeming I have seen so often,
yet which in fact I never saw before.

The entrance to the driveway leading to the
barns being open, I turn in, and as I reach the
space between the barns and house, a woman
comes out of the latter.

"Good-evening, madam."

"Good-evening, sir."

"How far is it to the nearest hotel?"

"It is twenty miles, at least."

After some hesitation, "Are any of the gen-
tlemen at home?"

"My son will be here very soon."

"I will wait and see if I can arrange with
him to keep myself and team over night."

"The only arrangement necessary is to wait
until I call a man to take your team."

She disappeared within the door. I looked
around me. Still that puzzling familiarity in
everything I saw. Presently the woman re-
turned, and with her a man. She said to me:
"Give him any directions you may wish
about the care of your horses, and then come
in."

I did so; then followed the woman into the
house.

Once inside, all that was familiar ceased. I
passed through the kitchen and dining-room
into the sitting-room, or, perhaps more prop-
erly, the living-room. Nothing familiar in
any of these. The living-room was unusually
large, even for so large a house; and I noticed
at once that it contained a piano, a bookcase
well filled with books, and on a table near the
hearth, late papers and magazines. Inside
and outside, the place betokened prosperity,
comfort and culture, all of which, I thought,
had been arrived at through the channel of
intelligence applied to farming.

The woman, saying that supper would soon
be ready, excused herself and left me. I went
to the bookcase and looked over the titles of
the books. I remember these: Chambers'
encyclopedia; Macaulay's history, essays and
poems; Gibbon's history; numerous volumes
of history of the Civil war; many of the poets;
Dickens, Bulwer, Scott, and Thackeray, com-
plete, and also many other well-selected vol-
umes. Beside this bookcase was a neatly
made, box-like, small case, open at the front,
and which contained what seemed to be an
accumulation of the files of some paper, bound
in home-made binding into volumes of about
an inch in thickness, by having strong cloth
pasted over the back and sides of each volume.
"Another evidence," thought I, "of the provid-
ent care which is everywhere manifest
about the place." All was homelike, comfort-
able and cozy, impressing one with the pres-
ence of that indefinable something which
exists always where culture is, and never
where it is not.

Supper was announced. Besides the mother,
there were present a son and two daughters,
ranging perhaps from sixteen to twenty-two
or twenty-three years of age, the son being
the oldest. The father was at the county-town
on business, and would be absent for some
days. The mother talked, the son and daugh-
ters talked, and all with ease, modesty and
intelligence. My interest in the place and
family grew. I questioned much of both,
even close to the line where the permissible
ends and curiosity begins.

Supper over, I went to the stable to see how
fared the lunatic companions of my journey.
Then I walked some little distance beyond the
front of the house, and in the twilight looked
around. The puzzling, dream-like familiarity
was still there. Where had I seen it before?
When in the house again I went to the book-
case, took out a volume of Gibbon, and turn-
ing to the son, said:

"I see you have 'The Decline and Fall of
the Rooshian Empire' here," quoting Dick-
ens' famous character in "Our Mutual
Friend."

He laughed, and said:

"Yes; and I think one reads it with addi-
tional interest after knowing the adventures
of Mr. Boffin and Silas Wegg with it."

We fell to discussing some subject of the
history, in which the mother and young
ladies took a quiet part. Then turning to the
mother, I made some remark about the high
state of improvement of their place as com-
pared with others I had seen in the valley.
She said:

"You seem interested in our farm, and if I
thought your interest would extend to the
little history of our struggles in making it
what it is, I would be glad to tell it to you."

I assured her of my interest, and she pro-
ceeded, in substance—and, as nearly as I can
recollect, in language—as follows:

"My husband and myself were both born in
one of the Atlantic states, and had both re-
ceived a fair education. Before our marriage
he had been employed for some years as a
clerk in a store, and I had been engaged in
teaching. At this time my husband had
never had any experience in farming, but had
often expressed to me a desire to engage in it.
Having a fancy for farm life, I encouraged
this; so, each of us having a few hundred dol-
lars, it was agreed between us that after we
were married we would go to some one of the
western states and buy a farm. We finally
did this, selecting and buying one near Car-
thage, Missouri, and here we went to work
with a good will; but with our lack of practi-
cal experience and knowledge of the business,
we went slowly backward instead of getting
ahead. After about three years of this we
both saw that to continue was to lose all the
little we had left. Finding a chance to sell at
a fair price, we did so, paid our debts, and with
much less than we originally had, went fur-
ther west, with the view of taking up govern-
ment land and using what we had left in
improving it. We finally took up this place,
and went to work again. We had but one
child then—our son; our girls were both born
here.

"The work of improving was slow, and
often discouraging, but we shortly succeeded in
building a small but comfortable house and a
small barn, and got a span of horses and a few
cattle. For about three years after this we
succeeded in living comfortably, but did not
progress beyond this. The next year, owing
to the season, our crops were very nearly a
total failure, and we became pinched and
much discouraged. We both worked hard,
and were willing to; but our work often had
to be done over again, or was a total loss, as
we now realized more fully than ever before,
because of our lack of knowing how to do it
in the proper way, and our discouragement
grew upon us.

"One day, about this time, a neighbor who
had been to the post-office, then twenty miles
from here, brought us a paper. It was not the
county paper—the only one we took. It was a
paper done up in a wrapper, with my hus-
band's name printed on it. I opened it with
interest. It was the FARM AND FIRESIDE,
published at Springfield, Ohio. Why had it
come to us? We had not subscribed for it. I
felt satisfied that it would come regularly for
a time, because the name was printed on the
wrapper. Had some old friend or neighbor in
the East remembered us, and subscribed for it
in our name? I talked to my husband about
it, but he was too discouraged to pay much
attention.

"I began to read the paper, and saw that
much of it was devoted to information about
farming. I read a short article about the care
of cows, in which, by way of illustration,
there was a quotation from a conversation
between 'Kenelm Chillingly' and 'Mr. Saun-
derson,' in which the latter had said to the
former, 'Do you know much about cows?'
Kenelm replied, 'Yes. Cows produce cream
and butter. The best cows are those which
produce at the least cost the best cream and
butter.' The best at the least cost. There
seemed to me to be a maxim in that, and one
that we had never thought of or used in our
business of farming. I read the article to my
husband, and commented to him upon the
ideas it gave to me. He became interested,
and that evening we read all there was in it
about the farm. I tell you this so fully be-
cause we both, my husband and I, look back to that
time as the turning-point in our fortunes. We
learned from it how to do this thing and that
better than we had known how to do it before,
and how, with little work and next to no
expense, we could change and improve things
about the farm so as to get better results at
much less expense in labor than we had been
doing.

"The paper continued to come to us, and we
continued to profit by its advice. Reading
about these things and doing many of the
things we read about, naturally led us to
think more and devise more for ourselves,
and the good results were both felt and seen.
Before the year expired for which we sup-
posed our unknown friend had paid for the
paper, we renewed the subscription, and have
kept it renewed ever since. Do you see that
box-like case there beside the books? We
keep the FARM AND FIRESIDE there. When
enough copies come to make a volume the
size of those you see, we bind them together
with thread, cloth and paste, to preserve them
better for reference. We never knew who
caused the paper to be sent to us for the first
year, but whoever it was certainly did a bet-
ter and a kinder act than he ever dreamed of
doing.

"Some two years after the paper first came
to us, we saw an article in a new number of it,
upon the subject of the best way of raising
beef cattle, and showing that they were a
product that, if in good condition, could
always be turned into money at a profit. We
often read this article and discussed it. This
valley, and the hills and mountain-sides
around us, are a natural feeding-ground for
stock. We decided to try it. Our beginning
in this new enterprise was very small indeed;
but it grew and prospered. The article advised
two things that we have strictly followed.
The first was, never to have more cattle than
could be well fed and sheltered through the
winter; and the second was, never to let an
animal lose a pound of flesh, but to keep them
all gaining in it always.

"That was the real start of our prosperity.
From that small beginning has come all that
we now have, and we are in very good circum-
stances indeed.

"I said that I would be glad to tell you this
little history, and the reason is that the FARM
AND FIRESIDE claims, and no doubt has, a
circulation of over three hundred thousand.
Of this number, I suppose at least one hun-
dred and fifty thousand subscribers live east
of the Mississippi river, most of whom are
well off. Of that one hundred and fifty thou-
sand, think of the thousands and thousands
among them who must have relatives, friends
or acquaintances in the West who are poor and
struggling with a new farm, and who do not
know the value of such a paper to themselves,
or knowing it, cannot spare even the small
amount the paper costs. Suppose the readers of
this paper in the East who have such relatives,
friends or acquaintances in the West should
know the little history I have told you, would
not many of them subscribe for the FARM
AND FIRESIDE, or some other good paper of
the kind, in the name of some such relative,
friend or acquaintance? They would do a
good and wise thing if they did."

She crossed the room, and returning with a
paper in her hand, continued:

"One thing more, and my story is done. I
wish to show you how literally we have fol-
lowed the paper of which we think so much.
When we had prospered so far as to begin the
new and better improvement of our farm, it
was my fancy to copy this, and you can see
how well we have succeeded in doing it."

She leaned over toward me, with her finger
pointing to the title picture of the FARM AND
FIRESIDE. And my thoughts, that had gone
out searching for the dropped links of mem-
ory, had found them, for I knew the picture
sketched upon the ground.

A SEWING-CLASS IN JERUSALEM.

Strange as the above may sound, perhaps
some of your readers will be interested to hear
of an excellent work which is being carried
on in a quiet way for the benefit of the native
girls in Jerusalem. This class was instituted
and is conducted by the wife of a well-known
dragoman, Mr. David Jamal, who devotes a
room in her house twice a week for the pur-
pose of holding it. Having herself experi-
enced the benefit of education in one of the
mission schools, she felt inspired to try to do
something for her less fortunate sisters, by
encouraging them to meet at her house for the
purpose of teaching them lacework and em-
broideries, for which the East is so famous. The
girls are paid for their work, and the results
are sold at such prices as to defray the cost of
production. During the non-tourist season
they are taught plain sewing, and make such
garments as will be useful to themselves.
While working, Mrs. Jamal reads to them, and
teaches them singing, hymns and songs in
Arabic and English.

The holding of one belief or another is no
barrier to joining the class, and one girl may
be observed at her embroidery-frame strictly
observing the fast of Ramadan, while her
next companion regards it not. The class now
numbers from sixteen to twenty, and they
vary in age from about ten to fourteen or fif-
teen, at which age they generally marry.

The work consists of gold and silver em-
broidery on silk and velvet, Syrian lacework,
consisting of doilies, mats, trimming of differ-
ent widths, suitable for underclothing, and
the wear of which is almost endless; orna-
mental edgings in colored silks representing
flowers, so dainty of execution that one mar-
vels how they can be produced. Orders can be
undertaken, and if pieces of silk are sent, such
as for dinner-table decoration, they can be
embroidered as desired.

On receipt of post-office order addressed Mrs.
David Jamal, Jerusalem, Syria, she will gladly
send a collection of work. It is all moderately
priced, but a slight reduction is made when a
quantity is taken for bazaars or charity sales.
—E. R. C., in *London Queen*.

THE COFFEE-CUP.

Historically speaking, the cup—in the sense
of tea or coffee cup—is the youngest member of
the European ceramic family, and its form
cannot be traced back to classic antiquity,
says *Home and Country*. A well-known writer
refers to the ancient Greek cyathus as the
probable ancestor of our present cup.

Although the cyathus had a single handle, it
was used as a pitcher, and not to drink directly
from. Even after the introduction of tea into
Europe had become general—that is, during the
latter half of the seventeenth century—tea-
cups were scarce. Almost simultaneously
coffee gained a foothold in Europe, having
probably been introduced from Abyssinia,
Asia Minor and Arabia. Still, apart from Con-
stantinople, the first coffee-cups in Europe
date only as far back as 1645 in Venice, 1659 in
Paris, 1652 in London, and 1694 in Leipsic.
From the very first, however, the conventional
oriental coffee-cup, without stand or handle,
was but little used, and in Germany not at
all. On the other hand, the Chinese teacup
was used not only for coffee and tea, but for
chocolate as well.

Undoubtedly specimens of porcelain were
introduced into Europe during the middle
ages. Yet these were not imported in a very
great quantity from China until after 1518.
Even then they came first as articles of virtu,
and it was not until later that they were used
to drink from. The most prominent of these
were cups. Many of the specimens, however,
found their way back to the middle kingdom
again. The penchant for collecting old por-
celain is far more universal in China than
with us, and a better price is paid for it.

The collection of Chinese porcelains, if it is
intended to be only of the genuine kind,
requires an immense amount of study and
experience, for the Chinese are admirable
imitators, and there are falsifications innum-
erable in the market.

REMARKABLE PROPOSITION.

We will give all the following free: 77 com-
plete interesting novels, 100 varieties choice
fresh flower seeds, 57 magic tricks and games,
186 puzzles, 20 pieces of music. All free if you
send 20 cents, stamps, to pay for trial sub-
scription to our new magazine. Address
FIRESIDE GEM PUB. CO., Waterville, Maine.

I believe, in all the annals of our race, Abra-
ham Lincoln is the finest example of an
unknown man rising from obscurity and
ascending to the loftiest heights of human
grandeur.—*James Speed*.

THE LITTLE KNEE-BREECHES.

BY A. M. M.

'Tis the last of the knee-breeches,
Left hanging alone:
Their disgusted young owner
Has left them and gone.
In a pair of new trousers
That come to his feet,
He thinks he is looking
Decidedly neat.

The cast-off knee-breeches
Are dear to my heart,
And it fills me with sadness
To think we must part;
But the lad at my side
Only laughs when I sigh,
And chides me for wiping
A tear from my eye.

But our babies grow tall,
And the clothes they have worn,
When once they've outgrown them,
Look sadly forlorn.
To us fond-hearted mothers
Who never would weep,
Could we only forever
Our little ones keep.

Safe at rest in our arms,
Free from sorrow and care
Which comes to all mortals,
For each one to share.
And the lad who is growing
So tall soon will be
A man, and perhaps
Far from home and from me.

Still I have one fond wish,
Which I hope, if I ask it,
He will keep fondly cherished
In memory's casket:
May he never forget,
Whether poor or mid riches,
His far distant home
And his little knee-breeches.

THE REVOLT OF SARAH.

To raise more corn to feed more hogs to sell for more money to buy more land to raise more corn—and so on, the dreary way round! I declare, I'm just tired of it all!" Sarah Peters set down her pails energetically and frowned. Some red and white calves, which had espied her from afar and started running, came up and began eagerly nosing around the buckets for their evening meal. "And these calves," she went on, "they'll go for more land, too—even Spotty, and Rose, and Peachkins, that father gave me for my very own. It's always the way, no matter how I tend and raise them. And it isn't right—it just isn't right!" The girl gazed meditatively away over the waving corn-fields, and for once did not heed Peachkins' frantic attempt to drink out of two buckets at the same time. Finally she shut her lips determinedly. "I'll do it," she said; "I'll do it if it kills me to brace up to it! It isn't any more than right, and it's the only thing that is right. Here, Spotty—Rose—Peachkins!"

She picked up the overturned pails. The calves ran tumultuously after her, and in a moment were securely penned in unaccustomed quarters.

"Be you goin' to church, Sairy? Because if you air, it's time to be a-hitchin' up of the team; and if you ain't, I kin ketch a ride with the Roundses."

Mr. Peters took his pipe from his mouth and gazed complacently through the rings of smoke at his goodly fields.

"That corn has growed a foot sense I left," he went on. "Landy! I wanted to see it so bad last night when I come home that I just felt like lightin' the lantern an' goin' out an' measurin' it. I'd no idee it 'n'd be so big. But my!" checking himself, "the price is so awful low that it won't bring nothin'—not enough to pay fur hanlin'—an' goin' lower an' lower every day. That's the way. Whenever there's the prospect of a man bein' a leetle forehanded, the market goes down an' kicks the bucket!"

He sighed retrospectively, and gazed across the road. A shiny, new carriage was being rapidly driven past.

"That's jest like your Uncle Cy's buggy—planny back," he continued. "His'n was the nicest one in town. I taxed him with it, an' he didn't deny it. Now, Sairy, if you was grand folks, you could travel in your kerriage, too, 'stid of in the lumber-wagon 'longside your old pa."

Sarah's lips twitched, but she said, calmly enough:

"Indeed, I want to ride by your side, father. But wouldn't a carriage be an improvement on the old wagon?"

"Now, Sairy," her father said, soothingly, "don't go to gittin' highfalutin' notions into your head. Your mother never rode in no kerriage, an' they never was no better woman livin'."

Sarah's eyes flashed.

"No, there never was a better woman," she replied; "and never one who worked harder or tried harder to plan for the comforts of life for her family. But what did it all come to?" The old man shifted his position uneasily. "I'm not saying but you've been good to us in your way, father," the girl went on. "We've had plenty to eat, and a roof to cover us, and you let us go to town to school when Aunt

Emma offered to board us for nothing. But oh! you could have made it all so much brighter and happier."

"Why, Sairy," the old man said, "how you talk!" He tried to smile.

"Yes, father," she repeated, rising and standing before him. "Do you remember how Oliver worked with the hogs that summer they were all sick, and he brought them out—all but two—and how you gave him some little ones because he'd been so faithful?"

"Well, now, Sairy—"

"And how you took the money he sold them for, when he'd been lotting on it and expecting to get a new suit of clothes with it to go to school?"

"His clothes wuz better than any I ever hed when I was a boy," aggrievedly.

"And do you remember," she went on, without heeding, "how you always used mother's chicken-money, and sold our calves every time?" mercilessly. "Of course, it seems as though we ought to have learned by experience, and not have expected anything else. But we kept hoping things would change. We used to plan and plan how to get things like other folks. And now, father, I have—one thing!"

Mr. Peters' jaw dropped. "Why, Sairy, what—do—you—mean?" he gasped.

"Nothing, only I sold my calves while you were gone, and Snsie's—I wrote her I was going to—and my turkeys, and bought a lovely buggy. Here it is now." The shining carriage had stopped before the door. "Now, father, hurry up and get ready. You'll go to church with me, won't you?"

The old man looked doubtful for a moment. Then he straightened up and said:

"Yes, Sairy, I will. An' I jest want you to keep a-chirkin' of me up!"

Sarah went up-stairs and brought down a collar. He took it without a word.

"The first time in twenty year," he murmured.

ELEANOR ROOT.

FRONTIER ARMY LIFE.

"Children are alike the world over," is an oft-heard remark. So is woman, say I, when it comes to longing for the beautiful, for what she considers personal adornment. In recalling my early married life, away back in the sixties, spent in the heart of an Indian country, hundreds of miles from the nearest railroad, a comical scene comes before my vision. My husband, an army officer, took me, a bride, from a comfortable, well-appointed Michigan home out to a tumble-down, forlorn little one-company post in the wilds of New Mexico. Shall I ever forget the day of my arrival, after a long day's ride in a rickety old stage through scorching sand-heds and miles of buffalo-grass and sage-brush, with a dry, hot wind blowing every step of the way and fairly boiling the very water in our canteens? The sun was setting when my husband exclaimed:

"There is Fort Saint Annie!"

I saw by the aid of a strong field-glass a tattered "Old Glory," which the wind threatened to soon sever from its long, slender pole, and under its folds a sentry on his beat. I looked and strained my eyes for the horses which I saw not, and said so, whereupon Captain J. pointed to the right, and said:

"There is our house."

Ye Mexicans! That upheaval on the side of the bank, from which a cracked, rusty stove-pipe peeped! That "our house!"

But I was a bride then, and many happy days were spent in the "dugout" house, and I was not at all idle, though my household duties were light in that humble abode, consisting of one room, or an apology for two, for I partitioned it off with a large, gray government blanket, behind which was the bed-chamber. I cut a small hole, unbeknown, in the blanket by the bed, through which I often peeped into the drawing-room at the late callers, and, if on sufficiently intimate terms, carried on conversation at my end of the line, reclining in state, glancing from my observatory now and then to see the effect of my remarks upon our callers seated there with my good captain on the upholstered candle-boxes and the three-legged stool—the stool that I found on the prairie, bedded deep in some sand and sage-brush, relic of some camping outfit gone to no one knows where.

This small post was in the center of an Indian reservation, and the post-trader did a large business with the braves and their consorts. I, being the only white woman in that vicinity, was, naturally, a never-failing source of amusement and keen interest to the squaws of the community, and my comical recollection previously mentioned is connected with these wild-eyed, wondering women.

In the day of the crimping-pin I was standing before a cracked hand-mirror (others having been confiscated by the Indians, who were pleased as monkeys over them) twisting my long, brown hair in and out of the crimping-pin. My maid, a huxom, dumpy squaw, stood gazing at me, giving vent to an occasional grunt and protruding her upper lip. She also happened to see me take down my curls, when she fairly shook with delight and admiration, and made excited gesticulations, which amused me greatly, as I discovered she wanted her hair done in like manner! To braid a horse's mane and have it wave nicely is an art, but nothing when compared to coaxing crimp into Indian hair. An hour's work saw the task done, however, and my Indian maid waited in feverish impatience for the

morrow's dawn, before which, I made her to understand, those pins were not to be taken down if she wished her hair like mine. The morrow came at snail's pace—to her—and with it "Singing Bird," smiling and expectant. The ecstasy of that poor, simple, lately captured Indian squaw, as one pin after another was unfastened and the bine-black masses of wavy hair fell over her head and shoulders, was worth an artist's brush. I admired and praised her, but no more than she did herself. No court beauty was ever more bewitched by self, than she. Crimps or no crimps, the breakfast had to be prepared, but no other labor would Singing Bird do that morning—not until she had gone to the Indian camp and sutler store and shown herself. What was the verdict of her lady friends? They all, each and every dmsky, horse-haired squaw of each and every tepee on that arid plain, returned with my vain Bird, asking that their hair be made "heap good" like white squaw's and Singing Bird's!

I had heard of fashions spreading rapidly, but never like unto this, and I the author of it, too! Horrors! Those fifty or more heads to pull and twist! I saw no way out of the appalling dilemma, and calling the source of all my trouble, I sent her to the post-trader's with a note begging him to send me, post haste, all the hair-pins he had in stock. The labor was great and the heads were many, but Singing Bird soon acquired the art and was of great assistance, as she put up nearly as many heads as I, and such a lot of frizzily heads as there was in that agency the next day—for many days, in fact. No matter what their deprivations might be, their heads were wavy. It mattered little if the moccasins of their lords and masters were worn out and beads dropping off for want of diligent wifely attention, that wife's hair went in pins every night.

I shall ever remain as being set apart the Goddess of Crimps in the minds of the squaws of that section, but I fear me I am remembered as a teacher of evil ways by the heads of those tepees.—J. Williams, in *Detroit Free Press*.

AMERICA'S COMMON ROADS.

The total length of the common roads in this country, good, had and indifferent, is estimated by General Stone, of the road bureau of the Department of Agriculture, at something over 1,500,000 miles. The majority of these roads have been opened by common laborers, hired by local supervisors, and no engineering principles have been observed in their construction. As a result, it costs more to keep them in repair than if they were as many finely macadamized roads. Keeping these poor roads in repair and opening new thoroughfares cost Massachusetts in 1893, outside of cities, \$1,136,944, or \$66.30 per mile; New York, \$2,500,000, or \$30 per mile, and New Jersey, \$778,407.82, or \$43.25 per mile. The total expenditure for roads in that year amounted to about \$20,000,000. As a greater part of the enormous sum was spent in repairing poorly constructed roads, that would need exactly the same attention next year, it is not an exaggeration to say that most of the money was wasted. Fine roads can be constructed all the way from \$400 to \$500 per mile, according to the nature of the country through which they pass, the cost of crushed stone and other engineering problems. The cost of keeping these roads in repair is infinitely smaller than that required to repair the ordinary dirt roads each winter and spring, when great gulleys and ruts are washed into them by the rains and floods.—*The Manufacturer*.

CAN YOU KEEP YOUR HAND STILL?

Thought provokes action; think of doing something, and (unconsciously, perhaps) you begin to do it.

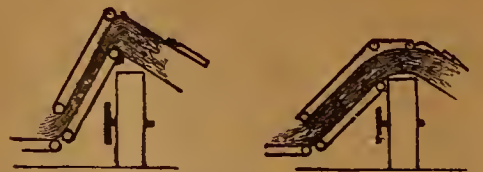
In the University of Wisconsin Professor Jastrow has an instrument called the automograph, which shows very clearly and precisely the automatic movements of the hand.

It consists merely of a piece of glass resting on three movable metal feet; or, in other words, it is a small carriage which will shift its position at the slightest movement.

At the end is a needle fixed vertically, and in contact with a roll of paper covered with a layer of lamp-black. If the apparatus moves, the movement is traced on the paper by the needle. Both paper and needle are hidden by a screen.

Professor Jastrow tells you to rest your hand upon the glass, and keep it perfectly still. This appears quite easy; but when you think your hand is quite motionless, you find to your surprise that the needle is tracing lines on the paper!

The fact is, you cannot keep your hand still; unconsciously and invisibly it moves with your thoughts. Look at that pair of scales; watch how the rod goes this way and that way as the scales move. Now look at the black paper; you will find that your hand has been moving exactly in agreement with the movement of the rod.



AVERAGE grain makes about 500 bundles to the acre.

Think of lifting each of these 500 bundles about one foot higher than necessary! That's what you do with the old style of Binders. That's what you save with the New CHAMPION Binder.

Each bundle weighs about 25 lbs., or in all, 12,500 lbs. per acre.

Think of lifting 12,500 lbs. one foot high! It's a good deal of a job and you wouldn't want to do it if you could avoid it.

Of course no Binder chokes in tying every bundle, but with the old style of Binder and certain conditions of ground and grain, there is one chance of choking with each bundle, because the extra power required to compress the bundle makes the bull wheel slip. Why take 500 chances per acre?

At least 5 minutes are required on the average, to clean out one "choke." That's an immense amount of time if counted for each bundle in an acre. Why take the chances? You don't need to with the New CHAMPION Binder.

Every time a big bundle is bound by the old style of Binders there is great strain on the machine and sudden jerk on the horses' shoulders. 500 jerks per acre! Pretty hard on the poor horses, isn't it? How would you like to be struck 500 even light blows per hour?

Why do you take these chances and submit to these misfortunes? That's what you do with the old style of Binders. You needn't take any of them with the New CHAMPION, and the New CHAMPION built on correct principles costs no more than the imitations. You have put up with these drawbacks because you didn't know they could be prevented. The force-feed elevator and eccentric binder wheel of the New CHAMPION Binder prevents them all. Other Binder makers try to do this, but have to use a steep elevator, low master wheel and flat binder deck. The New CHAMPION has an easy-slope elevator, high master wheel and steep binder deck. You know which is right.

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WOMEN IN THE INDIAN MINES.

All those who are contending for the free rights of women to engage in any occupation they can undertake, will rejoice exceedingly at an item of news received from Calcutta, to the effect that "Mr. Grundy, inspector of mines, in a report to the government, states that he is unable to discover any distressing circumstances connected with the employment of women and children in the Indian mines. They appeared to him to be healthy and happy, and without the wages earned by their work many families would be miserably in want compared with their present prosperity. Mr. Grundy, therefore, considers that the prohibition of female labor would have bad effects of a far-reaching character." A few words, therefore, upon this important aspect of women's industry, engaging as it does some thousands, may not be out of place.

The chief mining center of India lies in the Giridih coal-fields of Bengal. Minerals exist, of course, in the mountain ranges, and smelting on a small scale goes on in the central provinces, the Ghat district of Bombay, and in parts of Madras; but it is from the great tract, of which Giridih is a kind of focus, that the main output comes. Here the largest owners are the East India Railway Company, whose property covers an area of about five and a half square miles, turning out on an average of 1,500,000 tons of coal yearly, and having upon it and around it a working population of 11,560 souls. Upon the estate schools and hospitals, benefit and maternity clubs have been successfully established, and the director in control is Dr. Walter Saise, a gentleman of unusual learning and sympathy. Now, the mere physical conditions of Indian mining are so different to those at home that it is impossible to argue that what is necessary here must be followed there. To begin with, though the sinkings are deep, ventilation can be readily secured. Fire-damp is unknown, and naked lights can be carried with impunity. The cuttings, as a rule, are broad and high, and only in the extremely remote ones is it difficult for even an unusually tall person to stand fully upright. Water in the cuttings is also very rarely encountered, so that the danger of working in damp mud and steamy atmosphere is avoided.

As to the female workers themselves, it may be said that in spite of their marriages at fourteen and fifteen years of age, they are strong and well set up. Remembering, as one does, the terrible descriptions of the swearing, drunken, degraded disgraces to their sex that the north country colliery women used to be, the most remarkable point about these Kol and Santali women was their perfect gentleness and modesty. Each was dressed exactly as she would have been for any other occupation, though her cloth and sari were, perhaps, a little dirtier than they would have been in a less grimy one, and each wore a mass of bangles and anklets in silver and bell-metal work.

In India, it must be borne in mind, earnings are to be reckoned by the family, rather than by the individual, and that it would be a serious loss to take away the contributions of the women to the total. In their homes these Indian collier-women are good mothers and good housewives, and, taking into consideration the differing standpoints of comfort of East and West, they were neat and well-ordered.—Selected.

EASY TO EAT FIRE.

The so-called fire-eating magicians have long plied their trade in defiance of all explanations of chemists and physicians. A clever prestidigitator, Mr. De Vere, described recently how the trick, for such it is, is done. It is very simple of practice, but it necessitates an apparatus which must be very carefully and neatly constructed. The fire-eaters usually give their performances on a raised platform which hides the source of the fire, while it seems only to lift the operator a trifle higher from the floor of the scene, and is ordinarily covered with a handsome red carpet. It contains in the hollow space beneath it bags of rubber filled with ordinary illuminating-gas and compressed by weights.

The fire-eater has beneath the sole of his foot an ingenious apparatus ending in a tube, which fits exactly into another tube coming up through the platform from underneath, and forming a tight connection when he steps upon it; very fine rubber tubes, of the same color as the magician's dress, which is usually a diabolical scarlet red, run up along his body and along the arms to the farthest end of the index fingers; another tube runs around his neck and up under his chin, which is usually covered by a false beard, ending at his nether lip.

When entering upon the stage all the lights are usually turned down to heighten the effect of the performance; the operator steps upon the platform, makes his connection, and after a sign that he is ready, the gas is turned on from beneath. When he feels that it is beginning to escape from the tube at the end of his finger, he lights it by means of a little push-button, which is conveniently located near by, and sometimes even within his clothes on the inside of the cloak. The gas once burning, he has it entirely under his control, to light or turn out any one of the various jets he has previously arranged about his body. The jets

Cream Separator Infringers

Some of our correspondents call our attention to the fact that certain infringers of the De Laval Patent Rights deny that their machines infringe such Patents, and are now talking of "protection" to buyers.

Certainly nobody can have expected these infringers to publicly *acknowledge* that their imitations of the De Laval machines *do* infringe our Patents.

Infringers already enjoined.

That could scarcely be expected of such infringers, notwithstanding that some of their own agents and representatives—and many of the unfortunate buyers of their machines—have *already* been perpetually enjoined from the further use of same. Concerns which have long opposed the advance of centrifugal separation, in the selfish manufacture of impractical gravity setting apparatus, and then when forced to abandon same, have turned round and brazenly attempted to appropriate the just and lawful Patent Rights and invested interests of another, are no better in any sense than those who would take anything else of value, and no more to be trusted by any one.

THE DE LAVAL SEPARATOR CO.,

WESTERN OFFICES:
ELGIN, ILL.

Avail of offers of protection.

If these offers of "protection" are made in good faith, users of such infringing machines will do well to *immediately* avail themselves of same, *and they should in self safety demand a Bond given and secured by the endorsement and guarantee of some bank or other responsible persons in their own county and state*, since it is safe to assume that such infringing manufacturers, whose actual financial responsibility is at best limited and doubtful, will in the near future have all they can well provide for in the shape of direct damages on their own account, and advertising guarantees are of absolutely no actual value to any one.

Further caution.

That no infringing maker, agent, dealer, or user can have reason to complain at the possible outcome of such further proceedings as are pending and as may be necessary in protecting and maintaining our just and lawful Patent Rights and business interests, due and repeated caution is again given in this respect.

GENERAL OFFICES:
74 CORTLANDT STREET, NEW YORK.

on the fingers are controlled by pressure of the thumb upon a thin rubber tube; the gas-jet on his lip is lighted by a motion of the hand, and he always turns up his face, opens his mouth, and pretends to blow the flame from his mouth. The appearance is very deceptive indeed, as the breath blown from the lungs gives much life to the flame. As the scene is never light while the fire-eaters are at work, their secret has never before been discovered.—*La Nature*.

WHERE THEY SHOULD GO.

- Singers, to Alto, Ga.
- Bakers, to Cakes, Pa.
- Jewelers, to Gem, Ind.
- Smokers, to Weed, Cal.
- Printers, to Agate, Cal.
- The sleepy, to Gap, Pa.
- The idle, to Rust, Minn.
- Cranks, to Peculiar, Mo.
- Poets, to Parnassus, Pa.
- Dead-heads, to Gratis, O.
- Actors, to Star City, Ark.
- Perfumers, to Aroma, Ill.
- Apiarists, to Beeville, Ill.
- Tramps, to Grubtown, Pa.
- Bankers, to Deposit, N. Y.
- Small men, to Bigger, Ind.
- Widowers, to Widows, Ala.
- Brokers, to Stockville, Nev.
- Old maids, to Antiquity, O.
- Lovers, to Spoonville, Mich.
- Hunters, to Deer Trail, Col.
- Young ladies, to Bangs, Va.
- Hucksters, to Yellsville, Ark.
- Cobblers, to Shoe Heel, N. C.
- Politicians, to Buncombe, N. C.
- The "hoys," to Midway, S. C.
- Theosophists, to Mystic, Conn.
- Topers, to Brandy Station, Va.
- Physicians, to Doctortown, Ga.
- Puzzle fiends, to Riddleville, Va.
- Drummers, to Modest Town, Va.
- Druggists, to Baisam Lake, Wis.
- Prohibitionists, to Drytown, Cal.
- Political orators, to Stumptown, Pa.
- The gun brigade, to Chewtown, Pa.
- Newly married couples, to Bliss, Mich.
- Three-card-monte men, to Trickum, Ky.—*Philadelphia Bulletin*.

BOOKS FOR YOUNG PEOPLE.

Wise parents cultivate a love of reading in their children by choosing books that entertain as well as instruct, and are careful that most of their reading shall be clever and bright, and in good language.

Among those who write especially for children and young persons are Wm. O. Stoddard, Mrs. Mary Mapes Dodge, Kirk Munroe, Elizabeth Stuart Phelps, Sophia Swett, Hezekiah Butterworth and Elizabeth W. Champney.

Some interesting books at reasonable prices are the following:

- "The Story of a Bad Boy," Aldrich;
- "Not Quite Eighteen," Susan Coolidge;
- "Dear Daughter Dorothy," Plympton;
- "My Little Lady Lavender," Theodora Elmslie;
- "Melody," Laura Richards;
- "The Girlhood of Shakspeare's Heroines," Mary Cowden Clarke;
- "Jan of the Windmill" and "The Dovecote," Julianna Ewing;
- "Toby Tyler," "The Boys Revolt!" and "Mr. Stubbs' Brother," James Otis.

FREE TREATMENT MORPHINE, OPIUM HABITS.

TO THE EDITOR:—To prove that we have a painless and certain cure for opium and morphine habits, will send free sample treatment to any person honestly desiring to be cured. Golden Specific Co., Cincinnati, Ohio.

LINCOLN had a sterling common sense, a vein of humor, an unselfish patriotism, which secured for him a lasting place in the catalogue of the world's leaders.—*George P. Fisher*.

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The National Republican Convention will be held in St. Louis, June 10, 1896. There will be many thousand people in that city on that occasion. The "Big Four" offer to the public the most comfortable and luxurious line to St. Louis with elegant Through Wagner Sleeping Car service and unexcelled Dining Car service from New York, Boston, Buffalo, Cleveland, Columbus, Cincinnati, Indianapolis, Washington and all Eastern and South-eastern cities.

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VITAE-ORE is a God-made remedy, nothing added or extracted, not a dope sold by a quack who lives on the protraction of human ills, but by a man who would scorn to take any one's money before he has convinced them, at his expense, that it will cure them.

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Send for free sample and know for thyself. Not sold to the drug trade. AGENTS WANTED.

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Our Household.

LILACS IN THE DOORYARD.

When lilacs in the dooryard bloom,
And lift and shake their plummy sheaves;
When sunbeams smite the forest's gloom,
And winds go whispering through the leaves;
When wrens and robins build again
In peace anear the cottage eaves—
Then, though my strength is somewhat spent,
And though my eyes are growing dim,
I thrill with gladness and content,
My soul sends up a joyful hymn.
And in the beauty of the world
I feel my spirit overbrim.
Long years have gone since mother took
The lonesome way that angels mark;
The memory of her latest look
Is like a candle in the dark;
But when the lilacs bloom I see
Her sweet face in a starry arc.
She loved so well these homely flowers;
She broke them for my childish hand;
They speak to me of happy hours,
By mother love and patience spanned;
Their perfume has a waft of sweet
Blown hither from the immortal strand.
I like the dear old-fashioned things,
I always find them just the same;
And so the fancy wakes and clings
That, blooming by whatever name,
I'll one day pluck the lilac sheaves
Where flowers in deathless garden flame.
—Harper's Bazar.

A WORD TO HUSBANDS.

GOOD men, did you ever realize how little it really does take to make your wives happy? A woman's happiness is dependent on little things, and a few minutes' work here and there, that you would never miss, would often add a great deal to her comfort and

the effect is not restful, by any means, when she knows that very likely her better half is down town sitting on a dry-goods box, whittling and endeavoring to settle the silver question to his own satisfaction, or some other subject which all the loafing and whittling over in creation will not affect in the least. And if, when he comes home to supper, her face reflects the thoughts she has had in her mind, he feels dreadfully injured, and thinks his wife the crossdest woman alive, and himself the most "put-upon" husband on earth. A little thought and a glance around once in awhile would save many a tiff, and a woman will appreciate the few minutes spent in fixing any little thing for her comfort, and you will get your pay many times over. Instead of brooding over your neglect, with a heart full of resentfulness, she will think only of your thoughtful kindness, and all day long the memory of a loving word will be with her, and mountains will seem like mole-hills when her heart is happy. This seems childish, but it is true, nevertheless. We are all children, in a great measure. "only boys and girls grown tall; hearts don't change much, after all."

I do not think men are intentionally selfish or neglectful, but simply thoughtless. They do not see these things from our point of view. Once get them interested and they are all right, unless it be one who is particularly case-hardened. For such a one I would recommend a protracted visit for the wife, and an enforced season of quietness and meditation for the husband, with a chance for him to see for himself how hard it is to "get along" with unhandy things. If this does not help him, nothing will. However, the best way is to attend to the things that are only "trifles," as our lives are made up of trifles,

Select white pine or other light-colored wood. Prepare your design on a piece of paper, and then transfer it to the wood. Heat your poker and outline your designs on the wood, keeping the poker at as even a temperature as possible. The parts of the design which look darkest are scorched

bowl with crisp lettuce leaves, letting the tips extend above the edge of the bowl. Add two thirds of the dressing, a little at a time, before putting the carrots into the bowl, tossing lightly with a fork at the time, place them in a bowl, then add the remainder of the dressing. Any one who



darkest. The next degree of shade is produced by scorching lines somewhat closely together. Other parts of the design may be varied by crossing the scorched lines. Persons who can neither carve nor paint succeed well with the scorched wood, and are surprised at its beauty. KATE.

POSSIBILITIES OF CARROTS.

The carrot is a vegetable not yet fully appreciated, at least by the average housekeeper, who, beyond employing it occasionally as a flavoring for soups, and possibly for stews, finds no further use for it, whereas it is really well adapted to a variety of uses, and is extremely decorative in appearance.

PICKLED CARROTS.—Boil a dozen carrots until tender, cut in slices; place in a jar and cover with mild vinegar, adding a few cloves and allspice.

CARROT PUDDING.—Two cupfuls of boiled carrots rubbed through a colander, one cupful of milk and one egg. Rub four teaspoonfuls of flour smooth in the milk, add the beaten egg, and stir in the carrots, with a little salt and pepper and a large lump of butter. Bake a light brown, and serve hot.

FRIED CARROTS.—Scrape, wash and boil six large carrots; cut in halves and then split lengthwise. Dip each piece in batter made by mixing half a cupful of milk, half (scant) a cupful of flour, one egg and half a salt-spoonful of salt. Drop into hot fat, and fry a delicate brown on both sides. Serve on a hot platter, garnished with sprigs of parsley.

CARROT SOUP.—Take enough boiled carrots to make a pint after being rubbed through a colander, one and one half pints of milk, and three table-spoonfuls of

flour rubbed smooth in a little cold milk. Put milk, carrots and a salt-spoonful of salt over the fire, adding the flour when boiling. Stir constantly as it boils, and add a lump of butter the size of a black walnut, and a dash of pepper just before taking from the fire.

CARROT SALAD.—Put six carrots to boil in plenty of water. When about half done, remove from the kettle, throw out the water, and put them on to finish cooking in fresh water; when very tender, take out, cool, and cut smoothly into half-inch dice. Make a dressing of one small teacupful of vinegar, six table-spoonfuls of melted butter, the yolk of one hard-boiled egg, with a small teaspoonful of salt and a salt-spoonful of white pepper. Line a salad-

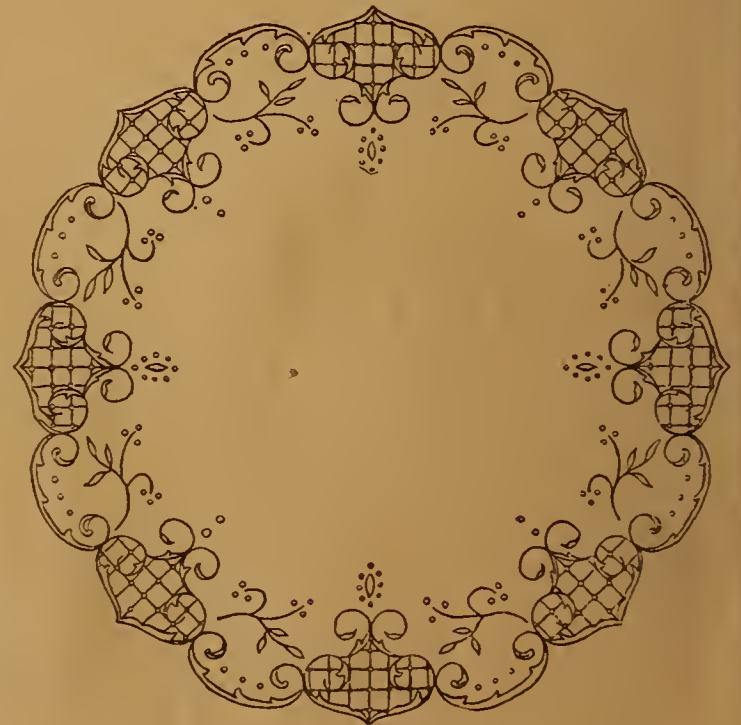
will try this dish will find it novel and ornamental.

RECEIVER FOR POSTAGE-STAMPS.

Among the pretty things which found their way on Xmas to our little home was this very dainty article. It is made of part of a linen cuff, exquisitely laundered. It is fastened at the back by a ring through the buttonholes and a ribbon; across the bottom it is laced through holes, made with an eyelet-punch, with very narrow ribbons. Upon the front is pasted a head cut from the stamp on a government envelop, which stands out clear white upon a green ground. Clover and a ribbon decorate it, painted in colors and edged with gold, also the postage-stamps. It can hang upon your desk, but if you expect to find a stamp in it when you want it, you will have to see that some one keeps it filled. L. L. C.

JEWEL CENTERPIECE.

This is one of the handsomest jewel-pieces of the season. The original was worked as follows: The dots were first filled with a few stitches of white embroidery-cotton, and then worked over with the various jewel shades. Care should be taken not to get more than one ruby jewel in each section. The edge was in white, the scrolls and leaves in very light green, and the straight lines running through the jewels were in washable gold thread. This



design is eighteen inches square, and sells in stores or bazaars for fifty cents.

We will send this centerpiece, stamped on an excellent quality of linen (Premium No. 579), to any address, postage paid, for 25 cents; or with FARM AND FIRESIDE one year, 50 cents.

It is the duty of every patriotic parent to make sure that their children are familiar with the lives of Abraham Lincoln and George Washington. They are safe foundation stones.



pleasure. A broken latch, a step that needs repairing, a garden gate off the hinges, holes in the fence where pigs get through into the yard, are all little things, but enough to fill a woman's soul with righteous wrath, sometimes. The Bible says we can "be angry and sin not," and who knows but what those words had a meaning for just such cases? At any rate, the cause is sufficient, and the effect sure in most cases.

There are very few women, if their husbands express a wish about anything they would like to have done, but will take pleasure in doing their best to please them, and it is only right that a man should regard his wife's comfort as well. There would not be so many dissatisfied wives and mothers if such were the case. Every woman who does her own work has care and trouble enough, even when she bears it cheerfully and uncomplainingly, without having all sorts of aggravations to sting her into cross speeches and bitter taunts, which only cause sorrow to both hearts.

When a woman is tired, and looks out of a door or window on a yard full of weeds,

and remember that kind and loving words are like the sunshine, and he who sows them shall reap an abundant harvest; for has not Christ himself said that "the greatest of these is love?" A. M. M.

INEXPENSIVE BEDROOMS.

There is no reason why a simply furnished bedroom should be otherwise than pretty. The walls may be dainty, even if the paper cost but five cents a bolt. The floor may be painted with two cans of paint, at an expense of half a dollar. A home-made rug before the bed imparts a touch of coziness. The bed itself may be only a cot, made comfortable with mattress, pillows and the various covers which abound in the home of a thrifty housewife.

After these things a table is necessary, and over it the indispensable shelf and looking-glass. A plate-glass with beveled edges and handsome frame gives an air of elegance to an otherwise plain apartment. We give an illustration of a shelf and glass-frame decorated with scorched patterns.

INVISIBLE ECONOMY.

Some of the most excellent things in existence retain their excellence only so long as nobody sees them. The human skeleton, for instance, is the most

think the simplest method is to renounce changes which are caused by mere love of change. This course will so simplify household affairs and wardrobe belongings that a great saving will result in regard to

lighter, a little darker, or a little less graceful in design than the patterns of the present season. Off it comes, and there is a change, but no improvement. Result, expense, bother, loss of time. This is but an example of a restless and unthrifty mismanagement.

My ideal economist, although she does not change her furniture frequently, and wears her clothes a long while, has fresh flowers in her parlor quite often during the winter, and does not deny herself an occasional treat of musical or dramatic entertainment. She has means and leisure for a trip now and then, and she is "given to hospitality." The fact is that when she and her family walk abroad, envious persons call them stylish and luxurious. But I am in that woman's confidence. I know her secrets. (I have partly divulged them to you.) She is an economist to that point of success which makes her an artist. She manages, she economizes, but her economy is invisible. She never throws away a good old thing, and thus she affords many good new things. AUNT GRISELDA.



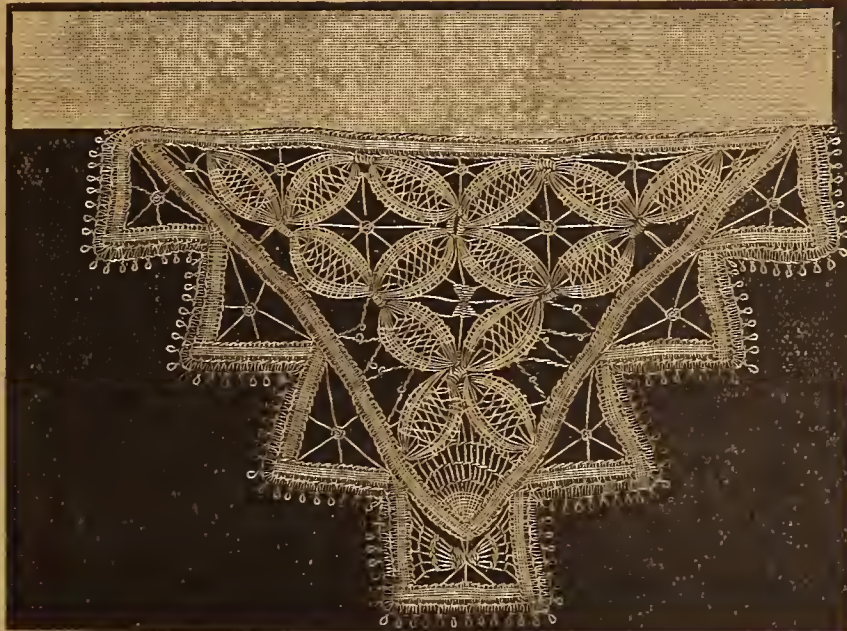
LACE NECK-POINTS.

Now that lace enters once more into the accessory of a woman's toilet, our younger women will need to be educated in lace. Avoid any kind that borders on commonness or vulgarity. Nothing shows a woman's taste or refinement more than her selection of lace. The patterns we give are for collar-points, made in very fine lace braid, with needlework finishings. The

admirable contrivance possible for the purposes which it serves, but so soon as this skeleton intrudes upon the attention of observers it excites disgust. I could cite many things which owe their success to an utter concealment of self, such as the fact that you know more than your neighbors, the fact that you "manage your husband;" but of all things that must be kept out of sight in order to truly accomplish the best result, it is economy. A lively girl of my acquaintance exclaims occasionally, "Oh, I hate even the sound of the word! I would strike it out of the dictionary! That horrid word economy!" But her aversion must be partly attributed to the extravagance of youth which loughs to be free from all restraint. Economy is not such a bad word nor such an unpleasant necessity if it is rightly understood, and not regarded as synonymous with parsimony and avarice. Economy means good management; but, of course, in case of a small income, management necessitates the doing without of superfluities. Management is interesting if you regard it in the way of intellectual exercise, and a means toward a desirable end. One distinguished author says, "I have no other notion of economy than that it is the parent of liberty and ease." True economy is the forerunner of these valuable conditions. The genuine economist is never in debt. On the contrary, she always has pocket-money, and something in the savings bank. Neither does the successful economist look shabby or saving; her management is invisible.

time, money and personal exertion, a threefold economy which will greatly increase "liberty and ease."

The ingenious women who conduct the departments of "What to Wear" and



material is inexpensive, but if neatly made command one dollar a pair. I have two sets on hand at that price. The beading on the edge is separate from the braid. The lace stitches are so simple as to need no explanation. When finished, they are sewed to a narrow band which just fits the neck-band. These are far more exquisite than the factory-made ones of common lace that sell much cheaper. L. L. C.

A JAUNTY JACKET.

Jackets and skirts are the feature of the season. Skirts of checks, with a jacket of the plain color, and several vests for variety, makes a very convenient suit for going away. One need not bother with much baggage. The one illustrated is of brown velvet, with tan-cloth skirt. The front and shoulder revers are trimmed with jet and edged with feather trimming. The turn-over collar is a distinctively new feature in the spring costume. The vest is of soft brocaded silk. The sleeves flare over the hands. The hat is of brown velvet, trimmed with large bows, rhinestone buckle and feathers.

A HOME-MADE CRIB.

A pretty crib can be made of a wash-basket or the bottom of a baby-carriage. To make this, secure from a carpenter four stout legs of wood the height desired; put casters on the ends of each secured with screws. Fasten the legs to the four corners of the bottom of the basket. Paint it carefully with white enamel paint, and gild parts desired with gold paint. A curtain of pink or blue silkoline, slightly full, should be fastened to the bottom, so the improvised legs will be hid. The curtain, when hemmed, should just escape the floor. M. E. SMITH.



"Household Furnishings" are always describing some new article with such fascinating attractiveness that it does seem we must run right away to buy it or make it. But sober reflection convinces us that these charming novelties are best left to new housekeepers and young social butterflies. When one settles down to solid comfort one deprecates rather than loughs for change. I know a beautiful room where the carpet is certainly twenty years old, and the lace curtains are contemporaries; but both are so good in quality, and so truly beautiful, that they suggest no idea of frugality. Their preservation is true economy. A poor manager would have changed these furnishings several times during those years, with triple expense and less than half the comfort and beauty. The same thing is true of clothes. The time and worry which it costs to have dresses properly fitted and made certainly suggest the desirability of letting a good dress last three years at least. You may laugh at old Aunt Griselda's ideas, and she is willing to let you. If there is a sure way to keep as uneasy as a fish out of water, it is an attempt to constantly keep up with the latest fashion. The parlor wall-paper is pretty and clean (let us suppose), but a little

Some girls have made \$10 a week

Representing The Ladies' Home Journal, a magazine which every girl can feel proud to be connected with,

and in their own village

No going away from home. This is a chance for girls to make money right at their own door-steps. It is easy enough: to make the trial is the thing.

Write about it to

The Curtis Publishing Company Philadelphia

FREE DYE! As we wish every lady to test the strength, brilliancy, and durability of "PERFECTION" dyes we make this liberal offer. Send 10 cents for a package of Turkey Red dye for cotton, and you will also receive a package of our new Fast Black dye for cotton and mixed goods Free, for trial, if you inclose this advertisement in your letter. W. CUSHING & CO., Dept. 17 FOXCROFT, MAINE. Mention this paper.

You Dye in 30 minutes if you use Tonk's French Dyes. No other dyes like them. Dye cotton as permanently as wool. Our turkey red for cotton won't wash, boil or freeze out—all others will. Carpets, dresses, capes and clothing of all kinds made to look like new. No failures with Tonk's dyes; any one can use them. Send 40c. for 6 pkgs. or 10c. for one—any color. Big pay to agents. Apply now and mention this paper. FRENCH DYE CO., Vassar, Mich.

THE EXCELSIOR CARPET STRETCHER and TACK HAMMER. Great preventive of profranity. A child can manipulate it. SIMPLE, STRONG and COMPACT. Post-paid for 63 cents stamps. Live agents make big money. Outfit free with first order for one dozen or more. R. MONTROSS, Sole Mfr., Galien, Mich. Mention this paper.

SHOPPING BY MAIL For those distant from good stores. Orders promptly answered to all inclosing stamps for reply. Address CHRISTIE IRVING, Springfield, O. 120 Maple Ave. Mention this paper.

Our Household.

HOME TOPICS.

RICE MUFFINS.—If you wish something especially nice and delicate for breakfast, try rice muffins. To a cupful of boiled rice add a cupful of sweet milk, two well-beaten eggs, a half teaspoonful of salt, a teaspoonful of sugar and a cupful of flour, with a heaping teaspoonful of baking-powder sifted with it. Bake in muffin-pans in a hot oven, and eat with honey or maple syrup.

PUT THE CHILDREN TO BED EARLY.—I know it is the practice in a great many families to allow the children to sit up until they choose to go to bed. Growing children need a great deal of sleep, and if they do not go to bed early, they are apt to sleep late in the morning, thus missing the chance of being out in the fresh morning air and sunshine. The morning sunshine is most essential to plant life, and it is not less so to child life.

"But," some one will say, "my children do not get sleepy early."

I know there is a great difference in children in this respect. Some who are very active mentally and physically become sleepy early, while others, with just as active brains, seem to grow more wakeful and excited the longer they are up. With the latter class of children, especial care should be taken that they do not study, read or play anything after dinner that will excite them. The American people seem to be growing more nervous with each generation, and what we should attempt is to store up in the bodies of our children vigor and strength to meet the demands of after years. If you commence with a child in infancy, putting him to bed regularly at an early hour, a useful habit will be formed. Let each child have a bed by himself, if you would have sleep be the recuperative power that it ought to be. Children should go to bed when the birds

do. If you have let them get the habit of sitting up late, don't attempt to change it at once, or doubtless a stormy time will be the result, and more harm than benefit follow. Gradually put them to bed a little earlier every night, telling them little nursery stories and rhymes, of the flowers and birds and lambs all going to bed, of the "Dreamland Tree," or the wonderful voyage of "Wynken, Blynken and Nod."

The habit will grow, and a few minutes earlier every night will, after a time, bring the required early hour for retiring, then never allow anything to interfere with this time. Above all things, avoid children's parties in the evening. It is bad enough for grown people to turn day into night, but for children it is absolutely criminal.

UNHAPPY MARRIAGES.—Fredrika Bremer says: "Many a marriage has commenced like the morning red, and perished like a mushroom. Wherefore? Because the married pair neglected to be as agreeable after marriage as they were before it." There is no doubt that this is one cause.

The first year or two of married life is a trying time, but if the foundation is a sincere respect and love; if each is willing to sacrifice something to the tastes and wishes of the other, and there is no wrong counsel by meddling friends, each year will bring the two nearer together. The love which first brought the two together should be cherished as the most precious thing in their lives.

Everyone has their faults, but both husband and wife should seek to hide the faults of the other, and never go to a third person for sympathy and advice. If wedded life is commenced right, and these rules are observed, the love that crowns the last years of married life will be far purer and more tender than the first.

MAIDA McL.

SNOWBALL LACE.

ABBREVIATIONS.—Sl means slip; k, knit; o, over; n, narrow; p, purl; p 2 tog, purl 2 together; st, stitch.

First row—Slip 1, k 1, o, n, k 4, o twice, p 2 tog, k 1, o twice, n, o twice, n, k 1.

Second row—Slip 1, k 2, p 1, k 1, drop loop, k 2, p 1, k 1, drop loop, k 2, thread over twice, p 2 tog, k rest plain.

Third row—Slip 1, k 2, o, n, k 3, o twice, p 2 tog, k rest plain.

Fourth row—Slip 1, k 10, o twice, p 2 tog, k rest plain.

Fifth row—Slip 1, k 3, o, n, k 2, o twice, p 2 tog, k 1, o twice, n, k 4, o twice, n, k 1.

Sixth row—Slip 1, k 2, p 1, drop loop, k 6, p 1, k 1, drop loop, k 2, thread over twice, p 2 tog, k rest plain.

Seventh row—Slip 1, k 4, o, n, k 1, o twice, p 2 tog, k rest plain.

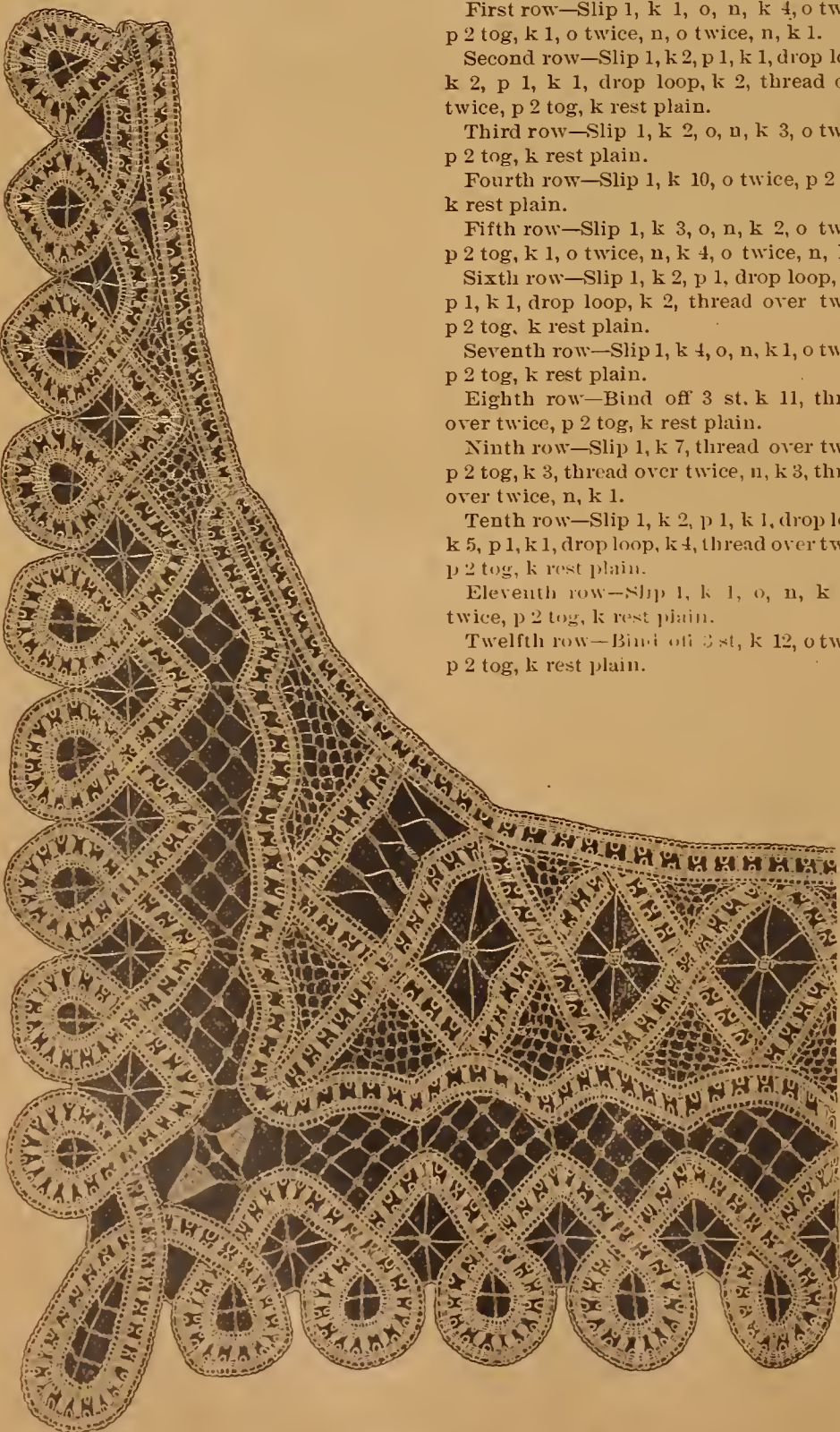
Eighth row—Bind off 3 st, k 11, thread over twice, p 2 tog, k rest plain.

Ninth row—Slip 1, k 7, thread over twice, p 2 tog, k 3, thread over twice, n, k 3, thread over twice, n, k 1.

Tenth row—Slip 1, k 2, p 1, k 1, drop loop, k 5, p 1, k 1, drop loop, k 4, thread over twice, p 2 tog, k rest plain.

Eleventh row—Slip 1, k 1, o, n, k 4, o twice, p 2 tog, k rest plain.

Twelfth row—Bind off 3 st, k 12, o twice, p 2 tog, k rest plain.



IVORY SOAP

IT FLOATS

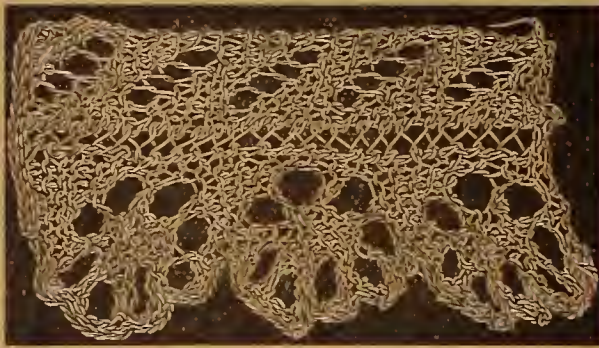
Try it for just one wash. Ivory Soap costs a little more, but it takes less to do the work, and how much whiter clothes are when they have been washed with it.

THE PROCTER & GAMBLE CO., CINCINNATI

Thirteenth row—Slip 1, k 2, o, n, k 3, o twice, p 2 tog, k 7, o twice, n, o twice, n, k 1.

Fourteenth row—Slip 1, k 2, p 1, k 1, drop loop, k 2, p 1, k 1, drop loop, k 8, thread over twice, p 2 tog, k rest plain.

Fifteenth row—Slip 1, k 3, o, n, k 2, thread over twice, p 2 tog, k rest plain.



Sixteenth row—Bind off 10, k 6, thread over twice, p 2 tog, k rest plain.

Repeat from first row.

MRS. F. J. DOZIER.

POINT-LACE COLLAR.

A very pretty design for a child's sailor-collar is here shown, developed in lace braid. The design should first be stiffened by placing heavy wrapping-paper underneath; the braid then sewed on firmly, and curves whipped to bring them to the proper outline. Sorrento bars and spiders fill the heart-shaped border, the two lower corners being developed in point Grecque. Large spiders fill the diamonds in the body of the collar, and point de Bruxelles is used in the interstices. Point de Venise and sorrento bars connect the border with the body of the collar, the two large corner spaces being filled with a weaving-stitch on a foundation of three threads.

GRACE McCOWEN.

KITCHEN KNOWLEDGE.

Here are a few easily prepared dishes for breakfast:

CUSTARD TOAST.—Bring a quart of milk to the boiling-point, season with sugar, add two eggs, well beaten, boil one minute, and pour over six slices of huttered toast. Set in the oven for a few minutes.

OMELET.—Six eggs, well beaten (yolks and whites separately), one tablespoonful of flour, one cupful of milk, a little salt. Beat all smooth. Put a lump of butter or lard in a skillet; when hot and well greased, pour in the omelet. Turn the edges as they cook.

To prepare mustard for the table, put a pint of strong vinegar to boil in a granite kettle. Mix with cold vinegar two tablespoonfuls of mustard, one of flour, two teaspoonfuls of sugar, one of salt and a pinch of cayenne. Boil all together, and stir once in awhile until cold.

BROILED FROSTING.—One cupful of granulated sugar, five tablespoonfuls of milk. Boil four minutes, stir until cold, and put on a cool cake.

AUGUSTA MILLER.

MACARONI, WITH TOMATO SAUCE.—Break the macaroni in short lengths, put it into boiling, salted water, cook it twenty minutes, drain, and turn it into a warm dish. Long and gentle stewing is an improvement to the sauce. To six good-sized tomatoes add one large onion; season with salt and red, black or white pepper. Some housekeepers add a pinch of soda or a little sugar. A teaspoonful or less of any kind of chopped, cold meat may be added to the sauce half an hour before serving, or when you start to put the macaroni over. If you prefer the sauce strained, it should be done before adding the meat. If the sauce is not thick enough, add a little corn-starch before taking it from the fire. A bit of butter is an improvement, stirred in as it is being taken up; at this time some cooks add a dash of tobasco sauce. A platter of

macaroni, flanked by a generous dish of the sauce and a dish of grated cheese, makes an abundant and satisfactory meal, and is appetizing at any season of the year. Suitable additions to such a meal are plain boiled potatoes, bread and butter and a plain dessert. The sauce may be seasoned with garlic, leeks or chives, in place of the onion, and leaves of sweet parsley or silver beet may be added, or a cupful of cold peas. Also, the sauce may be thickened with a little flour sago, farina, granola, fine bread or cracker crumbs in lieu of corn-starch.

ANNE NEWCOME.

CHESS PIE.—Four eggs, one and one half cupfuls of sugar, butter the size of a walnut, one half teaspoonful of cinnamon, one half teaspoonful of cloves, one tablespoonful of corn-starch, whites of four eggs on top, three fourths of a pint of sweet milk. Bake with one crust.

MRS. LOUIE H.

FIVE THOUSAND A YEAR.

Five thousand dollars in a country town is affluence, if the beneficiary is content to stay there; but in a city the family man with only that income, provided he is ambitious, can only just live, and might fairly be described as the cousin german to a mendicant. And yet there are some worthy citizens still who doubtless would be aghast at these statements, and would wish to know how one is to spend five thousand dollars a year without extravagance.—Scribner's.

There was a girl in our town
And she was wondrous fair,
She put some Cupid hair
pins
In her rebellious hair;
Now every lock in beauty
blends
Like gleams of golden
mist,
And for a nickel you can
have
The charm—

it's in the **TWIST.**

Made by
RICHARDSON
& DeLONG
BROS.,
Philadelphia.

WALL PAPER!

The Cut-Rate House sends 100 Spring Samples free for 2c. postage. Golds, 4c. roll up; Fine Gilt Parlor Styles, 7c. up; Embossed, 10c. up; 10% discount for Cash. 50c. secures large sample books for the trade. Increased discounts. Keim Wall Paper Co., 421 Elm St., Cincinnati, O. Mention this paper.

EVERY WOMAN

Can buy a **WORLD'S WASHER** on trial and no money paid until it is perfectly satisfactory. Washes easy. Clothes clean, sweet and white as snow. Child can use it. I pay freight. Circulars free. **C. E. ROSS** 10 Clean Street, Lincoln, Illinois.

SOLD!

UNDER A **POSITIVE GUARANTEE**

to wash as clean as can be done on the 75,000 in use. washboard and with much more ease. This applies to Terrill's Perfect Washing Machine which will be sent on trial at wholesale price; if not satisfactory money refunded. Agents Wanted. For exclusive territory, terms and prices write **PORTLAND MFG. CO.**, Box 4, Portland, Mich.

DILLEY'S KING WASHER, THE BEST WASHER ON EARTH.

REMOVABLE BOTTOM. NO RUST, NO INJURY TO CLOTHES. EVERY MACHINE GUARANTEED.

We want agents and guarantee good wages to any good, lively, hustling person. Write for full description. Address **MUIR WASHING MACHINE CO., Muir, Mich.**

"What makes my lamp smell so!" Wrong chimney, probably. "Index to Chimneys" will tell you.

Write Geo A Macbeth Co, Pittsburgh, Pa, for it—free.

Pearl glass, pearl top, tough glass.

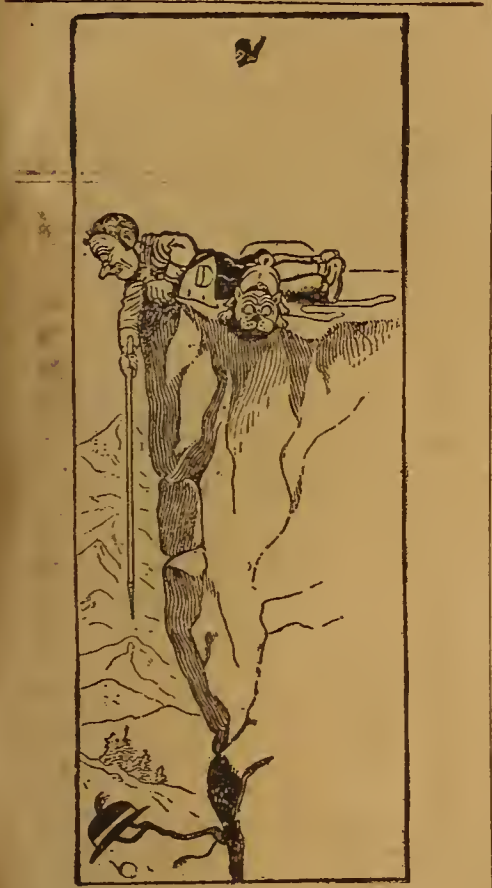
1/2 Saved HIGH GRADE BICYCLES We have no agents. Shipped on approval. 1100 wheels for \$59.75. \$75 wheels for \$47.50. All 1896 models, fully guaranteed. OHIO CYCLE CO., Mfrs., CANTON, OHIO.

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18 K GOLD RINGS FREE! We will give one half-round Ring, 15k Rolled Gold plate & warranted to anyone who will sell 1 doz. Indestructible Lamp Wicks (need no trimming) among friends at 10c. each. Write us and we will mail you the Wicks. You sell them and send us the money and we will mail you the Ring. STAB CHEMICAL CO., Box 412, Centerbrook, Conn.

ONLY \$2.43 GENUINE POLICE SAFETY The Only Genuine Automatic Revolver Ever Sold at \$2.43. We sold thousands last fall for \$2.75 and expect as any time to see the price go back to old cost. Send us this adv. and \$2. DEPOSIT as a guarantee of good faith and we will send you C. O. D. with privilege of full examination at express office before paying BALANCE \$2.18 and \$2.43. Our Genuine Police Automatic Revolver, the most effective and reliable weapon ever made. Smith & Wesson style, shoots 23 or 26 S. & W. Cartridges, Barrel 3 1/2 inch, best drop forged steel, long slant drop forged steel cylinder, full metal plated with rubber head. Entire length 8 3/4 inches. If not as represented all money will be refunded. We also send free our 300-page catalogue of jewelry, sporting goods, hardware and tools. ELY MANUFACTURING CO., 307-309 WABASH AVE., CHICAGO.

1896 \$1 Solid Silver RINGS FOR 10 CENTS These Leap Year (1896) Rings we warrant 952-1000 Sterling Silver, worth one dollar each. To introduce our great illustrated catalogue of Jewelry. We will send a sample to any person in the United States for TEN CENTS, postage stamps taken. Send a piece of paper size of your finger. Address LYNN & CO., 48 BOND STREET, NEW YORK.



High Arm MY HUSBAND Cant see how you do it. \$60 Kenwood Machine for - \$23.00 \$30 Arlington Machine for - \$19.50 Standard Singers - \$8.00, \$11.00 \$15.00, and 27 other styles. All attachments FREE. We pay freight ship anywhere on 30 days free trial, in any home without asking one cent in advance. Buy from factory. Save agents large profits. Over 100 000 in use. Catalogue and testimonials free. Write at once. Address, (in full), CASH BUYERS' UNION, 158-164 West Van Buren St., B 7, Chicago, Ill.

14 KARAT GOLD PLATE. CUT THIS OFF and send it to us with your name and address and we will send you this beautiful gold finished watch, by express for examination. You examine it at the express office; and if you think it a bargain pay our sample price \$2.75 and express charges and it is yours. It is magnificently engraved and equal in appearance to genuine Solid Gold watch. A guarantee and beautiful gold plate chain and charm sent free with every watch, write today, this may not appear again; mention whether you want gents' or ladies' size THE NATIONAL MFG. & IMPORTING CO., 234 Dearborn St., Chicago, Ill.

Handsomest, Highest Grade, Fast, Light, Strong, Highest Award World's Fair; \$100. Also Overland Cycles, \$45, \$65, \$75. Agents wanted, exclusive territory. Estab. 1864 Catalogue free CYCLES RUN EASY ROUSE, HAZARD & CO. Makers, 32 E St., PEORIA, ILL.

Our Sunday Afternoon.

THE BISHOP AND THE BABY.

A poor little pale-faced baby, Lost and hungry and cold, With the chill wind pinching her tear-wet cheeks And ruffling her bright hair's gold.

For just when the busy people Were hurrying here and on, Buying their gifts for the Christmas tree, Her mother was suddenly gone.

She did not cry, poor midget, But lifted pitiful eyes At the crowds of careless strangers, At the gray, indifferent skies.

Jostled and pushed and frightened, A tiny wail of the street, With the wintry darkness falling, And the snowflakes gathering fleet.

She was seen by a great kind giant; With swinging stride he came. Even then the angels in heaven Wrote saint before his name.

From the height of his splendid stature He stooped to the little maid, Lifted her up in tender arms, And bade her not be afraid.

Against his broad breast nestled, She clung like a soft spring flower That a breeze had caught and carried To a strong and sheltering tower.

In his thick, warm cloak he wrapped her, The little shivering child. "I'll find your mother, baby," The bishop said, and smiled.

That smile, like a flash of the sunrise— 'Tis but a memory dim, For the years are hastening onward, And we are mourning him.

The white, cold snows are drifting Where to-day he lies asleep. After his life's long warfare The soldier's rest is deep.

But of dear things said about him, Of victories that he won, No sweeter tale is told than this Of his grace to a little one.

—Margaret E. Sangster, in Harper's Bazar.

THE BEAUTY OF THE OLIVE.

His beauty shall be as the olive-tree." Anybody who has ever seen a grove of olives knows that their beauty is not such as strikes the eye. If it were not for the blue sky overhead that rays down glorifying light, there would not be much to look at or talk about. The tree has a gnarled, grotesque trunk which divides into insignificant branches, bearing leaves mean in shape, harsh in texture and with a silvery underside. It gives out a quivering shade, and has no massiveness nor sympathy. Ay! but there are olives on the branches. And so the beauty of the humble tree is in what it grows for man's good. After all, it is the outcome in fruitfulness which is the main thing about us. God's meaning in all his gifts of dew and beauty and purity and strength is that we should be of some use in the world. The olive is crushed into oil, and the oil is used in smoothing and suppling joints of flesh, for nourishing and sustaining the body, as food, for illuminating darkness, as oil in the lamp. And these three things are the three things for which we Christian people have received all our dew and all our beauty and all our strength—that we may be the means of conveying to other people nourishment, and that we may move in the world as lubricating, sweetening, soothing influences, and not irritating and provoking and leading to strife and alienation. The question, after all, is: Does anybody gather fruit off us, and would anybody call us "trees of righteousness, the planting of the Lord, that he may be glorified?"—Alexander McLaren.

OLDEST BOOK IN THE WORLD.

A leading German journal calls attention to the fact that probably the oldest book in the world is the "Papyrus Prisse," one of the treasured possessions of the great National Library in Paris. This document was found by Prisse in a tomb in Thebes, which contained also a mummy of the first Theban dynasty. This circumstance alone shows that the book certainly dates back twenty-five centuries before Christ, and an examination shows that it really belongs to a much earlier age—the time of King Assa. The title reads: "Injunctions of the Perfect Ptah-Hotep, Who Lived in

the Time of Assa, King of the North and South." Chronology places this Assa at about 3350 B. C., and to this age it would then seem that this book belongs. It is divided into forty-four chapters, and is written in hieratic rhythmic language. It directs its words to the higher classes, and contains for these a series of maxims and sayings. It advises those in authority to show in all their doings the characteristics of a perfect man. The ideal of the high official should be wisdom and science, and these guides he should heed. He is, further, not to abuse his power, is to be modest and moderate, for in this way only can he secure the good opinion of future generations. The author tells us that he has grown to be 110 years of age, and had attained to all the honors and favors which Egyptian royalty could bestow.

DO SOMETHING.

Each member of a Christian church should be a worker for Christ. Our Lord has never granted a dispensation to a single one of us; would any of us desire that he should? His vows are upon us all without exception. Are we obedient to his word, "Occupy till I come?" Are we putting out our talents to interest? If we are not doing so, we can never enter into rest. Rest implies previous labor. We are bidden by the Holy Spirit to labor to enter into the rest of God; it is the way thereto. Idlers are unrestful, fidgety, worried and worrying, fretful and fanciful, troubled and troublesome. They are happiest who are most completely consecrated to the service of God and most fully absorbed in obedience to his will.

Oh that all our church members were constrained by divine grace to do their utmost for the Lord! There would then be no lack of laborers; no vine would be left unpruned, no wheat ungarnered. Under God we have in the church all that is needful for her great work; it only needs bringing out and setting in order—perhaps we ought to say arousing and quickening. The world is full of stir—social, political, scientific, selfish—and shall the Savior's household be given to slumber? Heaven can be no heaven to us if we do not labor here, by either doing or suffering the divine will.—Spurgeon.

WHAT YOU CAN DO.

You cannot set the world aright, or the times, but you can do something for truth; and all you can do will certainly tell if the work you do is for the Master, who gives you your share; and so the burden of responsibility is lifted off. This assurance makes peace, satisfaction and repose possible, even in the partial work done upon earth. Go to the man who is carving a stone for a building; ask him where that stone is going, to what part of the temple, and how he is going to get it into place; and what does he do? He points you to the builder's plans. This is only one stone of many. So when men shall ask where and how is your little achievement going into God's plans, point them to your master, who keeps the plans, and then go on doing your little service as faithfully as if the whole temple were yours to build.—Phillips Brooks.

The last report of the London Young Women's Christian Association gives in detail the valuable work carried on by that society. In London it has forty institutes, homes and restaurants, one hundred other branches, and two gymnasiums. Besides the religious, social and educational departments, there are others designed to meet the special needs of girls, like employment agencies, sick and convalescent aids, traveler's aid, etc. The membership numbers 14,000.

CONSUMPTION CURED.

An old physician, retired from practice, had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all Throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints. Having tested its wonderful curative powers in thousands of cases, and desiring to relieve human suffering, I will send free of charge to all who wish it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail, by addressing, with stamp, naming this paper, W. A. NOYES, 820 Powers' Block, Rochester, N. Y.

Lincoln will stand in the memory of the world among the most forbearing, kindly and gentle, whose generosity toward the most bitter foes is without a parallel among successful rulers and conquerors.—Warren Hathaway.

DON'T STOP TOBACCO

Suddenly. To do so is injurious to the Nervous System. "Baco-Curo" is recognized by the medical profession as the scientific cure for the Tobacco Habit. It is vegetable and harmless. You can use all the Tobacco you want while taking it; it will notify you when to stop. "Baco-Curo" is guaranteed to cure where all others fail, and is sold with a written guarantee to cure any case, no matter how bad, or money refunded with ten per cent interest.

One box \$1.00; three boxes (and guaranteed cure) \$2.50, at all druggists, or sent direct on receipt of price. Write for free booklet and proofs. LEBREKA CHEMICAL & MFG. CO., LaCrosse, Wis.

PATENTS

LEHMANN, PATTISON & YESBIE, Washington, D. C. Examinations Free. Send for circulars

HOMESTUDY

Book-keeping, Penmanship, Arithmetic, Short-hand, etc. thoroughly taught by Mail at student's Home. Low rates; perfect satisfaction. Cat. free. Trial lesson 10c. BRYANT & STRATTON, 30 College Bldg., Buffalo, N. Y.

TYPEWRITER HEADQUARTERS

45 Liberty st., New York, sells all makes under half price. Don't buy before writing them for unprejudiced advice and prices. Exchanges. Immense stock for selection. Shipped for trial. Guaranteed first class. Largest house in the world. Dealers supplied. 52-page illus. cat. free.

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Write at once for ILLUSTRATED BOOK, telling how to learn and secure a Railroad position. Address Valentines' Telegraph School, Janesville, Wis

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Shipped C. O. D. Anywhere to anyone at Wholesale Prices without asking one cent in advance. We pay freight. Buy from factory. Save dealer's profit. \$15.50 carriage for \$9.25, our profits. Large list \$12.00 " \$5.95. Illustrated catalogue \$5.00 " \$2.65. Free Address CASH BUYERS' UNION, 164 West Van Buren Street, B 7, Chicago, Ill.

PARKER'S HAIR BALM

Cleanses and beautifies the hair. Promotes a luxuriant growth. Never Fails to Restore Gray Hair to its Youthful Color. Cures scalp diseases & hair falling. 50c. and \$1.00 at Druggists

WHAT CAN YOU PAY

For a Sewing Machine! All we ask is for you to drop us a card letting us know you want a sewing machine, and we will make you the most liberal arrangements ever offered—NO MONEY IN ADVANCE! 10 DAYS TRIAL IN YOUR OWN HOME. We manufacture the BEST and our highest priced machine is only \$22.50. Our discount in new locations are great. Liberty. We have shipped hundreds of our Best High Grade Alrah machines to introduce at \$2.15, \$2.22, \$2.36, \$2.44, \$2.58 & \$3.40 each. LET US MAKE YOU OUR BEST OFFER. Do not delay. Cut out this advertisement and send us to-day. ELY MFG. CO., B 4 307 & 309 Wabash Ave., Chicago, Ill.

1896 High Grade Bicycles

Shipped anywhere C. O. D. at lowest wholesale prices. \$100 "Oakwood" for \$7.50 \$55 "Arlington" " \$45.00 \$65 " " " \$37.50 \$20 Bicycle " \$10.75 Latest models, fully guaranteed; pneumatic tires; weight 17 1/2 to 30 lbs., all styles and prices. Large illustrated catalogue free. Cash Buyers' Union, 162 W. Van Buren St., B-7 Chicago

"DO IT YOURSELF!"

With Root's Home Repairs Outfits for half-soling and re-tying Boots, Shoes, Rubbers, Harness, Tawares, etc. No. 1, 40 items, \$3; No. 2, 32 items, \$2. Send for FREE catalogue describing these and "Root's Simplicity Process" for home re-pairing. Carpenters' and Blacksmiths' tools, etc. Agents wanted. The Root's Bros. Co. Box E, Plymouth, O

RUPTURE CURED? NO, But

with my 15 years' experience in fitting trusses I have become an expert on their application. My latest No. 10 Elastic is so constructed that a perfect fit is secured, and money will be refunded if not satisfactory. Anyone can fit it. Send for factory price list. Address M. G. CURTIS, - - Lynn, Mass.

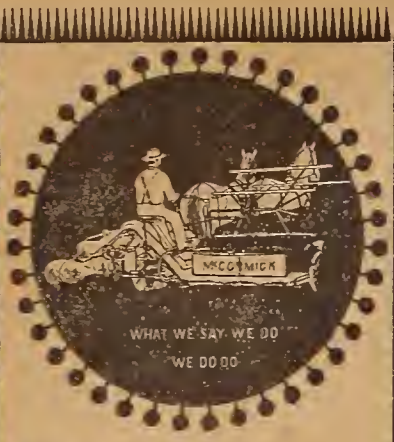
DEAFNESS

and Head Noises relieved by using Wilson's Common Sense Ear Drums. New scientific invention; different from all other devices. The only safe, simple, comfortable and invisible Ear Drum in the world. Helps where medical skill fails. No wire or string attachment. Write for pamphlet. WILSON EAR DRUM CO., 1301 Trust Bldg., Louisville, Ky. Offices: 1122 Broadway, New York.

RIPAN'S TABLETS

REGULATE THE STOMACH, LIVER AND BOWELS And Purify the Blood.

RIPAN'S TABLETS are the best Medicine known for Indigestion, Bileousness, Headache, Constipation, Dyspepsia, Chronic Liver Troubles, Dizziness, Bad Complexion, Dysentery, Offensive Breath, and all disorders of the Stomach, Liver and Bowels. Ripans Tablets contain nothing injurious to the most delicate constitution. Are pleasant to take, safe, effectual, and give immediate relief. Price—50 cents per box. May be ordered through nearest druggist, or by mail. Address THE RIPAN'S CHEMICAL CO., 10 SPRUCE STREET, NEW YORK CITY.



More Brains

Are often required to determine what shall be "kept out" of a harvester than to say what shall "go into" it. It is so easy to do the wrong thing—and the wrong thing has such an inviting appearance—that less experienced manufacturers than the McCormick Co. frequently find themselves "putting their foot in it" and building a machine one season which they are obliged to abandon a season or two later.

Because a good thing is a good thing in its place, it doesn't necessarily follow that it is a good thing in a harvester or mower.

Fight shy of the machine whose best recommend is that "it seems to have a bright idea" in its make-up. Remember this every day in the year:—McCormick Machines will work where others fail.

The makers of McCormick Machines have been at it for sixty-five years. By long experience they have found out how to build the best binders and mowers.

The new McCormick Light-Running Open Elevator Harvester and Binder, the McCormick No. 4 Steel Mower and the McCormick Corn Harvester are unequalled for capacity, light draft, efficiency of service and long life. Built, sold and guaranteed by the McCormick Harvesting Machine Co., Chicago. Agents Everywhere.

FILL YOUR TEETH Dr. Truman's Crystalline STOPS PAIN & DECAT. Is FREE. E. J. TRUMAN, WILLS BUILDING, N. Y.

AGENTS WANTED. One earned \$22,500 in 5 years. Several \$1,000 yearly. F. & F., P. O. 1371, New York.

SALESMEN wanted to sell to dealers; \$100 monthly and expenses; experience unnecessary; enclose stamp. ACME CIGAR COMPANY, 96 Fifth Ave., Chicago

WANTED AGENTS to sell Sash Locks & Door Holders. Sample Sash Lock free by mail for 2c. stamp. Best sellers ever invented. Beats weights \$12 a day. Write quick. BROWARD & CO., Box 83, Philadelphia.

YOU You can now grasp a fortune. A new guide to rapid wealth, with 240 fine engravings, sent free to any person. This is a chance of a lifetime. Write at once. Lynn & Co. 48 Bond St. New York

GOLD FOR YOU. CUT THIS OUT. We will send you a NEW BOOK HOW TO GET RICH WITHOUT CAPITAL, also a LOVELY RING warranted to please you, all for 10 cents, postage 2c. Address, BUSINESS, Box 75, Clintonville, Conn. Mention this paper.

WE WILL GIVE a beautiful picture, size 16x22 inches, in rich colors and gold, absolutely free to any person who will promise to show it and try to get orders at 25c. each. When you have taken 6 orders we will send six pictures on credit, which you deliver and get paid for; you send us one half the money and keep the other half for your trouble. Send 12c. to pay postage & adv't'g. Home Art Picture Co., Chicago, Ill. Mention this paper.

...AN... Agent Wanted

In every town and neighborhood to solicit subscriptions for

Farm and Fireside

In connection with popular premiums. Liberal commission given. Write for terms and sample copies at once.

Mast, Crowell & Kirkpatrick,
Springfield, Ohio.

PICKED POINTS.

A person accustomed to reading the veterinary departments of agricultural journals must observe the unusual prevalence of various diseases of farm animals in the so-called "corn belt," if the numerous requests for treatment are a criterion by which to judge. The cause is evident, but not generally recognized. The hay crop was short, but the corn crop immense; consequently, corn has been the main feed for swine, and stover for horses and cattle.

The cause of these troubles is easily seen. These feeds make rations just about twice as wide as they should be; that is, the animals get twice the proportion of the heat and force formers they should have; or, in other words, only half the required proportion of the flesh and bone formers. Animals cannot be thrifty and healthy so long as they are fed in this manner. Each person, by sending a postal-card request to the experiment station of his state, can get a bulletin on feeding animals that will instruct him how to feed for health and profit.

Disease and degeneration in pigs are certain to follow an exclusive corn diet. The very elements which make this grain the best fattening food for maturing hogs render it unfit for use when bone and muscle are needed to build up a strong frame and hardy constitution required for profitable pork production. The necessary elements to do this are to be found in clover, wheat-bran, middlings, oats, peas and some other products. It is not at all certain that a single feed cannot be found that will carry pigs in vigorous growth from September to a mature fat stage by the time the ground freezes up solidly in the North, and the animals harvest their own food.

It is said in the South that chufas will make both growth and fat equal to a variety of the best foods that can be given for the purpose. It is reported they will grow hundreds of bushels to the acre. They somewhat resemble peanuts in appearance, but have no shell. They grow just beneath the surface like all grass bulbs (for it is grass), and are sweet and nutritious, weighing forty-four pounds to the bushel. That they will flourish as far north as latitude forty-two and one half degrees was proven by me last season by planting a few. The leaves resemble those of blue-grass, and make just as good hay or pasturage, and the plant will endure as much freezing. The nuts ripened fully, and in every respect seem to warrant what I have heard southern people say of them. It is said that it does not seem to hurt the nuts after they are fully grown, about the first of September, to pasture off the tops or mow them for hay. By turning the hogs in they would get both grass and "grain," and I cannot see why they should not come out the first of December the very best kind of pork. I have no chufas to sell or give away; but they can be obtained from southern seedsmen.

Dr. GALEN WILSON.

SOUTH ATLANTIC AND GULF NOTES.

At the "Texas coast fair," held at Dickinson, near Galveston, Mr. Owen Smith, of Willis, took the first premium for the best display of tobacco.

The negroes of the South are evidently accumulating property. Those in Georgia last year made returns of taxable property to the amount of \$12,941,230.

All who are experimenting in tobacco culture in Florida, and westward to Mexico, should not be in too much of a hurry in deciding the suitability of soil and varieties. It is a well-known fact that the dried leaf has but a little of the fragrant aroma of the manufactured article. This is largely developed by a fermenting process with which the manufacturers in the celebrated tobacco-growing districts of Cuba are familiar. According to all indications, the interest in tobacco culture in Florida is on the increase. There is said to be nearly a thousand applications for tobacco-seed on file in the office of the commissioner of agriculture in Tallahassee. Tobacco associations have been formed in nearly every county in the state.

J. W., JR.

FLORIDA FACTS.

On April 12th there arrived in Tallahassee twenty excursionists from the West and Northwest, in charge of an agent of the Clark Syndicate Companies. All these were representative people, who went down for the purpose of investigating the claims made by the Syndicate in the columns of this paper.

In this issue we publish letters from one or two of those who went down, and, from time to time, shall also publish other letters, as we have done in the past, giving the honest opinions and truthful statements of various land-seekers in regard to the beautiful hill country of Western Florida.

It is, of course, gratifying to us to know that everyone who goes down to our section is so interested and enthusiastic about the country. Most of these have bought land, and in the fall will move down and become active citizens of that section. Many are there already.

We can only reiterate here that we have one of the very finest sections in all this country, and it needs only to be seen to be appreciated. We offer to all those seeking new homes and new locations very great advantages. We have a country with one of the most equable and delightful climates to be found anywhere. We have everything in the way of improved and unimproved land. We can sell to the farmer cleared land, which he can begin to cultivate and farm at once, or we can give him land at a very low price, on which is simply a small growth of timber, and he can clear it by his own labors, from time to time, with practically no cost to himself.

In the Tallahassee region we have as fine hard-wood hammock lands, thoroughly cleared and grubbed, as are to be found anywhere in this country, and we are certain that all it is necessary to do is for the people to go down and see for themselves, and they will become as enthusiastic and as great believers in our section, and as great believers in its future, as it is possible to be.

Many questions have been asked us with reference to the prevalence of fevers in the Tallahassee country, and we take this occasion to say that yellow fever has never been known in or about the Tallahassee region. Our land is high and rolling, and it is one of the most healthful sections of all the South. Neither yellow nor other malarial fevers exist here.

Throughout the lands of the Clark Syndicate Companies are to be found many springs, and the fact that pure water can be had simply by the driving of a short well is a great advantage in itself.

For four cents in stamps, the Clark Syndicate Companies will mail you a very pretty calendar for 1896-97. An especially attractive thing for the ladies.

LATE LETTERS ABOUT FLORIDA.

TALLAHASSEE, FLA., January 27, 1896.
CLARK SYNDICATE COMPANIES,
315 Dearborn Street, Chicago, Ill.

Gentlemen:—Yours to hand inquiring about the cost of raising tobacco. I am just in from the country, and as I will not have time to get letters from other tobacco-growers on the subject, I will give you my experience, which, I think, will answer every purpose, as I was as successful as any grower in the country; and as I hired all the labor done and purchased all the fertilizers used, my experience will show the maximum cost. A barn for three acres will cost \$75.

Interest on this at 10 per cent equals, per acre	\$ 2.50
per annum	12.00
100 bushels cotton-seed per acre (for fertilizer)	3.50
100 pounds muriate of potash for composting	2.50
Rent of land per acre	20.00
Labor	12.00
Assorting and packing for market	7.50
Packing-cases and incidentals, hauling to market, etc.	\$60.00
Total cost per acre	\$150.00
Yield, say 600 pounds, net price 25 cents per pound.	\$150.00
Profit, 500 per acre.	

The above is an average of several crops, including the first crops grown by me, when I was green at the business. I have produced crops at less cost for labor. Then, some years when seasons were not so favorable for setting and the worms were bad, it would cost a little more, but the prices realized for crops well handled during such seasons always more than compensated for the extra cost of labor. These figures are very conservative, and the yield per acre and price per pound depend almost entirely on the grower. One thousand pounds per acre can be grown by early planting, careful cultivating and proper fertilizing, though the quality might suffer. I have raised crops that would yield 800 pounds per acre, and netted over 40 cents per pound, at a cost not to exceed \$50 per acre. The variety of tobacco grown by me was invariably Havana, though I have known others to secure even better results growing Sumatra tobacco.

Trusting that this gives you all the information required, I am
Yours very truly,
(Signed) W. L. TAYLOR.

CHICAGO, ILL., March 23, 1896.

CLARK SYNDICATE COMPANIES,
315 Dearborn Street, Chicago, Ill.

Gentlemen:—I am on my way home to Medicine Hat, Assiniboia, Canada, N. W., having been to view the Tallahassee country, of which I had read so much. From the glowing accounts I had read of the country, I was led to believe that it was a goodly land to dwell in and make a home in. A sense of gratitude prompts me to say, that however high my expectations ran, they fell far short of the actuality.

For several days I traveled through the Highlands, visiting fruit-farms, tobacco-farms, dairy-farms, and cotton and cane fields, and after the most thorough investigation I am of the opinion that the Tallahassee country offers and extends to the home-seeker, be he a farmer, stock-raiser, fruit-grower, or all in one, such opportunities as can be found in no other land or clime that I know of. The facilities afforded by your company for viewing and investigating the country cannot be excelled.

I saw pear and peach orchards in great variety, English walnut and pecan orchards, and vineyards. I visited one farm where the proprietor told me he had raised and marketed, during the past season, twenty-one hundred dollars' worth of tobacco; another farm where two thousand dollars had been realized in a single season on cabbages alone; and still another where the tenant on the farm threw open the crib doors and showed us several hundred bushels of corn, at the same time saying that the land on which it grew had produced sixty bushels to the acre.

The beautiful scenery of the Highlands is beyond my descriptive powers. No writer, in my opinion, however facile his pen, has as yet done it justice. It must be seen to be fully appreciated. It is impossible within the scope of a single letter to give you all of my impressions of the Tallahassee country.

To conclude, I will say that I met many land-seekers at Tallahassee, some of whom had been in every state in the South, and they all, without exception, pronounced the Tallahassee country the "garden spot of the South." I intend to make my future home in the Tallahassee country.

Very truly yours,
(Signed) WM. SALVAGE.
Grand Central Hotel.

NORWOOD PARK, March 25, 1896.

CLARK SYNDICATE COMPANIES,
315 Dearborn Street, Chicago, Ill.

Gentlemen:—I just got back a few days ago from my second trip to Tallahassee, Florida, and I found the weather here far from pleasant. In Florida everything was in bloom, and the weather warm and pleasant. Here in Chicago, just the opposite. To say I am pleased with the Tallahassee country and its climate is telling it mildly, and I am very anxious indeed to go down there and settle. I went thoroughly over the property I bought from you, and have selected a spot to build on. I am getting plans for my house and barn ready, and as soon as I can make arrangements, shall begin to build.

I have at different times heard that no wheat or other grains can be grown in Florida, and I wish to say, in my opinion this is a mistake, for I have seen rye that was put in last November that stands from four and a half to five feet high, with good heads. I think that is a little better than I have seen in the North.

Very truly yours,
(Signed) CHAS. J. DEIHL.

EXCURSIONS TO FLORIDA.

Our next round-trip excursions to Tallahassee, Florida, are on April 21st and on May 5th. We make a reduced round-trip rate from Chicago and from Cincinnati on these dates, and can also quote reduced rates from other points. We leave Chicago over the "Big 4" route, and Cincinnati over the "Queen & Crescent," on the Limited Florida Train, passing by daylight through the beautiful scenery of the Blue Grass region and the famous battle-fields in the neighborhood of Chattanooga. In fact, we make almost an entire daylight ride from Cincinnati to Florida, giving one a most excellent opportunity to see the country.

If you cannot come to Chicago or Cincinnati and join our excursion, go to your nearest ticket agent and get through rates from him on the special excursion days. Then, if you will advise us when you leave, we will have our manager at Tallahassee meet you at the depot. He will show you every courtesy and attention, and arrange free transportation for you over our own railroad lines while you are visiting Tallahassee.

People wishing to go from the East can make the trip via the Clyde Steamship Line from New York or Philadelphia, and the fare for the round trip (first-class) is \$46.70. The round-trip fare from Boston via the Savannah Steamship Line is \$49.50. This price includes meals and berth on board steamer to Jacksonville, Florida, and from there it is only a short ride to Tallahassee.

For all information regarding excursions to the Tallahassee country address
CLARK SYNDICATE COMPANIES,
Care of FARM AND FIRESIDE,
1643 Monadnock Block, Chicago, or
108 Times Building, New York City.

Queries.

READ THIS NOTICE.

Questions from regular subscribers of FARM AND FIRESIDE, and relating to matters of general interest, will be answered in these columns free of charge. Querists desiring immediate replies, or asking information upon matters of personal interest only, should inclose stamps for return postage. The full name and post-office address of the inquirer should accompany each query in order that we may answer by mail if necessary. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Queries should not be written on paper containing matters of business, and should be written on one side of the paper only.

Damp Cellar Walls.—M. S. F., Wilton, N. C., writes: "Please inform me how to prevent dampness on the walls inside the cellar."

REPLY:—If the dampness is due simply to the condensation of moisture on the cool walls, provide better ventilation for the cellar. If the cellar is in undrained soil, dig down below the bottom of the walls on the outside and put in a line of tile around the cellar, with an outlet at the most convenient point.

Sprouting Sweet-potato Plants.—W. D. J., Ridgway, Ohio, and J. N. F., Sheridan, Ind. Prepare the hotbed for sprouting sweet potatoes shortly before corn-planting time. Use about one foot of coarse horse manure, packed well. Cover it with a layer of sand or light loam about three inches thick. Bed the potatoes so as not to touch each other. If large, they may be cut lengthwise and placed flat surface down. Cover lightly at first; after the sprouts appear, add three inches of sand or light loam. Request the Secretary of Agriculture, Washington, D. C., to send you Farmers' Bulletin No. 26.

VETERINARY.

Conducted by Dr. H. J. Detmers.

To regular subscribers of FARM AND FIRESIDE, answers will be given through these columns free of charge. Where an immediate reply by mail is desired, the applicant should inclose a fee of one dollar, otherwise no attention will be paid to such a request. Inquiries should always contain the writer's full address. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Subscribers may send their veterinary queries directly to Dr. H. J. DETMERS, 1315 Neil Avenue, Columbus, Ohio.

Will Not Eat.—N. A. R., Waverly, Kan. If your pigs will not eat, I cannot tell you how you can make them, if that is all that ails them. Maybe they are sick, and it is even possible that they have swine-plague.

Effects of Inveterated Grease-heel.—J. F. C., Fox, Ala. If the consequence of inveterated grease-heel, lymphangitis and degeneration of the skin extends over a large portion of the body, a cure is out of the question.

Lost Her Cud.—M. D. B., Perry, Okla. Ter. To say that a cow loses her cud is nonsense, and to give a cow a greasy dish-rag as medicine is worse than foolishness. Your cow, probably, had eaten something that did not agree with her, and when the effect was over she recovered.

Probably Heaves.—J. C., Cumberland Hill, R. I. What you describe appears to be a case of so-called heaves, or to be more particular in your case, one of chronic catarrh. It must be considered as incurable. See numerous answers under the heading of heaves in recent numbers of FARM AND FIRESIDE.

Pig-eating Sows.—N. R. L., Stauffer, Pa. Pig-eating is supposed to be induced by a vitiated appetite, caused by an unsuitable diet, but experience teaches that a sow which has done it once is apt to do it again. Therefore, I have to advise you not to take any further risk, to fatten your sows for the butcher, and to procure others for breeding.

A Barren Cow.—F. W. Q., Bristow, Ky. There are many different causes of barrenness, a few of which, when known, can be removed; but the majority cannot. In your case, it is probable that one or another of the internal sexual organs became injured when the cow had her last calf; but without further particulars it is impossible to say which, or in what way.

Goiter in a Cow.—B. P. W., Delaware, O. If your cow is affected with goiter, a morbid swelling of the thyroid gland, the best you can do is to let it alone. It is true, the gland can be extirpated by means of the surgical knife, but the operation is a rather dangerous one. You may possibly succeed in somewhat reducing the swelling by frequent applications, say once a day, of a salve composed of iodide of potash, one part, and lard, six parts.

A Diseased Udder.—H. C., Orwell, Ohio. When your cow gave bloody milk out of one teat for eight days last fall, there must have been some morbid process of an inflammatory nature, perhaps, which gradually produced a degeneration of the mammary gland; otherwise it cannot be accounted for that that side of the udder remained dry when the cow became fresh again. I do not see what you can do to restore the functions of a degenerated organ. Bloody milk may be produced by too many different causes to go into particulars.

Poor Breeders.—J. T. P., Worthington, Minn. If your sows are such poor nurses (produce so little milk) that one raises only four pigs out of eleven, and the other only three out of eleven, the same must be very undesirable brood-sows, unless it be that not the sows but the food they receive is at fault. If food and keeping are not at fault, it surely does not pay to keep such sows, and it will be best to convert them as soon as possible into pork.

A Good Milker.—F. S., Hastings, Neb. If your cow will become fresh on May 17th, and produced on March 17th yet five pounds of butter a week, she must be a very good one. Still, it is not advisable to take all you can get, but be more prudent to let her rest for at least five or six weeks. To accomplish this, do not feed too much milk-producing food; milk for a few days only once a day; then once every other day; then once every three days, and so on until no more milking is necessary. I cannot advise you to use artificial means; be sure, though, that your cow is with calf.

Lousy Calves.—A. L. P., Whitakers, N. C. If your calves are so very lousy, wash them first with soap and warm water, and then with a five-per-cent solution of Pearson's creoline in water. Apply both washes with a brush, and in a thorough manner, but do not take the calves back into the old premises, unless the latter have been thoroughly cleaned and freed from lice and nits, else the washed calves will soon be as lousy as ever. Besides this, feed them well, so as to gain strength and vigor. Parasites, like lice, are always the thriffter the more declining their host, and vice versa.

Swine-plague.—L. H., Milford, O. What you describe appears to be swine-plague, or so-called hog-cholera. It is a disease in which prevention is of much more importance than any treatment that has or can be devised. It can be prevented in two different ways; namely, by strict separation of the animals to be protected in a non-infected place, which often is very difficult, and by protective inoculation. As far as the latter is concerned, in about three weeks I expect to be able to apply the protective inoculation to as many hogs as may be desired, and to send a well-qualified and fully prepared agent where I cannot go and perform the inoculation myself.

Probably a Fracture.—A. W., Little Bras d'Ore, Nova Scotia. Considering the cause, the galloping on the frozen ground, and the suddenness of the lameness, and the peculiarities of the latter, as described by you, I have to come to the conclusion that one of the bones in the foot, either the navicular-bone or the third phalanx (hoof-bone) must have been splintered or broken by the severe concussion. Nothing can be done but to give the horse strict rest and make it as comfortable as possible for him. Whether the horse will ever again be serviceable or not depends upon the direction and the extent of the fracture. What your "old-fashioned blacksmith" did caused the horse unnecessary pain, and may prove to be injurious.

Foot-rot.—N. A. R., Waverly, Kan., and M. K., Brant Center, Mich. The lameness of your cow and bull, respectively, is caused by a disease which may be called foot-rot of cattle. Clean the cleft between the hoofs of the affected foot most thoroughly, and if there is any loose horn, cut it away with a sharp knife. This done, take some absorbent cotton, saturate it with a mixture composed of liquid subacetate of lead, one part, and olive-oil, three parts, and press it into the cleft so that it comes in intimate contact with the whole of the sore, and then put on a bandage to keep the cotton in place and to protect the foot. This dressing must be renewed twice a day, and the animals, until the sores have healed, must be kept on a dry and clean floor.

Paralytic Parturition Fever.—J. A. C., New Texas, Penna. What you describe was evidently a case of paralytic parturition fever, a disease also known under the name of puerperal fever, parturient apoplexy, puerperal eclampsia, typhoid milk-fever, etc. It almost exclusively affects good milk cows which happen to be in an excellent condition as to flesh at the time of calving, and as a rule makes its appearance within three days after parturition, seldom later. In most cases it can be prevented, if such cows are kept on a light diet during the last four or five weeks before, and the first two weeks after, calving, and it seldom, or never, occurs if, immediately after the cow has calved, a quart or more of a blood-warm one-per-mille (1,000) solution of corrosive sublimate in water is carefully injected into the uterus. The disease is usually very fatal, and you are fortunate that your cow survived in spite of the irrational treatment for such imaginary diseases as "hollow-horn" and "wolf-in-the-tail," diseases which never have been observed, except by the most ignorant quacks.

"THE TREE IS KNOWN BY THE FRUIT IT BEARS."—And so Dr. D. Jayne's Expectorant rests in the confidence of the public to-day as a Lung remedy, because, after OVER SIXTY YEARS' constant use, it is known to be fully worthy of that confidence. The best family Pill, Jayne's Painless Sugar-Coated Sanative.

WASHINGTON AND LINCOLN.

In furnishing at marvelously low prices such superior biographies of the two greatest Americans, we hope a copy of each will reach the hands of every youth in this "land of the free and home of the brave." Such books will do more than entertain and educate. They will inculcate a clearer and higher sense of the great principles of successful personal and governmental life. It is the duty of every patriotic parent to make sure that their children are familiar with the lives of Abraham Lincoln and George Washington. They are safe foundation stones.

WORLD'S FAIR MEDAL

GRANTED, TOGETHER WITH A SIXTEEN-AWARD DIPLOMA, TO THE DEERING COMPANY, FOR ITS LIGHT-DRAFT ROLLER BEARING MACHINES.

Through the courtesy of the Deering Harvester Co., Chicago, we are enabled to show our readers a picture of the much-talked-of World's Fair medal.

The Deering Company was awarded this medal in October, 1893, together with a handsome diploma, enumerating sixteen separate awards.



As our readers will remember, these awards were given to the Deering Company as a result of exacting field-trials of its binders, mowers and corn-harvesters, held during the Fair in 1893.

These trials created a decided sensation at the time, for they were the first official and scientific tests of the roller and hall-bearing machines. The official judges were as much surprised as anybody at the remarkable saving in draft made by these bearings. At field-trials of competing machines, held by the same judges at Wayne, Ill., the lowest record made by a five-foot mower had been 152 pounds, while the Deering Ideal five-foot mower, under conditions if anything more difficult, made an average draft record of 85 1/2 pounds.

At the Wayne trial, the so-called "light" open-elevator binder averaged 356 pounds draft, while the Deering Pony Binder, cutting the same swath, averaged only 285 pounds.

Alabama Homes For particulars write THE THOMAS T. MUNFORD LAND CO., Uniontown, Ala.

DAKOTA UNIMPROVED LAND First-class, and cheap. Write for description. David Greenway, Dartford, Wis.

MAY BE YOU CAN'T make \$40 or \$50 a week, like some agents, selling our 5-Acre \$100 Farms on instalments of \$1 weekly, but almost anybody can earn half as much. D. L. Risley, 211 S. 10th St., Philadelphia, Pa. Send for full particulars.

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Potash (K₂O)

in form of sulphate. To insure a clean burning leaf, avoid fertilizers containing chlorine.

Our pamphlets are not advertising circulars booming special fertilizers, but are practical works, containing latest researches on the subject of fertilization, and are really helpful to farmers. They are sent free for the asking.

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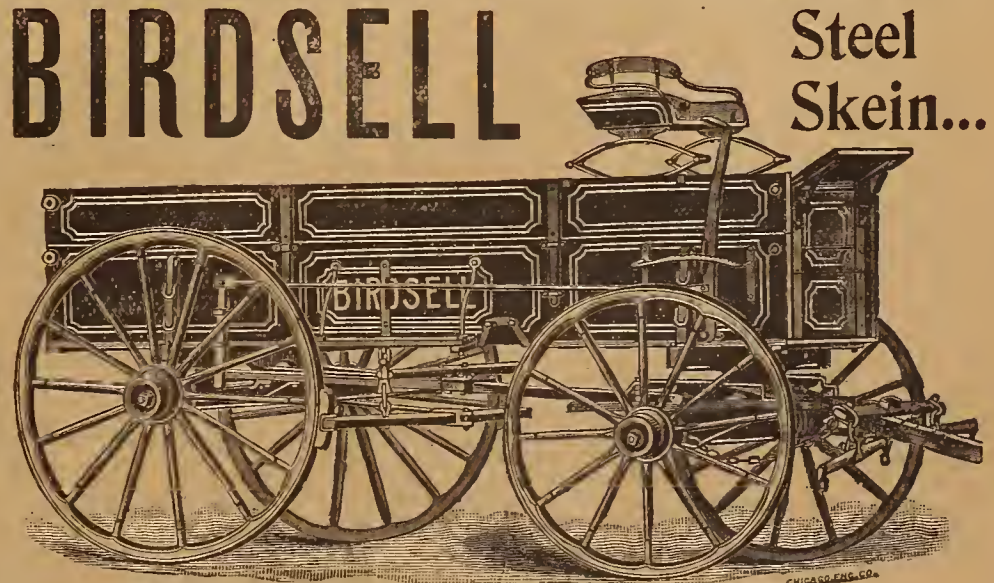
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Matchless for strength, proportion, finish and lightness of draft. Our steel truss, cut under rub irons and "horses' friend" coil spring doubletree, furnished with every wagon without extra charge. Farmers should not fail to investigate the superior qualities of this wagon. Catalogue sent free. Address

BIRDSELL MFG. CO., Box 59, SOUTH BEND, IND.

Our Miscellany.

CAMBRIC was first introduced into England during the reign of Queen Elizabeth. The first piece imported was presented to the virgin queen to make a ruff for her neck.

It may be a casting of pearls before swine to show graciousness to bores, kindness to the brutal, and forgiveness to the hardened sinners, but the casting of pearls indicates great wealth, and who would not wish to be considered rich in graces?

A WISE dressmaker tells her customers that what they wear is of little importance compared to the way they wear it. A washer-woman's frock and a regal air make a much finer combination than a regal frock and a washer-woman's air.

It is true that only the cautious, penny-counting woman ever accumulates riches to enjoy, but it is also true that in the process of accumulation she loses her power of enjoyment. It is better to sail down the bay frequently, longing for European trips all the time, than to save the price of many excursion tickets and finally to find that ocean voyaging has no charms.

WHEN Queen Victoria was first photographed by Mr. Downey, he was asked by his friends: "What did you say?" and "What did she say?"

"Well," said Downey, "I took her majesty just as I was any other person; and when I'd settled her, I said: 'Wad it please her majesty to put on a more favorable countenance?' And she said: 'Sartilly, Mr. Dooney.'"

WOMEN desiring to use, or agents desiring to sell a washing-machine that always gives satisfaction, and that is at the same time reasonable in price, could not do better than to communicate with the Rocker Washer Co., Fort Wayne, Ind., whose business during the past year has been very large, notwithstanding the almost universal depression in all lines of business.

By the way, some of the New York belles are adopting Miss Olga Nethesole's style of wearing their hair—parting it down the middle, waved over the ears, and caught up just over the nape of the neck in a loose knot. It is extremely becoming to some faces. It is an old fashion of some forty years ago revived. To be becoming, the hair should be waved prettily, and puffed out from the sides of the face, and allowed to tumble over the ears carelessly. This style favors many of Sir Joshua Reynolds' pictures, and gives to the face a small and dainty look.

FREAK OF FORGETFULNESS.

One of the most peculiar freaks of the memory resulting from concussion of the brain ever heard of hereabouts was in the case of Charles E. Lamb, a machinist, who was struck by an engine in the railroad yards some time ago, and who has since been in the hospital.

Lamb came here from Stamford to visit relatives on Howard avenue. One night he started for the depot, and instead of going by a roundabout route, he climbed down from the Howard avenue bridge, and walked up the railroad cut. As he was passing the watch-tower one of the men called to him to get out of the way of a switch-engine. He did not do so, and was knocked down and injured about the head. Lamb was removed to the Emergency hospital in the Organized Charities building, and it was thought there that he had been drinking. He was unconscious all night, and had to be strapped to his bed, he was so violent. After he was taken to the hospital he did not recover consciousness for several days. Meanwhile his relatives, who had been worried about his disappearance, found out where he was. His mother and his brother came to see him.

A few days ago Lamb began to recover consciousness, but remembered nothing that had transpired for the last ten years. He continually called for his school friends, and seemed to imagine that he was back at school again. When his mother visited him he recognized her, but seemed puzzled to know why her hair was so gray.

This condition continued for several days, and occasioned many odd occurrences, but finally Lamb entirely recovered his memory, and it is thought he will be able to go home before long fully recovered.—*New Haven Evening Register.*

EVERY MAN HIS OWN TELESCOPE.

There is a race of men who can see as far with the naked eye as an ordinary man can with a telescope. "Every man his own telescope" might be applied with propriety to these fortunate persons. They live in a wild state in the south of Africa, among the tribes, or Bushmen. The name "Bushman" is an Anglicism of the Dutch word "Bjoseman," meaning "man of the woods."

These human telescopes have derived their extraordinary power of vision, according to Mr. Herbert Spencer, through necessity. If it were not for this they must have long ago become extinct. They are remarkably small in stature for wild men, and they offer an easy prey for the large, fierce beasts that infest certain parts of southern Africa. And, on

account of their diminutive size, they are not able to fight on equal terms with their warlike and larger-proportioned neighbors. Travelers in the region of the long-sighted Bushmen have reported some truly remarkable feats with the eyes. One day, while a European was walking in company with a friendly Bushman, the latter suddenly stopped, and, pointing ahead in some alarm, exclaimed: "A lion!"

The white man stared until his eyes ached, but he could make out nothing. Thinking that the native must have made a mistake, he insisted on going forward, though his companion urged him to retreat. When they had advanced a little further, the Bushman again came to a halt, and absolutely refused to go on another step, for, as he explained, he could distinguish not only a lion, but also a number of cubs. It would be dangerous, he said, to tamper with a lioness while nursing her little ones.

The European, however, still unable to see a lion, much less the cubs, pushed on boldly. When he had advanced a quarter of a mile he saw an object moving slowly along in the distance at the point to which the Bushman had directed his gaze. Still doubting that a human being could possess such marvelous power of vision, he approached nearer, and finally distinguished the form of a lioness making leisurely for a line of forest.

The limit of a man's power of vision is established by necessity. If our existence depended on our ability to see twice as far as we do, this additional power would be acquired by practice. Deerslayer, of "Leather Stocking" fame, surprised everyone by his long-sightedness. Probably he could see further than these Bushmen, but he was a fiction character. All woodsmen, and, as a general rule, all persons living an outdoor life, give their eyes practice at long range, which ultimately makes their accuracy of sight seem wonderful to a man who never uses his eyes except to read.—*Pittsburg Dispatch.*

CHEAP EXCURSIONS TO THE WEST AND NORTHWEST.

On April 21 and May 5, 1896, the North-Western Line (Chicago & North-Western R'y) will sell Home Seekers' excursion tickets at very low rates to a large number of points in Northern Wisconsin, Michigan, Northwestern Iowa, Western Minnesota, Nebraska, North Dakota and South Dakota, including the famous Black Hills district. For full information apply to ticket agents of connecting lines, or address C. Traver, T. P. A., Marine National Bank Building, Pittsburg, Pa.

AN OHIO EDITOR IN FLORIDA.

The following is from the *Farm News*, Springfield, Ohio:

"The editor of the *Farm News* has just returned from a trip to the South, during which we took every pains to get at the exact truth, with a view of telling our readers our conclusions, whatever they might be. It was not our first trip to this section of the country, for we have been there and stayed for months at a time, but that was more than fifteen years ago, and to say that we were surprised at the change is to express our sentiments in a very mild manner. We belong to a generation which has but little to do with the traditions of the fathers, and the old feeling that stood a barrier between the North and South has no place in our heart. We find it the same in the South. There has grown up a generation of young men and young women who are free from prejudice, and ready to welcome with a warm greeting the stranger and wayfarer who stops with them. Not only are the people generously inclined, and as cordial as possible to those who come from the North, but the

NO-TO-BAC GUARANTEED TOBACCO CURE HABIT

Over 1,000,000 boxes sold. 300,000 cures prove its power to destroy the desire for tobacco in any form. No-to-bac is the greatest nerve-food in the world. Many gain 10 pounds in 10 days and it never fails to make the weak impotent man strong, vigorous and magnetic. Just try a box. You will be delighted. We expect you to believe what we say, for a cure is absolutely guaranteed by druggists everywhere. Send for our booklet "Don't Tobacco Spit and Smoke Your Life Away," written guarantee and free sample. Address THE STERLING REMEDY CO., Chicago or New York.



Stump before a Blast. | Fragments after a Blast.

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HERCULES POWDER will do it Safely, Surely and Cheaply. Ask your dealer for it, and if he wants to put you off with some unknown brand, send to THE HERCULES POWDER CO., at Wilmington, Del., or Cleveland, Ohio.

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 A work of art illustrated in 10 colors. Worth its weight in gold. We pay charges on it and send it FREE, all you have to do is to ask for it to-day please. Remember this is the old established house of CORNISH & CO., the only firm in the world selling exclusively from Factory to Family direct. A single instrument at wholesale price. We save you from \$25.00 to \$250.00. Write at once to MENTION PAPER. CORNISH & CO., Estab. 30 years, Washington, N. J.

ARNOLD METAL WHEELS.
 These are the only wrought metal wheels made in which the spokes do not penetrate the tire, and upon which the tire can be easily and quickly renewed when worn out. They have staggered wrought iron instead of straight spokes, and are made in all sizes for all uses.
STRONGEST WHEEL in the WORLD
 Descriptive Circular sent FREE.
 ARNOLD METAL WHEEL CO., Box 19, New London, O.

"Pearl Bryan's Fate"
 New song by A. J. Resseguié. Beautiful words and music. Selling by thousands. Agents Wanted. Many are making from \$3.00 to \$5.00 per day selling this new song. Retail, 50 cents; sample copy, 20 cents. Send for our catalogue of half-price music.
J. C. GROENE & CO.,
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TURKEY SUBDUED AT LAST.
 In spite of the common belief that she could not be restrained, an eastern man raised an immense drove, pent up with PAGE, from the egg to the oven. See picture in "Hustler."
PAGE WOVEN WIRE FENCE CO., Adrian, Mich.
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climate is as genial as the inhabitants of this country.
 "There are possibilities for farmers in the South that can never exist in the North. Lands are cheap, easily cultivated and fertile. Railroads are accessible in every part of the South, almost, and enterprise will build them as needed where they are not now to be found.
 "The man who goes there to grow fruits has advantages that the fruit-grower in no other section can have. He ships his fruit to the best market by almost direct lines of transportation at express speed. Fruits ripen before those of any other part of the country do, and this secures the highest price for it. Grapes sold last year for 75 cents per ten-pound baskets, and peaches at a marvelous price. Land can be bought from \$5 per acre up, and the man who goes there to farm can begin in January by selling his products in May in sufficient quantities to pay all his living expenses. We shall have more to say concern-

ing this country in future numbers. To show what our own opinion is, we need only to say that we expect to make it our home in future. We have a great affection for Ohio; it is a grand old state, but in the way of material advantages for him who tills the soil it is not as good a place as the South."
A VERY LIBERAL OFFER.
 To introduce our Perfume, we will send a case, post-paid, for 10 cts. We will mail with it, absolutely free, a beautiful gold plated Garnet and Opal Ring. Send 10 cents in stamps. W. S. Everett & Co., Lynn, Mass.
FOR THE INVALID.
 Egg tea is a palatable and nutritious drink. To prepare it, beat the white of an egg to a stiff froth. Beat into this a scant tablespoonful of sugar and the yolk of the egg. Gradually add half a cupful of hot water or hot milk all the time the hot liquid is poured. A little nutmeg, if liked, may be added.

Dollars in Eggs...
 Keep your Chickens warm—they will grow twice as fast. Keep your Hens warm—they will lay more eggs. Cover your Poultry Houses inside and outside, at small cost, with the Water-proof, Frost-proof, Vermin-proof, Wind-proof, Money-Saving
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Smiles.

A FLOWERY TRAGEDY.

The poet found a violet Upon the frozen way. Blue-eyed and bright it charmed his sight— A memory of May.

He took the outcast to his breast— A little pearl of price; And marveled much at fudding such A tender flower in ice.

He wrote a poem six yards long; His wife—she laid it flat By saying: "Dear, that violet Was cloth—from Sallie's hat!"

—Atlanta Constitution.

PROBABLY NEVER WILL KNOW.

SAY," inquired a customer at one of the book-stores the other day, leaning eagerly over the counter, "have you got the sequel to 'The Lady or the Tiger?'"

"No," replied the salesman.

"Is there any such book in the market?"

"Not that I have ever heard of."

"Have you anything that's got it in?"

"No." "It's like this," explained the customer. "I suppose I'm awfully behind the times, but I never read the story till this morning. I want to know whether it was the lady or the tiger, and I want to know mighty bad. Do you know which it was?"

"I do not."

"If it had ever been published you'd be likely to know, wouldn't you?"

"I think I would."

"Ever heard anybody say which he thought it was?"

"Oh, yes, frequently."

"What seems to be the general opinion?"

"Well, some persons think it was the lady and others think it was the tiger."

"What is your opinion?"

"Sometimes I think it was one, and sometimes I think it was the other."

"Do you keep stamps?"

"Yes."

"Paper and envelopes?"

"Certainly."

"Where's Frank Stockton's address?"

"I think it likely a letter in care of the Century Magazine, New York, would reach him."

"Two and two's four, and—say, here's a dime. Give me two stamps, and the rest in paper and envelopes. Can I go to that desk and write a letter? All right. I'll inclose a stamp for answer. That's the right thing, isn't it? If I mail this right away I ought to get an answer inside of three days, oughtn't I? Or four at the outside? If he doesn't answer promptly, by George, I'll telegraph! I'm going to find out which it was before I'm a week older, or I'll know the reason why."

He took his stationery and sat down at the desk. In less than five minutes he had his letter written, addressed and stamped, and was on his way to the post-office with a wild, hunted look in his eye.

NOT AN IDLE BOAST.

Doolan—"Fitzgerald says he's descended from some of the greatest houses in Ireland."

Mulcahy—"Musha! So he did many's the toime—on a ladder!"—Puck.

ONE OF "LABBY'S" JOKES.

They have been printing recently some of Henry Labouchere's experiences as a diplomat in the United States. He was, as you will remember, an attache of the British legation in Washington, once upon a time. One day, they tell us, Labouchere was sitting in his office, when a rather noisy individual came in and asked to see the minister.

"You can't see him. He's gone out. You must see me."

"I don't want to see you. I want to see the boss of the ranch," said the noisy individual.

"All right," replied Labouchere, going on with his writing. "Take a chair."

The visitor sat down and waited for an hour. Then, with several picturesque extracts from profane history, he inquired how long the boss would be out.

"I should think about six weeks," replied Labouchere, carelessly. "You see, he has just sailed for England."—Washington Post.

GREAT OFFER TO YOU.

Clip this out, return to us with ten cents, silver, and we will mail you our great package consisting of 12 excellent books, a box of Turkish perfume and two pretty handkerchiefs. You will be delighted. Address KEYSTONE BOOK CO., 1111 Arch Street, Philadelphia, Pa.

It appears to thoughtful minds that God called Abraham Lincoln to rise from the log cabin in the wilderness to take the helm of the new American nation in its crisis hour.—C. A. Payne.

HE WAS SURE OF HER.

A young man about twenty-five years old was sitting in the waiting-room of the Brush street depot with a year-old baby on his knee, and his alarm and helplessness when the child began to howl were so marked as to attract attention. By and by a waiting passenger walked over to him, with a smile of pity on his face, and queried:

"A woman gave you that baby to hold while she went to see about her baggage, didn't she?"

"Yes."

"Ha! ha! ha! I tumbled to the fact as soon as I saw you. You expect her back, I suppose?"

"Of course."

"Ha! ha! ha! This is rich! Looking for her every blessed minute, ain't you?"

"I think she'll come back."

"Well, this makes me laugh—ha! ha! ha! I had a woman play that same trick on me in a Chicago depot once, but no one will ever again. Young man, you're stuck! You've been played on for a hayseed. Better turn that thing over to a policeman and make a skip before some reporter gets onto you!"

"Oh, she'll come back," replied the young man, as he looked anxiously around.

"She will, eh! Ha! ha! ha! Joke grows richer and richer! What makes you think she'll come back?"

"Because she's my wife and this is our first baby!"

"Oh—um—I see," muttered the fat man, who got over feeling tickled at once, and in his vexation he crossed the room and kicked a dog which a farmer had tied to one of the seats with a piece of clothes-line.—Detroit Free Press.

IT WAS A PROFESSIONAL SECRET.

An accomplished master of the art of stealing had to answer a charge of robbery in a Vienna court of justice. The prisoner at once admitted his guilt, but to the great surprise of the bench, maintained a stubborn silence after one of the questions addressed to him. The presiding magistrate repeated the question: "Tell me, how did you manage to abstract the watches, which were nearly all fitted with safety-rings?"

The prisoner still hesitated to reply. At length he said, deeply blushing, and with a timid voice: "Excuse me, your worship; that is my secret."—Tageblatt.

SURVIVAL OF THE FITTEST.

Bobbie—"On my way to school this morning I met the new boy who has moved in next door."

Mrs. Bingo—"Yes, and here's a note from the teacher saying your were late."

Bobbie—"That's nothing. The new boy didn't get there at all."—Truth.

A MAN OF REPOSE.

Western train-robber—"Hold up your hands!"

Reggie Languid—"Aw—go to my mau, deah fellow; he always avanges about my twaveling bills."—Truth.

A POLITICAL DEFINITION.

"What do they mean by saying that a candidate is in the hands of his friends?"

"It means that their hands are in his pockets."—Truth.

TITBITS.

Enfant Terrible—"And did they go into the ark two by two?"

Mama—"Yes, dearest."

Eufant Terrible—"Well, who went with auntie?"—Pittsburg Bulletin.

Employer—"So you want a fortnight's salary in advance? But suppose you should die to-night?"

Clerk (proudly)—"Sir, I may be poor, but I'm a gentleman."—Pearson's Weekly.

"This trick donkey, ladies and gentlemen, can smoke cigarettes, drink beer, read the newspapers, and, in fact, has all the accomplishments of the modern dude."

"What a perfect ass he must be!" said Hicks.—Harper's Bazar.

"Was your husband good to you during your long illness?" inquired the kind lady who was making a charity call.

"Oh, yes, indeed, ma'am!" replied the poor woman, "as good as could be—he was more like a friend than a husband."—Amusing Journal.

Mr. Faxon—"Did you observe anything in the way of a temperance movement in the miuing towns out West?"

Returned traveler—"Well, the nearest thing I saw to one was out in Livingston, Mont. Out there they charge twenty-five cents for beer."—Somerville Journal.

SUPERFLUOUS HAIR.

I have a sure, quick remedy. To prove it, I will send a \$1.00 bottle, sealed, free. Address Mrs. J. De Vere, P. O. Box 494, Philadelphia, Pa.

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Recommended by all who have tested its merits.—Used by people of refinement. Gentlemen who do not appreciate nature's gift of a beard, will find a priceless boon in Modene, which does away with shaving. It dissolves and destroys the life principle of the hair, thereby rendering its future growth an utter impossibility, and is guaranteed to be as harmless as a water to the skin. Young persons who had an embarrassing growth of hair coming, should use Modene to destroy its growth. Modene sent by mail, in safety mailing cases, postage paid, (securely sealed from observation) on receipt of price, \$1.00 per bottle. Send money by letter, with your full address written plainly. Correspondence sacredly private. Postage stamps received the same as cash. (ALWAYS MENTION YOUR COUNTY AND TOWN NAME.) On this advertisement only.

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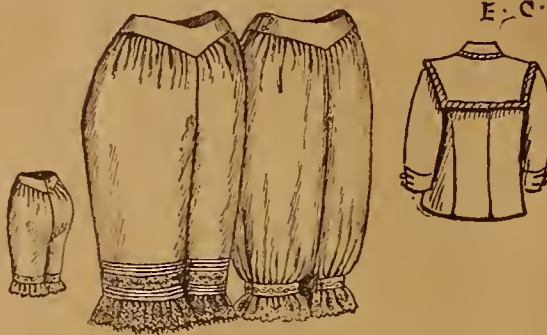
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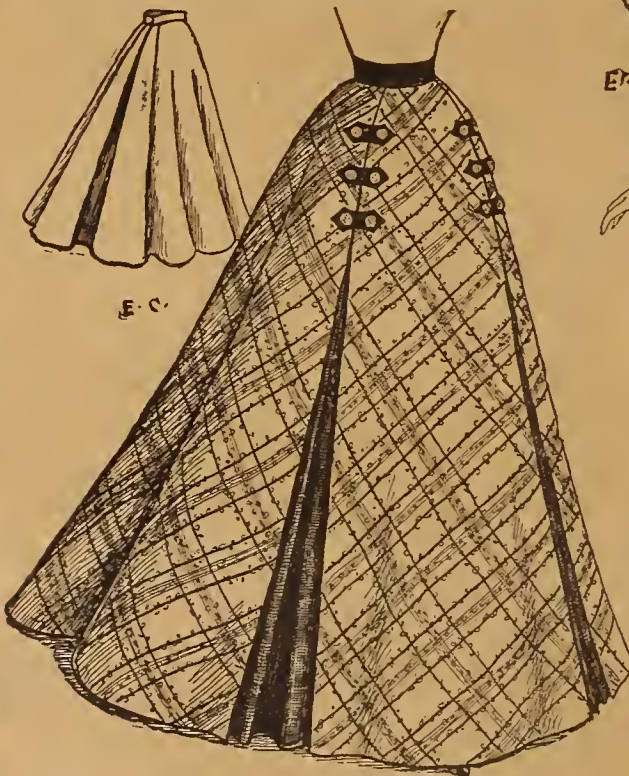
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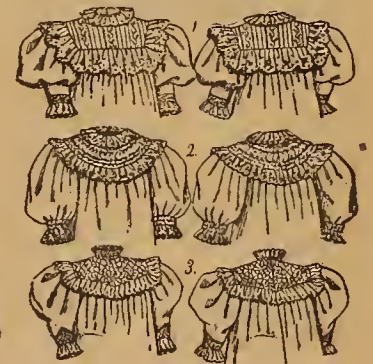
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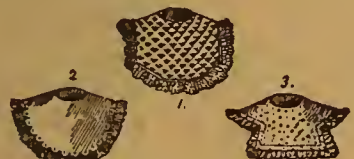
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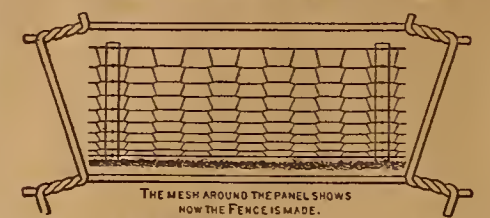
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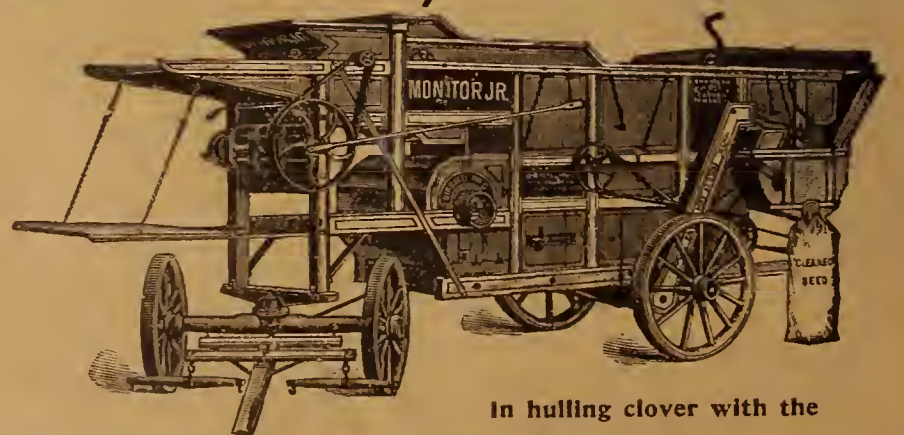
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In his recent letter to the House committee on ways and means, President Search, of the National Association of Manufacturers, presented some forcible arguments in favor of the re-enactment of the reciprocity provisions of the act of 1890. Prefacing his arguments, he said:

"My view of this matter is taken from a purely business standpoint, without regard to any political considerations; for there is probably no feature of our tariff system, past or present, that has come so near as reciprocity to being a purely business matter. To this fact may be attributed the enthusiastic support which the principles of reciprocity have received from men of differing political views.

"The treaties of commercial reciprocity which were negotiated under the act of 1890 were based upon the very simple principle of demanding something in return for that which we had to give. We had a market in this country for certain commodities which were produced in the West Indies, in Central America and in South America, but we were not dependent solely upon those sources of supply. On the other hand, those countries had need of many products of our agriculture and industry, but we could claim no monopoly of the supply of these articles. The treaties of commercial reciprocity which were negotiated under the customs law of 1890 simply secured the admission of our products to the southern countries more freely without making any sacrifice of our own home markets. This was accomplished, not by making further concessions to those countries, but by demanding from them the granting of privileges in return for the

advantages which they had long enjoyed in our own markets.

"It requires but a glance at the conditions under which the treaties of commercial reciprocity were negotiated to reveal how much was gained by this country and how little was given in return. By permitting the continuance upon the free list of three commodities upon which duties had not been imposed for many years, and by conditionally placing two additional items upon our free list, concessions were obtained from a dozen foreign countries which either wholly removed or largely reduced the duties imposed by those nations on over two thousand articles of American production or manufacture. Tea, coffee and hides were already on the free list—had been there since 1873—and the duty was removed from sugar and molasses by the act of 1890. The very simple provisions of the reciprocity clause of this act authorized the imposition of duties upon all of these commodities when imported from countries to which American goods could not enter as freely as the goods of other nations. It was not by the extension of the free list of our customs law that favors were obtained from other nations; it was by the threat of the imposition of duties upon the products of countries which discriminated against us that to American merchants were secured equal rights with their competitors in foreign markets."

Then followed a brief review of the growth of our foreign trade with the countries that made reciprocity treaties with us. The simple facts demonstrated the advantages of reciprocity. During the few years they were in force there was a large increase in our exports to and imports from these countries.

Concluding his letter, President Search said:

"I desire only to point out a few specific reasons for such legislative enactments as will permit the restoration of treaties of commercial reciprocity with those nations with which they were established under the act of 1890, and the negotiation of similar treaties with other countries with which more freedom in our trade relations is desirable.

"1. Reciprocity commends itself to business men who have given the subject careful consideration as a sound and judicious business principle.

"2. As applied under the act of 1890, reciprocity was a thoroughly American principle, inasmuch as it provided for the protection of our commercial interests, not only at home, but abroad.

"3. As a principle that has been earnestly advocated by both Republicans and Democrats, reciprocity ought to be considered upon a strictly non-partisan, non-political basis.

"4. The practical application of reciprocity under the provisions of the act of 1890 demonstrated beyond question the ability of such treaties to extend and enlarge our foreign trade under exceedingly favorable conditions.

"5. Apart from those results which can be measured in money values, the reciprocity treaties rendered valuable service in effecting more cordial relations between the United States and other nations.

"6. From a protectionist standpoint, reciprocity is not open to objections, as it involves no sacrifice of the principles of protection. The treaties which were negotiated under the act of 1890 added nothing to the free list that was not already there.

"7. Those who advocate free trade ought not to object to reciprocal commercial treaties, as their whole effect is to lessen the restrictions upon international trade.

"8. Treaties of commercial reciprocity with other nations, particularly the Latin-American countries, are necessary as a matter of self-protection, for treaties of this character are being or have been negotiated between European governments and nations to the south of us, to the detriment of our commercial interests abroad.

"In behalf of the enormous industrial interests represented by this association, I desire to urge, with all possible emphasis, the necessity for such treaty relations with foreign nations as shall insure the utmost possible favor to American products in the markets of the world."

SPAIN is vainly struggling to hold the remnant of her former vast possessions in America acquired by conquest. The haughty Spaniard can feel no compassion, exercise no mercy, for the Cuban patriots, whom he styles "bandits and niggers." It is not in his nature to do so. The same brutal atrocities now committed by Spain in Cuba blacken the whole career of Spanish dominion on the American continent, and in Europe, also. The history of the Spanish conquest and rule of the Moors in Spain and of the Indians in America is a history of crime.

When Spanish dominion began in America, it was denied that Indians are men. In his "History of the Intellectual Development of Europe," Dr. Draper says: "The lust for gold was only too ready to find its justification in the obvious conclusion; and the Spaniards, with appalling atrocity, proceeded to act toward these unfortunates as though they did not belong to the human race. Already their lands and goods had been taken from them by apostolic authority. Their persons were next seized, under the text that the heathen are given as an inheritance, and the uttermost parts of the earth for a possession. It was one unspeakable outrage, one unutterable ruin, without discrimination of age or sex. Those who died not under the lash in a tropical sun died in the darkness of a mine. From sequestered sand-banks, where the red flamingo fishes in the gray of the morning; from fever-stricken mangrove thickets, and the gloom of impenetrable forests; from hiding-places in the clefts of rocks, and the solitude of invisible caves; from the eternal snows of the Andes, where there was no witness but the all-seeing sun, there went up to God a cry of human despair. By millions upon millions, whole races and nations were remorselessly cut off. The Bishop of Chiapa affirms that more than fifteen millions were exterminated in his time. From

Mexico and Peru a civilization that might have instructed Europe was crushed out. Is it for nothing that Spain has been made a hideous skeleton among living nations, a warning to the world? Had not her punishment overtaken her, men would have surely said, 'There is no retribution, there is no God!' It has been her evil destiny to ruin two civilizations, oriental and occidental, and to be ruined thereby herself. With circumstances of dreadful barbarity she expelled the Moors, who had become children of her soil by as long a residence as the Normans have had in England from William the Conqueror to our time. In America she destroyed races more civilized than herself. Expulsion and emigration have deprived her of her best blood, her great cities have sunk into insignificance, and towns that once had had more than a million of inhabitants can now show only a few scanty thousands."

WE have received from the Department of Agriculture a copy of a special report on "Nut Culture in the United States." It is a comprehensive and valuable work, beautifully illustrated and containing the best information obtainable concerning the culture of both native and introduced species of nuts. This treatise is intended "to encourage experimental work among growers, and to incite them to investigate the possibilities of their respective regions by planting and testing choice kinds that are likely to succeed. The development of this industry cannot be dreamed out; it must be worked out." This book was planned in 1889 by Prof. H. E. Van Deman, the predecessor of the present pomologist of the department. By 1892 he had the work prepared for printing. Lack of funds delayed the publication until recently. In his preface note to the book, the present pomologist withholds from Prof. Van Deman his due and proper credit, and nowhere in the book are the facts concerning its origin and authorship given.

THE lower branch of the Ohio legislature has passed the anti-shoddy bill, which provides that cloth fabrics in every form shall be plainly labeled so as to show the true composition of the same, whether wool, shoddy, cotton, or, if a mixture, the proportion of each ingredient used in its composition. It is hoped that the bill will pass safely through the senate and become a law. It is pioneer legislation in this line, and a victory has been gained, whether the bill becomes a law this session or not. It is right in principle, and will prevail ultimately.

SOUTH CAROLINA is now prepared to adopt the plan of "good roads by bad men." Under the new constitution, all the courts have the power, in their discretion, to impose sentence of labor upon highways, streets and other public works upon persons by them sentenced to imprisonment; and all convicts sentenced to hard labor by any of the courts of the state may be employed upon the public works of the state or of the counties and upon the public highways.

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We believe that all the advertisements in this paper are from reliable firms or business men, and do not intentionally or knowingly insert advertisements from any but reliable parties; if subscribers find any of them to be otherwise we should be glad to know it. Always mention this paper when answering advertisements, as advertisers often have different things advertised in several papers.

Potato-scab. The standard preventive of potato-scab is the corrosive-sublimate treatment. Dissolve two ounces of this rank poison in hot water, using an earthenware vessel; then put this solution, with fifteen gallons of water, into a tub or barrel. For convenience in handling, put a bushel or a half and a half of the seed-potatoes into a gunny-sack, then place it in the solution and let it remain for ninety minutes. Handle this poisonous solution and the poisoned potatoes with care.

An Oklahoma subscriber writes: **Millet.** "German millet-seed is very cheap here. Farmers can get only fifteen to twenty cents a bushel for it. I have found by grinding the seed into fine meal, which can be done on an ordinary corn-mill, that it is one of the best of feeds. I feed one third less of it than of chopped corn or fine corn-meal." The composition of millet makes it a food similar in some respects to oats. Undoubtedly, there is a great advantage in grinding it. The seeds are so small that only a portion of them is thoroughly masticated and digested by the larger animals.

Kansas Corn. Secretary Coburn, in the March quarterly report of the state board of agriculture, presents a detailed showing from sixty-eight long-time extensive growers, in forty-five counties which last year produced 140,000,000 bushels, giving from their experience, "on such a basis as others can safely accept," each principal item of cost in growing and cribbing an acre of corn, estimating the yield at forty bushels. About two thirds of those reporting prefer planting with listers, and the others use the better-known check-row method, after the land has been plowed and harrowed. The statements of all the growers, summed up, averaged and itemized, show as follows:

COST OF RAISING AN ACRE OF CORN.

Seed.....	\$.07
Planting (with lister or with check-row planter, including cost of previous plowing and harrowing).....	.77
Cultivating.....	1.03
Husking and putting into crib.....	1.18
Wear and tear and interest on cost of tools.....	.25
Rent of land (or interest on its value).....	2.41
Total cost.....	\$5.71
Cost per bushel.....	.114
Average value of corn-land per acre.....	\$29.25

Commercial Fertilizers. The following "points" are from a recent bulletin of the New Jersey experiment station: "It must not be erroneously believed that this station maintains that it is *always* better to buy raw materials and mix at home than to buy the manufacturers' mixtures. The manufactured brands of leading firms have been shown by repeated tests made at this station to be composed of the best forms of plant-food, and they would doubtless give quite as good satisfaction as home mixtures based on the same formula; their cost, however, in most cases, includes, in addition to expenses of mixing and bagging, commissions of dealers and credit, which is equivalent to an excessive rate of interest. If reliable manufacturers would make a discount for cash orders equivalent to the usual credit and commissions, the financial saving due to home mixing would be reduced to differences in cost of mixing and bagging. The making of home mixtures has been practised for years by a number of the best and most businesslike farmers of the state—men who know that the value of a fertilizer depends upon the kind and form of the nitrogen, phosphoric acid and potash contained in it, and not upon the name of the brand. These men, if using manufactured brands, would be likely to know how to buy and to get the best, yet they continue to get the raw materials and do their own mixing. It is their experience that it is the best method, and that it pays. That it will pay under all circumstances is a question for each farmer to decide for himself, though the conditions under which it does pay are those under which farming as a business is made to pay.

"This work of the experiment station in showing the composition and value of raw materials, the importance of concentrated mixtures made from standard supplies and the savings from cash purchases, has for its main object the teaching of the very important lesson that a pound of any one of the constituents in its original form is practically uniform in price to all manufacturers, and the subsequent variations in price are due to conditions that occur between the manufacturer and the consumer, and for which the consumer is largely responsible. If the latter knows what he wants, buys what he needs, and pays cash, he will find that the cost of plant-food will be considerably reduced, and that his returns will be largely increased, notwithstanding the method of purchase. Farmers must remember that:

"1. It is not the material itself, but the nitrogen, phosphoric acid and potash in it that makes a fertilizer.

"2. The cost per pound of this nitrogen, phosphoric acid and potash depends less upon where it is bought than upon how it is bought.

"3. Fully one fourth of the cost of the average commercial mixture goes to pay for mixing, bagging, credit and commissions.

"4. All of this, and more besides, is saved by buying raw materials, paying cash and mixing at home.

"It has been demonstrated that manufacturers were willing to sell the fertilizing ingredients in raw materials at lower prices per pound on the average than those used in computing the station's values, and it now appears that the same can be successfully done in mixed fertilizers. Attention is again called to the fact that when the extravagant charges for the average fertilizer are paid, the laborers who mix, bag and handle the goods, the railroads which carry and the dealers who sell, receive much greater returns for their labor than the farmer who uses the product.

"The prices received for the various crops are low, and at these prices for plant-food a very narrow margin is left him for the legitimate charges for the labor of growing, handling and selling his crop and other expenses.

"The station has repeatedly stated, and it reiterates that statement now, since it is based upon the indisputable testimony of actual facts, that even under the existing unfavorable conditions of farming it is advisable to increase the productive power of the soil to the maximum point. To do this at a profit, farmers must not only know what their soils and crops need in the way of plant-food, but must get what they need at a much lower cost than is now possible in the average mixed fertilizer."

NOTES AND COMMENTS.

Plant and Stock Feeding. Twenty years ago not one farmer in a hundred knew anything about the principles of plant nutrition; all was darkness. The application of manures was mere guesswork, and made entirely on the hit-or-miss plan. Then began the teachings of the press, and of the agricultural experiment stations, and the publication of popular works on manures and manuring, until at the present day no soil-tiller can make any claim to progressiveness (or can become more than ordinarily successful in his calling) unless he is perfectly familiar with and fully understands the meaning of terms like phosphoric acid, sodium nitrate, muriate and sulphate of potash, etc., which some years ago were intelligible only to the professional chemist. We now talk about "complete" and "well-balanced" and "special" fertilizers, and plant-food "elements," and about "phosphates" and "superphosphates" and "reverted phosphoric acid," etc., just as readily as if we had been used to this vocabulary from childhood up. And we have learned how to put this knowledge of plant-food "elements," and of their interrelations, to practical use, also. But when it comes to stock-feeding, we find ourselves in about the same general ignorance that we were in regard to plant-feeding twenty years ago.

There is no problem of greater importance before the farmer to-day than that of compounding feeds for his domestic animals, from the horse and cow down to the chick and duckling. The agricultural press, and the institute lecturers, and the experiment stations, etc., cannot say too much about this subject, nor make too great exertions in every way, to bring and keep the subject of rational and economical stock-feeding before the farmer. If all do their duty, it will not be many years before the terms "balanced ration," "nutritive ratio," "albuminoids" (or flesh-makers), "carbohydrates" (or heat-producers), etc., are as readily understood by the more progressive farmer as the corresponding terms in regard to plant-feeding are understood and used by them now. Who will doubt that this is a most necessary and urgent matter? Every winter horses and cattle and sheep die by the thousands. We lose a large proportion of our hogs, of chicks and other poultry. They all die, and we wonder what ails them. Usually, the disease is and remains a mystery to the owner of the animal. Yet the whole fearful annual loss is preventable; for the cause of the trouble is nothing more nor less in most cases than faulty nutrition.

The Balanced Ration. I have mentioned and tried to explain the principles of the "balanced ration" on a former occasion. Yes, this is a proper case for "line upon line." A couple of weeks ago I was at the meeting of the New York State Breeders' Association, in Hornellsville, and had the pleasure of listening to an address by that famous veterinary surgeon, Dr. Smead, whom I am tempted to call the "apostle of the balanced ration." Although I was already well acquainted with the principles herein involved, yet I would not have missed hearing that lecture, impressively and forcibly delivered as it was, for ten times the expenses of the trip. If the Department of Agriculture, by its free publications, wished to do a real service to the farmers of the United States (and a kindness to the average farm animal, too), it could accomplish it by printing such an address in large letters, and sending a copy to every farm-house in the land.

Just this line of feeding unbalanced rations, and ignorance in breeding, said Dr. Smead, are what keep the veterinary surgeon in business. Even the skilful breeder who knows how to select his animals, and to mate them, will often ruin all by mistakes in feeding. When a young animal is improperly fed, its digestive organs are overtaxed, and the animal grows up a dyspeptic. The stomach is ruined, and all sorts of ailments follow, even ringbone, spavin, etc. The balanced ration would drive the veterinary surgeon out of business. For the farmer's sake, Dr. Smead said he was glad that timothy hay is scarce. The best timothy hay you

can cut will starve a horse or cow, if you feed it to the animal long enough to the exclusion of other foods.

A Warning Against Timothy. The very best timothy hay that is in most palatable and most easily digestible condition has a nutritive ratio (proportion of flesh-makers to fat and heat producers) of 1 to 12. The animal requires a ratio of 1 to about 5 1-10, and when more exposed, of 1 to 7, 1 to 8, or even 1 to 9. When you go beyond 1 to 9, you will soon see the evil results, especially when the animal is closely confined. Then people begin to think that the horse is having trouble with his teeth, or from worms, etc. In five cases out of six a horse has no trouble with his teeth; sometimes he may have worms. But when nature's laws are observed in feeding a balanced ration, then there would not be worms enough to do any harm. Surely, the veterinary surgeon lives on the ignorance of the people.

A Horse Cure. Dr. Smead then tells about a farmer who came to consult him about his sick horse. The animal had generally been standing idly in the stable, and been fed the very best of timothy hay right along, all he would eat. The man said the horse's liver seemed to be torpid, and his digestion all out of order. The veterinary surgeon might have replied that the sole cause of the trouble was the exclusive diet of timothy hay, which the farmer thought was all right, and a generous way of feeding. He also might have prescribed simply to feed less hay, and generous rations of wheat-bran and oil-meal instead. But such a way of "doctoring" horses would hardly have been appreciated; besides, the doctor's business is to cure, and perhaps pretend to do so with medicines. So Dr. Smead fixed up a whole lot of powders, which, being bitter, had to be given in dry wheat-bran, three times a day, and at least four quarts to a meal. He also directed that a smaller quantity of hay be fed. In other words, he induced the farmer to give a "balanced ration," and when the doctor and the farmer met again, two weeks later, the latter, with much enthusiasm, told about the great cure which the powders had effected. Yet in reality it was not the medicine that had done the business, but the bran which had offset and "balanced" the faulty ration.

Too Much Bulk. On the whole, it may be said that we give to our horses and cattle by far too much bulky food. There is so little of the elements that make muscle and blood and nerve in our coarse foods that if animals are dependent on these coarse materials for all their needs, they must gorge themselves, and then they will not get enough. Most of the stuff which we compel our animals to put into their stomachs consists of woody fiber, and is entirely indigestible. We simply overtax their digestive powers, and if we do we cannot expect the best service from our horses, or the most milk and butter from our cows. Grain is cheaper than bulky food, and if fed in liberal doses, with a comparatively small portion of coarse stuff, far more productive of good results for equal values allowed. Another lecturer, Mr. Converse, stated at the meeting already referred to, that we usually feed our horses too much hay. There should not be a constant supply in the manger. It is only too true. One of my friends just sold a load of timothy hay for thirty-two dollars. Even without considering the ill results from excessive hay feeding, we can't afford to do it just now.

Bordeaux Mixture versus Peach-yellows. The Michigan peach-growers claim to observe a decided decrease of peach-yellows attacks where the trees have been sprayed right along with Bordeaux mixture. This spraying was done to combat the leaf-curl, and without any idea of preventing the yellows. If all this is true (and it sounds almost too good), the accidental discovery would at last give us the means of controlling this terrible pest of the peach-grower, and make successful peach culture again possible in many localities where it once flourished, but had to be abandoned on account of the yellows.

T. GREINER.

Our Farm.

FARM THEORY AND PRACTICE.

PEAS AND OATS FOR FORAGE.—Meadows and pastures have been reduced in acreage by the unfavorable weather of the past two seasons, and there is much inquiry about forage crops that may be grown this spring or summer. Frequently I am asked the value of Canada peas in Ohio and adjoining states in the same latitude. So far as I have been able to learn, this pea has not been fully satisfactory even in the extreme northern portions of these states. It thrives in a cool climate, doing well in New York and farther north. Still, it is used with oats to some extent in Ohio, and makes a very rich food for stock. The seeding should be done as early as possible in the spring, and in our latitude there is probably no better way than to drill the peas in quite deep, using one and one half bushels of seed per acre, and then broadcasting the oats and harrowing them in. It is now too late to seed to oats and peas, but this much about this forage crop may be helpful for another year. However, there are other forage crops preferable to peas, and the latter will never be extensively used in Ohio.

COW-PEAS.—Many readers of farm journals are confusing the southern cow-pea with the Canada pea. They are entirely distinct in habit of growth. The cow-pea is a bean, in fact, and thrives only in warm latitudes. While the Canada pea delights in cold, being sown very early in the spring, the cow-pea delights in heat, and should not be sown any earlier than any other tender bean. Unfortunately for Ohio, the state lies a little too far south for the Canada pea and a little too far north for the cow-pea. The latter is grown with some success north of the Ohio river in the southern counties of Ohio, Indiana and Illinois, but chiefly as a manurial crop. The growth is too light to make a profitable hay crop, but is pastured to some extent, and when the peas are ripening they furnish fine feed for hogs. The chief value of this plant in the North is as a quick-growing catch crop that will improve the fertility of land that would otherwise be idle in July and August. It is not a forage crop with us, while the Canada pea is used almost exclusively as a forage crop where it thrives.

OATS.—Oats are not a profitable grain crop south of the latitude of Columbus, Ohio, but they may be used to a limited extent for soiling in early summer, with fair satisfaction. They make good green feed as soon as the heads appear, and are at their best just before the grain enters the dough state. For feeding purposes, the crop is more valuable at this time than afterward, as the heat of the Ohio valley prevents a heavy yield of grain, when left to ripen, and the straw loses in value as the grain ripens. For an early forage crop, oats are worth more than any other sown crop we have.

RYE.—This plant furnishes early pasture, and when cut green makes fair feed while fresh and succulent, but for hay I do not esteem it highly. Some have claimed that rye hay is palatable and nutritious, but this is only when the rye has been close pastured in the spring so that the plants have stooled very freely and made a rather short and fine growth. A rank growth of rye, no matter when harvested, is coarse, woody and unpalatable. It is good practice to seed land to rye in the fall for early pasture, as it makes growth in the winter, and is very hardy, but should not be sown for hay.

MILLET.—In the event of a short hay crop, millet furnishes a large quantity of winter feed per acre, and for this purpose I would place it next to corn in value. The land should be plowed early, so that a store of moisture may be kept in the ground, but seeding should not be done until the ground and weather are thoroughly warm—usually, early in June. It is difficult to cure, both because the growth is rank and because it must be cut before very ripe, or the hay will be too woody and unpalatable; but when properly cured, it is a good feed. In dry seasons, some growers fail to get a stand of millet and rapid summer growth

simply because they leave the preparation of the seed-bed until planting-time. It is important that the ground be prepared as for a spring crop, and then with an occasional harrowing the soil is kept sufficiently moist to start the plants even if the weather is dry. This rule applies to all crops that are planted in the early summer. Failure usually results from lack of moisture, and pains must be taken to retain the winter's supply of water.

INDIAN CORN.—The farmer who now foresees a shortness in pasture or forage for winter cannot supply the lack more surely and cheaply than by the use of corn, if he have land fitted for this crop. It is the greatest forage-plant of America. To supplement pastures, large varieties of sweet corn may be planted at frequent intervals until late in June, but for late fall and winter use I prefer the common field-corn. It may be planted in drills three feet apart, having a grain every six inches in the drill. When a silo is not used, I would seed fully this heavily, as it prevents the stalks from growing too large for good fodder. The amount of feed that can be grown on an acre in this way is extraordinary. The soil should be rich and well prepared. If a meadow proves to be weedy and unpromising in May, the breaking-plow should be put in at once, and the roller should follow the plow closely; then, with spring-tooth or disk harrow and float the ground should be made fine and solid. We usually have a soaking May rain that solidifies fresh-plowed land, and makes it possible for water to rise freely from the subsoil by capillary attraction. Then one is reasonably sure of growing a big crop of winter feed. An acre of well-cured corn fodder does not furnish as much palatable food as an acre of siloed corn, but it is nearly as nutritious, and far exceeds an acre of any other kind of forage. It should be cured in shock, bound in bundles of convenient size with tarred twine, and then put into mow or stack. DAVID.

PICKED POINTS.

Lambs are dropping as spring opens, and those who have fed their breeding-ewes potatoes liberally, because they were cheap, are now seeing their error. A flock-master who has committed this error reports his lamb crop as follows: "The lambs come fat, but limp, and without muscular strength. Many of them laid on their sides, unable to stand, and finally died."

The editor of the New York edition of FARM AND FIRESIDE utters sage remarks in regard to potatoes for seed. His experience is so in consonance with my own, that I desire to make a brief quotation. He says: "I have never failed to obtain the largest yields from the use of whole tubers for seed, and I have made comparative tests every year for a long period. This is why I have never looked with even the least favor upon the idea of using single-eye pieces in planting." Doubtless, where just the right conditions are present, single eyes may produce just as large yields; but not one in a thousand has these conditions. It may be remarked further that I planted Early Rose potatoes for twelve years without changing seed, and they constantly improved. Seed was selected from vigorous hills and planted whole. It made no difference whether the tubers were large or small, the yield was the same. One season the seed were all very small, but they produced as large potatoes as ever.

It is settled that crimson clover will endure the winter as far north as latitude 44½°. The winter just past was as severe on vegetation generally as it is probably possible to be. Now, the first of April, two fields of this clover near me are the only green vegetation in sight. Wheat is frozen to the ground, and the fields look brown and bare, although there is still life in the roots. Not a green blade of timothy or other grasses, or leaf of red or white clover, is to be found anywhere, while armfuls of green can be gathered from crimson-clover fields for the fowls. The time to sow this clover here is about July 20th. It should have a "free field and a fair fight" for life. Fit the ground as for wheat, sow broadcast and harrow in lightly. I am not a believer in the assertion that it would do well in the corn-fields in the North if sown at the last working. The shade is so dense that clover could not

flourish. It may answer for the South, where the corn-leaves are plucked for "blade fodder," for then little shade remains. There will be a lively demand for northern-grown crimson-clover seed, for that will be acclimated. As it produces ten to fifteen bushels per acre, the thoughtful farmer can see money in planting it this season for a crop of seed next year.

"Spare the rod and spoil the child." Spare the seed and spoil the meadow and pasture. One is as true as the other. Americans are the poorest seeders among the nations. They probably sow seed enough per-acre, but confine themselves to one or two kinds—usually red clover and timothy. The clover goes out in two years (its life limit), leaving the timothy alone, and it does not cover the ground. There are bare spots between the stools, and it requires several years for natural grasses to fill the interstices. This entails great loss, for thin grass is always a light crop. "An inch at the bottom is worth ten at the top," so far as a meadow is concerned. The following mixture is a seeding used with great success: Timothy, red clover, orchard-grass, meadow-fescue, four pounds each; alsike clover, white clover, redtop, two pounds each; sheep-fescue and sweet vernal, one pound each.

"Sheep don't pay." I quote this current expression for the fun of refuting it, and to tell how owners of sheep can make them pay if they do not now. It is not right to say that any branch of farming "don't pay" when one has failed in it because of slipshod methods. Before one can pronounce a just judgment he must have conducted the business on common-sense principles. I make the broad assertion that no one knows a flockmaster who has not made money all the time and does not now make money by sheep husbandry, if he has judgment, and exercises it, unless he loses by some unusual accident. To be sure, there is not so much to be made in sheep as a few years ago, nor is there in other branches. All seem to be depressed about alike. A poultry-writer said recently, and truly, "If hens do not lay properly it is their keeper's fault," and I say if a man does not make money at keeping sheep it is his own fault, and he should be ashamed to tell of it. If any reader does not make money with his sheep, I will tell him how he can do it. Thousands of responsible farmers in the South want to take sheep to double in four years; that is, lend them one hundred now, and in four years they will repay with two hundred. What branch of farming gives greater returns? A million or more sheep could be let on these terms to-day, or any time during several years to come. Sheep have been going from Ohio to West Virginia on these terms. "Sheep don't pay," eh?

GALEN WILSON.

AGRICULTURE IN THE SOUTH.

A recent trip through some of the southern states afforded a good opportunity to study its advantages. The scenery is usually quite interesting and picturesque. The climate is inviting and healthful. The people are courteous and obliging; in fact, they are extravagant in their entertainment of visitors. The resources are rich and varied. The development of trade and manufacturing interests is marvelous. The growth of some of the cities has been rapid and substantial.

It can scarcely seem possible that only thirty years ago this entire region was made desolate by war. Homes, farms, towns and cities were in ruins then; to-day they are full of life and activity. Small hamlets have grown into large towns; villages into busy, bustling and prosperous cities. The desolation of war has given place to the busy hum of commerce. Even the feelings which once engendered strife have been buried deep beneath the memories of the past, and one can only see or hear the spirit of progress leading on to higher success and more complete development. Let all rejoice together in recognition of this fact.

Though the great staple crop of the southern agriculturist has long been cotton, and will probably ever remain cotton, there are many who see the advantage in a diversity of products and the advisability of a rotation in crops. Cotton is a very exhaustive crop to the soil, and where land

is planted to this crop year after year regular succession, the soil is soon exhausted and the farmer must resort to commercial fertilizers. Where a variety of crops are grown, and where more clover is grown, the process of degeneration of the soil is less rapid.

There is scarcely a locality to be found which some variety of clover may successfully grown, and that, very marked benefit to the soil. Even the most red or medium clover is common in some places when it has a fair chance. In to fill exceptional requirements. All of these are well adapted to our soil, as well as to our value for forage or provender.

A number of southern farmers a few years ago established the fact that it is profitable as well as more profitable to grow their own meats, than to depend entirely upon the market. A class of farmers has not been depressed from the late depressed farms are to-day in better condition.

There are most excellent dairies in the South for dairy and commands a good price for their products. Not long nor severe frosts of pure water are common, and the cream-separators are easily tided over by the use of the cream-separators. Any difficulty in securing the markets are not serious.

The few dairy-farms are proving very profitable. Good profits to the farmer are some years before they are done, for the nation is up cotton, and it is not until the cotton comes from the North that the advisability of it is too, the rapid development of manufacturing in the South has a great influence, and he who prepares for prosperity will re-

PHOSPHORIC ACID.

Insoluble phosphates in the soil are not hot solutions of phosphoric acid. The phosphoric acid of South Carolina is of the "bone-black" type, and of the "bone-black" type, and in no visible good instances, in the soil, applied to crops, a small proportion of phosphoric acid, as reduced to carbonates, are applied in the soil on "sour soils" with abundance of decaying matter (humus), they operate as efficient fertilizers.

Available phosphoric acid is an expression properly employed in general to signify phosphoric acid in any form or phosphates of any kind that serve to nourish vegetation. In the soil, phosphoric acid and all phosphates, whatever their solubilities as defined in the foregoing paragraph, are more or less freely and extensively available to growing plants. Great abundance of "insoluble" phosphoric acid may serve crops equally well with great solubility of a small supply, especially when the soil and the crop carry with them conditions highly favorable to the assimilation of plant-food.

In commercial fertilizers, "available phosphoric acid" is frequently understood to be the sum total of the "water soluble" and the "citrate soluble," with exclusion of the "insoluble."

The "insoluble phosphoric acid" in a commercial fertilizer costing \$20 to \$50 per ton has very little or no value to the purchaser, because the quantity of it which can commonly go upon an acre of land has no perceptible effect on the crop, and because its presence in the fertilizer excludes an equal percentage of more useful and much more valuable ingredients.—Connecticut Experiment Station Report.

Our Farm.

NOTES FROM GARDEN AND FIELD.

THE NEW STRAWBERRY CULTURE.—In many localities the great trouble which the strawberry-grower has to contend with is the leaf-blight. This is a serious enemy of the crop, and often entirely ruins the otherwise bright prospects of the grower. Without healthy foliage we cannot expect good fruit. This first step to success must be to keep the young plantation free from disease attacks. Fortunately, this is not so very difficult. Spraying with fungicides, if properly and persistently done, will keep the blight in check. But it is often inconvenient to spray a patch when the plants are first set, and while they are scattered so far apart. The new "strawberry culture" offers an easy way out of the difficulty. Mr. L. J. Farmer, of New York, is the "inventor" of this new method of handling strawberry-plants, although Mr. L. B. Pierce, of Ohio, claims to have practised and seen in practise a similar plan for many years. Mr. Farmer told his story before the Western New York Horticultural Society last January. He says that instead of setting the plants into the permanent bed at once, he puts them in a small bed close together, about twenty plants to the linear foot, then shades from the direct rays of the sun for a few days.

A furrow about eight inches deep is made with a spade, the plants are trimmed of superfluous leaves, their roots shortened to four inches (Fig. 1), then set closely to the land side, hauling earth up to the roots, and thus filling the furrow. The little rows are made about a foot apart, except once in awhile when a row is omitted for a path, to facilitate moving about them in watering



FIG. 1.

FIG. 2.

and spraying. Fine manure is put between rows for a mulch, and to add fertility. The plants are kept in this bed about a month or six weeks. Meanwhile, they are watered as often as necessary, and sprayed with Bordeaux mixture once a week to keep them free from blight. When ready to set out, the ground is soaked about the plants, and the latter are taken up in pans and carried to the field. While in this bed new roots start out on all sides of the old ones (Fig. 2). These cling to the soil, and when transplanted, earth is taken along with the plants, and they grow right along.

Mr. Farmer claims the following advantages of this plan over the old one: If you set plants out permanently in April, he says, the ground cannot be properly prepared, because it is too wet. Set out so early they apparently stand still and become thoroughly infested with leaf-blight, but the weeds do not fail to grow, unless a great amount of work is laid out on them. You must be even vigilant, or the weeds get a start, especially if the plants are weak and debilitated by leaf-blight. The new method permits the plowing of the patch, and its working over with harrows and cultivators for about six weeks before setting the plants in the permanent patch. All weed-seeds are destroyed, and if the land is infested with grubs, they are brought to the surface, where birds pick them up. The time of setting the plants in permanent beds is about June 1st.

The other advantages of the plan are ease of spraying, the plants all being concentrated in a small area, and the transfer of the work of setting the plants in permanent patch from the busy time of early spring to that of comparative leisure in early June. A man will "heel in" or set closely together ten thousand plants in a day, while to set out permanently, an ordinary man can handle only about two thousand plants.

T. GREINER.

Orchard and Small Fruits.

CONDUCTED BY SAMUEL B. GREEN.

THE APRICOT AS A STOCK FOR NATIVE PLUMS.

Recently, a nurseryman who makes a specialty of the best native varieties of plums showed me a few rows of them that he had worked on Russian apricot-stocks. He had root-grafted them three years ago, and the first year's growth was so good that he thought he had struck a cheap, good method of propagation, since apricot-stocks can generally be bought very cheap, and native plum-stocks are often high in price. But the trees on apricot-roots now look weak and poor, or are dead altogether. Careful examination showed that there was no real good union between scion and stock. There was a large swelling at the graft, but scion and stock readily broke apart where put together. There can be no question but that our native plum-stocks are the best stocks for native plums.

INQUIRIES ANSWERED

BY SAMUEL B. GREEN.

Best Fall and Winter Apples.—W. H. P., Boonsboro, Iowa. For fall use plant Wealthy. For winter use, Longfield, Tallman Sweet and Malinda.

Best Strawberries for Home Use.—A. B., North Vernou, Ind. You will probably get as much satisfaction out of planting Haverland, Warfield and Beder Wood as from any varieties I know of. The first two are pistillate and the Beder Wood perfect. One third of the whole planting must be of the latter if the first are used.

Leaf-roller.—D. W. H., Rose, Kansas. The leaf-rollers which you refer to as damaging your apple-trees, I suppose, attack them early in the season, rolling the leaves together and living within them. The remedy is to spray the leaves with Paris green and water at the rate of one pound of the poison to one hundred and fifty gallons of water. This should be sprayed upon the trees as soon as the buds commence to open, and should be repeated as soon as the tree comes into leaf, and frequently for a few weeks if the weather is rainy.

Quince Not Fruiting.—S. McG., Tipton, Mo., writes: "What will make quince-bushes fruit every year? They are full of bloom, but do not bear fruit."

REPLY:—There is nothing that will make quince or other fruit-plants bear each year. Their failure to bear might be due to late spring frosts and insect pests or fungous diseases, or to some weakness in the plant itself. It seems to me that if you observe carefully and consult fruit-growers in your vicinity, you will get some idea of the cause of failure.

Fire-blight—Injured Apple-trees.—J. W. R., Washington. The disease you refer to as attacking your pear-trees is probably what is known as fire-blight, or twig-blight. There is no known remedy. The only way of preventing it is to plant varieties not much subject to its attacks. Some varieties are very liable to its injuries. It is much more injurious some years than others, and there are often several successive seasons of comparative immunity from its injuries.—From your description of the injury done to your apple-trees, I am inclined to think it was caused by some twig-borer, but it may be some disease. Please examine carefully and send specimen.

Catalpa Seedlings.—C. F. B., Convoy, Ohio. If the trees are to remain where the seed is sown, the whole land should be got into good, fine condition, and the seed sown thinly in drills eight feet apart, covering it about one half inch. But the common way is to sow the seed in a seed-bed and transplant the seedlings to the field when they are one year old. Under this plan the seed should be sown in well-drained, mellow soil, as early in the spring as it can be worked, in rows about three feet apart. Each row should be six or eight inches wide, and the seed should be scattered pretty thickly all over this space, covered about one half inch deep, and the soil somewhat packed down over them. If the weather is very dry, they should be watered each day until they start; but this is seldom necessary, even in the western states.

Planting Fruit-trees.—F. C. M., North Lawrence, Ohio. Apple, cherry, peach and all other trees and shrubs are generally planted in the spring. It is best to get them in the ground as soon after it can be worked as may be, but they may be successfully planted as late as the middle of May, provided the buds have not opened much. Plant so they will stand a little deeper than they grew in the nursery. You can easily tell by the looks of the bark what was in the ground. If the land is in fairly good condition, do not use any fertilizers so long as you get a good growth on the trees. If you can get it, use good stable manure on the land, and spade or plow it in. If stable manure cannot be obtained, use about four hundred pounds ground bone or tankage per acre. But do not apply any manure until after the trees are planted.

Bitter-rot of Apples—Grafting the Peach.—F. R. H., Squires, Mo. What few experiments have been tried for bitter, or ripe, rot of apples have shown good results from the application of Bordeaux mixture at intervals of a few weeks, commencing when the leaves began to expand. In some experiments good results have been obtained by commencing the applications as late as the early summer months. It is well worth trying. For this purpose try Bordeaux mixture, made of five pounds of lime, five pounds of sulphate of copper and fifty gallons of water. The early summer varieties of apples are most subject to this disease.—It is very unusual to graft peaches in the northern states, but in doing so the work should be done as early as may be in the spring, cutting the scions as they are wanted for use. It is not nearly so sure an operation as the propagation of them by budding in the summer.

Peaches Dropping.—J. H. P., Festus, Mo. Your peaches were probably stung by the plum-curculio, which infests all stone-fruits and generally causes them to fall. The mature insect is a snout-beetle about one quarter of an inch long. The remedy is to spread two sheets on the ground under each tree early in the morning, and then jar it. This should be done daily, or as often as the beetles can be obtained. The beetles are dumpish in the morning, and quickly fall when jarred. This work should be commenced as soon as the flowers fall, and will generally have to be kept up for three weeks. It is not as expensive a job as one might think for, to go over a peach or plum orchard in this way. To expedite matters, most growers use two large frames covered with cotton cloth, instead of sheets. This pest winters over in dead grass and brush, and if these are burned, their numbers may be considerably lessened.



FROM TENNESSEE.—I came from Indiana in the spring of 1882 and settled at Summertown, Lawrence county. I have watched the development of this section, as well as other parts of the state, and am fully convinced of this fact: Tennessee holds out inducements that should not be overlooked by capitalists, and particularly by those seeking cheap homes. The climate of Tennessee is delightful. Long, hot summers and rigid winters are unknown. The average temperature of the year is 58 degrees—the same as that of the northern part of Spain, the southern part of France, northern Italy, Greece and the islands of Japan. The great mineral wealth of this section has just been brought to notice, and is now being developed. This section will, in the near future, be the richest part of the state. The lands here vary from level and rolling to broken, and well watered by ever-flowing springs. The principal timber is white oak, black oak, poplar, chestnut and hickory. Summertown, situated in the northern part of Lawrence county, has 600 inhabitants—mostly northern people. We have good schools and churches.

J. J. C.

Summertown, Tenn.

FROM CALIFORNIA.—I live about one and one half miles from Newcastle, the famous fruit market of the state. This is a fruit section, and lies in what is called the warm or citrus fruit belt, and is along the foot-hills of the Sierras, and at an altitude of about nine hundred and fifty feet. Here we can raise nearly everything that you put in the ground—oranges, lemons, figs, apricots, pomegranates, and all semi-tropical fruits. Peaches reach perfection in this decomposed granite soil. Cherries, pears, plums and nectarines do finely. Now, for climate give me a California winter. Of course, it gets warm in summer, and must needs be so to ripen and bring to such perfection the various fruits; but will say I have suffered more with the depressing heat of an Illinois summer than I ever have here, for if you but step into the shade of a tree you will soon be comfortable. The nights are almost always cool and comfortable. The scenery is beautiful, looking in almost any direction. You can look down into the Sacramento valley or up at the mountains, snow-capped even in summer; the gorgeous sunsets are indescribable. Our little town is progressive. We have the best of social advantages—church and school privileges. All the secret and almost all other organizations are represented. We have electric lights, and six of the largest fruit-shipping warehouses in the state. As many as eighteen car-loads of green fruit are shipped in one day. During fruit season it is a little city so far as business is concerned.

G. W. M.

Newcastle, Placer county, Cal.

FROM NORTH DAKOTA.—Good, improved farms, 160 acres, with ordinary buildings, can be had for from \$750 to \$1,200. The land is all good and has a plentiful supply of water. There are no stones except along the foot of the mountains. Corn is grown here only for table use. The first settlers came in here about thirteen years ago. Homestead land is plentiful yet, but the nearest to the county-seat is about nine miles. Land is generally sold here on the crop-payment plan; that is,

the half of the crop (wheat) until paid. Good oak wood is worth \$3.50 per cord; poplar, \$2.50. Coal has been very little used, but it has been found cropping out along the foot-hills of the mountains. Many are afraid of our winters. I lived seventeen years in Ontario, Canada, and I prefer our winters here. They are clear, cold and invigorating. We have some stormy days, but not half so bad as the eastern people picture them. Our summers are pleasant. It is generally windy in the spring. We have no cyclones. The nights are generally cool. There are no snakes or dangerous animals. Mosquitoes are thick in June. We have a thriving little town—two banks, three large elevators, flouring-mill, four large general stores, two large livery-stables, and all the other places of business that go to make up a small town. The population is in a great part made up of Canadians and Norwegians. Wheat has been the main crop, as our land here is strong and good. Our machinery is mostly all adapted for four horses, one man doing the work of two. The writer bought a farm in '91, and paid for it with the first crop. I will have 500 acres in wheat this year. I would say to any one intending to come West, look this county over, and I assure you you will not be disappointed. Wages are high here—from \$20 to \$30 per month for season hands; harvest and threshing hands, \$2 a day.

D. C.

Bottineau, Bottineau county, N. Dakota.

FROM MISSISSIPPI.—Last year, owing to the depressed condition of the cotton market, a large area of cotton-land was planted to corn, and the resulting crop was a much larger one than usual in this section. This great abundance of corn forced the price down to twenty-five cents a bushel—a price fifty per cent lower than ever before known here. The planter cannot see any profit in it at that price, and has resolved to go back to cotton. Corn in the ear is and has been the chief grain for feeding stock of all kinds in this section. No one thinks of growing oats or root crops, although such can be readily grown here from fall planting, and in no way interfere with a cotton or corn crop the next year; in other words, oats may be sown in September, after corn, and reaped in May, and then a corn or cotton crop may again occupy the land. Root crops, such as carrots, mangels and turnips, are planted on a small scale only—or rather, the turnip is alone grown here—and these as winter vegetables for table use only. Carrots and mangels are never used, although we are aware of their value for feeding purposes. This country is chiefly devoted to cotton, and has been since its earliest settlement. Implements and improvements are all in line with that business, and any departure therefrom would necessitate considerable change and great expense. Cotton has, until recent years, been a very profitable crop, and, properly conducted, its production will pay a fair profit at even present prices. Sugar-making from ribbon-cane could, no doubt, be extended some distance above its present limit. The writer plants annually a small field of this sugarcane, and finds it to make as well and to contain as much saccharine as the Louisiana growth. This section being a few degrees of latitude further north, there is more trouble experienced in saving the cane for seed. It is propagated by planting the stalk—laying the cane in the furrow, lapping the ends to secure a complete stand. It is cultivated as corn, and the yield is immense. Stock of all kinds are very fond of it when it is chopped into small pieces so they can eat it. Hogs will fatten rapidly when fed on this cane. We never attempt sugar-making, as the system is costly, but we make the best quality of syrup at a very little cost. This can be done with the ordinary sorghum mill and evaporator. There are so many different crops that we can grow successfully, no one should ever be at a loss to know what to plant. As for fruit, we can have that at all seasons.

W. E. C.

Mayersville, Miss.

Cleanse

Your blood and make it pure, rich and full of vitality. In such a condition it can nourish the nerves, organs and tissues and impart good health to the whole system. Now is the time when the blood is full of impurities, and they must be expelled at once. The way to cleanse

Your Blood

Is to take Hood's Sarsaparilla. This medicine has proved by its unequalled record of cures that it is the One True Blood Purifier. A few bottles taken at this season will give you vigor and vitality and may be the means of saving you much expense and great inconvenience and suffering. Cleanse your blood now with

Hood's Sarsaparilla

The One True Blood Purifier. All druggists. \$1.

Hood's Pills cure Liver Ills; easy to take, easy to operate. 25c.

NO WORK IN THE FUTURE.

Mr. Edison predicted the other day that work would be altogether abolished in the next generation, and that our only labor would be to press a button and start the machinery going. Mr. Edison may be slightly wrong as to the generation; that is, it may take longer, a few more generations than he imagined, but that the drift is in the direction he indicates, and that actual labor will become a very small element in all industries, is self-evident. Steam did a great deal to free us from the curse of labor, but electricity is a far more potential instrument, and its uses seem almost limitless. We have made it do our lighting, our transportation, and a thousand small jobs, but we have only just begun to use it.

Hitherto this mighty genie has been brought into play mainly in the field of manufactures, and man is still compelled to labor hard to grow crops; but there is a disposition to use electricity more and more in agriculture, and it seems to be even better suited for the field than for the workshop.

In Saxony they are now plowing by electricity, with great success, using an ordinary dynamo, and doing away with horses and men to a large extent. In the department of Tarn, France, a water-wheel is made to give sufficient force and to develop enough electricity to cultivate the farm so that the little brook that runs through it saves the farmer nearly all labor. In Moravia a single dynamo furnishes all the power needed to cultivate three adjacent farms.

Plowing by electricity is much cheaper and better in all respects than plowing by steam. With a waterfall handy, and ordinary intelligence, there is no reason why all the hard work of the farm, from butter-making to the threshing of grain, should not be economically done by a well-distributed electric plant. French experiments have further shown that the distribution of electricity through the soil by means of ordinary current-bearing wires stimulates the growth of plants and increases the yield.

It is not necessary to go into further particulars. We have mentioned the work done on the farm as a sample of the electrical development going on in a field of which we hear very little—agriculture. The farm as well as the city is to be benefited by this new force, and the farmer as well as the city merchant will simply touch a button and have electricity do all his plowing for him. Edison is not a dreamer.—*New Orleans Times-Democrat.*

A MORAL FOR WOMEN.

A GOOD MAXIM, EITHER IN WAR OR HOUSEKEEPING, AND TRUE EVERYWHERE.

A famous marksman says the most wonderful shooting is done when your eyes see nothing but the mark. In target-shooting, when you see only the bull's eye—the "gold," and everything else fades away out of sight, then expect a wonderfully good shot.

The same thing is true in all the practical affairs of life. Have just one single aim in view, and the chances are you'll hit the mark. That's the way to succeed in anything; that's the way to accomplish great things—to have one purpose in mind and stick to it, and give all the thoughts and all the energies to accomplish that one object; that means success. It's the same in everything; in business, in housekeeping, in mechanics—concentrating all the powers of the mind on one point means success.

NAPOLEON'S MAXIM.

Napoleon's famous maxim, "always concentrate your forces; never divide them," made him the conqueror of Europe. His enemies spread out their bigger armies, but he gathered his together and struck at one point, and conquered. At the last, when he neglected his own advice, and his own forces became divided, he was himself conquered.

TRUE IN BUSINESS AND HOUSEKEEPING.

In business, a man gives all his mind to one line of trade, and gains a snug fortune; then he "spreads out" in several directions, and loses everything. In housekeeping, when you try to do everything at once, nothing gets done; but by putting all the thoughts on one thing at a time, you accomplish a heap of work. There's always a heap more to do; but anyway if you stick to one thing, *something* gets done.

TRUE IN MECHANICS; TRUE EVERYWHERE.

In mechanics, when any one invents a machine to do several different things, the chances are it won't do any of them well. Look at some of those wonderful combination household contrivances; knife-cork-screw-ice-pick-tack-hammer-screw-driver-stove-lifter-carpet-stretcher all in one tool. Such a tool is likely to be worse than useless. The practical housewife or man about house says: "Give me a good hammer or a good jack-knife—something that does just one thing, and does it well."

An invention intended to do several different things at once is likely to miss all of them; but when a man of brains and experience puts all his mind and powers on an invention to accomplish just one particular thing, his invention is likely to do that one thing thoroughly and completely.

THE SECRET OF SUCCESS.

The same rule holds in medicine. That is the secret of the wonderful success of Dr. R. V. Pierce's Favorite Prescription for women. It heals and strengthens the organs distinctly feminine. It prevents the weakness and cures the diseases peculiar to women. It is not intended for any other purpose; it is not a panacea for all sorts of troubles; its sole object is to prevent and cure this one class of disorders and

For nearly thirty years Dr. Pierce has been chief consulting physician to the Invalids' Hotel and Surgical Institute, of Buffalo, N. Y., and has attained an eminence second to none in his profession as a specialist in diseases of women. The fruits of his unequalled experience are embodied in the "Favorite Prescription," the unflinching helper and strengthener of women in every critical period of her existence.

FOR MOTHERS.

Prospective mothers and nursing mothers will find the "Prescription" a wonderful sustainer and help in their time of trial and of early motherhood. Taken early during gestation, it completely overcomes all the perils of parturition, shortens confinement and labor, and divests it of a large degree of pain and discomfort. Young mothers will insure their own recuperative powers and abundant healthy nourishment for the child by the use of the "Favorite Prescription" during the nursing period.

REMARKABLE EVIDENCE.

The fact that the sales of Dr. Pierce's Favorite Prescription exceed the combined sales of all other medicines for women is a remarkable evidence of the high esteem in which women hold this wonder-working remedy, and its unexampled success. It is



weaknesses, and it fulfils this one purpose absolutely and completely, as no other medicine has ever done. It directly strengthens, heals and builds up the healthy condition of the delicate feminine organism, thus reaching the internal source of female ailments, and curing radically and permanently all derangements and unhealthy conditions. It stops debilitating drains; cures inflammation and ulceration; restores functional regularity; imparts vigor and elasticity to the tissues and ligaments, and promotes a sound, healthy, normal condition.

A BLESSING TO SENSITIVE WOMEN.

Dr. Pierce's Favorite Prescription has done away with all necessity of the embarrassing "examinations" and "local treatment" so dreaded by modestly sensitive women, and which, except in very rare instances, is totally needless and useless. Such treatment frequently does more harm than good; at best it is a mere superficial makeshift, and nineteen times in twenty results in utter failure. This is a striking contrast to the results of Dr. Pierce's practice, which, in a period of nearly thirty years, and the treatment of more than two hundred and fifty thousand women, shows a record of over ninety-seven cures in every hundred cases.

the only medicine on the market adapted specially to the intricate and delicate organism of women, by a regularly graduated physician who has made a life study of this subject.

DISCOURAGED WOMEN.

Any woman who is discouraged with suffering and useless doctoring, if she will write the particulars of her case to Dr. R. V. Pierce, addressing him to the above-mentioned institution, will receive from him, free of charge, sensible and fatherly professional advice and directions for home-treatment, by which, without the aid of a physician, she may cure herself if her trouble is curable. And the records show that many thousands of cases pronounced incurable by doctors have been completely and permanently cured by Dr. Pierce's home-treatment by correspondence.

Mrs. Ida Coventry, Huntsville, Logan County, Ohio, writes: "I had 'female weakness' very bad—in bed most of the time, dragging down pains through my back and hips; no appetite; no energy. The family physician was treating me for liver complaint. I did not get any better under that treatment, so I thought I would try Dr. Pierce's Favorite Prescription and 'Golden Medical Discovery.' I felt better before I had used one bottle of each. I

continued their use until I took six bottles of each. In three months' time I felt so well I did not think it necessary to take any more. In childbirth it does what Dr. Pierce recommends it to do."

Mrs. Fred Kempson, Cambria, Hillsdale County, Mich., writes: "When I began to take your medicine I could not do any work to speak of. I was in such misery that many times, as I lay down for the night, have I prayed that I might never see the rising of another sun. It was almost death to me to stand on my feet. When I began using your medicines I weighed 103 pounds. I have taken in all ten bottles of your Dr. Pierce's Favorite Prescription, six of 'Golden Medical Discovery,' and some of your 'Extract of Smart-Weed.' To-day I am well, and weigh 148½ pounds, and am doing the work for my family of nine."

Mrs. C. P. Miller, No. 1628 Frederick Avenue, St. Joseph, Mo., writes: "I cannot say enough in praise of Dr. Pierce's Favorite Prescription, as it has done me a world of good and undoubtedly saved my baby's life, as I came near losing him twice before the proper time."

Mrs. Annie B. Fitch, Johnstown, Cambria County, Pa., writes: "I have been taking Dr. Pierce's Favorite Prescription (three bottles of it), and am getting well fast. I can do my own work, which I have not done for almost two years. I do my own washing and all of my house work. I have gained about six pounds taking your remedy. You cannot know how glad I am that I tried your 'Favorite Prescription.'"

Miss Laurretta McNees, of Box 723, Reno, Washoe County, Nev., writes: "I have discontinued taking Dr. Pierce's Favorite Prescription, and will not need any more. Last month I had no pain at all, and worked every day without any inconvenience whatever. It was the first time I never had any pain during the period. I cannot say too much for your medicines, especially the 'Favorite Prescription' and 'Pleasant Pellets.' I know of a lady in a family way who took one bottle of your 'Favorite Prescription,' and she says she was not sick like she was with her first baby. This was her second baby. She thinks it a grand medicine, and so do I."

Mrs. S. F. Zachary, Columbia, Fluvanna County, Va., writes: "I hurt myself about seventeen years ago, lifting more than my strength would allow, which caused displacement of internal organs, after which time I was a complete invalid. I could hardly get about the house, and was confined to my bed a good portion of the time. Under the treatment of the best physicians our town could afford, I took a quantity of medicine which seemed to do me no good. Some one recommended Dr. Pierce's Favorite Prescription, and before I had taken one bottle there was a change for the better. My husband then got Dr. Pierce's Golden Medical Discovery, and I took it in connection with the 'Favorite Prescription.' These medicines have been, through the blessing of God, the means of my recovery. I continued your medicine until I felt that there was no longer any need of it. I have been rewarded for giving your medicines a fair trial."

A WONDERFUL BOOK FREE.

All women should possess the complete information about themselves, which is contained in Dr. Pierce's free book, "The People's Common Sense Medical Adviser." It is a large thousand-and-eight-page book, a perfect medical library, in one volume, with more than three hundred illustrations. Several chapters are devoted to the special physiology and the diseases peculiar to women. It is written in plain, interesting language. It has had a larger sale than any other medical work ever printed; six hundred and eighty thousand copies were sold at \$1.50 each. The profit on this phenomenal sale enabled Dr. Pierce to issue the present edition of half a million copies *absolutely free* to any one who will send the little COUPON NUMBER in this paragraph, with twenty-one cents in one-cent stamps (to defray the expense of mailing only), to World's Dispensary Medical Association, Buffalo, N. Y. This free edition is precisely the same as the book which sold at \$1.50, except that it is bound in strong paper covers. If you desire it in French-cloth, embossed binding, send ten cents extra (thirty-one cents in all), to cover the extra cost of this more beautiful and more substantial binding. Do not fail to enclose in your letter the little COUPON NUMBER printed above, to be cut from this paper.

Our Farm.

THE POULTRY YARD.

Conducted by P. H. Jacobs, Hammonton, New Jersey.

PRACTICE AND INCUBATORS.

No matter how favorable the outlook may be, the time to begin with an incubator is when one is not engaged in hatching for profit. The summer season is the most appropriate period of the year for experimenting with an incubator, for then eggs are cheap and more of them are fertile. It costs something to start an incubator, and much of the learning can be saved by doing the work before the season for operating an incubator opens. It does not pay the novice to procure an incubator, begin hatching eggs for supplying broilers, and then find out that failure is due to lack of experience, for when an operator loses a hatch he loses three weeks' time, and is just so much behind, which eventually gets his broilers into market too late to secure the high prices.

The management of the brooder is also to be made a matter of study. It is often that more chicks are lost by the brooder than from any other cause, and it is important to know what to do before the brooder comes in to use, or there will again be lost time. The summer is an excellent period for practice in this direction, as less heat is to be provided and the cost therefor lessened. There is no difference in winter and summer management of a brooder other than that of providing necessary

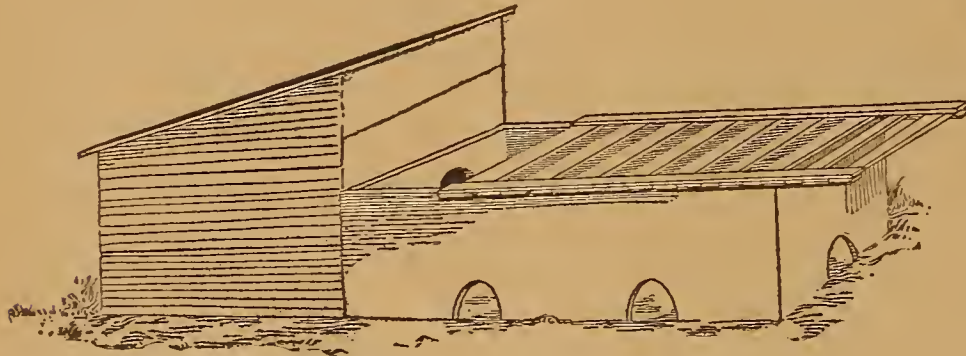
DETACHABLE COOP FOR SITTERS.

A convenient and cheap little coop for hens that are sitting and for hens having broods is shown in the accompanying illustration. It consists of a box for a nest or shelter, a frame for a run, and a movable top to cover the frame. To make the top, get a bundle of laths, using a whole lath for each of the sides. Cut some of the laths exactly in the middle; nail the ends to the whole laths, and then nail a whole lath on these ends, on each side. You will have a frame 2x4 feet, the sides being strengthened by having two laths covering the ends of the short lath.

The frame is simply four boards, 12 inches wide, with no floor or top, and 2x4 feet. The box may be made of boards, or a soap or candle box will answer. The frame and box have entrances cut into them, which should be of the same size, as they are intended to be connected. The box should have a tarred-paper roof.

Place the frame against the box, the egress and ingress openings coming together; then put the top on the frame, and the run is complete. It will serve for sitting hens or for hens with broods, and protects against hawks or cats, as well as a shelter against storms or high winds. A few bricks or small stones on the top will hold it in place. The advantages of the arrangement are that the parts are detachable, thus being easily removed to a new location, as well as permitting of quickly cleaning any portion. The box should have a board bottom, raised an inch from the ground.

The complete box, top and frame, can be made at a cost of about twenty-five cents, and can be stored away for future use.



MOVABLE COOP AND RUN.

warmth. Keep the chicks warm, and one half of the danger of loss will be averted.

It is but proper that those who contemplate the use of an incubator and brooder should get them now, and learn all about them before the time for hatching early broilers arrives. It should be mentioned that while a self-regulating incubator may be an advantage, yet the too frequent mistake made is that of reliance on the regulator. The best regulator is yourself. Do not attempt to save labor in the operation of an incubator. An engine may have a governor, but the engineer is the one on whom to depend. No incubator made can be left to itself, and he who is not willing to bestow his time and attention to the hatching of the chicks does not deserve them, and will not meet with success, as brains are more essential than the machine or implement.

TO PREVENT SITTING.

To prevent the hens from sitting, place a porcelain egg in the nest of each sitter, and allow no food but once in two days, the food to consist of an ounce of lean meat. Let the hens stay on the nest two weeks, and then place each hen in a coop with open, lath bottom raised a foot off the ground, and in two or three days there will be no inclination to sit. If allowed to stay on the nest two weeks they will be reduced in flesh, and when they begin to lay will keep at it, as the resting for two weeks will be beneficial.

SULPHUR FOR LICE.

If a pound of sulphur is burned in a poultry-house, no lice will remain, as the gas evolved from it will destroy all life. First stop up all the cracks and openings, and when ready, have a hot pan placed on two bricks, pour the sulphur on the pan, leave as quickly as possible, and shut the door. Do not open the door for an hour. If done properly, the house will be purified of any disease that may exist and the lice destroyed.

SUFFERERS FROM COUGHS, SORE THROAT, etc., should be constantly supplied with "Brown's Bronchial Troches."

ARMSTRONG & McKELVY
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IT IS JUST AS EASY, and a heap more sensible, to use a little care in the selection of materials when having painting done and secure the best result as it is to take chances and use mixtures of which you know nothing. To be sure of getting

Pure White Lead

examine the brand (see list genuine brands). Any shade or color desired can be easily obtained by using NATIONAL LEAD CO.'s brands of Pure White Lead and Tinting Colors.

Pamphlet giving valuable information and card showing samples of colors free; also cards showing pictures of twelve houses of different designs painted in various styles or combinations of shades forwarded upon application to those intending to paint.

NATIONAL LEAD CO.,
1 Broadway, New York.

meal (baked brown and moistened in hot milk) or broth made from waste scraps from the butcher-shop, fed warm and lightly seasoned with pepper. When a few days old they may have cracked wheat at night, and will soon eat whole wheat if provided with fine, sharp grit. Fed in this way, and kept dry and warm, they never have bowel complaints. The most critical period in the life of a chicken is when the wing and tail feathers are in process of forming and immediately after, but good care at this time and before will do much to tide them safely over. Until this crisis is well past they should be fed three times daily, feeding at each time no more than can be eaten at once. Almost any vegetable, boiled, mashed and thickened with mill-feed or bran, and fed warm four times a day, is excellent, with plenty of green food and fresh water at all times. The evening meal should be of grain, either whole or cracked. Meat-scraps and sour milk, the latter slightly scalded and the whey drained off, leaving only a soft curd, are great aids in keeping up the strength at this time, and especial care should be taken to keep them warm and dry.

H. T.
Junction City, Oregon.

INQUIRIES ANSWERED.

Bone-cutters.—A. S. T., Marion, Ohio, writes: "Is a bone-cutter necessary for a flock of twelve fowls?"

REPLY:—Bone-cutters are so cheap and useful that it pays to procure one for even a small flock.

Ducks.—W. H. G., Parsons, Kan., writes: "Which breed of ducks is used on the large duck-farms of Long Island?"

REPLY:—The Pekin is regarded as the best, it being better contented without ponds than some breeds.

Shaking the Heads.—G. W. E., Veblen, S. D., writes: "Why do hens shake their heads when a strange noise is made in the chicken-house?"

REPLY:—It may be due to excitement, and is also of common occurrence when the fowls have lice on the heads or when the combs are affected by cold winds.

Selecting a Breed.—P. T. M., Fort Atkinson, Wis., writes: "Which breed would you suggest for laying and producing good market stock?"

REPLY:—For your climate, a hardy breed, such as Brahmas, Cochins, Plymouth Rocks, Wyandottes or Langshans should be selected. It is difficult to secure the best layer and the best market fowl in the same breed.

Canary.—Mrs. H. T. H., Beulah, Wyoming, writes: "What can I give a canary that breathes very hard and seems to cough? It otherwise seems well. I give it prepared seed, fresh water daily, and gravel. It has been this way for six months, but sometimes seems almost well."

REPLY:—It may be a disease of the throat of some kind, the imperfect description not enabling me to determine. Try a small quantity of raw egg, yolk and albumen well beaten together, two or three times a day.

Pinworms.—Mrs. W. F. L., Newell, Ky., writes: "I have several times lately found a bunch of small pinworms near the bottom of the chickens' gizzards. The place where they are seems to be a lump until cut open. The disease seems to be in certain flocks. Is there a remedy? What is the cause?"

REPLY:—It is a difficulty that has been carefully investigated, and no remedy is known, as the worms seem to be beyond the reach of curative agencies. It is best to destroy the birds, thoroughly disinfect, and procure other stock.

Hens Not Laying.—F. E., Weldon, Va., writes: "What is the cause of hens not laying when well fed? How can hens be made to lay?"

REPLY:—As a rule, well-fed hens do not lay because of overfeeding. The best plan to adopt is to give but one meal a day for a week or ten days, consisting of a pound of lean meat for twenty hens, and also scatter a gill of millet-seed in litter and compel them to scratch, which will bring them into laying condition.

Blood-spots on Eggs.—M. E. P., Hancock, Md., writes: "I find the eggs from one of my pullets contain a clot of blood, sometimes on the yolk and again on the white. What is the cause?"

REPLY:—It is a very common occurrence, being due to the rupture of a minute blood-vessel. It soon passes away, and the eggs become free from the blemish. It is caused by liberal feeding on highly seasoned food, especially when too much red pepper or condiments are given.

J. D. SOUDER, Telford, Pa., all var. of Poultry, Pigeons, Eggs, \$1.00 p. 13, 4c. for fine cat. cir. free.

BROWN LEGHORNS, Lt. B., Br. P. R. and P. Ducks. Eggs for hatching \$1 for 15. H. FRIEND, Poultryman, FRIENDSVILLE, MARYLAND.

INCUBATORS 2c. stamp for \$6.00 catalogue. Address, S. Howard Merryman, Bosley, Md.

FREE CAT. of 22 varieties Pure-bred Fowls. 32 prizes won at one show. Eggs booked now for hatching. Scientific Poultry Yards, W. E. SENNEFF, Prop., Dixon, Ill.

TOULOUSE Geese, Bronze Turkeys, P. Ducks, B. P. Rocks, W. and B. Leghorns, W. and S. L. Wyandottes, W. H. Turkeys, Lt. Brahmas, W. B. and P. Cochins. Fine stock for sale. P. B. McCORMAC, New Concord, O.

BEEKEEPERS SEND FOR Sample copy of CLEANINGS IN BEE CULTURE. A Handsomely Illustrated Magazine, and Catalog of BEE SUPPLIES FREE. THE A. I. ROOT CO., Medina, O.

Mention this paper.

MANN'S BONE CUTTER on trial. Try it before you pay for it. Nothing on earth will MAKE HENS LAY Like Green Cut Bone. Ill. cat. free if you name this paper. F. W. MANN CO., MILFORD, MASS.

Mention this paper.

2000 PREMIUMS at 10 State Fairs in 1895. This is my record. Eggs and Fowls For Sale. Largest Range in the West. Send 5 cent stamps for best Illustrated Catalogue. CHAS. DAMMERDINGER, BOX 68 COLUMBUS, O.

Mention this paper.

Lice, Mites, Fleas, Etc., on poultry, stock, etc., easily and completely eradicated. No old-fashioned treatments such as dusting, dipping, etc. Endorsed by Nellie Hawks, Mrs. Mackey, Judge Emry and thousands of others. Hundreds of agents in all parts of U. S. More wanted. Great seller. A postal will bring circulars telling all about it with testimonials. Geo. H. Lee, Mfr. of LEE'S LICE KILLER, Exeter, Neb.

NEW MAMMOTH POULTRY GUIDE showing colored plate of chickens in natural colors. Finest book ever published. Almost 100 pages. Tells all about Poultry for Profit or Pleasure. Price only 15c. JOHN BAUSCHER, JR., Box 141, Freeport, Ill.

Mention this paper.

THE IMPROVED VICTOR INCUBATOR Hatches Chickens by Steam. Absolutely self-regulating. The simplest, most reliable, and cheapest first-class Hatcher in the market. Circulars free. GEO. ERTEL & CO., Quincy, Ill.

Mention this paper.

INCUBATORS, BROODERS, VEGETABLE and CLOVER CUTTERS. BONE and GRAIN MILLS. A complete line of poultry supplies at lowest prices. Green cut bone will MAKE HENS LAY in winter and produce fertile eggs for hatching. Send 4c. for catalog and reliable information on poultry raising. PEERLESS INCUBATOR & BROODER CO., 513 E. Ohio St., QUINCY, ILL. Absolutely Self-Regulating.

Mention this paper when you write.

WALL-PAPER Samples mailed free from the largest concern in U.S. Prices 30% lower than others. PAPERS from 2c. to \$3 1/2 a Roll—8 Yards. DEALERS can have large books by express with TRADE DISCOUNTS. A MILLION ROLLS—An Unlimited Variety. 982-984 Market St. 418 Arch St. PHILADELPHIA. KAYSER & ALLMAN

Mention where you saw this advertisement.

Abraham Lincoln is one of the most commanding figures in history. The world has confirmed and history has recorded it. When he died, it was as a conqueror.—Samuel Adams Drake.

Our Fireside.

DOWN AT THE FARM.

BY JOHN T. HINDS.

Oh, the days long ago I remember so well!
They come to me now like a magical spell;
They fill me, they thrill me with exquisite charm,
For they make me a lad again down at the farm.

I see the old attic—the place of retreat,
Where we slept 'neath the sound of the rain's dancing
feet;

Where we painted and feathered in Indian-like style,
Or lounged to be Crusoe on some distant isle.

I remember the spring at the foot of the hill,
And the brook that flowed on down by Perkins' mill;
And the wonderment grew, as we went to and fro,
To know where it came from and where it would go.

I remember the road where the travelers went by,
And the dust that rose up like a cloud toward the sky;
And the peddlers with packs, whose wonderful store
Was the newest and best—prices just for the poor."

I remember the field with its ripening grain,
And the wild flowers growing adown the big lane;
The forest, too, trembled with autumn's red glow,
And hunting-time came with the deep-falling snow.

The ice-covered pond, lying hard by the way,
And school having ceased e'er the close of the day,
How often we scampered—impatient to wait
For the fun and the joy of a jolly good skate.

As I sit in my room with the worry and dread
Of city life's battles for shelter and bread,
The days long ago, with their exquisite charm,
Make me long, even now, to be down at the farm.

LOVE'S OLD SWEET SONG

BY SARAH H. HENTON.

Just a song at twilight, when the lights are low,
And the flickering shadows softly come and go.



BEFORE Mrs. Robert Hunt began dressing for the reception given in honor of Miss Vance, she made a singular request of her husband, which was this:

"Rob, I'll go with you this evening if you will promise not to be so pronounced in your attentions to Miss Vance as you were on the last occasion of this kind."

Mrs. Hunt was a lovely young person, with a mass of soft auburn hair, violet-blue eyes, with dark lashes, and exquisite mouth and teeth.

"What do you mean, Bessie?" said Mr. Hunt. "I never knew you to speak so before. I am not in the habit of compromising myself, am I? I must say I'm astonished."

"I knew you would be, Rob," she said, blushing prettily, "but I hear Miss Vance has a penchant for fascinating young husbands, and says it's so much fun to see a wife jealous. I think that is a very cruel speech, but I must admit that she is the most beautiful woman I ever saw. Don't you think so, Rob?"

"No, I can't say that I do; she is too sepulchral and statuesque—not enough soul and emotion about her to suit me. But get ready, my pet; I'll promise you to be your most devoted slave for this evening. I engage three dances, and claim three kisses (right now) for that saucy talk of yours." And catching Bessie in his arms, he imprinted a half dozen kisses upon her pouting lips.

The night for the reception was beautiful. It was a charming drive out to Colonel Kelly's country home a few miles from the city, and numbers of vehicles had already deposited their burdens at the canopied doors.

Inside all was light and warmth, and odorous with the perfume of blossom and bloom, while music resounded with the twitter of gay voices and rippling laughter.

Miss Vance had almost a continental reputation, in the few years she had been out, for beauty and wit, and had been the theme of many tongues. All pronounced her beautiful, her toilets superb; but it was generally believed that she was not fond of her own sex, and was too much given to sarcasm. She had also shown had taste in preferring the society of brilliant married men to the unfettered and free.

Miss Vance stood receiving with all the grace of a queen, but she did not lose sight of a dainty figure in pure white, that bounded up the stairway, her handsome young husband following on his way to the gentlemen's dressing-room. She watched the lithe young form of Mrs. Hunt, and saw how her face vibrated with love and emotion as it rested upon her husband. Miss Vance had been heard to remark that she could not see what it was in Mr. Hunt's wife that he admired; that he was very handsome and fascinating, but she thought his wife not at all pretty.

Mr. and Mrs. Robert Hunt were among the first callers upon Miss Vance.

Miss Kelly, whom she was visiting, was Mrs. Hunt's best friend, and had been her first bridesmaid a year before our story begins. Natalie Kelly had repeated a little speech, made by Miss Vance, to Mrs. Hunt, so as to put her on her guard. She knew Robert Hunt was very much in love with his wife, and

nothing but a well-laid scheme could get his attention. She also knew that Miss Vance admired very few men, but had expressed herself as admiring him exceedingly, and had said that she enjoyed his conversation more than any gentleman she had met since her arrival. Miss Kelly remarked:

"You are wasting your time on Mr. Hunt; he has a lovely wife, you know."

"Oh, do you think so, Natalie?" she said. "That is what makes him so interesting; he is just a little too fond and foolish about that wife of his, and too indifferent to other women."

"You mean he is indifferent to Miss Vance's charms," said Natalie, laughing, but at the same time she felt an uneasiness for her friend's happiness. She had witnessed some of Miss Vance's conquests, and knew how she forgot prudence and judgment in her all-absorbing love of power.

One thing in Mr. Hunt's favor, he was not susceptible, and had less vanity than most men. Miss Vance was gowning in a lustrous white satin, and her clear-cut, cameo face shone out from the great crowd superior to all other beauties, though there were many types.

Mr. Hunt was true to his promise, claimed the first dance with his wife, and lingered near her. It did look as if Miss Vance was not to have the triumph she so confidently expected in capturing Mr. Hunt.

Mrs. Hunt was an acknowledged belle before her marriage, and had thought nothing of leaving Rob to do a little innocent flirting (as she called it) with some of her old admirers. She felt quite different about her husband; he was so dignified and had such a high code of morals, she thought it looked out of place for him to condescend to anything so frivolous as flirting.

It flattered Mr. Hunt more than he would have owned to himself that a woman of Miss Vance's reputation would seemingly turn from others to him; but she knew how to conduct such affairs—to gently stifle false hopes, and avert crises with tact; she thought she was able to diagnose such maladies of the heart with accuracy.

Bessie usually plunged into the delights of a fresh flirtation, and permitted herself to be carried along with the tide of her emotions. She knew she would land safe, would never be wrecked, nor washed against the rocks of passion. She had never loved but one man, and that was her husband. She was pretty, romantic and susceptible, but she never dreamed that she had a spark of the demon jealousy. To-night she had felt it. Could it be possible that Rob had ever suffered from her innocent flirtations? She recalled vividly to mind one night when she had danced quite often with Will Clark how Rob looked, and came up to her and asked for a waltz, and how coquettishly she had denied him. She also remembered how silent he was on their way home. Still, he had not censured her. Mrs. Hunt's partner noticed how very quiet she had become, and also how pale she looked. She had no desire for new conquests to-night. Her heart was heavy. To think her husband had not kept his promise! He had fallen into Miss Vance's trap. How handsome he looked, as he listened with a rapturous reverence and grace of manner so natural to him when addressing ladies. Miss Vance's eyes shone like stars. Mrs. Hunt could not help looking at them. He seemed bewitched; she wondered if he could leave her if he wished. He seemed oblivious to all others. She also heard remarks on all sides regarding his attentions to Miss Vance.

Mrs. Hunt feigned a dull, nervous headache, went up to the dressing-room, threw herself down on the bed, shaded her eyes from the light, and covered herself with a light shawl. She felt more wretched and miserable than she ever had in her life. Rob had forgotten she was living, she thought. "Oh, how my head throbs and aches, but my heart aches worse!" Presently she heard some one come into the room with a gliding step, and peeping from out her covering, she was astonished to see it was Miss Vance.

Miss Vance saw some one lying on the bed, and called softly, saying, "Virginia Kelly, is that you? Do you know where I could get a light shawl? Mr. Hunt wants me to promenade with him out on the lawn."

Mrs. Hunt made no response, of course, but kept quiet. Miss Vance continued, "I suppose Virginia is asleep; I'll not awaken her," and left the room.

Mrs. Hunt learned, months later, that Miss Vance was only carrying out her role of making her jealous. She had seen her go up-stairs, and had purposely played a part.

If Mrs. Hunt had been miserable before, she was wretched now. She really was suffering, and rang the bell for a servant, and sent immediately for Miss Kelly.

Miss Kelly came at once, and there sat poor Mrs. Hunt on the side of the bed, wan and haggard; in her nerveless hands were some withered American Beauties, that she had plucked to pieces in her agitation. Miss Kelly knew at a moment's glance what was the trouble. She had watched with pain Miss Vance's subjugation of Mr. Hunt. All that Mrs. Hunt said was, "Tell Rob I'm sick, Natalie. I want to go home."

"All right, dear; but can't I do something for you?"

Miss Kelly sent her brother with a message to Mr. Hunt to come to them. He came two steps at a time, and halted at the door, asking if he could come in.

"Yes," said Miss Kelly. "Bessie is in here, and sick."

With that he was at Bessie's side, asking her what was the matter. "Why, darling, how long have you been up here?" When he caught sight of the desolate little figure in white, that had looked so radiant a few hours ago, the blue eyes swimming in tears, he then remembered his promise to her, and wondered if that could have anything to do with her looks; but no, she was dancing gaily with one of her old admirers the last time he remembered seeing her. She must have one of her sick headaches. He told her he would order the carriage, and asked Miss Kelly to make their necessary excuses.

Mrs. Hunt was to be pitied; this was her first real sorrow. She was suffering, and worse than that, she felt herself an injured wife.

"You are weak, darling," said Mr. Hunt. "Lean on me," he said, tenderly.

As she passed down the stairway, her vision was steady again; and throwing back from her brow her disordered hair, she felt as if something was clutching at her throat, as she caught sight of the smiling face and graceful figure of Miss Vance through the open doorway.

Mr. Hunt was frightened at the cold, glittering flash in her eye as his wife turned her face upon him. Just then the sound of the carriage-wheels on the gravel drive was heard, and the driver called out, "Mr. Hunt's carriage."

Mr. Hunt lifted Bessie into the carriage, and said, tenderly, "Lay your head on my shoulder, dear, won't you?"

"No, I thank you," she said, coldly. "I must learn to suffer alone in the future. You have shown to-night how little you care for me."

"Why, Bessie Hunt! Don't say such a cruel thing, please."

"How can you justify your conduct to-night, promenading in the moonlight out on the lawn, after giving Miss Vance the whole evening. Everybody was remarking upon it, until I felt so mortified I left the room. Your promise was forgotten, I was forgotten—here her voice broke down.

"Who said I promenaded with Miss Vance? It's false."

"She said so herself," replied Bessie, sobbing.

"How dared she tell you that? If I had thought you really cared so much about the promise—still, I did not intend to spend so much time with Miss Vance, but I would have been positively rude to have left her. She chose to talk upon grave subjects, rather than dance; when I could leave without seeming to be unappreciative, I did so. And, my dear little wife, I prided myself that our love was on too sure a foundation to be uprooted by one such evening. Then, too, you were gaily dancing with Will Clark when I saw you last."

"I have been told that the first year of one's married life was the unhappiest. I am sure it must be true," said Bessie.

Poor Bessie! Her heart ached so, still it hurt her to say unkind things to Rob. She would not let him say anything to soothe her, yet she startled her young husband by her utter look of misery and despair as he lifted her out of the carriage at home. It had been such a happy drive out there, but a silent one back.

When Mrs. Hunt got safely into her pretty chamber, her first thought was to throw herself on the bed and cry her heart out; but she felt a new kind of resentment, no forgiveness in her heart for Rob's conduct, no matter how sorry he might be. "He broke his promise" was the bent of her thought.

When Mr. Hunt came up, he asked playfully if he might come in.

How charming and attractive everything was in there! The room they loved and admired. Her tiny gold-embroidered slippers in front of her lounge, near by her pretty old rose dressing-gown. The whole room was permeated with the fragrance of flowers, and the pleasant, subtle, spicy Indian perfume which clung to all Bessie's effects. She was a dainty creature, and had always been so gentle. Instead of answering him to-night, she merely shrugged her shoulders.

He paid no attention to this, but stepped up near to her and said earnestly, with his old caressing voice:

"Bessie, don't you think it would be better for us to make peace with each other?"

He put his arm around her. She turned her face so that the light fell directly upon it; it looked pale, her features sharpened. He took no further notice of her petulance, but took her hand in his and kissed it fondly, saying:

"Bessie, listen to reason; you certainly will not be jealous of some one who was out of my mind in ten minutes after I left her. If you knew how little thought I gave her, or how much more you were in my mind, you would pardon me. One does not always think and do the right thing. Come, my little darling, let's be friends."

He took her hand in his. She started from his touch, saying:

"Rob, no one could have caused me to break a solemn promise made to you. My pride is hurt; it meant everything to me. That woman vowed she would hold you for that one evening, as she did the evening at Mrs. Wallace's, just to make me suffer—with no other motive—and she was proud of it; then wasn't satisfied, but had to come to the dressing-room and put another screw of torture upon me, by telling that you and she were going out on the lawn. She was so proud of your devotion, and you gratified her in her low object. She looked at me with such conscious power, and, oh, Rob! I

was so cut to hear the people's remarks, so humiliated."

Then Bessie gave way to such sobbing and moaning that he comprehended the gravity of the situation. She was cold and ill, and needed taking care of. In a few moments he had the bed-covers turned down, helped her off with her party dress and jewels, lifted her into the bed, put mustard to her temples and a heater to her feet. She made no resistance now; the oppressive feeling about her heart became more significant, taking the form of a sharp physical pain. The old family physician at home had told her not long before that she must guard against any vehement outbreak or violent emotion. She fully realized his meaning now, and knew that her heart must be seriously affected. She had never mentioned it to Rob or to her family. He sat by her until she fell asleep, then turned the light very low and went softly down to the library to smoke and think.

If any one had asked the question, "Who was the happiest and most popular couple in L—?" the answer would probably have been, "Mr. and Mrs. Robert Hunt." They were sought after in society, and while they entered into all its enjoyments, they loved the quiet evenings around their own fireside best. They both sang finely, loved to read, and were very congenial.

Mrs. Hunt had been foolishly in love with her husband, would never leave him to make even a short visit home, although, when she left the home roof, they prophesied she could not stay away from them, she was such a home child.

Mr. Robert Hunt was thoroughly aroused and miserable. He lit his cigar, stirred up the library fire, determined to try to smoke off some of his bad feelings and think over his recent conduct. Why did he succumb so completely to Miss Vance's charms? "She had made her threats, Bessie says, but I was not aware of that. It must have been sheer vanity on my part because she preferred me to others." He did not think her so beautiful, but he had to own that she held dominion over him by her tact, will or something. He was not given to such folly. Then there was a new phase in Bessie's character; she had never seemed to care to whom he paid attention. Ah! this jealousy, as Shakespeare truly says, makes "trifles light as air seem to the jealous confirmations strong as proofs of holy writ." Quixotism was out of date, but it had been one of his virtues. To have given food for gossip was intolerable to him.

Bessie slept well the rest of that night. She got into the bed, feeling that her brain was in too deep a tangle to unsolve, and feared she would not sleep at all; but sometimes nature is merciful. When we are tired out, mental distress is only a dull ache, but in the hard, cold light of morning it strikes a deadlier, deeper pain. The trouble of the night before came to her gradually during the moments of waking. She saw the light still burning. But where was Rob? This thought came with a sudden pain.

The maid came into the room quietly, and stood by her bed, saying: "I thought yer wuz up so late, Miss Bessie, I wouldn't wake yer up, an' I found Mas' Rob in de library asleep in de hig cheer."

"Did you rouse him, Fanny?"

"No, Miss Bessie, I didn't know whether ter wake him up or not."

While they were talking, Mr. Hunt came softly into the room. He had on his dressing-gown and slippers, and looked haggard and pale.

"Good-morning, Bessie," he said, going over to her and lifting one of her hands to his lips. "You are better, aren't you?"

"Yes," she said. "I think I'll get up and dress soon."

"Oh, no, not unless you feel well; you had better rest to-day. Let me bring you up your breakfast, and bathe your face for you."

"No, I'd rather Fanny would do it," she said, feebly.

"Still hurt with me, pet? Isn't there anything I can do or say to make you forget last night's work?"

"We won't talk about it now, Rob."

Mr. Hunt was very fastidious in his dress, and usually made a faultless appearance, which Bessie admired; but this morning he seemed indifferent, hurried through his breakfast, then down to the bank, telling the house-girl to look after Bessie, as he would be busy until dinner.

Bessie drank a cup of hot coffee and ate a piece of toast, and felt so much better that she decided to get up and put on her street gown. The first feeling was a vague sense of coming disaster. She had quarreled with Rob. She would not listen to any of his apologies.

"I know it isn't right, but I know what I do need just now—it's 'mother;' but I wouldn't tell her on Rob for the world. But I'll go home and miss all these parties that are to be given to Miss Vance. I will not let her triumph over me again. Yes, I will go home. That pain in my heart frightened me last night. I'll go and see good Doctor Allen about it."

To think was to act with Bessie Hunt. She was very impulsive, the idea seemed to infuse new life into her. She called the house-girl up and told her of her intentions, and asked her to help her off.

"You isn't gwine by yerself, is yer, Miss Bessie? Want me ter run fer Mas' Rob?"

"No, Fanny. Do you think I'm such a baby I couldn't go by myself?"

"No, Miss Bessie, but Mas' Rob jis' thinks you is most to good ter walk on dis earth."

"You think so, Fanny?"

"I knows so; I's lived wid lots ob young married folks, an' dar ain't many sich good husbands—come home eber night ob de world."

"Well, Fanny, you are kind to say so, and I'm going to leave you and Annt Martha to take care of Mr. Hunt while I'm away."

The idea of going home had struck Bessie suddenly. She felt a hungering and yearning at her heart, and if she could not be on good terms with Rob, she must go home and get her mind off her trouble. With a sudden impulse she picked up her pen and wrote a note to Mr. Hunt, telling him that she was not feeling well, and wished to see her own doctor. "I will write again." She felt almost frightened at herself to write such a note, and what could she tell them at home?

"I'm a coward," she said. "I'm running away from Miss Vance, cruel woman! I don't believe Rob cares for you, if you are so beautiful. Oh, pshaw! what am I saying? Thinking of her again, and I said I wouldn't. I'll just put my note right here where Rob will see it at the first glance."

She started, with Fanny carrying her valise. She looked so bright and rosy with excitement that all traces of last night's suffering had vanished. She got to the train just in time. How queer she felt, not telling her husband good-by! How surprised they would be at home!

When she arrived at D— station, whom should she see but the good old doctor himself, in his buggy. He had driven over for his mail, and took her home, as he had to pass her father's.

Such a greeting as she had from them all—so unexpected, but, oh, so welcome! They lifted her off her feet and almost carried her in. They began questioning her, and she told them if they asked any questions before she got rested she would go back home.

"Is Rob coming on the next train?" said the doctor.

"I won't tell you, either, doctor," she said. The doctor saw that Bessie was not looking well. He examined her pulse, and said:

"Bessie, you must let me prescribe for you."

"Ob, I shall be all right to-morrow."

Bessie had one brother and a little sister. She was the eldest daughter, and the idol of her family. They had given her up very reluctantly—thought no one good enough for her; but Robert Hunt had loved her so long, and was so worthy, that they ceased to object. Since the couple had seemed so happy they did not regret the marriage.

Bessie seemed feverish and excited; unusually gay one moment and silent the next. A mother's love makes her watchful, and she saw these signs with fear and trembling. Could her child be unhappy? Her father was never so happy as when Bessie was at home. He questioned about Rob, and praised her for coming alone, not waiting on Rob. She answered all their questions brightly, but suddenly she was taken with a violent pain around her heart. It became worse and worse, and frightened them. They brought a young doctor, who told them Mrs. Hunt had heart trouble, very serious case, and that she must have had some recent or sudden excitement. She had one or two fainting spells and became unconscious. When Doctor Allen came, he told them to telegraph for Mr. Hunt.

* * * * *

Mr. Hunt hurried through his business after leaving Bessie in bed that morning, so as to go back to her, but one caller after another detained him later than usual. When he got home, the cook had a nice lunch ready, but Bessie's note was the first thing he saw. He read it, and was shocked, grieved and indignant, all at once.

"What does Bessie mean by treating me so? I'll resent it. She will go home and make them all miserable. I wish I had never heard of Miss Vance. I do believe Bessie thinks I care for her. Fanny, come here; tell me what Bessie said. I don't want any dinner."

"Oh, she won't be gone long; come back by nex' train, I'spec', Mas' Rob."

"How did she look? I told you to take care of her, and this is the way you do it—let her run away from me, Fanny."

"I told her you wouldn't like it, Mas' Rob, but she jis' would go."

Mr. Hunt had never felt so perplexed. Had Bessie a secret from him? She speaks of wanting to see her doctor. She looked like a person fatally ill for awhile last night, so pinched and drawn-looking. I wonder if she is keeping anything from me? It's cruel if she is."

Aunt Martha brought a cup of hot chocolate, his favorite drink, and made him take it. He lay down on Bessie's low lounge, and looked about him. There was everything to remind him of their happy life. The piano was left open with their favorite song ("Love's Old Sweet Song") upon the rack, just as Bessie had left it. They had sung it together after she was dressed for the reception at Colonel Kelly's. She said playfully: "Rob, let's sing 'Just a song at twilight.'" He repeated the words over to himself; they were associated with the happiest hours of his life. Was it an echo?—he seemed to hear some one singing:

Tho' the heart be weary, sad the day and long,
Still to us at twilight comes love's old song,
Comes love's old sweet song.

Mr. Hunt was not superstitious, but he could have sworn that he heard Bessie's voice singing the last lines of that song. Twilight was coming on; the evenings were usually their happiest, but the last few hours had seemed a week to the unhappy husband. "I'm proud, too," he said to himself. "I don't suppose she wants me, else she would have said come." He threw himself down again on her lounge; he had been walking up and down the room. While shading his eyes in troubled thought, a messenger-boy stepped before him, holding a telegram in his hand. Fanny had shown him in without announcing him. It did not startle him, supposing it was sent to the house from the office. He broke it open slowly, but turned pale, and called Fanny back.

"Here, Fanny, I must go to Bessie. She is very ill. They have telegraphed me; I must catch the six-o'clock train. Pack my grip-sack. You all take care of the house."

He hurried like a man almost wild; rushed off, leaving the key in the door, and everything open.

Bessie had become delirious, and talked wildly about her recent troubles. They all thought nothing of it, supposing it was all delusion and meant nothing. When she opened her pretty violet-colored eyes, Rob sat behind her holding her in his arms, so she would be able to breathe more freely. She did not recognize any one. Her father and mother also sat beside her, each holding a hand, and watching to see her slowly come back to life. It did seem as if her spirit had flown to a better, fairer region.

"I wonder," she said, "if the pain that cut like a knife was my heart, or was it an ache? You know Rob can hurt me more than anybody in the world. I didn't think I had such capacity for suffering. I won't try to revenge myself on Rob. Give me something to make me strong enough to go back," and then, in a mysterious, low whisper, she said: "Is it Dr. Allen? Doctor, I ran away. Wasn't it awful? I never thought I could do such a thing; but I expect God put it in my heart to come home to die, don't you?"

The old doctor looked frightened, but said: "She is delirious; don't know what she is saying, of course, but I'll give her some drops that will quiet her."

He did, and she fell asleep after her wild talk.

Mr. Hunt looked five years older, and so wretched that Mr. and Mrs. Bradley forgot their own terrible heartache in watching his sorrow. He didn't seem to have any hope from the first that she would get well. "It's my punishment," he thought. He never left Bessie a moment. They brought his food to her bedside.

Bessie awakened from the last sleep rational, and remembered what had happened and where she was. Mr. Hunt feared his presence would excite her and bring back one of her faints, but her face beamed with joy. He saw it.

"Ob, Rob, you are here! How good of you to come! Kiss me, dear. I have been very near to the gates of death. And, Rob, were you singing 'Just a song at twilight?' It sounded lovely; some one must have been singing it. You know it was the last song I ever sung. Will I ever sing again, I wonder?"

The doctor forbade her talking any more. She was very weak, but when she began taking nourishment she grew better fast. She no longer evaded the subject of their trouble, but had a warm, compassionate pardon for her husband.

"I have been too near death's door, Rob, to be unforgiving, but do not speak of our trouble to mother or father."

With the restlessness of those who have been seriously ill, she longed for a change. She begged Mr. Hunt to let her go back home. Her physician advised letting her go. She was not out of danger, but it was not best to cross her, and she would have to be guarded carefully, and avoid excitement or fatigue. She had never looked so beautiful as she did now.

They were silently happy in each other's presence. He felt so thankful that she had lived to forgive him, and had not died with resentment against him in her heart. He could never forget that ride over to D—, after getting the telegram telling of her illness.

Mr. Hunt wrote home to the servants to have everything in order for their coming. They had only been absent three weeks, but it seemed as many months. Bessie was wild with delight at the idea of being at home again.

"I never expected to see my dear home, or you, either, Rob."

A full, true, young human happiness is always charming to a looker-on. I think even Miss Vance would have admired the conscious victory that showed itself in the love of these two lovers. Bessie's face reflected her happiness. All the bitter feeling that she had promised herself to cherish against her husband had departed. They found numerous invitations awaiting them at home, among them one in honor of Miss Vance.

A charmingly written note from Miss Vance, asking Mr. and Mrs. Hunt to join her, or rather, to be chaperons for a box-party that had been tendered her the following week.

Mrs. Hunt proposed that they should act as chaperons.

"What do you say, Rob?" she said, looking up naively into his handsome face.

"Your wishes will be considered entirely, my darling; but I must say that you could

have done or said nothing that would have given me so much happiness. It shows what confidence you place in me after my breaking my promise to you. Then, also, it shows what a noble, sweet nature you have. Yes, I will be proud to show to the world that there is but one woman in it for me in the future. You will never have cause to complain of me again, I hope, my darling."

"Nor you of me, Rob; but twilight is coming on, and I want 'Love's Old Sweet Song.'"

And as I finish my story I hear two happy people singing:

Just a song at twilight, when the lights are low,
And the flickering shadows softly come and go,
Tho' the heart be weary, sad the day and long,
Still to us at twilight comes love's old sweet song.

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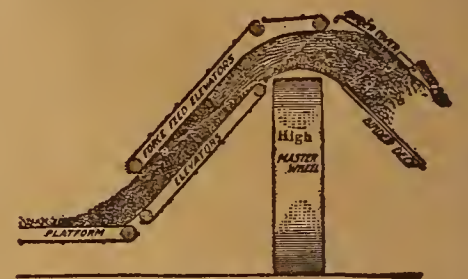
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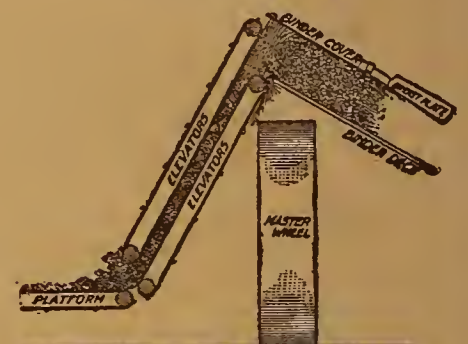
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Now that the spring work is in progress, we who live on large farms have our hands and minds so full of things that need immediate attention, that it becomes necessary to know the easiest and quickest ways to do them.

Now that Tom, Dick, Harry and Jack are tramping about in the plowed fields, they wear out their socks, oh! so fast. I find that by putting a thin piece of cloth under the largest holes and then darning through the cloth and catching down the ragged edges of the hole, that it makes a smooth patch, and those awful men won't make such a fuss about those thick darns. Just darn through the cloth one way, and by taking a thin piece of old cambric the color of the sock and darning through with white, you will hear no complaints from the lords of creation.

Some of these rainy spring mornings are just suited to such work as getting the spring sewing done. With the big sleeves now in fashion, it is more difficult to "fix over" than it used to be, but if you have two old dresses of a contrasting shade, you can make some very pretty waists and children's dresses. I made a new (?) waist the other day, and it looks so well that I will describe it for the benefit of some of my readers who must of necessity make old clothes answer for new ones, sometimes.

To begin with, I had an old gray silk waist that had once been the skirt of a dress. It was made with large puffs on the sleeves; that is, the upper part of the sleeve was very full, and was set on a cuff that came to the elbow. The waist was badly pulled at the seams, so it was ripped up and the lining carefully washed and pressed. Some pieces of nice black cloth that was left from a last winter's dress was used for a new tight waist, cut round and allowed to come just below the waist line. A box-plait of the silk was put down the front, a collar of the same (or ribbon of another shade could be used, if preferred). Cuffs were made of the black, with a strap of the silk about two inches wide up the back, and on this were set tiny pearl buttons. Buttons were also put on the box-plait, and with a twist of the silk around the bottom of the waist, it will make a serviceable garment for spring and for cool days in summer; and if worn with a black skirt, will look as stylish as if new.

If the "mon" is haudy with saw and plane, get him to make some shelves for that room where the boxes, papers and such things are kept. Make them as long as possible, and instead of fastening them to the wall, have upright pieces at each end, fasten the shelves to these, and they can be moved and are much easier to keep clean. Casters can be put under the corners of the upright pieces, and you will find it a most convenient piece of furniture for either the store-room or any other place where shelf-room is scarce.

I am coming again, to tell you how I fixed my cozy corner, but haven't time now for anything more.

ELSIE.

MOTHER STEWART.

A BIRTHDAY OFFERING.

In Picketon, Ohio, a monumental pile should be raised to mark the spot in commemoration of the deeds of one who was born there on April 25, 1816. In that town Mrs. Eliza D. Stewart began her eventful life. Motherless at three, and orphaned at twelve, the early lessons of bereavement and endurance were fitting her to feel for, and sympathize with, suffering humanity.

From childhood her heart was ever drawn to those who suffered, either in body or mind, and she was ever most happy when she could alleviate their distresses. She has ever felt for the poor, because she has learned the harder lessons of self-support and self-sacrifice. A nature sensitive, refined and loving, the huffings of the world had a tendency only to enlarge her sympathies and soften a more than usually tender heart into one of intense love and kindness, that has gone out and on, until the whole civilized world has known Mother Stewart.

Converted at fifteen, she began active church work wherever duty called. Later she took upon her the responsibilities of Sunday-school and common-school teaching, and to her both of these meant a rounding out of moral and Christian character, as well as intellectual development, as many prominent men living to-day can testify. She was an advocate of temperance always, and began agitating reform before the civil war. When that awful crisis in national affairs came, she was ready. Being of the Baldwin and Guthery line of ancestry, the patriotic spirit was inherited, and opportunity only was needed to show that she loved her country next to God. Husband and stepsons were at the front, while her energies were given to helping with supplies, until all along the line the boys in blue said, "God bless Mother Stewart!" In all these years to the church, missions, Freedmen's Aid, and to every effort of reform, to help the poor or save the erring, she ever gave a helping hand. If she was not rich in purse, she could devise means to accomplish her purpose.

"The crusade against rum" brought every latent gift into recognition, and with "the courage of Daniel," and trusting in his God, she went forth for home and humanity against the hosts of rum. "A born leader," and "the



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chosen of the Father" for that great event, she proved true to the trust, and often went where even her friends feared to follow. During the crusade she spoke in a hundred cities and towns in the first six months, and often two or three times at a place. When this movement was crystallizing into the Woman's Christian Temperance Union, she was one of the foremost in working for it. Her historic home at Apple-tree Place, Springfield, Ohio, has almost numberless proofs of her leading out in different lines of work.

Because of the great amount of work she has been instrumental in having accomplished in her city, the first Ohio W. C. T. U. convention was called at that place.

In 1876 she carried the message of the crusade to Great Britain, and as a result of her work, she had the satisfaction of seeing, before she left the kingdom, the organization of the British Woman's Temperance Association, of which Lady Somerset is the leader to-day. She has since crossed the seas twice in that great work. She took the work into the South, and with love and Christian charity did more than any other woman to dispel the bitterness remaining after the civil strife. A newspaper sketch can hardly cover such an eventful life. She has been an honored Good Templar for years, and is an adopted sister of the Sir Knights in the Masonic order. She was sworn in as assistant postmaster under General Jackson's administration in 1833 (sixty-three years ago). She stood all one night on picket duty, when Morgau's "guerrillas" went through southern Ohio. She took the place of a lawyer and plead the cases of drunkards' wives and children against the saloonists, and never lost a case. She has often done evangelistic work in the churches, and many souls have been given her as sheaves for the Master.

But we desist; enumeration is vain. Eighty full years of earnest Christian toil can be known only "when the mists have cleared away," and our comprehension is enlarged and radiated by the light of eternity. But with all her public work she has been a faithful mother, a true wife, and not only a tidy housekeeper, but a model homekeeper as well. The beautiful example of her life will go down the ages brightening as the years go by.

She demonstrated that women may be intelligent on all lines, even as men are, and yet be as womanly and refined as the most critical standard demanded by men. This climax in womanhood she has attained for women, and never again will it be possible to prescribe the limit of woman's sphere. Her capacity for usefulness is now the only boundary that God or woman recognizes. The great world recognizes at this eightieth birthday that Mother Stewart's sphere of usefulness is without limit to our mortal view, but we hope that the sunset glories of life's resting-time may be commensurate to "the heat and burden" borne in its meridian. Love's labor is sweet, but may the resting after it be sweeter than thy toil.

All hail, Mother Stewart!
This birthday of thine,
With love's sacred halo
We hope to enshrine
In memory's chamber,
Where sacred things lie;
Which, passing from sight,
We can never let die.

No, no! Never let die!
Your work shall e'er be
Crown'd with remembrance
While long ages flee.
And your birthday be kept
With Time's onward roll,
Till birthdays come not
In "God's Home of the Soul."

BEFORE WE HAD ENVELOPS.

Sixty years ago the letter-envelope was unknown, except in rare instances. Letters, usually longer than at present, were written on quarto-post sheets, filling two or three sides, but not the fourth.

When the letter was finished the inside leaf was folded in three lengths, the middle fold somewhat broader than the two others. Then the inside and the outside together were again folded in three breadths, and the thick end, containing either two or three folds, was tucked into the thin end, in which there was, of course, only one thickness.

Letter-writers whose matter was too much for their sheet economized space by writing on the inturned folds of the outside. The center parallelogram of the outside was left for the address.

Great was the effort to make it an exact parallelogram, and greater the art required to make the other two parts fit in exactly; much the bungling and barsb the treatment of an

awkward school-boy who could not properly fold the semi-official holiday letters informing his parents of his expected return home.

INTERESTING LETTER ABOUT FLORIDA.

WAUPUN, WIS., April 9, 1896.

PUBLISHERS FARM AND FIRESIDE.

Gentlemen:—Since my return from Florida I have received so many letters with reference to that region that it takes all my time to answer them. I think the whole country (Canada included) has gone "Florida mad." I will now try and give all the information that I learned, or that any sane person could learn or desire to know about the country. The climate in winter is delightful, and in summer it is not so warm as it is many times in the North, only the heat is more uniform; there are no sudden changes. They told me that the highest the mercury ever registered there was 95°, and we have greater heat than that here in Wisconsin. They claim that a case of sun-stroke was never known there. Improved land within one to two miles of Tallahassee can be purchased for \$15 to \$50 per acre, according to location and improvements. Good, uncleared land can be got for \$5 to \$12 per acre, the last within close proximity to railroad or any one of the near towns recently laid out. The hard-wood lands are suited to the culture of tobacco, sugar-cane, cotton, corn, fruit, etc.; the pine lands are better adapted to fruit-raising, truck-farming, dairying, poultry-raising, etc. I was told that all of the above were profitable industries. The soil in both these classes of land is rich, and good crops of whatever is suitable to the ground can be raised, without fertilizing; but, of course, better crops can be raised with the use of fertilizer, as there can be on any land. The country is well watered with pure freestone water, which is easily obtained for household use. Lumber can be bought at the mills for \$7 to \$10 per thousand feet. Carpenters' wages are about \$2 per day. Labor is cheap on account of colored men working for such low prices. Household stores are about the same price as in Wisconsin. Flour sells for \$4 to \$5 per barrel. Fish and oysters are plentiful and cheap, and of excellent quality. Churches and schools are good, and there is separate tuition for white and colored pupils. The outlook for business is good. The land is "rolling," but not enough to interfere with agriculture. Grass is rich in nutriment, and stock does well when properly taken care of. Mules sell for \$125 to \$150 each; cows, \$30 to \$50 each; other stock in proportion. I was told that the best time to settle there is the fall months, as a person then gets acclimated before the warm weather. A man with a capital of, say, \$1,000 can make a good start. That part of Florida is quite a health resort for people, especially those afflicted with pulmonary diseases and a tendency to consumption. They claim that the salt breezes from the Gulf, mingled with the pine odors, are particularly beneficial to that class of diseases. Among the different varieties of fruit raised are peaches, pears, plums, and all small fruits. Oranges, figs, lemons and bananas can also be raised, but not in such quantities as to make it profitable, the climate not being sufficiently warm for those tropic fruits.

This is all the information I can give about the Tallahassee country, and now I wish it distinctly understood that I withdraw my offer to send a written reply to all who would send a stamped envelope, and after this date I will not reply to any one who addresses me on the Florida subject. To all those who complied with my request relative to the self-addressed envelope, I have sent a written answer. Those who failed to do so will now understand the reason why they failed to receive an answer. I am not in the employ of the Clark Syndicate Company, and I have endeavored, in what I have transcribed, to state facts as far as I learned them during my brief sojourn in that region.

Very respectfully,
(Signed) SILAS W. FARNUM.

FREE TREATMENT MORPHINE, OPIUM HABITS.

TO THE EDITOR:—To prove that we have a painless and certain cure for opium and morphine habits, will send free sample treatment to any person honestly desiring to be cured. Golden Specific Co., Cincinnati, Ohio.

BAMBOO ORGAN.

A bamboo organ has been built for the Jesuits' church at Shanghai, and is said to surpass organs made of metal. As bamboo can be obtained of all dimensions from the thickness of a pen to pieces of a foot in diameter, this natural material costs little more than the simple labor, and the notes are beautifully soft and pleasant to the ear.

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Our Household.

LAST YEAR.

I.

You thought, O Love, you loved me then, I know—
 For that I bless you, now when Love is cold,
 Remembering how warm the tale you told
 When winds of autumn fitfully did blow,
 And by the sea's perpetual ebb and flow
 We wandered on together to behold
 Noon's radiant splendor, or the sunset's
 gold,
 Or beauty of still nights, when moons hung
 low.
 Your voice grew tender as you called my
 name—
 I heard that voice to-day—was it the same?—
 The old time's music trembles in it yet:
 Your touch thrilled through me like a sud-
 den flame,
 And then a sweet and subtle madness came,
 And lips, cold now, my lips had quickly met.

II.

Ah, Love! you must remember, though, to-day,
 There is no spell to charm you in the past—
 So dear the dream was that it could not last:
 Full soon our pleasant skies were changed to
 gray,
 The sun turned from our barren land away,
 And all the leaves swept by us on the blast,
 And all our hopes to that wild wind were
 cast—
 For dead Love's soul there is no place to pray.
 But still the old time lives in each our
 thought—
 In our regretful dreams the old suns rise,
 And, from their shining, memory hath
 caught
 Some lingering glory of the glad surprise
 When Love rose on us, like the sun, and
 brought
 Our hearts their morning under last year's
 skies.

—Louise Chandler Moulton.

HOME TOPICS.

SWEETBREADS.—Sweetbreads are often prescribed as an article of diet for invalids and convalescents. One of the best ways to prepare them is as follows: Soak a sweetbread in cold water for an hour or two, then drop it into boiling water, and let it simmer for twenty minutes. Wipe it dry, dip in well-beaten egg, and roll in bread crumbs. Lay

it in a small pan, put two or three bits of butter over it, and a little salt; add about two spoonfuls of water, put it into the oven, and let bake until brown, basting it often. When the sweetbread is done, lay it on a nicely browned square of hot toast, pouring what gravy there is in the pan over it, and serve at once.

LEMON PIE.—At this season of the year, before early spring fruit is ripe, lemon pies are one of the best desserts. The ingredients required are one large lemon, one teacupful of sugar, three eggs, one table-spoonful of corn-starch and one cupful of boiling water. Grate the yellow rind from the lemon, and shred the pulp, removing the seeds and tough white rind. Wet the corn-starch with enough cold water to make it smooth. Separate the yolks from the whites of the eggs, beat the yolks, and mix them with the lemon and corn-starch. Set the dish on the stove, and pour in the boiling water, stirring it briskly all the time. Let it boil up once, and remove it from the stove. Line a pie-plate with good pastry, prick it with a fork, and bake. While hot, pour in the lemon custard, and spread over it the whites of the eggs, beaten until stiff, with a table-spoonful of powdered sugar. Return it to the oven long enough to color the frosting a very delicate yellow. A delicious pie.

TEACH THE CHILDREN KINDNESS.—By this I do not mean kindness to their brothers, sisters and playmates alone, but kindness to all animal life. Teach them to be kind to the weak and helpless, whether fellow-beings or dumb brutes, and that He who made us made also the tiniest insect that lives. Teach them by example as well as by precept. If you have domestic animals around you, see that they are always well fed and sheltered from storm and cold. I have known people to give a little child a kitten or puppy for a pet, and then let them drag it about and ill treat it in every way; and if the tortured animal retaliated with teeth or claw, it must be whipped for it. This will most assuredly cultivate cruelty in the heart of a child.

One of the earliest lessons a boy learns in cruelty is fishing with live bait. Teach them to use meat or an artificial fly for bait, and not to fish just for fun, catching little fish that are not good for anything, as I have known children to do. Cruel, un-

merciful boys can never make kind and gentle men, with a tender consideration for all weak and helpless things. It is not enough that we send our children to church and Sunday-school, that we teach them to be truthful and honest; but besides all this let us teach them that

"He prayeth best who loveth best
 All things, both great and small;
 For the good Lord who loveth us,
 He made and loveth all."

MAIDA McL.

ROSE DESIGN.

The roses can be worked in shades of pink or yellow, and the leaves and stems in the regular olive-green shades. The inside circle can be worked in outline or solid. The outside edge is to be couched with white couching-cord, and the button-hole-stitch worked over the cord. This makes a very strong and showy finish. This design is eighteen inches square, and sells in stores or bazaars for fifty cents.

We will send this centerpiece, stamped on an excellent quality of linen (Premium No. 577), to any address, postage paid, for 25 cents; or with FARM AND FIRESIDE one year, 50 cents.



A PRETTY CUSHION.

One of the prettiest, and at the same time simplest, sofa-cushions that you ever saw is made from ordinary blue-barred toweling. You can buy it at the stores in one-inch and two-inch checks. Cut a square large enough to cover your pillow, then from the small blue squares start a diagonal in herring-bone stitch. You may carry it entirely across the plain white space to the next blue check, if you wish, and so on over the cover. Then turn and go across the other way. You will like this best with the inch check.

In the two-inch check work diverging diagonals, making the two outer ones shorter than the central one. Indeed, the central one you may run entirely across, if you wish.

Make a ruffle two inches deep, and work to match, or trim your pillow with a flounce of blue and white embroidery, so popular a year ago.

The same idea may be carried out in the red-checked toweling, with Turkey red floss.

A pretty cover was recently made of coarse, cream-colored scrim, made over a foundation of sky-blue silesia, and trimmed with a deep ruffle of oriental lace and a flyaway bow of blue.

MARGARET M. MOORE.

STYLISH TOILET.

The jacket effect of this toilet is relieved from the severity of its effect by the lace jabot which decorates the front. It is happily conceived in either black satin or dark green velvet, with cuffs and revers of white corded silk or bengaline. The buttoned inside vest can be of pale lemon-colored brocade, or of pique. Large buttons are used to finish it. This could be worn with several skirts in harmony with it.

PUTTING OUT PLANTS.

With the coming of warm spring days many seem to have a perfect mania to get outdoors and make a flower-bed somewhere at the first opportunity. Get out doors—that's all right—but don't make a flower-bed until the weather is more settled than it sometimes is during the first of May.

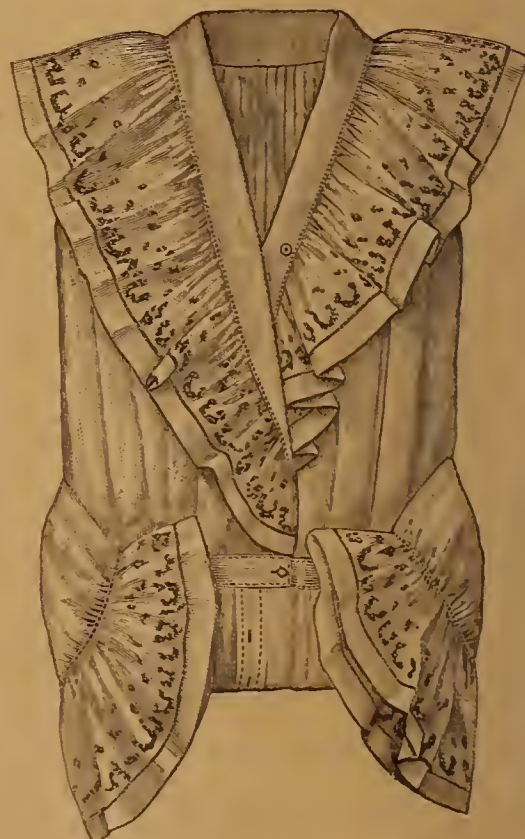
There are a few hardy annuals that can only be successfully grown by early planting; sweet-peas especially can sometimes be put in the last of March, but the major-

ity of flower-seeds will not grow their best until the ground becomes warmed thoroughly. When seeds take so long to sprout they seem to lose their vitality. The best way is to start seeds in a hotbed, and remove plants to the border when danger of frost is over. Then you can arrange the plants just as desired, and have no empty spaces where seeds have failed to come up.

For several years I have made a practice of putting plants out just about Decoration day, with good success. Where I have "got smart" and rushed them out the first of May, there has been some frozen noses among the posies, or else there was an awful lot of work covering and uncovering the plants to keep Jack Frost at bay.

Plants may be set on a veranda before this, and become accustomed to outdoor air, with good results. They are easily brought indoors if too cold.

Geraniums seem to be about as hardy as any of the popular bedding-plants. They will stand quite a frost without injury, and yet they cannot put forth much growth when the mercury is playing "suap and catch 'em" about the freezing-point. Some of the summer-flowering bulbs that receive a check from frost do not seem to



regain their former vitality for a long time. Start seeds and bulbs in a hotbed, or in sand in the house, if you possibly can, moderately early, but do not bury them up in flower-beds with the first breath of spring, unless you wish to bury them for all time.

GYPSEY.

ASTHMATIC TROUBLES AND SORENESS OF THE Lungs or Throat are usually overcome by Dr. D. Jayne's Expectorant—a sure curative for Colds. The best family Pill, Jayne's Painless Sugar-Coated Sanative.

There is little fear of our forgetting—there is little fear of the world's forgetting the name of Abraham Lincoln.—John McClinton.



PRACTICAL REMODELING.

To mothers who have occasion to study economy in dressing their children, I will offer a few suggestions, hoping that they may be of help to some one in their work.

When you come to look over your little girls' wardrobes this summer, you will find that many of the little garments are so badly outgrown that they cannot be used again without being remodeled. The first garments that will be needed to replace the heavy ones of winter will be the little white wool vests. They are too small, of course; too short in the sleeves and body. To remedy this, open the side seam from the bottom up to the sleeve under the arm, and down the sleeve to within four inches of the wrist, then set in some narrow strips to fit the opening, tapering them to a point near the bottom of the sleeve. Cut the strips from the good parts of a worn-out garment of the same kind and color, if you have it; if not, from some soft, thin pieces of white flannel. To lengthen the sleeves, crochet round and round the wrists in plain crochet with fine white yarn until long enough, finishing off with tiny scallops. The bottom is lengthened the same way, with the exception of the scallops. The little wool pants are to be lengthened in the same manner. Thus with a little work the undergarments are made to wear almost as long as before.

The next to be treated are the white muslin drawers, tucked and trimmed with lace.

off the waist and turn down the piece allowed; and if a good-sized seam has been made under the arm, the waist can be let out a little at the same time. Turn down the hem on the sleeves and add a neat cuff, or a shoulder-puff would answer the same purpose.

If you have no material left like the garment, it would be well to lengthen the little dresses with some pretty silks or velvets, for worsteds; for gingham, I would use ruffles and bias bands of the same; for white goods, insertions and embroideries. Bands of insertion can be used to lengthen the skirts, and to form belts and cuffs. The embroideries can be used for vests in the fronts of waists, where they have to be opened to make them large enough, and for ruffles on the skirts and around the neck.

If the remodeling has been neatly done, and the little garments nicely washed and ironed, I think one will feel well repaid for one's trouble. It is wise to buy about one yard more goods than is really needed for a child's dress, so as to allow for turning in, and for pieces that may be needed in remodeling.

Their stockings can also be remade very nicely, too, when the little toes and heels come through. First wash and press out all wrinkles, then take the scissors and cut out the old undersole, being careful to follow the seam where it joins the upper. When the heel is reached, turn and cut



If you do not wish to let out a tuck, thereby showing that they have been lengthened, you can rip off the old band and sew on a pointed yoke deep enough to give the required length. An easier way is to make the waist longer to which they are buttoned.

In making waists for drawers and petticoats, I have found it a good plan to have the straps that go over the shoulders about three inches longer than needed, when they are first made. I fasten them firmly to the front part of the waist, turn up over the shoulder, and down to the back part, securing them by stitching across twice with the machine, letting the surplus ends hang down on the inside. This stitching is easily removed to lengthen the waist when the child grows taller, or the garments shrink in washing. There will be three buttons needed to close the back of the waist, and a row on the bottom at equal distances apart, on which to button the drawers.

This is also a handy way of lengthening petticoats, and is not so bungling around the waist as turning in a piece would be.

In making little dresses, either of worsted or gingham, I always turn in two or three inches at the top of the skirt, and a deep hem on the bottom of the sleeves, so when I come to lengthen them, I have only to rip

lengthwise one and one half inches, right between the old heel and the upper; this is to form the new heel. Now cut off the ragged part of the old heel, rounding it off a little to fit. Sew up, turn and press.

Cut out from some old stocking-legs saved for the purpose a new undersole, using the old pieces for a pattern, and make it a little larger if need be; sew the square end to the heel; turn and sew in the sole.

All seams should be sewed with sewing-machine, as this makes a neater and firmer seam. This is a very practical idea where there are three or four girls in the family. The elder girls' stockings can easily be remade for the younger ones, while the older sisters can have new stockings, thus doing away with so much darning, which does not seem to pay for the trouble taken.

FANNIE FRANCIS.

DAINTY UNDERWEAR.

The return to the fashions of so many years ago brings back the use of other garments that were discarded with tight-fitting dresses. Any of our models are well selected for style and comfort. Night-dresses, too, are assuming a more comfortable style about the neck, surplice fronts and Empire effects being the favorites. L.

IVORY SOAP

99 ⁴⁴/₁₀₀ PURE

You have noticed the disagreeable odor of clothes just from the wash. That's the soap. Cheap soaps do not rinse out. Ivory Soap rinses readily, leaving the clothes sweet, clean and white.

THE PROCTER & GAMBLE CO., CINTI.

THREATENINGS OF RAIN.

Farmers are so dependent upon the sun, wind and rain to help them during seed-time and harvest, that they become very weather-wise, and the wisdom which they display is crystallized in quite a number of homely proverbs.

When a storm is approaching, the air grows heavy, and the change is noticeable in minerals, as salt, for instance, which grows heavy; in wood, which swells with the dampness, so that doors and windows stick; and in drains, whose odor is more offensive in the damp, heavy air. All birds, animals and insects feel the approaching change, so the English country-folks have the proverbs:

When the cock goes to bed,
He will awake with a wet head.

When the cat licks her face,
There's a storm in her tail.

Storms usually travel in circles, and a day or two of rain and cloud is apt to be followed by a day or two of blue sky and sunshine, which in turn will be followed by storm again. A day of cloudless blue is often called a weather-breeder, perhaps for this reason: A storm is usually prophesied when the distant hills are clearly visible, while a gray, misty morning is often the forerunner of a fine day.

The wise countryman, quick and alert in every sense, has small need of a barometer. The smoke curling low from his chimney, the thick, padded look of an overhanging cloud, the changing wind, a flight of crows, the boiling water in his dinner-pot, all are eloquent signs to him.

An old poet once gathered forty of these proverbs in regard to signs of rain, and used them as an excuse for declining an invitation to go out. The following are among them:

The hollow winds begin to blow,
The clouds look black, the glass is low;
The soot falls down, the spaniels sleep,
And spiders from their cobwebs creep.
Last night the sun went pale to bed,
The moon in halos hid her head;
The boding shepherd heaves a sigh,
For see, a rainbow spans the sky.
The walls are damp, the ditches smell,
Closed is the pink-eyed pimpernel.
Hark! how the chairs and tables crack,
Old Betty's nerves are on the rack;
Loud quacks the ducks, the peacocks cry,
The distant hills are seeming nigh.
How restless are the snorting swine,
The husy flies disturb the kine;
Low o'er the grass the swallow wings,
The cricket, too, how sharp he sings.
Puss on the hearth with velvet paws,
Sits wiping o'er her whiskered jaws.
Through the clear streams the fishes rise,
And nimble catch the incautious flies.

Scientists tell us that hundreds of years of weather observation and experience are intermingled with these every-day proverbs about the weather, which are not silly at all, but really very wise.

FRANCES BENNETT CALLAWAY.

CREAMED CARROTS.

Scrape six good-sized carrots, cut in thirds and split lengthwise. Boil until tender in salted water; drain, add one cupful of rich milk, and when it begins to boil, stir in one tablespoonful of flour rubbed smooth in a little cold milk; boil up once, and add a dash of pepper and a lump of butter the size of a black walnut. Serve at once.

"Swift Instinct leaps: slow Reason feebly climbs.
Brutes soon their zenith reach. In ages they No more could know, do, covet or enjoy.
Were men to live coeval with the sun,
The patriarch pupil would be learning still."

SING a song of six-pence,
A pocket full of rye;
Cooky's hair no longer
Figures in the pie.
Her tresses from the puddings,
Thank fortune, too, are miss'd.
She wears the CUPID Hair-Pin
now—
We're safe—
it's in the
TWIST.

By the makers
of the famous DELONG
Hook and Eye.

Richardson & DeLong Bros.,
Philadelphia.

Even a Child can
make Ice Cream in a
**LIGHTNING
FREEZER.**

It runs so easy. Freezes as quickly as any. "Freezers and Freezing" tells about it; contains recipes by Mrs. S. T. Rorer; free.

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BABY CARRIAGES Shipped C.O.D.

Anywhere to anyone at Wholesale Prices without asking one cent in advance. We pay freight. Buy from factory. Save deal—\$18.50 Carriage for \$9.25. ers' profits. Large—\$12.00 " " \$5.95. Illustrated catalogue \$5.00 " " \$2.65. free Address **CASH BUYERS' UNION,** 164 West Van Buren Street, B 7, Chicago, Ill.

YOU can get a fine DRESS FREE Beautiful in design every thread wool, 50 in. wide. Send full name and address at once to **L. N. CUSHMAN & CO., Boston, Mass.**

Our Household.

ABOUT MOTHS.

A GREAT deal has been said and written about the best way to keep furs and woolen goods safe from the depredations of moths. I was many years ago much interested in articles on that subject, living as I then did in a smaller house than the one I now occupy, and having but a limited space for packing away winter clothing. But the circumstances set me to thinking and planning, so the experience was a helpful one, though neither agreeable nor convenient. But as some of the FARM AND FIRESIDE readers may be similarly situated, I may be able to assist them a little by a few suggestions.

I did not like the smell of tobacco, camphor, etc., which were used to preserve furs from moths, so put mine into a muslin bag, tied it tightly, and hung it up in a closet or any room where it was cool and dry, and have never since had any trouble with moths, or had to air my furs for days to get unpleasant odors out of them.

The moth-miller is what we have to guard against, and it is not very small; so a loose texture of muslin (unbleached) is the best to use for this purpose, as it admits the air freely, and prevents the "musty" odor which gathers in closely packed clothing. The old methods did not always succeed with furs, as I found to my sorrow, but not a moth can reach the inside of a well-made muslin bag, if properly tied.

My blankets I treat in the same manner. Wash them, if they need it, or put them for half a day on the clothes-line, in the bright sunshine. Then roll neatly, and slip the roll into a strong pillow-slip (if you have plenty), one pair in each slip, rolled together. Tie up tightly, and hang up or place on the closet shelf, or eud. They will come out in the autumn sweet and whole. Try it, sister housekeepers.

In the March 15th number of the FARM AND FIRESIDE I noticed Maida McL.'s directions for preparing barrels for keeping woolen clothing. I think if she will try my plan she may like it better. Make a bag of unbleached muslin just large enough to slip into a barrel easily, and about six inches larger than the depth of the barrel. Fill it after it is placed in the barrel, tie securely at the top, and tie over the top of the barrel a paper or cloth to keep out the dust. If preferred, you can

if the housekeeper is a busy one, as I am, and has but a small amount of strength to expend upon household duties.

For carpets, I have found nothing better than a good quality of insect-powder. The best is put up in tin boxes, and does not lose its strength. Dust it freely all around the edges and over the carpet for two feet or more from the wall. If it is Brussels carpet, you can draw a broom carefully over it after the powder is put out, and it will disappear so it will not be noticed on the carpet, but will do the work on the moths just the same.

For preserving plush cloaks, overcoats or wool dresses, double a piece of thin, unbleached muslin a few inches longer than the garment to be covered, sew it up on both edges, baste a gore-shaped seam on each side of the uncut end, for the shoulders, and hem a tiny vent in the center for a cord to come through. Then put the garment on a wire hanger (or half of a smooth barrel-hoop will answer), and tie a strong cord to the center of it. Put the case over the cloak, draw the cord through the vent at the top, and tie another cord around it, closing the vent completely. Then baste the edges together closely at the bottom, and hang it in the closet. No moths can reach it, however plentiful they may be.

But garments should always be carefully brushed before being put away, and it is best to attend to them as soon as they are

grated cheese. Melt two ounces of butter, add two tablespoonfuls of chopped onion, and spread over the asparagus, after which cover the top of the dish with grated cheese and bread crumbs, and bake in a hot oven.

PATCHWORK.

Some one says "patchwork is an ancient device of the powers that believed women



needed martyrdom." Well, be that as it may, many of us can testify that the martyrdom we women all pass through isn't confined to patchwork.

A beautifully pieced and quilted quilt is always to me significant of thrift, or brings to mind the form of the grandmother who has gotten through with most of life and can only sit and sew the neatly cut pieces of the family dresses in a pretty design, that is to her entertaining, and which, after all, takes very little thought. I often wonder what the next generation of grandmothers will do for pick-up work. Knitting always stays in style, and can be very exquisite work. One hates to think of being tied to the mending-basket and made to patch and darn, and yet this very necessary part of the household work is too often relegated to the grandmothers.

Quilt-patches are the very best kind of sewing for a little girl to learn to sew upon, and the simple seam well done soon leads to something more important. We reprint quilt patterns for those who would like to use them. CHRISTIE IRVING.

APRONS.

Pretty aprons are the housekeepers' delight. Nothing gives a woman a more homey effect than a pretty white apron. Our models are made of serim. The first one is decorated with ribbons drawn through the pulled threads. The second one is embroidered in large effect. The third one is of dotted swiss, trimmed with ruffles edged with lace. This one is particularly suitable for church socials where one must assist with the entertainment.

An eider-down quilt, rolled up and tied with a broad ribbon, is now occasionally seen piled with the other cushions of a divan.

No burner or lamp is half so good with a chimney that does not fit it and suit it.

The "Index to Chimneys" tells. You get it by writing Geo A Macbeth Co, Pittsburgh, Pa—free.

Pearl glass, pearl top, tough glass.



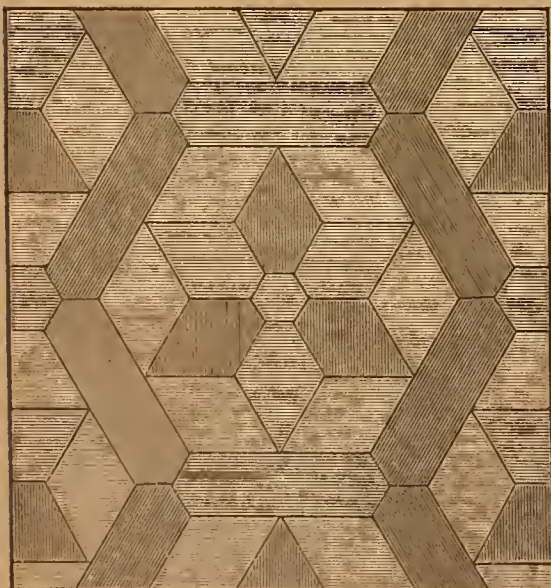
laid off for the season, before the moth-millers make their appearance, if possible. MRS. V. GRACE McFADDEN.

HOW TO COOK ASPARAGUS.

A correspondent writes asking how to cook and serve asparagus. The latest dishes show in the best shops in which to serve asparagus are round plates, about the size of a breakfast-plate, with a depression running across the center, in which the asparagus is placed. On either side are little shell-like depressions, in which the melted butter for sauce is served. Asparagus is eaten by taking up one end of the stalk in the fingers, and thus conveying it to the mouth. To cook asparagus, scrape the stalks; let them stand in cold water for half an hour; tie in a bundle, and make them uniform in length; put them into salted, boiling water, and cook about twenty minutes, or until soft, but not so soft as to be limp. Place the asparagus on buttered toast and remove the string, and serve with plain melted butter, or a white or Hollandaise sauce.

Cold boiled asparagus is served as a salad with plain French dressing. The proportions of a simple French dressing are one tablespoonful of vinegar to three of oil, one half teaspoonful of salt and one quarter teaspoonful of pepper. Mix the salt and pepper with the oil, then stir in the vinegar, and it will become white and thick.

An Italian method of cooking asparagus is to boil it as already explained, then put it in layers in a dish, and sprinkle over it



put on the barrel a square board cover and tack around three sides of it a curtain of bright calico, and a cover, ruffled around the edge, which makes quite a neat toilet-table for a back bedroom. This saves the trouble of pasting paper inside and on the top of the barrel, which is quite an item, especially

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Brown's French Dressing

Ask your dealer for Brown's French Dressing and be sure to accept no other

Superior to all others for the following reasons:

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3. Unlike all others, it does not crack or hurt the leather, but on the contrary acts as a preservative.
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to wash as clean as can be done on the 75,000 in use. Washboard and with much more ease. This applies to Terrill's Perfect Washing Machine which will be sent on trial at wholesale price; if not satisfactory money refunded. Agents Wanted. For exclusive territory, terms and prices write PORTLAND MFG. CO., Box 4, Portland, Mich.

Mention this paper.

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Can buy a WORLD'S WASHER on trial and no money paid until it is perfectly satisfactory. Washes easy. Clothes clean, sweet and white as snow. Child can use it. I pay freight. Circulars free. G. E. ROSS 10 Clean Street, Chicago, Illinois.

Mention this paper.

THE EXCELSIOR CARPET STRETCHER and TACK HAMMER.

Great preventive of profanity. A child can manipulate it. SIMPLE, STURDY and CONCEPT. Post-paid for 65 cents stamps. Live agents make big money. Outfit free with first order for one dozen or more. R. MONTROSS, Sole Mfr., Galien, Mich.

Mention this paper.

High Arm MY HUSBAND

Can't see how you do it.

\$30 Kenwood Machine for \$23.00
\$50 Arlington Machine for \$19.50
Standard Singers - \$8.00, \$11.00, \$15.00, and 27 other styles. All attachments FREE. We pay freightship anywhere on 30 days free trial, in any home without asking one cent in advance. Buy from factory. Save agents large profits. Over 100,000 in use. Catalogue and testimonials free. Write at once. Address, (in full), CASH BUYERS UNION, 158-164 West Van Buren St., B 7, Chicago, Ills.

A TAILOR-MADE We'll make to your measure a Frock or Sack suit of

SUIT for ALL WOOL GOODS, equal to any local tailor's \$18 garments for \$10. We pay express charges.

Other Suits and Trousers just as cheap. Save 50 per cent by buying big lots of material from makers—that accounts for it. Samples of cloth, tape line and particulars—free. LOUIS F. VEHON, Tailor, 155 W. Jackson St., Chicago.

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Catalogue Free. Handsomest and highest grade ever offered. \$100. Acknowledged without a peer at 1896 Cycle Shows. A 1 so high grade popular priced Overlands, \$45, \$65 and \$75. Agents wanted. Exclusive territory. Estab. 1884. Rouse, Hazard & Co., Makers, 32 Est. Peoria, Ill.

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Cleanses and beautifies the hair. Promotes a luxuriant growth. Never Fails to Restore Gray Hair to its Youthful Color. Cures scalp diseases & hair falling. 50c, and \$1.00 at Druggists

FREE trial to your home. Cut this out and send for catalogue. Prices to suit you. Oxford Sewing Machines awarded World's Fair Medal. DOES WHAT ANY WILL DO. FULL SET OF ATTACHMENTS. TEN YEAR GUARANTEE. FREIGHT PAID. ADDRESS: OXFORD MUSE, CO., 340 Wabash Ave., CHICAGO.

Our Sunday Afternoon.

"THERE IS NOTHING NEW UNDER THE SUN."

There is nothing new under the sun; There is no new hope or despair; The agony just begun Is old as the earth and air. My secret soul of bliss Is one with the singing stars, And the ancient mountains miss No hurt that my being mars.

I know as I know my life, I know as I know my pain, That there is no lonely strife, That he is mad who would gain A separate balm for his woe, A single pity and cover; The one great God I know Hears the same prayer over and over.

I know it because at the portal Of heaven I bowed and cried, And I said, "Was ever a mortal Thus crowned and crucified! My praise thou hast made my blame— My best thou hast made my worst; My good thou hast turned to shame; My drink is a flaming thirst."

But scarce my prayer was said Ere from that place I turned; I trembled, I hung my head, My cheek, shame-smitten, burned; For there where I bowed down In my hoastful agony, I thought of thy cross and crown— O Christ, I remembered thee.

—Richard Watson Gilder.

ORIGIN OF THE "SICK MAN."

It was the first Emperor Nicholas of Russia who described Turkey as the "Sick Man." On the night of January 9, 1853, Sir Hamilton Seymour, minister of Great Britain at St. Petersburg, was at a party in the palace of the Archduchess Helen. There Nicholas said to him: "The affairs of Turkey are in a very disorganized condition. The country itself will be a great misfortune, and it is very important that England and Russia should come to a perfectly good understanding upon these affairs, and that neither should take any decisive step without at least consulting the other." The English minister answered that this was certainly his view of the way in which the Turkish question should be treated. Nicholas then said, as if continuing his previous remarks: "Stay; we have on our hands a very sick man. It will be, I tell you frankly, a great misfortune if one of these days he should slip away from us, especially before all necessary arrangements are made."

This is the origin of the phrase that became extended into the "Sick Man of Europe." On a later occasion the emperor, speaking to the same minister, said: "Turkey has by degrees fallen into such a state of decrepitude that, as I told you the other night, eager as we all are for the prolonged existence of the man (and that I am as desirous as you can be for the continuance of his life, I beg you to believe), he may suddenly die upon our hauds."

Nicholas went on to inform Sir Hamilton Seymour that he would never permit England to establish herself at Constantinople. As for himself, he was disposed to engage not to establish himself there, but he added: "It might happen that circumstances, if no previous provision were made, and everything should be left to chance, might place me in the position of occupying Constantinople."

A month later, at a party given by the hereditary grandduchess, the emperor said to Sir Hamilton Seymour: "If your government has been led to believe that Turkey retains any elements of existence, your government must have received incorrect information. I repeat to you that the 'sick man' is dying, and we can never allow such an event to take us by surprise. We must come to an understanding."—Chicago Times-Herald.

MOTHERING.

What does the world need most? The answer must be, "Mothering." From the thrill of joy that moves the mother with the consciousness that a child is the fruition of her love, the throb of pain whose pang is borne with a consciousness of the love that sanctifies it, through the days of lullabys, of prayerful guiding, of heroic renunciation, to the laying down of life in the quietness of old age, look where one will, in the world of business, education, sickness, trial, it is mothering

that the world needs. It needs strength combined with tenderness, hatred of evil, with mercy and wisdom for the sinners, self-sacrifice, with the insight to separate sentimentality from the divine spirit that makes a man give of himself to another, ambition that builds day by day the structure of character that makes for God and his people, courage that faces evil fearlessly and fights to overcome it. Most of all it needs love—the love that moves mother when she forgets everything in life but that which ministers to the child, the crown of her love.—The Outlook.

A GOOD MAN'S WISH.

I freely confess to you that I would rather, when I am laid down in the grave, some one in his manhood stand over me and say, "There lies one who was a real friend to me, and privately warned me of the dangers of the young. No one knew it, but he aided me in the time of need. I owe what I am to him." Or I would rather have some widow, with choking utterance, telling her children, "There is your friend and mine. He visited me in my affliction, and found you, my son, an employer, and you, my daughter, a happy home in a virtuous family." I say, I would rather such a person should stand at my grave than to have erected over it the most beautiful sculptured monument of Parisian or Italian unalloyed. The heart's broken utterance of reflection of past kindness, and the tears of grateful memory shed upon the grave, are more valuable, in my estimation, than the most costly epitaph ever reared.—Bethune.

JOYFUL SOULS.

"There are souls in the world," says Faber, "who have the gift of finding joy everywhere, and of leaving it behind them when they go. Joy gushes from under their fingers like jets of light. Their influence is an inevitable gladdening of the heart. It seems as if a shadow of God's own gift had passed upon them. They give light without meaning to shine. "Such bright hearts have a great work to do for God and humanity. In the dark hours of the nation's history it is such as these whose cheerful exhortations keep together the 'forlorn hopes' of patriotism. In seasons of financial depression it is really wonderful to see how the great public searches for the men who with apparently sincere hearts can utter words of hope, and how, when found, it leans upon them, and willingly follows their example. In our private experiences, too, how much do we all owe to the cheer of sympathetic friends! Such cheerful souls are in demand everywhere, but in no place is the inspiration of their presence needed more than in the home."

GREAT OFFER TO YOU.

Clip this out, return to us with ten cents, silver, and we will mail you our great package consisting of 12 excellent books, a box of Turkish perfume and two pretty handkerchiefs. You will be delighted. Address KEYSTONE Book Co., 1111 Arch Street, Philadelphia, Pa.

A man thirty years old should have his fields of life all plowed, and his planting well done; for after that it is summer-time, with space scarce enough to ripen his sowing.—Lew Wallace, in Ben-Hur.

Baco-Curo advertisement. The only scientific cure for the Tobacco habit. Cures when all other remedies fail. Does not depend on the will power of the user. It is the Cure. Vegetable and harmless. Directions are clear: "Use all the Tobaccos you want until Baco-Curo notifies you to stop." Is the Original Written Guarantee Remedy that refunds your money if it fails to cure. Does the Curing. Its Competitors do the Blowing. Investigate Baco-Curo before you buy any remedy for the Tobacco Habit. The U. S. Courts have just decided that BACO-CURO is what it Pretends to be. A CURE. WHICH DO YOU WANT? A CURE OR A SUBSTITUTE? One box \$1.00; three boxes (and guaranteed cure) \$2.50, at all druggists, or sent direct on receipt of price. Write for free booklet and proofs. EVANS & CHESTER, Chemists & Mfrs. Co., LaCrosse, Wis.

Unjust Taxation advertisement. McCORMICK Harvesting Machines. "cheap" harvesting machinery is doomed to pay tribute to the manufacturer for replacing parts that break—parts that wear out too soon. This is unjust taxation. McCORMICK Harvesting Machines are built upon honor. They insure the purchaser against extortion for repairs; parts that should not break do not break, because scientific figuring enters into their construction; parts that wear do not show wear, and need not be replaced until after long, hard service. The first cost of a McCormick is a little more than the first cost of other machines, but with the McCormick you get more than you pay for, while with the others you pay for more than you get. The new McCormick Light-Running Open Elevator Harvester and Binder, the McCormick No. 4 Steel Mower, and the McCormick Corn Harvester are unequalled for capacity, light-draft, efficiency of service and long life. Built, sold and guaranteed by the McCormick Harvesting Machine Co., Chicago. Agents Everywhere.

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DETECTIVES advertisement. Wanted everywhere under instructions; experience unnecessary. Book of particulars free. Grannan Detective Bureau, Cincinnati, O. McKINLEY Bright men and women are making \$10 to \$25 a day handling the Life of McKinley, our NEW BOOK. Everybody wants this authentic biography of the brilliant advocate of protection and our next President. Finely illustrated. Sold only by subscription; exclusive territory given; act quick as time is money. For terms, etc., address the publishers, The N. O. Hamilton Pub. Co., 1125 The Arcade, Cleveland, Ohio.

WE WILL GIVE advertisement. A beautiful picture, size 16x22 inches, in rich colors and gold, absolutely free to any person who will promise to show it and try to get orders at 25c. each. When you have taken 6 orders we will send six pictures on credit, which you deliver and get paid for; you send us one half the money and keep the other half for your trouble. Send 12c. to pay postage & advt'g. Home Art Picture Co., Chicago, Ill. Mention this paper.

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Agent Wanted advertisement. ...AN... Agent Wanted. In every town and neighborhood to solicit subscriptions for Farm and Fireside. In connection with popular premiums. Liberal commission given. Write for terms and sample copies at once. Mast, Crowell & Kirkpatrick, Springfield, Ohio.

MOTHERS KNOW advertisement. that there are certain epoch points in every human life when nature calls for assistance. The babe before it is born asks her for strength and nutriment, while, after it is born, it requires in the sweet stream it craves, power to grow, healthful repose and easily digested food. She can provide all this if she takes PABST MALT EXTRACT the BEST Tonic than which there is none so pure, so full of food and strength, so sleep-producing. At druggists.

PATENTS advertisement. LEHMAN, PATTON & NESBIT, Washington, D. C. Examinations Free. Send for circulars. HOMESTUDY. A thorough and practical Business Education in Book-keeping, Shorthand, etc., given by MAIL at student's home. Low rates. Cat. free. Trial lesson 10c. Write to BRYANT & STRATTON, 30 College Bldg., Buffalo, N. Y.

New Invention—The Perfect Meat Tenderer advertisement. No pounding—all nutrition retained—saves its cost in a month—fast seller—our salesmen making \$2.00 to \$5.00 a day. Send \$1.00 for burnished nicked sample—express prepaid—and agents' outfit. HUBBELL MFG. CO., "Box J," Springfield, Ohio.

FREE advertisement. Cut this out and send to-day for catalogue. Bicycles from \$15 to \$60. You save 50 per cent if you buy A HIGH GRADE OXFORD. Shipped direct from factory. Don't pay agents' and dealers' profit. Oxford Mdse. Co., 338 Wabash Ave. Chicago.

HIGH GRADE BICYCLES advertisement. We have no agents. Shipped on approval. \$70 wheels for \$59.75. \$15 wheels for \$47.50. All 1896 models. Fully guaranteed. OHIO CYCLE CO., Mfrs., CANTON, OHIO.

SUITS, SWEATERS, BASE BALL, ATHLETIC GOODS. GENTS' BICYCLES. J. E. POORMAN, Jr., 622 Race Street, Cincinnati, Ohio. CATALOGUE FREE.

STERLING SILVER BELT PIN, 10c. Sterling Plated Belt Buckle, Belt Pin, and Shirt Waist Set, 50c. Jewelry Cat. free, 326 illustrations. McRAE & KEELER, Attleboro, Mass.

GOLD RINGS FREE! advertisement. We will give one half-round Ring, 18K Rolled Gold Plate & warranted to anyone who will sell 1 doz. Indestructible Lamp Wicks (need no trimming) among friends at 10c. each. Write us and we will mail you the Wicks. You sell them and send us the money and we will mail you the Ring. STAR CHEMICAL CO., Box 412, Centerbrook, Conn.

Leap Year RINGS advertisement. \$1 Solid Silver RINGS FOR 10 CENTS. These Leap Year (1896) Rings we warrant 952-1000 Sterling Silver, worth one dollar each. To introduce our great illustrated catalogue of Jewelry. We will send a sample to any person in the United States for TEN CENTS, postage stamps taken. Send a piece of paper size of your finger. Address LYNN & CO., 43 BOND STREET, NEW YORK.

SORE EYES CURED advertisement. Weak, Inflamed or Granulated Eyes or Lids relieved and cured by using Pinus Eye Salve. By mail, 35 cts. Money or st'ps. The Pinus-Pastile Mfg. Co., P. O. Box B-310, Kalamazoo, Mich.

ON 30 DAYS' TRIAL advertisement. THIS NEW ELASTIC TRUSS. Has a Pad different from all others. Is cup shape, with self-adjusting Ball in center, adapts itself to all positions of the body, while the ball in the cup presses back the intestines, just as a person does with the finger. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free. C. H. EGLESTON & Co., 1205 MASONIC TEMPLE, CHICAGO.

R.I.P.A.N.S TABLETS advertisement. REGULATE THE STOMACH, LIVER AND BOWELS And Purify the Blood. RIPANS TABLETS are the best Medicine known for Indigestion, Biliousness, Headache, Constipation, Dyspepsia, Chronic Liver Troubles, Dizziness, Bad Complexion, Dysentery, Offensive Breath, and all disorders of the Stomach, Liver and Bowels. Ripans Tablets contain nothing injurious to the most delicate constitution. Are pleasant to take, safe, effectual, and give immediate relief. Price—50 cents per box. May be ordered through nearest druggist, or by mail. Address THE RIPANS CHEMICAL CO., 10 SPRUCE STREET, NEW YORK CITY.

Dr. ISAAC THOMPSON'S EYE WATER advertisement. Sufferers with SORE EYES.

COST PER ACRE OF GROWING FRUITS IN WAKULLA CO., FLORIDA.

Table with 2 columns: Item and Cost. Includes Pecans, Thorough clearing of land, Two pounds selected nuts for seed, etc.

Trees never die of old age, and the yield increases from year to year. They produce a small crop the eighth or ninth year, and when fifteen years old should bear 150 pounds of nuts per tree, or 9,000 pounds per acre, worth ten cents per pound, or \$900 per acre.

Table with 2 columns: Item and Cost. Includes Peaches, Clearing land, One hundred trees (choice varieties), etc.

Peach-trees have to be renewed about every ten years by setting young trees between the old ones and cutting out old when the young are bearing age. There is no loss of crop, and but little expense. Five-year-old trees will yield about 350 bushels per acre, worth \$1.50 per bushel, or \$525 per acre.

Cost per acre, same as peaches, and trees bear at about same age. Many varieties ripen before any other fruit is on the market, in early summer or late spring, and command fancy prices. A valuable crop sometimes brings in net returns at the rate of six to eight hundred dollars per acre. Trees require very little attention, except spraying twice or three times in bearing season.

Table with 2 columns: Item and Cost. Includes Grapes—Standard Varieties, Clearing land, Preparing and planting, etc.

Grapes are very long-lived and free from diseases in our country. Yields here are enormous, and the flavor is the finest. Three-year-old vineyards have paid several hundred dollars per acre profit.

Cost per acre, about same as peaches. Trees in Jefferson County, Florida, over eighty years old are bearing crops every year. The yield per acre is about 500 bushels. Figs do not ship well, but are valuable for preserving and drying.

Table with 2 columns: Item and Cost. Includes Strawberries, Clearing land, Preparing and planting, etc.

No crop yields better returns for intelligent attention. Set in October, strawberries will yield a fair crop, say 2,000 quarts, the following spring. First year's fruit is always fine, and should average ten cents per quart. Second year, the cost of cultivation and mulching would be the only expense, and a yield of 4,000 quarts, valued at \$400, would be the result. Many growers realize at least 15 cents per quart for their entire crops.

Pears and various other small fruits can be grown at about the same average cost as peaches. Most varieties of Japanese and Asiatic fruits may be successfully grown here. They bear at an early age, and are becoming popular and profitable.

ARROWSMITH, ILL., April 6, 1896. CLARK SYNDICATE COMPANIES, Chicago, Illinois.

Gentlemen:—Your esteemed favor of the 27th ult. duly received. In reply to your kind inquiry will say that I arrived safely at Arrowsmith on the 22d ult., having gotten an early train out of Chicago, and arrived at Arrowsmith at 8:30 P. M., finding a blustering snow-storm in progress. After enjoying the beautiful climate of Western Florida, such a greeting was not altogether pleasant.

If asked to express an opinion of the "Tallahassee hill country," would say that I think it the ideal place for the poor Northern farmer who has toiled many days and accomplished little more than a living. In the Tallahassee country I believe one can acquire a good living and work but little, by tilling, properly, the rich, productive soil. Without the slightest doubt, a man can make more money there than in any other state in our broad Union. In that country the farmer can have his choice of crops, and raise from two to three crops each year on the same land. The reason I say the farmer can have his choice of crops is that the Tallahassee hill country is capable of producing anything that can be grown in any state. This country, too, is the home of the hunter and fisherman; all kinds of game are

to be found there, and the lakes and streams abound in fine specimens of the finny tribe.

Thanks to the gentlemen whom I met in connection with the Clark Syndicate Companies, I had a most enjoyable time on my trip to Florida. I can give your country no better evidence of my commendation than is contained in the fact that I intend to remove with my family to 310 1/2 acres, two and one half miles from Tallahassee, having this day completed the arrangements for its purchase with your Mr. Swearingen. Hoping to have the pleasure of meeting you again at some time in the future, I am

Yours very truly, (Signed) L. M. POWELL.

TALLAHASSEE, FLA., April 10, 1896. W. C. BURR, Chicago, Ill.

Dear Sir:—I just received your letter to Tallahassee, where I am yet. I find just the place which suits me, and I am so pleased of this country that I don't think I will ever go back to Kansas.

I would have been very pleased to receive you next month, when you will be in Russell, but my brother will take my place, perhaps in better conditions than me. I just write to him in this way, and I am sure he will be very pleased to receive you.

If you want to stay in the country (and I think you will be better than in town), you will have my room, my buggy and horses completely to your disposition. And be sure that I would be very pleased if my position could oblige you.

I think you will have plenty chances to decide some families to leave this bad country (Kansas) to come to Tallahassee.

My brother is to come next fall, and he will make his possible to help you in this way.

Please excuse my writing, for I am a little better acquainted with the French than with the English language, and believe me

Yours sincerely, (Signed) MAR BEROU.

CHICAGO, ILL., April 7, 1896. CLARK SYNDICATE COMPANIES, 315 Dearborn St., Chicago, Ill.

Gentlemen:—I have just returned from a two months' visit in Florida, and I think it has the best climate and is the finest country that I ever saw, especially the "Tallahassee hill country." I met tourists from all over the world there, and they said that the climate of that region was superior to anything they had ever been in, and they gave it the preference over all other parts of the South.

The people were very cordial, and at Lanark Inn, where we visited, we met a number of gentlemen from Washington, with whom we went hunting, sailing and fishing, and had the finest sport that we ever had in any place.

I think Lanark is the leading town on the Gulf between Pensacola and Cedar Keys. It is destined to be a great resort for both summer and winter. Very truly yours, (Signed) WILLIAM PIGOTT.

THE FOLLOWING EXTRACT IS TAKEN FROM A TALLAHASSEE, FLORIDA, PAPER OF A FEW WEEKS AGO:

J. H. Staley was in town a few days ago with 1,000 pounds of home-raised meat for sale. He had no trouble in disposing of it within a short time, at an average of ten cents a pound.

Mr. Staley lives on the Ross Place, about three or four miles from this city. Last year he used two plows, hired only two bands, and at harvest season housed 400 bushels of oats, 800 bushels of corn, and cured 2,000 pounds of meat, besides a good supply of potatoes, sugar, syrup, vegetables, etc.

EXCURSIONS TO FLORIDA.

Our next round-trip excursion to Tallahassee, Florida, is on May 5th. We make a reduced round-trip rate from Chicago and from Cincinnati on this date, and can also quote reduced rates from other points. We leave Chicago over the "Big 4" or the "Monon" routes, and Cincinnati over the "Queen & Crescent," on the Limited Florida Train, passing by daylight through the beautiful scenery of the Blue Grass region and the famous battle-fields in the neighborhood of Chattanooga. In fact, we make almost an entire daylight ride from Cincinnati to Florida, giving one a most excellent opportunity to see the country.

If you cannot come to Chicago or Cincinnati and join our excursion, go to your nearest ticket agent and get through rates from him on the special excursion days. Then, if you will advise us when you leave, we will have our manager at Tallahassee meet you at the depot. He will show you every courtesy and attention, and arrange free transportation for you over our own railroad lines while you are visiting Tallahassee.

People wishing to go from the East can make the trip via the Clyde Steamship Line from New York or Philadelphia, and the fare for the round trip (first-class) is \$48.70. The round-trip fare from Boston via the Savannah Steamship Line is \$49.50. This price includes meals and berth on board steamer to Jacksonville, Florida, and from there it is only a short ride to Tallahassee.

For all information regarding excursions to the Tallahassee country address CLARK SYNDICATE COMPANIES, Care of FARM AND FIRESIDE, 1843 Monadnock Block, Chicago, or 108 Times Building, New York City.

Our Miscellany.

OVER 40,000 women are attending the various colleges in America, yet it has only been twenty-five years since the first college in the land was opened to women.

WHEN Governor Richards, of Wyoming, leaves the capitol, his daughter, aged nineteen, who is his private secretary, becomes governor in everything but name.

MRS. CHARLOTTE FOWLER WELLS was the first woman publisher, and has been in business since 1814 in New York City. She says she is too busy to think how old she is.

THE highest salary paid to a governess is probably that received by Miss Etta Hughes, English governess to the young Princess of the Asturias, a relative of the late Queen of Spain. Miss Hughes receives £1,000 a year.

MR. SPURGEON'S idea of luck was thus expressed: "I never had any faith in luck except I believe that good luck will carry a man over a ditch if he jumps well, and will put a bit of bacon in his pot if he looks after his garden and keeps a pig."

LITTLE Grand Duchess Olga of Russia was taken from the Alexander palace to be christened at Zarskoe Selo in a state carriage built in 1709 for Catherine I. It is heavily gilt, decorated with the empress' monogram, and lined with red velvet. The harness is studded with diamonds. The coach was used at the coronation of Alexander II. in 1856, and at that of Alexander III. in 1883.

THE Empress of China has started a vast silk-weaving department, in which employment will be given to thousands of girls and women. The industry will be carried on in the palace grounds, which her majesty, by Chinese custom, is forbidden to leave.

I FIND the bottle of "5 Drops" to be very good, and just what you claim. My wife has been suffering with Catarrh and Hay Fever over 16 years. She has tried everything and doctored much, but no cure. I would like the agency for "5 Drops" for this county, as I know it is good and am sure it will sell readily. Please send me one dozen by express for the money inclosed. REV. L. VON WALD, March 31, 1896. Millbank, S. D.

THE oldest bonnet was found upon an Egyptian mummy, that of a princess who was interred about two thousand years before Christ.

St. Vitus' Dance. One bottle Dr. Fenner's Specific cures. Circular, Fredonia, N. Y.

THE most curious paper-weight in the world is said to belong to the Prince of Wales. It is the mummified band of one of the daughters of Pharaoh.

CHEAP EXCURSIONS TO THE WEST AND NORTHWEST.

On April 21 and May 5, 1896, the North-Western Line (Chicago & North-Western Ry) will sell Home Seekers' excursion tickets at very low rates to a large number of points in Northern Wisconsin, Michigan, Northwestern Iowa, Western Minnesota, Nebraska, North Dakota and South Dakota, including the famous Black Hills district. For full information apply to ticket agents of connecting lines, or address C. Traver, T. P. A., Marine National Bank Building, Pittsburg, Pa.

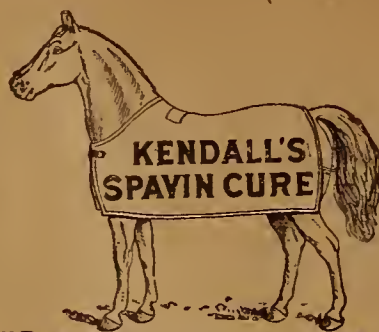
COMPLETE.

She—"So you believe your college education complete, now that you have been graduated?"

He—"I should say yes! Why, I've won six medals for sprinting, ten diamond rings for bicycle-racing, \$1,000 for winning an amateur prize-fight, and got my picture in the Police Gazette for surviving twenty foot-ball games. My education complete? I should say yes."—Syracuse Post.

THE "PEPPLER" SIX-ROW SPRAYER.

Any one who grows fruit or vegetables on any considerable scale, will do himself an injustice if he buys any other sprayer without investigating the claims and merits of the "Peppler" Six-row Horse-power Sprayer. It is positively warranted by the manufacturer to be the best on earth. No other horse-power sprayer has had such an enormous sale as the "Peppler." It sprays trees, potatoes and vines of all sorts, and economizes time and labor to such a degree that it doesn't take long to save the difference between the cost of it and a small-capacity sprayer. No one interested should fail to write for a catalogue to Thomas Peppler, Hightstown, N. J.



THE MOST SUCCESSFUL REMEDY FOR MAN OR BEAST. Certain in its effects and never blisters. Read proofs below.

KENDALL'S SPAVIN CURE

BLUEPOINT, L. I., N. Y., Jan. 15, 1894. Dr. B. J. KENDALL Co.—I bought a splendid hay horse some time ago with a Spavin. I got him for \$30. I used Kendall's Spavin Cure. The Spavin is gone now and I have been offered \$150 for the same horse. I only had him nine weeks, so I got \$120 for using \$2 worth of Kendall's Spavin Cure. W. S. MARSDEN.

KENDALL'S SPAVIN CURE

SHELBY, Mich., Dec. 16, 1893. Dr. B. J. KENDALL Co.—I have used your Kendall's Spavin Cure with good success for Curb on two horses and it is the best liniment I have ever used. AUGUST FREDERICK.

Price \$1 per Bottle. For sale by all Druggists, or address DR. B. J. KENDALL COMPANY, ENOSBURGH FALLS, VT.

The "HARTMAN" Steel Fence

Is intended for Lawns, Parks, Cemeteries, Churches & Schools. Stronger, hand-



somer and CHEAPER than either wood or iron. Does not mar but rather adds beauty to the lawn or garden. When set with our Self Anchoring Steel Posts it's a thing of beauty. Several heights, several widths of pickets. Write for circulars & prices. HARTMAN MFG. CO., Ellwood City, Pa. 277 Broadway, New York. 1315 Manhattan Bldg., Chicago.

SALESMEN wanted to sell to dealers; \$100 monthly and expenses; experience unnecessary; enclose stamp. ACME CIGAR COMPANY, 96 Fifth Ave., Chicago



FINE BLOODED Cattle, Sheep, Hogs, Poultry, Sporting Dogs. Send stamps for catalogue, 150 engravings. N. P. BOYER & CO., Coatesville, Pa.

THE ELECTRICITY from the batteries will turn a needle through your table or hand. Cures Rheumatism, Liver and Kidney disease, weak and lame back, etc. For advertising purposes we will give ONE BELT FREE to one person in each locality. Address, E. J. SHEAD & Co., Dept. 132, Vineland, N. J.

SIDE COMBS

These side combs are over two inches long by one inch wide, triple silvered, now very fashionable. Sample Pair by mail TWO CENTS. ADDRESS LYNN & CO., 48 BOND ST., NEW YORK.

AGENTS make your own preparations, and realize from 100 to 1,000 per cent profit. For one dollar I will furnish a reliable, up-to-date formula for anything in the line of Baking Powders, Flavoring Extracts, Wild Cherry Phosphate, Perfumes, Face Washes, Face Powders, Hair Tonics, Hair Removers, Bust Developers, Headache Powders or Patent Medicines. I will give an exact estimate of the cost of each preparation, with full instructions for any one to make with small capital. Some of my formulas are worth hundreds of dollars, and are in daily use by the largest concerns in the country. John H. Quine, Ph. Chem., Consulting Chemist, Rochester, N. Y.

SALARY AND COMMISSION

With allowance for expenses, to one live, wide-awake man or woman in each town or city, to introduce goods on a brand-new scheme, never before worked, resulting in quick sale at almost every house. Steady work for the right person. Address at once, LOCK BOX 488, Springfield, Ohio.

2 Minutes for Refreshments

THE Handy Tablet requires neither sugar nor spoon to make healthful and refreshing drinks the moment it touches water. Sample by mail, 10 cents. The HANDY TABLET CO., 1011 N. Front St., Philadelphia, Pa.

When in the very flush and glory of the triumphant progress of his armies, Lincoln showed a noble magnanimity of soul toward the vanquished, which stands as solitary among the history of rebellions as our republic does among the family of nations.—J. F. Garrison.

WIND IS MONEY TO USERS OF MILLS. Goodhue Pump and Power Wind Mills. Back Geared and Direct Stroke, Galvanized Steel and Wood; 5-ft to 18-ft. New principle in governing; no weights or springs; leads in simplicity, durability, strength and effective work. Most successful power mills for grinders, feed cutters, shellers, etc. \$9000.00 (worth of our power mills in daily use in one township. 3 and 4 corner galvanized steel towers. Strongest in use. Never overblow down. Our line of "Hero" and "American" Grinding Mills, Fodder Cutters, Shellers, Wood Saws, etc., the best and most complete, 2 to 5 Horse Sweep Powers; 2 and 3 horse Tread Powers; "Success" One Horse Tread Power for Cream Separators, pumping, etc. Our new 150-page catalogue tells all about machines for preparing feed, pumping water, irrigation, etc. Send for it. APPLETON MANUFACTURING CO., 9 Fargo St., BATAVIA, ILLS.

Queries.

READ THIS NOTICE.

Questions from regular subscribers of FARM AND FIRESIDE, and relating to matters of general interest, will be answered in these columns free of charge. Querists desiring immediate replies, or asking information upon matters of personal interest only, should inclose stamps for return postage. The full name and post-office address of the inquirer should accompany each query in order that we may answer by mail if necessary. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Queries should not be written on paper containing matters of business, and should be written on one side of the paper only.

Horse-radish.—W. N. R., Union City, Teun. Horse-radish can be profitably grown as a second crop after early cabbage, etc. Set the small roots midway between the rows, and keep the top growth down by cultivation until the first crop is removed. Plant the sets, or small roots, deep, in holes made by an iron-pointed stick. After the first crop is off, cultivate a few times; the horse-radish will soon take full possession of the soil. The roots can be taken up for market in the fall or following spring.

Club-root in Cabbages.—E. H. W., Uggal, Va., writes: "What can I do to prevent club-root in cabbages? Is there anything I could put on the ground (an old garden spot) to prevent it?"

REPLY:—"An old garden spot" tells the story. It is never safe to plant cabbages after cabbages, radishes, turnips or mustard, all of which are affected by the club-root. The old garden soil is thoroughly infested. Better plant the cabbages in a new place. If you must plant them in the garden, make heavy applications of lime and ashes to the soil, and use commercial fertilizers liberally.

Lawn Fertilizer.—P. S. F., Athol, Mass., writes: "What commercial fertilizer is best for a lawn?"

REPLY:—If the soil is deficient in the three most important elements of plant-food, it is necessary to use a complete fertilizer; that is, one containing nitrogen, phosphoric acid and potash. Apply a mixture of equal parts of nitrate of soda, superphosphate and muriate of potash, at the rate of a small handful to each square yard. It is unnecessary to actually mix them before applying; each can be sown separately. If the soil is deficient in potash alone, a dressing of hard-wood ashes will improve the appearance of the lawn; if deficient in nitrogen alone, an application of nitrate of soda or some other good ammonia fertilizer is all that is necessary.

Land-plaster, Wood Ashes and Hen Manure for Corn—Spring Wheat and Rye—Best Grasses—German Millet.—A. W. C., Greenwich Village, Mass. Gypsum, or land-plaster, wood ashes and hen manure are all good fertilizers for corn. Use the gypsum liberally in the hen-house, or mix it with the droppings. Do not mix the wood ashes with the hen manure. Apply these fertilizers broadcast, and harrow in.—It is doubtful if spring wheat or rye will do as well in your section as the fall varieties.—If most of the farmers in your section use timothy and red-top, it is probably because experience has shown them to be the grasses best adapted to your soil and climate. Experiment on a small scale with other grasses until you find something better.—German millet, cut early, that is, just when it is coming out into head, and properly cured, makes excellent hay for cattle and horses. It is a warm-weather plant, and should be sown after corn is up. Sow from one half to one bushel of seed per acre. The thicker seeding makes finer hay.

BE INDEPENDENT!

Don't stay poor all your life! Get a farm of your own, and in a few years you will wonder why you remained in the cities and paid rent. You can secure good homestead land of the United States government, free of cost, along the line of the Lake Superior division of the Chicago, Milwaukee & St. Paul Railway, in Northern Wisconsin and Upper Michigan, or you can buy at low prices, on easy terms. Address C. E. ROLLINS, 161 La Salle St., Chicago, Ill.

VETERINARY.

Conducted by Dr. H. J. Detmers.

To regular subscribers of FARM AND FIRESIDE, answers will be given through these columns free of charge. Where an immediate reply by mail is desired, the applicant should inclose a fee of one dollar, otherwise no attention will be paid to such a request. Inquiries should always contain the writer's full address. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Subscribers may send their veterinary queries directly to Dr. H. J. DETMERS, 1315 Neil Avenue, Columbus, Ohio.

NOTE.—Parties who desire an answer to their inquiries in this column, must give their name and address, not necessarily for publication, but for other good reasons. Anonymous inquiries are not answered under any circumstances.

Makes a Noise when Trotting.—H. S., Forsyth, Montana. The noise made by your colt when trotting is not produced in the intestines, but in the sheath of the animal.

Lice on Cattle.—C. E., Reedsburg, Wis. Wash your cows with a five-per-cent solution of creolin in water, and thoroughly clean and disinfect the premises, so as to prevent a reinfection.

So-called Thumps in Pigs.—O. A., Lebanon, N. J., and C. B. M., Ruth, Kan. So-called thumps in pigs is, as a rule, a fatal symptom of swine-plague, or so-called hog-cholera, which is one and the same disease.

Hematuria.—G. H. W., East Sound, Wash. Hematuria, bloody urine, or red water, is a symptom of various diseases, and cannot be considered as a definite disease or as a disease itself. Therefore, if no further particulars are given I cannot answer your question.

Worms in a Dog.—D. W. S., Farnsworth, Mich. The best you can do is to give your dog, a few mornings in succession, a dose of santolin. As I do not know anything about the size of your dog, you will have to ask the druggist concerning the dose, and he will also tell you how to give it.

Navicular Disease.—K. W. B., Hallstead, Penn. According to your description, your horse appears to be affected with navicular disease. See answer to G. D. C., Plano, Texas, in present issue. Further than that, I would advise you to consult a veterinarian. It will not be difficult to find a good one in Pennsylvania.

A Morbid Growth.—I. D., Goffs, Kansas. What you complain of is a morbid growth or tumor of some kind, the nature of which does not appear from the information you convey. I shall not send an answer by return mail for a two-cent stamp. See heading of veterinary column.

Rachitis.—B. R. B., Tracy, Minn. Change the food of your pigs; leave off the potatoes, feed a variety of food, especially such as is rich in phosphates and in lime salts; for instance, bran, and, as soon as it can be had, clover. Then, if it is not already too late, give the pigs an opportunity to take voluntary exercise.

Inveterate Shoulder-boils.—J. P. F., Grapeland, Texas. The hard (fibroid) on each shoulder of your horse, and caused by an ill-fitting collar, can be removed either by excision or by inserting into the center of each a crystal of sulphate of copper. If possible, have the operation performed by a veterinarian.

Stomatitis Ulcerosa.—J. W. C. Tell your tenant to wash out his mare's mouth with slightly acidulated water, and then to feed hay and other food that is sound and clean and not spoiled. The sores in the mouth have nothing to do with the fact that the mare is with foal. They are caused by food, especially hay, and clover in particular, contaminated and spoiled by fungi.

Probably Navicular Disease.—G. D. C., Plano, Texas. According to your brief description, your mule appears to be affected with navicular disease, an ailment which is very seldom cured. If your mule is not a valuable animal, and if you are satisfied with getting one year's work out of him, it may be advisable to let a veterinarian cut the nerves. This operation, if well performed, will at once remove the lameness; but, of course, will not remove the morbid process, and by making the disease painless will render the animal fit for work for about a year, or possibly longer.

Foot-rot in Cattle.—J. L. C., Greer, Mont., Canada. What you describe is (malignant) foot-rot in cattle, brought on by frost and filth. Pare away all loose horn, dress all the sores, if possible, twice a day, with a mixture of liquid subacetate of lead and olive-oil, one of the former to three of the latter, and absorbent cotton, especially in the cleft between the hoofs; protect the sores and keep the dressing in place by means of a bandage, and keep the animals on a clean and dry floor in a clean stable, where food and water are carried to them. If you do this you will soon see improvement, and in a short time will effect a cure.

Incipient Elephantiasis.—G. McF., Montague, Mich. What you describe is now a case of incipient elephantiasis. I do not believe that you will ever succeed in removing the swelling of your horse's leg entirely—for that it will be too late—but you may succeed in more or less reducing the same by exercising the animal during the day, keeping the swelled leg bandaged during the night, and applying morning and evening a good rubbing, preferably with the hands. All the reduction you are able to effect by exercise you will succeed in making permanent, if you persevere with the above treatment, but more you must not expect.

Too Much Bulky Food.—A. W. B., Lakeview, Oregon. All that ails your mare which is heavy with foal is that she receives too much bulky food. The vastly expanded intestines, together with the expanded uterus, have not sufficient room in the abdominal cavity, press upon the diaphragm and upon the large blood-vessels, and thus seriously interfere with the circulation and respiration. Result, an imperfect nutrition of the extremities, and of other parts of the body, and thus causing the weakness complained of. Feed more concentrated food (grain) and very little bulky food (hay, etc.), and then give the mare all the voluntary exercise she is willing and able to take. Also see to it that she is not costive. If she is, relieve her by feeding bran mashes.

Icterus.—C. C., Dunellen, N. J. You say you butchered a healthy-looking pig, weighing two hundred and fifty pounds, and when you cut it open you found that everything beneath the skin, but especially all the fat, was very yellow, and desire to know what ailed the pig, and whether or not it is dangerous to eat the meat. As to the first question, all I can say is, the pig must have been suffering from a morbid condition, which either interfered with the functions of the liver, the secretion of the gall, or bile, or which prevented the discharge of the latter into the proper intestine, the duodenum, and thereby caused it to be absorbed and to pass over into the blood again. Your second question I cannot satisfactorily answer, because I do not know the nature of the morbid condition that caused the trouble. The meat and fat may not necessarily be dangerous, but they undoubtedly will have an unpleasantly bitter taste.

A Loller.—E. A. S., New Pittsburg, Ohio. If your horse lolls his tongue whenever he has a bit in his mouth, it is highly probable that the bit is an unsuitable one. One and the same bit does not fit every horse; it may be suitable to one and entirely unfit for another one. Therefore, I would advise you to try variously shaped bits, and to find out what kind of one will suit. Some horses require a flat and others an arched or curved bit. There is no remedy for a confirmed loller.

"Has a Kind of Cough."—G. J. G., Bismarck, Mo. If a cow does not clean in due time after parturition, the cause very often consists in a premature birth; and if this constituted the cause in your case, the insufficient flow of milk finds an easy explanation. Concerning the "kind of cough" which you say your cow has, I cannot advance any opinion. In the first place, coughing is only a symptom common to most diseases of the respiratory organs, and therefore the diseases attended with coughing are very numerous. Secondly, you do not say whether the cow had that "kind of cough" before parturition, or whether it appeared later. It is even possible that some of the medicines you gave the cow passed into the respiratory passages, and thus caused the cough. It is utterly impossible to base a diagnosis upon a symptom common to many diseases.

Swine-plague—Diarrhea.—L. D. G., Albert Lea, Minn. Your pigs are dying of swine-plague. If they are all diseased, I do not know what you are able to do for them, because I do not know how you are situated.—If your calves have diarrhea, and are not too far gone, are not yet disinclined to move, and have not lost their appetite, you can save them, if you change their food; do not feed anything that is soured, contaminated or spoiled, feed nothing but what is sound, fresh and clean, transfer them to a dry, clean and non-infected place, in which they have pure air to breathe and dry bedding to sleep on, and then give to each calf the following medicine, to be divided into two doses, to be given one in the evening and the other in the morning, or vice versa: Rec. Opil pulv. gr. x, Pulv. rad. Rhei Chinens. drachm. ii, Magnes. carbonic. scrupul. i, and Infus. flor. Chamomill. unc. x. The above is intended for a calf eight to ten or twelve days old.

Protective Inoculation against Swine-plague.—W. H. H., Moberly, Mo. Yes, I have the inoculation material now in a more perfect condition than ever before, because of late my time has been my own, and I could bestow more care upon its preparation; but for very good reasons I have concluded to have it handled and applied only by persons who have been under my personal instruction and who are personally known to me as strictly reliable and above any suspicion of ever engaging in any questionable transactions. On or before the first of May I expect to have two authorized, fully equipped and reliable representatives in the field, who will, at a very moderate cost, inoculate as many herds of hogs as they may be called upon to do. One of them will be my son, Henry E. Detmers, and it will probably be he who will visit your state. I am now so situated that I am able to prepare all the material that may be needed, and none will be used that is not prepared by myself. Every flask will have a label showing the date of its preparation and my signature.

Slight Colicky Pains.—L. A. R., Grabam, Texas. What you describe are evidently slight attacks of colic, but their cause, or probable cause, cannot be ascertained from your description. Colicky pains may have different causes; they may be produced by almost anything that interferes with the process of digestion; for instance, eating more food than the digestive organs are able to manage, a weakened condition of the digestive organs themselves, caused by a catarrhal condition of their mucous membranes, by the presence of intestinal worms, by the presence of foreign bodies, such as stones and concretions, by the existence of an aneurism in the anterior mesenteric artery, etc. As long as the cause is not known, or if known and the same is of such a nature that it cannot be removed, the best that can be done is to feed as regularly as possible, to give no food except but what is sound and easy of digestion, not to put the horse to work immediately after a substantial meal, but to give an hour's time for digestion to be inaugurated, never to feed a heavy meal immediately after the horse comes home from work covered with perspiration, but to wait a reasonable time, at least an hour, or until the horse has cooled off and the circulation of the blood has become adjusted again. After an attack has passed, withhold the food until the digestive organs have had time to recuperate, and while an attack is on make the horse as comfortable as you can, and do not give any medicines unless you precisely know what effect the medicines will have, and what you desire to accomplish by their use.

ROLLER BEARINGS THE FOE TO FRICTION.

A PPT ILLUSTRATION OF A CLEVELAND PREACHER—LIKENS CHRISTIANITY TO BALL BEARINGS.

Rev. W. W. West, of the Oakland Baptist Church, Cleveland, Ohio, two years ago preached a sermon on "Ball Bearing Christianity." He described how ball bearings in machines brought about the conditions in which friction was reduced to the minimum. "All the clank and noise," he said, "all the jar and wear have been done away with by the ball bearing idea. The life of the machine has become pleasanter, quieter, more prolonged. Similarly, Christianity enters a life, and men no longer strive and contend; the friction of life is done away with, giving place to a smoothness that makes peace for the soul."

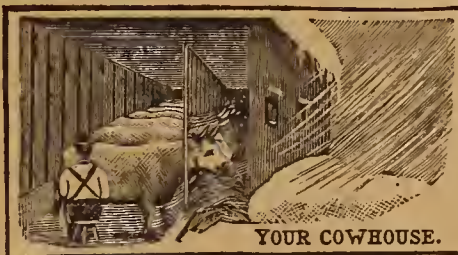
So great is the saving accomplished by roller bearings and ball bearings that they are being introduced into all kinds of machines from rolling mills to roller skates.

The whole secret of the value of the "rolling bearings"—whether rollers or balls—lies in the fact that they change the ordinary sliding contact of the axle or shaft to rolling contact. For instance, it would be impossible to skate on a steel pavement with ordinary steel skates, while steel roller skates would roll over the surface without friction. Roller bearings put roller skates under the axle.

Our farmer friends are to be congratulated that through the enterprise of the Deering Harvester Co. of Chicago they are given the benefit of these wonderful savers of draft and power and friction and wear and expense. The Deering binders and mowers have roller or ball bearings wherever there is the greatest friction to be overcome. These bearings make the Deering binders universal two-horse machines even where as many as four horses are needed on machines without sub bearings. As applied to mowers they reduce friction to such an extent that the farmer can use a Deering mower with a cutter bar one-third longer than he had been accustomed to use, accomplishing fully one-third more work with the same team each day.

The Deering Harvester Co. has agreed to send free of charge to all of our readers asking it and mentioning this paper, a copy of an interesting pamphlet called "Roller and Ball Bearings on the Farm."

A Cow Fatally Injured While Calving.—O. S. L., Livingston, Wis. If I understand you correctly, you say that when your cow was calving, the calf had a posterior presentation with the hind feet below the body, and that the veterinarian turned the calf, and changed the posterior presentation into an anterior one. If this is the case, your veterinarian must be very inexperienced as an obstetrician, otherwise he would have known that such an operation is not at all necessary, and cannot be executed without the greatest danger to the maternal animal. I know very well that this very thing is recommended in a well-known book on veterinary obstetrics, but have my doubts whether the author of that book ever had any practical experience, and did not merely copy from a work on human obstetrics. The bones in the hind legs of a fetus of a mare and of a cow are too long to permit such a turn without almost absolute injury to the maternal animal. On the other hand, the calf, unless it had become wedged in, could have been extricated with comparative ease; and if it had been wedged in, turning would have been entirely out of the question, and embryotomy would have been necessary to save the cow. Still, even if the case was as I understand it from your description, the veterinarian cannot be seriously blamed, if he is a young man without much experience in obstetrics, a graduate of a school in which that branch of veterinary medicine is rather superficially treated, and if he had to gather his information from the text-book above mentioned. The possibility is also not excluded that the tear already existed before the veterinarian attempted the operation, because it often happens, especially in cases of obstetrics, that a veterinarian is not called until it is too late, or until everybody who "knows something" has been at work, and has made the case a desperate one.



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Smiles.

A POINTER.

If you'd dwell With Love content, Never let him Pay the rent. Never let his Royal grace See a bill— Collector's face! Love endures All humau ill, But he will not Pay the bills. —Atlanta Constitution.

A MENU.

Mary had a little lamb, Likewise an oyster stew, And ere the rosy morning dawued, She had a nightmare, too. —Judge.

SHE HAS A GRIEVANCE.

She is an observing little mortal, and she knows her own mind. She has been subjected to all the osculatory annoyances that pretty children have to put up with, and she is as heartily sick of them as the average child usually is. Everyone seems to feel that he or she has a license to kiss a pretty child in this world, without giving the least thought to the rights of the child in the premises.

This little girl, however, has noticed that no such infiction is imposed upon her older sister, and it has made her jealous.

"Mama," she said one day, "I wish I was big."

"How big?" "As big as Mamie," she replied, referring to her sister.

"Why?" inquired her mother. "Cause Mamie has a lot better time than I do. Everybody doesn't want to kiss Mamie."

"How do you know they don't?" "Well, she don't have to let 'em, anyway, if she don't want to."

"Are you sure about that?" asked the mother, somewhat amused.

"Course I am. She can talk right back to any one who kisses her, and it ain't impolite at all; but if I did it I'd be punished."

"Ethel!" broke in Mamie, with a warning shake of the head.

"Well, you can," protested Ethel; "and it ain't fair. All the old grannies don't even try to kiss you like they do me—only the nice-looking young men, and you can send them about their business if you want to. I heard you tell that man with the black mustache, who was here last night, that he ought to be ashamed of himself, and you know what would happen to me if I said anything like that just because somebody kissed me." —Chicago Post.

TO WEAR WITH BLOOMERS.

Down in Mississippi not very long ago there was a young ducky who bore the classic name of Scipio, and was the happy possessor of two mules, which rejoiced in the appellations of Sam Jones and Mary; and so dearly did he cherish the brutes that one day when he met a girl named Mary, he fell in love with the dusky maiden, for no other reason, as he admitted, than that she bore the same egoomen as the off mule, and they decided to wed. Scipio wanted to do the thing up right, and give the bride a present, so he went one day to the country store, and after examining the entire store, purchased two hoop-skirts and took them to the girl. She was delighted, but pretty soon she said:

"Look heah, Scipio, what fur d'you git two er dese hupes fur?"

"Why, honey," responded Scipio, "I didn't want 'cher t' look lopsided."

"Whus 'at? Lopsided? Humph!"

"Shuah, honey; I got one fur de right laig an' one fur de left." —Pittsburg Chronicle-Telegraph.

ICE COLD.

Nantucket is famous for auctions. They are held in the public square. There are few things one cannot buy at auction if one bides one's time. Whenever an old home is broken up, or a resident leaves the island, the unwanted effects are closed out at auction for whatever they will bring.

At the last one I attended a refrigerator was put up.

"Too late. The season is over," shouted some one in the crowd.

"But there'll be another, and perhaps a hot one," said the auctioneer.

"But one may die before that," said the other.

"Well," replied the auctioneer, "if you die you will be sorry that you hadn't bought a refrigerator and taken it along with you." —Harper's Magazine.

SUPERFLUOUS HAIR.

I have a sure, quick remedy. To prove it, I will send a \$1.00 bottle, sealed, free. Address Mrs. J. De Vere, P. O. Box 494, Philadelphia, Pa.

"NEW WOMAN" DEFINED BY AN OLD MAN.

The new woman is pretty homely. She was always old, but was never good foru till now. She knows her husband by sight. Hates children. And cats. Tells her age without asking. Wears loose shoes and tight corsets. Pays twice the price of natural violets for artificial, and wears them from choice. Rewrites fiction into history to read at the Mutnal Admiration Society club. Eats raw onions to put into effect her heaven-born right. Deeliues to dance before being asked, and plays ebeekers all night with a dude. Brags that she hasn't read "Tribly." Goes to the theater in the afternoon and to church in the evening. Hunts foxes in winter with second-generation nobodies in society. —Philadelphia Times.

LEADING HIM ON.

"Josiar," said Mrs. Cornrossel, "would you fight if they was a war?" "Yes-sir-ree," was the earnest reply. "Every time."

"An' git up in the gray dawn ter the sound of a hngle, an' not make any fuss 'cause ye didn't hev nothin' but hard-tack fur breakfast?"

"Course." "Well, I'm glad to hear it. Ef ye're willin' ter do all that, ye surely won't have no fault ter fin' 'bout gittin' up at six o'clock ter-morrow mornin' an' lightin' the fire, so's I kin cook ye some panekakes that wouldn't be despised by nobody." —Washington Star.

LAW FOR TAXING A BILLY-GOAT.

The newly appointed assessor in a Maine city was making up a tax assessment, and taxed the hilly-goat of a hard-working citizen. "Snre," said the latter, "where do you get the authority for that?"

Much talk ensued, and finally the assessor got the book of laws and read that all property bounding and abutting on both sides of the street should be taxed so and so. "Aud sure," said the assessor, "many's the time I've seen that same billy-goat o' yours a-boundin' and a-buttin' on both sides o' the street." —Lewiston Evening Journal.

INCONSIDERATE.

The tramp in New Jersey who timed his burglary to chill weather and compelled the owner of the house to elase him barefooted across stubble-fields that hurt his toes, while the said owner was arrayed only in a pistol and a night-shirt, was one of the most inconsiderate of his inconsiderate tribe. —Brooklyn Eagle.

A MATTER OF LANGUAGE.

"Johu," she said, rather sternly, "the coal-hin is empty."

"Yes," was the diseonsolate reply, "it's that way most of the time. It's never of use in an immediate emergency. I'm going to change its name and call it a coal-has-been." —Washington Star.

A BETTER ARRANGEMENT.

Huggius—"Hello, Kissam, had your hair cut?"

Kissam—"Yes, dear boy. I found a place where they cut your hair while you wait."

Huggius—"That's good. A barber-shop is usually a place where they cut some other man's hair while you wait." —Life.

THE MARK-DOWN.

"Man," she bitterly exclaimed, "is dominated by the almighty dollar."

"And woman," he rejoined with spirit, "by the almighty 99 cents."

In the meanwhile, Destiny was wondering which it would be. —Detroit Tribune.

TIME ENOUGH.

Railroad official—"You may not believe it, but this dining-car cost \$20,000."

Planetree—"How long has it been running?"

"Just a week." "Paid for itself yet?" —Life.

CONSUMPTION CURED.

An old physician, retired from practice, had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all Throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints. Having tested its wonderful curative powers in thousands of cases, and desiring to relieve human suffering, I will send free of charge to all who wish it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail, by addressing, with stamp, naming this paper, W. A. NOYES, 820 Powers' Block, Rochester, N. Y.

Mr. Lincoln was the greatest man this country has produced. He was mortal, and yearned, above all things, for the final approval of mankind. —Wm. D. Kelley.

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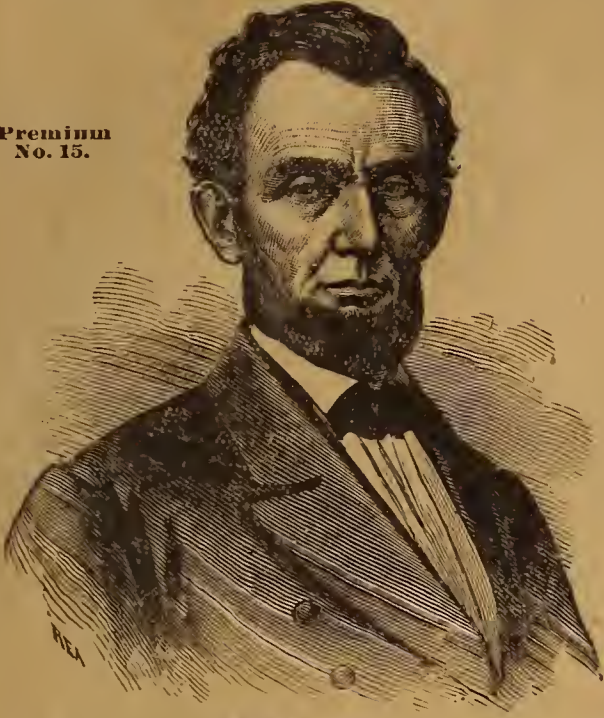
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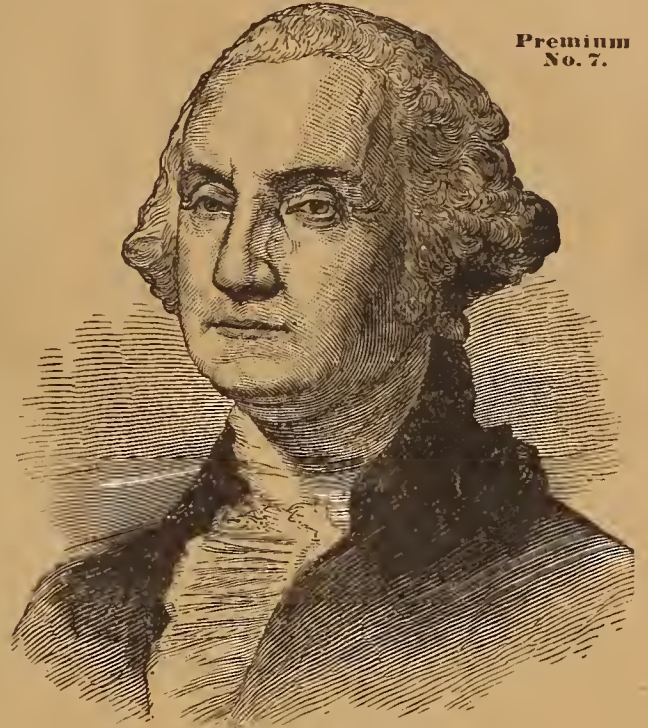
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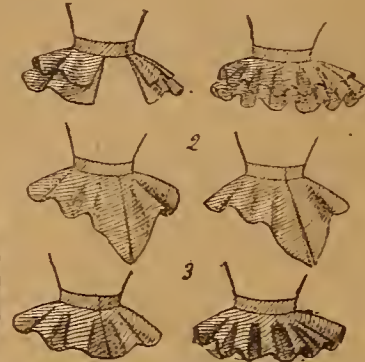
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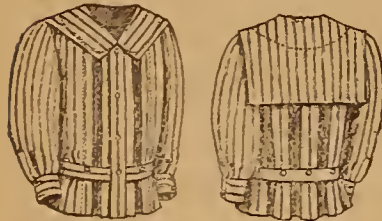
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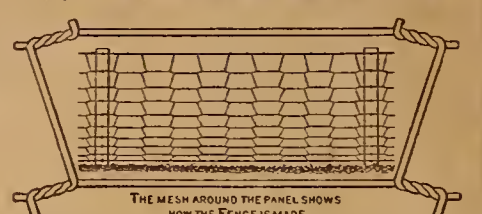
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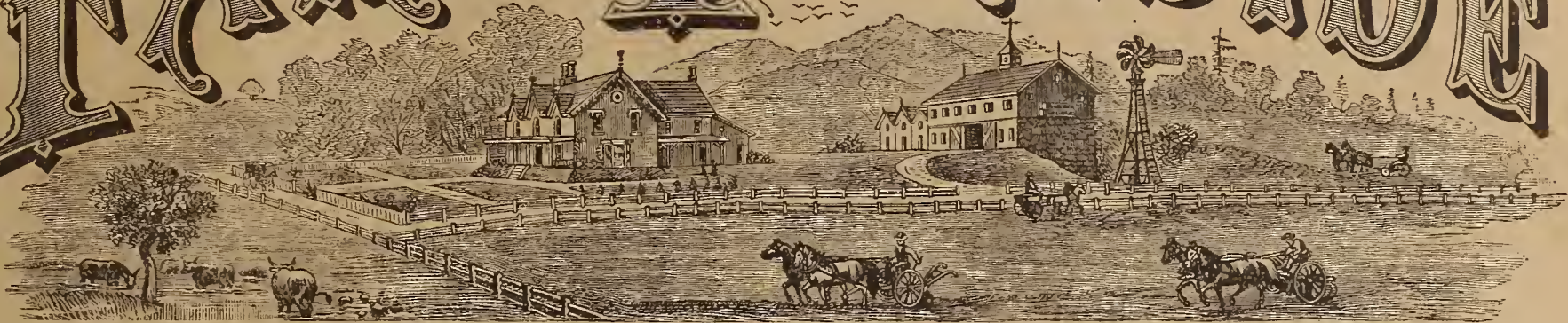
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MAY 15, 1896.

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Just before the Ohio legislature adjourned, the committee appointed to investigate the charges against the food and dairy commission submitted a unanimous report. The committee fully exonerated Dr. McNeal from all charges against him, and complimented him highly for his integrity and fearlessness. The committee criticized the action of some of his deputies and employees in entering into business relations with a person liable to prosecution under the law. In regard to an attorney employed by the commission who was charged with receiving \$5,000 bribe, the committee declared there was a preponderance of evidence against him, and recommended his dismissal, which has since been acted upon.

That portion of the report referring to Dr. McNeal and the pure-food law reads as follows: "We find the operation and effect of the pure-food laws have been beneficial to the people of the state of Ohio, in that the sale of many impure, adulterated and worthless articles have been prevented, and the use of labels has made it more difficult for dealers to impose upon their customers. Serious opposition to the enforcement of these laws, especially during the first years of their operation, was made by dealers, and only after protracted litigation and new legislation have the laws been sustained and construed so that they can be readily enforced.

"Dr. McNeal, the head of the state dairy and food department, has administered his office with the sole aim of properly enforcing the laws, and it is largely through his strict construction of the laws, and his personal integrity in the work of his department, that it has been made successful.

The complaints generally made against the department are, in fact, against the use of the discretionary powers of the commissioner in dealing with particular cases; and while some instances of seeming hardship have occurred, your committee is of the opinion that the commissioner has honestly and fearlessly performed his duties, and that any acts of discrimination for or against individuals were not known to or authorized by him."

THE filled-cheese bill is now before the Senate, and its friends are urged to make earnest effort to secure favorable action on it. Senator Redfield Proctor is chairman of the agricultural committee, which has the bill in charge, and communications and petitions on the subject may be addressed to him. The senators from each state should also hear from their constituents who desire early and favorable action on the bill, and the completion of the good work done by the House of Representatives.

Filled cheese is one of those contemptible food frauds that injure both consumers and producers. It has about ruined our export trade in cheese, and has restricted its consumption in this country. It cheats the consumer and deprives the producer of genuine cheese of his market. It is a source of great gain to a few unscrupulous food adulterators at the expense of the general public. It cannot be destroyed too soon.

In a speech on the bill before it passed the House, Congressman Dolliver correctly characterized filled cheese as an "admixture of skimmed milk and soap-grease." And he put it in the list of food frauds that will not be palmed off on consumers much longer. He says: "The world will not go on forever buying coffee-grains delicately molded out of blue mud. It will not go on buying tea that has been generously commingled with the dried leaves of the forest. It will not go on drinking wine that has been manufactured in a cellar without the intervention of grapes, nor those other and more penetrating beverages that have been placed in partnership with such a fatal assortment of explosive chemicals as to greatly facilitate the descent of our fellow-citizens, as the old negro preacher expressed it, 'down lubricated steps to the opaque profundity of damnation.'"

THERE will be a meeting of representatives of fruit-growers' associations in Chicago, May 20, 1896, for the purpose of organizing the National Fruit-growers' Union. The objects of the national association, as set forth in the call for the meeting, are, in part, as follows: The time has come when it seems imperative that the fruit-grower, to be financially successful, must identify himself with some plan in the disposition of his fruit that will enable him to know what the markets of the world demand, and when and how they want it. Some plan of co-operation is the only means by which intelligent methods can be adopted and sustained. What is co-operation? If twenty fruit-growers find that by working together they can secure better results in marketing their product,

and form a local union among themselves, it is much more necessary that twenty such local unions that may have formed themselves together in co-operative work, each for the same purpose, should thus unite into a larger and broader field. If there are twenty of these larger unions, it is much more important that they form themselves into one large association. The same reason that necessitates the formation of the first union of twenty individuals demands the formation of the several unions into a still larger one.

The existence of a national union would immediately strengthen all of the many fruit associations in the United States. Instead of each section being in the dark as to the shipments of competing sections, a system could easily be perfected by which each section would keep every other section (using the same markets at the same time) fully advised as to the quantity and kinds of fruit en route to all markets, thereby enabling competing sections to so direct their shipments as to not only prevent the disastrous glut now so frequent, but also to make a more equal distribution of the fruits to the many distributing cities. It would enable the growers to secure fair and honest treatment through agents to whom they trust the disposal of their fruit. It would enable the growers to plant intelligently the most profitable fruit for each section, and to know the demand for and the supply of the different fruits. It would enable the fruit-growers of the whole country to better existing transportation conditions, and to mutually assist each section in correcting unjust discriminations on the part of the common carrier.

If by some such plan the fruit-growers of the country can secure fair transportation rates, and furnish a steady supply of their products to the markets at uniform and fair prices, they would benefit the consumers as much as themselves, and the consumption of fruit would increase enormously.

THE events of the past four months in the Transvaal republic will make some notable pages in the history of the world. The real purpose of Jameson's raid has been finally disclosed, to England's shame. Five leaders of the so-called reform committee of Johannesburg plead guilty to the charge of treason, and were sentenced to death. President Kruger has commuted the sentence, and made public the proofs of the conspiracy against his country by the British authorities in South Africa. Public sentiment in England has turned from the support of her filibustering colonists to admiration for the grand old statesman of South Africa who is president of the brave little republic.

Commenting on the latest development of Transvaal affairs, the New York Sun says: "The facts just revealed by the head Boer, Kruger, concerning the connection between the British company chartered to exploit that district and the Jameson raiders were predestined. When an English company, directed by a forcible adventurer like Mr. Cecil Rhodes, and stimulated by the opportunities of dazzling surroundings,

finds the road to expansion barred by savages like the Matabeles, it crushes them in the name of humanity and civilization. When it meets the Boers, a civilized people of nineteenth-century political organization, and proven able to hold their lands against any open foe, it makes a plot to overthrow them by a combined raid from without and insurrection from within, in the name of revolution and liberty.

"Jameson's expedition, or rather, the South Africa Company's expedition, was one of the most stupendous robber raids in history. All the sheep and cattle stealing forays which were for years the chief occupation of the original nobility of Great Britain, would be put now on a par with a pickpocket's 'prig' of a handkerchief, or the 'swipe' of a pocket-book, compared to the grand game set up against the Boers. If ambition and not success is to decide, Mr. Rhodes and his allies will have to be listed in the great catalogue of truly gorgeous marauders like Genghis Khan and Timour the Tartar. These British adventurers arranged to capture the unlimited gold-fields of a settled and civilized people. Their plan wasn't to swoop down in the night and run off with what they might snatch, but to enter upon the land and possess it. So bewildering were the possibilities of their enterprise that even after Jameson had been whipped without glory and reduced to tears, Mr. Alfred Austin, England's beautiful poet laureate, still sang enthusiastically:

"I would rather have had that foray
Than the crushings of all the Rand.

"The South Africa Company meant to have the foray and the Rand, too. Perhaps our old friends the marines will believe that foreknowledge of the raid among important Englishmen stopped with Mr. Rhodes, and didn't go higher up, to Mr. Chamberlain and to others connected with the British Foreign Office, supposing that venerable institution, the 'Office' itself, to have been innocent.

"No very strong ability to compare is needed to know that what has been attempted in South Africa by these sanctioning agents of British commerce has been done by their counterparts in Venezuela, where gold is, but no Boers are. Because of the absence of people like the Boers, able to provide for arbitration by themselves, the tract of Venezuela now held by Great Britain against Venezuela's protest and against former British statesmen's agreements, has become in Lord Salisbury's eyes the sacred possession of British settlers, concerning whose freshly acquired title the British government insolently refuses to arbitrate.

"A Jameson with his raiders by his side, and a poet laureate at home, weren't required to do the job down in South America, but there must have been some guiding spirit or spirits corresponding to the South Africa Company's director, Mr. Cecil Rhodes. Who was he? Or who were they? Will Mr. Joseph Chamberlain tell us, if he knows; or find out, if he happens not to know, and tell us?"

FARM AND FIRESIDE

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FARM AND FIRESIDE,

Springfield, Ohio.

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We believe that all the advertisements in this paper are from reliable firms or business men, and do not intentionally or knowingly insert advertisements from any but reliable parties; if subscribers find any of them to be otherwise we should be glad to know it. Always mention this paper when answering advertisements, as advertisers often have different things advertised in several papers.

In nurseries two methods of propagating the apple by grafting are in use. One is piece-root grafting, where the scion is grafted on a short piece of root from a young seedling tree. From two to four trees are made from a single root. The other method is known as whole-root or crown grafting. By this method the scion is grafted just above the collar of the seedling tree, near the surface of the ground. Only one tree is made from each seedling by crown-grafting, and it has all the roots of the young tree used as a stock.

There are two important differences between these methods, to which we now wish to call attention. First, in piece-root grafting, the scion, which in time will form the fruit-tree, starts from a single short piece of root, from which a complete set of roots must be formed. In crown-grafting, the scion starts with a whole set of roots. Second, in piece-root grafting the hard wood of the scion is joined to the soft wood of the root and forms a defective union. In crown-grafting, the hard wood of the scion is joined to the hard wood of the stock, and if the work is properly done, always forms a perfect union.

The accompanying illustrations have been reproduced from nature. The young apple-trees were photographed on wood, and the cuts carefully engraved. The specimens are the same age, and the relative size and vigor of both trunk and roots are correctly shown in the illustrations. Fig. 1 shows crown, or whole-root, grafting. Fig. 2 shows piece-root grafting. In Fig. 1 at C, the union of the scion and the stock, the bark is smooth and sound. At D, in the cross-section through the center of the tree, the union of the hard wood of the scion and the hard wood of the stock is perfect; there is not a defect in it, although the grain of the wood shows the outlines of the graft. In Fig. 2 at A, the point of union, the bark is good, and the young tree is apparently sound and thrifty; B, in the cross-section cut, shows clearly the saddle-graft of the scion on the piece of root. The hard wood of the scion has formed a defective union with the soft wood of the root, and

both are decayed where they are joined together. A and B are specimens of merchantable trees sent out from nurseries in countless thousands. From outside appearances they are sound and healthy, but are rotten at the heart. Set out in orchards and cared for, they will grow and may bear fruit, but the decay gradually spreads, and by the time the tree is of full bearing age, if not before, it breaks down and dies.

F in Fig. 2 shows a diseased condition at the union, which is frequently seen in piece-root grafts. The callous which forms over the cuts in the process of grafting has made an abnormal growth, and decay is already far advanced. E illustrates a poor piece of work; only a small portion of the bark of the scion is united to the root, and there is a broad line of decay between scion and stock. At the end of the scion a few small, weak rootlets formed, which assisted the tree in making a feeble growth. E and F are not merchantable specimens, but they illustrate some of the results of piece-root grafting, which takes place in the nursery instead of the orchard.

American orchards are full of "old-young" apple-trees, and the farmer wonders why the trees he planted out do not live one third or one half as long as those planted out by his grandfather, who lived before piece-root grafting was a common practice.

There is one branch of agriculture that has been profitable during the general depression of the past few years. That is practical, progressive dairying. It would not be true to say that all dairying has been profitable. The scrub cow does not and never will pay her way. There is much needed improvement in the dairy cattle kept by the average farmer, and there is much needed improvement in the methods of dairying followed by him. But the opportunity for a profitable business has existed right along during the general agricultural depression. Good butter has brought good prices when wheat, cotton and many other farm products were selling for unusually low prices. In fact, the prices for good butter have been remarkably high during this period when compared with the prices of most other farm products. When the best wheat-grower and the best cotton-planter found their business unprofitable on account of low prices, the best dairyman was doing a profitable business, and experienced no "hard times." The progressive man, worthy of the name of dairyman, has been taking advantage of the

and cheap as they are now, so that in many cases we give them away or feed them to the full limit that it is safe to do (all in order to avoid the necessity of having to throw them away), the very best use we can make of our potatoes is to plant them without much or any cutting.

How Much Seed? I have always been an advocate of heavy seeding in potato-growing, and often I have met with determined opposition. Gradually, the experimenters and the general planters have come over to my



FIG. 2.

standpoint. In the last issue of the *Rural New-Yorker* I find the following paragraph:

"We would advise our friends not to plant single-eye potato-seeds. This has been advocated by several potato specialists as more economical than larger seed-pieces. Potato-growing, in a purely experimental way, has been one of our specialties for many (twenty) years, and if we have learned anything from our work, it has been that single-eye seed do not pay at all. Two-eye pieces from large tubers with lots of flesh are the smallest we care to use. It is well known—it has been proved time and again—that whole potatoes give the largest yields. It has also been shown that whole potatoes for seed, if the tubers have many eyes, yield a maximum of small tubers. This, however, may be remedied by planting further apart. Now that seed-potatoes were never lower in price, we may well be liberal in the size of the seed used. With our present assumed knowledge, were we growing potatoes for the largest possible yield at the least expense, we would use medium-sized tubers, cut in half lengthwise, so that each

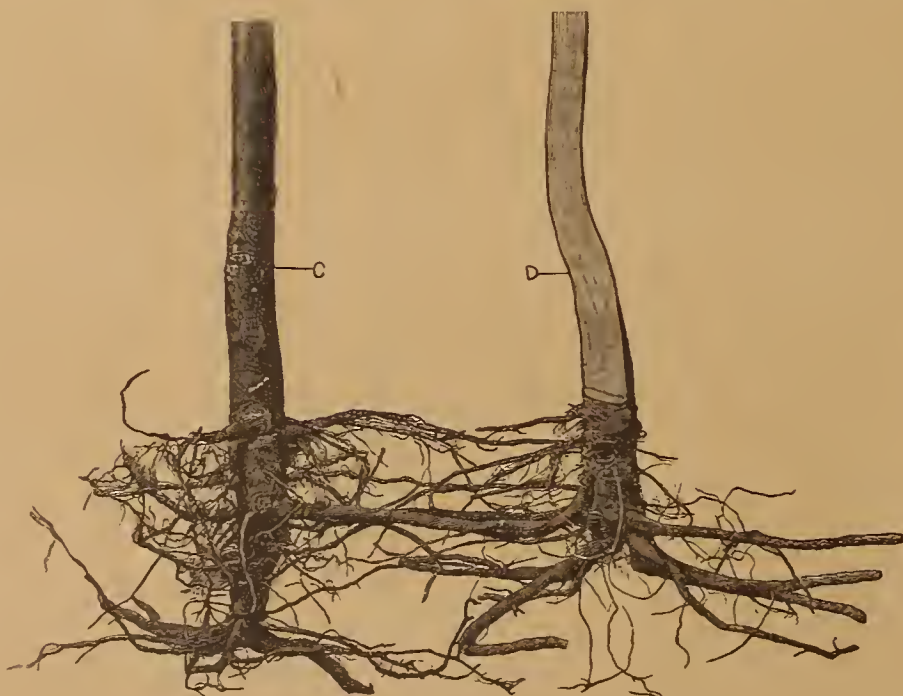


FIG. 1.

opportunity. The outlook for dairying is certainly very good. With the improvement in all other lines of business, it can hardly fail to be better than it is now, and it has the advantage in the start.

NOTES AND COMMENTS.

Potato-Planting. As the season of potato-planting comes closer, I wish to repeat a word of warning against single-eye planting. The only advantage of using single eyes is in saving seed, and usually it is done at a big loss in the crop. When potatoes are as abundant

half would have just a half of the seed-end as well as the stem-end eyes."

I quote this so fully because it tells so exactly my experience and my practice for years. The danger of getting very small potatoes from uncut seed is not as great as one might suppose (except with a few varieties like the Freeman), provided the seed is well preserved. Potatoes that have been kept in large bulk until the whole mass is bound together by long sprouts, are hardly fit for seed, and especially not

for planting whole, for they are liable to produce an undue number of weakly sprouts, and therefore numerous and small tubers, while well-preserved seed will produce only a moderate number of strong sprouts, most of the eyes remaining dormant.

In commenting on what I said on this subject in an earlier issue of *FARM AND FIRESIDE*, my friend Mr. A. I. Root tells the following incident: "Some years ago, when potatoes were a drug in the market, I had some very nice ones that I could neither sell nor give away. In a fit of desperation I planted them, making rows about three feet apart, putting a large whole potato every foot or fifteen inches in the row. I think I must have planted toward forty bushels on an acre; but I was rewarded by getting toward 300 or 400 bushels. The only difficulty was that the enormous lot of tubers burst the ground open so as to let in the sun, making a good many of them green. This hurt them for table use, but it did not injure them for seed. The next year there was a scarcity, and I got about \$1 a bushel for every one of them. Now, do not throw your potatoes away because you cannot sell them. Plant them on some good ground as above, and they may bring a better price in the fall. By the way, when I want to raise potatoes very early, I have always had better success with whole potatoes put in something as above."

Preparing My Early Ohio I invariably plant whole, Seed-potatoes. or the very largest ones cut in halves. I also always expose them to the light (under the greenhouse benches) for weeks before I plant them. This is indeed the very best preparation which we can give to our seed-potatoes, and it would be well to treat them all that way. We can lay them out on a dry floor, in thin layers, in some light and airy room. If they shrivel, it does not matter much. We want them to make a short, stubby growth of sprouts, and when we plant them in that condition, they will speedily start and make a strong growth.

Government The free-seed distribution by the government is again in full blast. I myself do not want any of these seeds, but there is no reason why our readers should not have their share of them, so long as the seeds are distributed, anyway. These seeds have always been distributed hit-or-miss fashion. They were common, and in many cases poor seeds at best, and the good gardener has hesitated to put any reliance on them. City and town politicians have received the bulk, and a large number of the packages sent out have never been planted, and a large proportion of those planted have never given a satisfactory crop. Radical changes in the whole business have been inaugurated. Possibly the seeds will be better and the varieties more suitable. A Philadelphia seed-house furnishes the whole lot of ten million packages of vegetable-seeds, and another house a large number of flower-seeds, and as both houses are responsible, we may expect to get seeds that at least will grow and be reasonably pure, notwithstanding the fact that these dealers receive only about one half of one cent per packet for them. We may well infer, however, that these seeds (being furnished at such trifling cost) cannot be very scarce or costly to begin with. I do not see how any seed-house can sell any but the most common and most cheaply grown seeds at such a ridiculous figure. Then see the difference between this and the price that we are asked to pay to seedsmen for seeds! You can take either horn of the dilemma. Seeds furnished at half a cent a full package cannot be very valuable, or the seedsmen have been making the enormous profits of the drug trade on the seeds we have been buying. But let our readers apply to their congressman, or to the Department, at Washington, for their legitimate share of the seeds, anyway.

T. GREINER.

Buckwheat The Pennsylvania experiment station has Middlings. fed this cheap by-product to cows, with very satisfactory results. It is not fed alone, but mixed with corn-and-cob meal and lindseed-meal in the following proportions by weight: Buckwheat middlings, 3 parts; corn-and-cob meal, 2½ parts; new-process oil-meal, 1½ parts.

Our Farm.

FARM THEORY AND PRACTICE.

INDIAN CORN.—The Kansas state board of agriculture has issued a very valuable report in which corn and sorghum occupy a leading place. The cultivation, handling, utilization, cost and value of corn are discussed in a practical and helpful way. The results of many experiments at our stations, and the experience of some successful farmers, are summed up for the benefit of the producers of America's leading crop. I have attempted to summarize some of the most striking points for FARM AND FIRESIDE readers.

THE COLOR OF THE GRAIN.—Twelve hundred and sixty-seven tests with four hundred and ninety varieties have been made, to determine the relative productiveness of white and yellow varieties, and the average yield of the white has been two and one half bushels in excess of the yellow. At six of the seven stations making these tests some one white variety has given the best yield, and of the thirty-five varieties named as giving the best yields at the different stations, twenty-four are white and only seven are yellow. Of course, many white varieties are better than many yellow ones, but on the average white is the most prolific. As to feeding value, the color makes no difference. Chemical analysis shows no difference, and such authorities as Professor Plumb, Professor Morrow and others are agreed that color does not denote any difference, though some good feeders hold an opposite view

NUMBER OF PLANTS PER ACRE.—The results of many experiments in our leading corn states indicate that rather heavy seeding is the best. The Illinois station obtains its largest yields from ten to twelve thousand plants per acre. As there are 3,240 hills on an acre when checked three feet eight inches, this means three to four stalks in each hill. The Indiana station finds a falling off in yield when stalks stand more than fourteen inches apart in drilled rows, the yield being the same for any distance between eleven and fourteen inches. This is also equivalent to three or four stalks in hills the usual distance apart. Our experimenters have found little or no difference in yield between drilling and checking when the same number of plants stood upon an acre. The drill system permits the grower to get his crop planted earlier in the season, and does well in a clean soil, while checking is always advisable for weedy land.

DEPTH OF PLANTING.—The depth of planting of most seed depends upon the character of the soil and the season, but our stations find the rule to be that corn should be planted rather shallow. The Ohio experiments on this point are very thorough, and the station obtained its best results from a depth of only one inch. The same is true of the Illinois station. Professor Plumb says on this point: "On warm, light soil, the seed should be planted deeper than where it is cold and retentive. The process of vegetation is slower on cold than warm land, as the temperature is lower at the same depth below the surface. In summer, if dryness occurs, the greater depth of planting on the light soil is beneficial to the growing crop. Generally speaking, the writer believes one and a half inches a satisfactory depth to plant the seed."

CULTIVATION.—Notwithstanding all that has been said in favor of frequent surface cultivation of corn, a vast number of station experiments do not show any material gain or any profit from frequent cultivation. At the Kansas station, three years' trials show that a cultivation every two weeks was as good as one every three or four days. The Illinois station obtained a very slight increase in yield by frequent cultivations. Professor Plumb says that he plans for only five cultivations in the season. But there is gain from shallow workings as compared with the deep. Root-pruning has been found distinctly detrimental. Of course, sufficient cultivation must be given to prevent weed growth, as weeds pump out the moisture the corn-plants need, but they may be destroyed by cultivations not over two inches deep, and

these do not injure the corn-roots. In 1893 Professor Morrow found that root-pruning decreased the yield of corn at the station twenty-two bushels per acre.

SMUT.—There is a general impression that smut, when eaten, is injurious to live stock. Experiments to determine this matter have not been numerous. Professor Morrow fed a steer two bushels of smut, and it did not injure it. In another case two healthy cows were fed on smut, both wet and dry. "The wet did no harm, but a loss in weight followed the eating of the dry." On this point Professor Henry, who is a well-known authority in the matter of stock-feeding, says: "It is barely possible that the smut-fungus at times may become virulent and dangerous to the health of the animal, but surely its prevalence shows that such a change in character is very rare. I have been frequently consulted by parties asking whether they dare feed smutted grain, and have always recommended its use in limited quantities, urging that the animals eating such injured grain be closely watched, and the feed changed if evil symptoms appear. I have always asked for reports if anything wrong happened, and have never yet received an unfavorable report." From all this it would appear that there need be no particular anxiety on the score of some smutted ears in the feeding of corn.

WHEN SHOULD CORN BE CUT?—The proper time to cut corn for the grain, and the proper time to cut in order to have the best fodder, are not identical. The Iowa station has found that the highest yield of corn and the highest feeding value of grain per acre are not obtained until the ears are well hardened and the blades are about half dry. It found that the stover reaches its highest feeding value and greatest yield when the ears are well dented and the blades are just beginning to dry. The station concludes that the highest feeding value of both stover and grain is obtained when the corn is cut almost immediately after the stover is at its best. Professor Curtiss adds: "After the corn-plant is fully ripened, the deterioration of the stover sets in early and progresses very rapidly, and corn-stalks lose half their dry matter and more than half of their feeding value by standing in the field sixty days after maturity is reached." As well-cured corn fodder is as valuable as timothy hay for feeding, it should be put into shocks as soon as the grain is well dented; and after husking, it should be protected from the bad weather either by being put into mow, stack or large shocks securely bonded.

DAVID.

CANAIGRE AS AN ECONOMIC PLANT.

With the rapid increase in our population, there has come an increased demand for all substances needed by the various manufacturing industries of our country. This is notably true in regard to the tanning industry. In 1879 the Agricultural Department made an energetic and by no means unsuccessful effort to ascertain the value of different plants as to their value for tanning purposes. Of these, canaigre, a kind of dock, having a bulbous root, which was found to be growing wild in great abundance along the Rio Grande, thence northwardly over quite a large portion of western Texas, Arizona, New Mexico and southern California, was, by chemical analysis, found to contain about thirty per cent of tannic acid. This acid is known as rheo tannic, and is identical with that existing in rhubarb.

As soon as the commercial value of this plant for tanning purposes was made known, five-year contracts with farmers were entered into for growing it extensively in Arizona and New Mexico. The export demand for it is increasing rapidly. The present method of preparing the root is to dry it, but in the near future extract factories are likely to be built, so that the product will be so condensed as to obviate much of the cost of transportation.

The yield per acre is variously estimated at six to eight tons of green roots, which will make, when dried, from two to two and one half tons of the marketable product, which finds ready sale at about \$40 per ton.

As to soil, unless somewhat sandy and well irrigated, it should be deeply plowed and well pulverized. The usual method of planting the roots is in rows thirty inches apart and nine inches apart in the row. This requires about a ton of the roots to plant an acre. A potato-planter can be

used in planting and covering them, and the potato-digger in harvesting the crop. The cost of growing the crop per acre in Arizona, where irrigation is required, and the water rental is \$1.50 per acre, is estimated at \$16.50.

The method of cultivation is much like that of the potato. In fact, the bulbs (roots) are produced in clusters, like some kinds of sweet potatoes, and some of the clusters weigh several pounds. The canaigre, like other plants of the dock family, grows at a comparatively low temperature, and in favorable localities for its culture, from October or November until April.

Since the disastrous freeze in Florida, of December, 1894, which so greatly damaged the orange-growing interests of the state, some enterprising farmers of Orange county, in the central part of the state, have procured a large quantity of canaigre-roots from New Mexico, with the view of determining whether the sandy soils of Florida are or are not well adapted to its culture.



In this connection it may be well to add that when in a young state the leaves are greedily eaten by cattle, and are also frequently used as a pot-herb, or greens, for table use. J. W., JR.

"SOMETHING NOW."

The man was wise who said, "Give me the training of the boys of this generation, and I will be responsible for the men of the next generation." Many agricultural orators and writers, interested, presumably, in the farmer, have much to say on the future of agriculture, and declare that the growth or decline of agriculture depends upon wise legislation, state and national. While legislation, wise or otherwise, may help or hinder, yet agriculture may live, aye, and may thrive without it. The future of agriculture depends not on the lawmakers, not on import duties or export bounties, but upon the men who will be directly connected with agriculture; namely, the boys of this generation. They are to be the custodians, the prosecutors, the advocates of agriculture—the agriculture of the next thirty or fifty years.

The institute season throughout the country has closed for the year—the institute year. During the fall and winter lecturers have traveled up and down and sowed broadcast good seed; and if a fraction of it has taken root, the advocates of institutes must be encouraged. Every crop known to the farmer and the best method of cultivating and harvesting has been discussed exhaustively, and with profit to all who have had a hand in it.

But in all this discussion and rehearsing of methods of planting and cultivating, what has been said in regard to the most important factor on any farm where such a factor is; namely, the farmer's boy? He is to agriculture what Atlas is to the world—it rests on his shoulders. Occasionally a speaker appears who is interested in the farmer's boy, and he becomes the boy's advocate. But generally, institutes give him no place on the lecture calendar. It is true, however, that the subject of the farmer's boy is a difficult one to handle without giving offense. Naturally, the farmer believes that he is competent to deal with his boy without help. Some have yielded to argument, made concessions to their boys, and thus saved them for agriculture. The city merchant is looking forward to

the time when his son will succeed him. The farmer is looking forward to the same result, but his method of keeping the boy interested in the business until the time of partnership comes is different from the merchant's. The latter begins to build on the boy's self-interest as soon as the boy is old enough to appreciate it. He puts money into his hands perhaps long before he is worth much to the business, knowing that it is money well invested.

Some farmers begin in the same way, and always win; that is to say, the boys stay on the farm. Others tell their boys that they must work until twenty-one for board and clothing, and then—and then they can have regular wages or an interest in the farm. Too late! The ambitious boy of this age will not wait until he is twenty-one to begin to get on by himself. "Slow and sure" is a good motto, but we may be a little faster than the snail, and be sure.

With others, I went to a farm to see the owner's fine stock. During the visit we learned that the farmer expected to be succeeded by his sons, who, he said, had become good farmers. When I saw the boys, perhaps fifteen and seventeen years of age, I had doubts about their succeeding their father, unless his "management" changed. The most interesting feature on a farm to me is the boy, if there be a boy there. I know from long experience what a boy's life on a farm is, and I have studied the farm boy for twenty-five years.

The farmer's sons referred to were stalwart, handsome boys, of whom any farmer might be proud, yet their faces told the story, as easy to read as print; they were downcast, and a discontented spirit was within. When we went to dinner, the boys were not allowed to sit at the table with the guests, although there was room enough. That was two years ago. The boys are both in the city, and will never return to the farm, and the farmer has only himself to blame. A little thing, apparently unimportant, may have great influence upon minds ready to make much of it.

Generally, the boys who leave the farm are censured, but if the facts were known it might appear in the majority of cases that it was more creditable to the boys to go than to remain. As I have said, the age of twenty-one is too far away for ambitious youth; he cannot wait until that age comes before he puts a dollar into his pocket.

A farmer told his boy, his only child and dependence, then eighteen, "You'll have this farm some time, if you'll wait; it will all be yours." "But I can't wait," said the boy. "I want something now, and if I can't get it on this farm, I must get it somewhere else."

That is the cry of the farmer's boy everywhere to-day—"something now!"—and the farmer must heed or the farm loses the boy. If a boy at sixteen be offered the wealth of the Indies when he is twenty-one, or a dollar a day now, he will accept the latter, if in the meantime he must work for board, clothing and no pocket-money.

I have told the story in the FARM AND FIRESIDE of the boy who was induced to stay on the farm for ten cents a day, paid every Saturday night. Little as it was, it gave that boy new interest in life, and was sufficient to keep him. "Something now!" Not when the boy is twenty-one; not when his parents are gone, and the farm comes to him, an old man, perhaps, but now—"something now." GEORGE APPLETON.

Blood

That is impure is a constant source of danger. Circulating as it does to every part of the system, carrying nutriment to the nerves, muscles and the great vital organs of the body, it is absolutely necessary that the blood should be pure if good health is to be expected. The great secret of the cures by Hood's Sarsaparilla lies in the fact that the blood is

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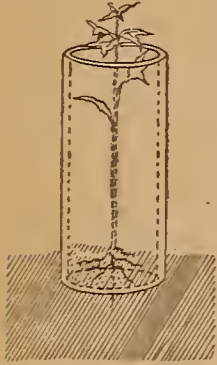
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Our Farm.

NOTES FROM GARDEN AND FIELD.

ONION-SETS.—A reader in North Carolina asks me how to prepare land for raising onion-sets, when and what variety to sow, etc. So far as the preparation of the land and the cultivation of the crop is concerned, the same directions which apply in my own locality are good for every other place. We want a clean, sandy loam, and make it quite rich, but avoiding manures that contain weed-seeds. Weeds are the greatest enemy of the crop, and the cause of the greatest expense in raising it. Plow and harrow as you would for any other garden crop. Yellow Dutch makes a good yellow, and Silverskin a good white set. Here we sow as early in spring as the ground can be gotten in best condition for sowing. We aim to make the crop before the dry spell in July and August. Sow about forty or more pounds of seed per acre, using a drill or sowing by hand. We make our rows a foot apart, which is very convenient for cultivation. Just as soon as the onions are up so we can see the rows, we go over the patch with the Planet Jr. hand wheel-hoe. Hand-weeding follows, and then operations are repeated as often as may be needed. The wheel-hoe should be used very freely. The plants stand so thickly that they cannot make large bulbs, and we really do not want them larger than marbles.



When the tops begin to die down, we may harvest the crop by scooping the plants up with a large hand-trowel, and throwing them into a sieve to free them from the sandy soil. Then the bulbs are allowed to cure, and when perfectly dry, may be cleaned again by running through a fanning-mill, etc. The great trouble with sets is the wintering, and not everybody succeeds in this without experience. The best way would be to sell the crop in the fall to some dealer who has the facilities for wintering sets.

Everything in the onion line has been a drug on the market for some time. Many growers are ready to give up. But it is a long lane that has no turn. I think we have about reached the turning-point. There will be less planting this year, and probably a better demand for the lighter supply. The sales of onion-seed (as reported by seedsmen this spring) have been lighter than for many years. Altogether, I plant onions with greater confidence this year than ever before.

DELICATESSE ONION.—One of our seedsmen offers a new variety of onion, the rose-colored Delicatess, as "the greatest novelty," "of greatest weight and finest quality," and, in fact, "the most beautiful of all onions, the largest, finest, best and most productive." Now, I don't believe all this, and I have my doubts whether the seedsman in question, when he published his catalogue, was sure that he believed it. Two years ago I received seeds of a "Delicatess onion" from a Hungarian seedsman, and in exchange forwarded to him some Prizetaker seed. This seedsman wrote me very enthusiastically over the Prizetaker afterward, while I grew his "Delicatess" only one season, and then discarded it as very much inferior to the Prizetaker. Of course, I do not know whether this Delicatess and this new introduction are the same thing or not.

SETTING TOMATO-PLANTS.—We usually wait until about the very end of May before setting many tomato-plants in open ground. Usually, we have some frosty nights about that time, and, of course, we do not care to risk our fine large plants. But possibly we might set them a little earlier in the season, and surround each plant with a large tile, as shown in the accompanying illustration. The tile may be sunk a few inches into the ground. It will be a sure protection from cut-worms, too, and the plan may be worth the trial.

GROWING AND SAVING SEEDS.—A reader in Creston, Ohio, asks me a number of questions about growing onion and tomato seeds. One of these questions has been asked quite often; namely, whether seed of the Prizetaker and Gibraltar onions can be grown successfully in the northern and northeastern states. I have several times planted selected specimens in the fall, but they invariably failed to grow in spring. I think, to grow seed we will have to carry the bulbs over winter and plant in spring. I do not think that there is any great difficulty in the way. Whoever can grow seed of any of our ordinary varieties can raise seed of Prizetaker and Gibraltar in the same way, and nearly as easily. Prizetaker seed is grown largely in California. How to keep tomato-seeds strictly pure, where more than one variety is grown, is yet a problem with me. I have saved seeds of the newer varieties for my own planting for many years, and usually, but not always, had them come true, although many varieties were grown in the same patch. I have an idea that if a variety, especially where grown in large patches, is at least at a little distance—say a few rods—from other sorts, we can save and plant seed of it with a reasonable assurance of its purity; seed that will be good enough for practical purposes. But if we wish to be able to guarantee the absolute purity of the seed, I would not want another variety within a hundred rods. The wind is probably the agent which effects cross-fertilization in tomatoes wherever it takes place naturally.

T. GREINER.

Orchard and Small Fruits.

CONDUCTED BY SAMUEL B. GREEN.

CROSS-FERTILIZATION OF PLANTS.

This is a very important question. Mr. C. thinks it is not worth while to raise seedlings. I will admit that with some fruits it would not be profitable, but with the apple it is different. A variety that has once been crossed will vary to show that crossing for many generations. With tomatoes I have found it to be surprisingly true that we will continue to get variations. I planted the seed of scarlet tomato, but I found in two generations that the fruit was all scarlet, but in the third generation there was the yellow tomato; it was the first time the yellow had appeared. Variations will appear through several generations. Suppose we plant the seed of the Duchess apple; if that has been crossed we shall get variations. The probability is that a majority of the seedlings will imitate the parent. This was shown in Mr. Freeborn's experiments. I think it is an excellent thing to take time to grow seedlings. If we have patience to wait, crosses are all right.—Prof. Goff, in Wisconsin Horticultural Report.

INQUIRIES ANSWERED

BY SAMUEL B. GREEN.

Cherry-trees.—J. F. W. Practically, all the cherry-trees that are sold are budded or grafted on seedling Mahaleb or Mazzard roots. These seedling cherries are worthless for fruit, but they make good stocks. When such trees are planted out, the union of the scion and stock is often put above ground. In such a case it is evident that all sprouts that come from the roots or stem below ground would be of the same kind; that is, either Mazzard or Mahaleb. But if the trees are planted deep, so that the union of scion and stock is below ground, roots and sprouts will often be sent out from the scion, in which case such sprouts will be true to the variety planted, and may be safely used. The foliage of the Mahaleb and Mazzard stock cherries are so different from that of any of our cultivated cherries, that there is no danger of an observing person mistaking either one of them for any of the cultivated sorts. So that while the statement you quote is practically correct, it is not absolutely true. It is the experience of the best European horticulturists that in severe situations cherries, and many other fruit-trees, are harder when grown from sprouts, so that they are on their roots, than when worked on other roots. In the best fruit regions this point is not so important. In parts of Russia Morello cherries are grown on their own roots in the form of bushes, which are trimmed back occasionally in much the same way that we practise cutting back currant-bushes, and renewing them by sprouts from the roots when the old wood becomes barren or injured by the cold.

Pear Near Walnut Trees—Renewing Orchards.—G. C. S., Maccdonla, Mo. Pear-trees are liable to suffer if grown near walnut-trees, since the walnut-trees are apt to shade them too much, and to take a good deal of the water and manure out of the soil that the pear needs, but otherwise there is no special objection to having them growing near together.—There is no great objection to setting a young orchard where an old one has been cut out, provided the land is naturally good, and is first well manured; but if the land is rather poor I would rather not do it, and should not do it, anyway, until I had got it into the best condition by manure and good cultivation. In writing this I assume that the old orchard was not infested with woolly-aphis. If it was so infested, I would not plant fruit-trees or other fruit crop on it for two or three years.

A NEW Botanical Discovery

Which Will Prove a Blessing To Humanity.

THE WONDERFUL KAVA-KAVA SHRUB.



The Kava-Kava Shrub (*Piper Methysticum*.)

Of Special Interest to all Sufferers from Kidney or Bladder Disorders, Bright's Disease, Dropsy, Rheumatism, Pain in Back, Female Complaints, and Irregularities, Blood Impurities, and other maladies caused by improper action of the Kidneys and Urinary Organs.

A Free Gift of Great Value to You.

A short time ago our readers were made aware of a valuable new botanical discovery, that of the Kava-Kava Shrub, or as botanists call it, *piper methysticum*, found on the banks of the Ganges river in East India. From a medical standpoint this is perhaps the most important discovery of the century. The use of the Kava-Kava Shrub, like other valuable medical substances, opium and quinine, was first observed by Christian missionaries among the natives as a sovereign remedy for Kidney diseases. Speaking of the use of the Kava-Kava Shrub by the natives of India, Dr. Archibald Hodgson, the great authority on these diseases says:

"Intense heat and moisture of this tropical climate acting upon the decaying vegetation renders these low grounds on the Ganges the most unhealthy districts found anywhere. Jungle fevers and miasma assail the system, and even the most robust constitutions yield to the deadly climatic influences. The blood becomes deranged and the Urine is thick and dark-colored and loaded with the products of disease, which the Kidneys are vainly endeavoring to excrete from the system. Under these conditions the other organs become affected, and life hangs in the balance. Then when all the remedies of modern medical science fail, the only hope and harbor of safety are found in the prompt use of Kava-Kava shrub. A decoction of this wonderful botanical growth relieves the Kidneys and enables them to carry off the diseased products from the Blood. The Urine becomes clearer, the fever abates and the intense suffering and nausea are alleviated. Recovery sets in and the patient slowly returns to health."

Of all the diseases that afflict mankind, Diseases of the Kidneys are the most fatal and dangerous, and this being the case, it is but natural that the discovery of the Kava-Kava Shrub—Nature's Positive Specific Cure for Diseases of the Kidneys—is welcomed as a gift to suffering humanity.

Alkavis, which is the medical compound of the Kava-Kava shrub, is endorsed by the Hospitals and Physicians of Europe as a sure Specific Cure for Kidney and Bladder Diseases, Diabetes, Bright's Disease, Brick-Dust deposits, Rheumatism, Liver Disease, Female Complaints, pain in back, and all diseases caused by impurities of the Blood, due to defective action of the Kidneys.

Rev. W. B. Moore, D.D., of Washington, D. C., editor of the "Religious World," writes of the wonderful curative effects of Alkavis: "For several years I was a sufferer from Kidney troubles, and could obtain no relief from physicians. I used various Kidney remedies, but with no success. I had given up all hopes of ever recovering my health, until hearing of the marvelous cures effected by your Alkavis, decided to try same. After using the first bottle I began to experience relief, and following up the treatment was permanently cured. I cheerfully recommend your excellent Alkavis to persons afflicted with Kidney and Rheumatic disorders as the best remedy known."

Mrs. James Young, of Kent, Ohio, writes that she had tried six doctors in vain, that she was about to give up in despair, when she found Alkavis, and was promptly cured of Kidney disease, and restored to health. Mrs. Alice Evans, of Baltimore, Md.; Mrs. Mary A. Layman, of Neel, W. Va., twenty years a sufferer; Mrs. Sarah Vunk, Edinboro, Pa.; Mrs. L. E. Copeland, Elk River, Minn.; and many other ladies join in testifying to the wonderful curative powers of Alkavis, in various forms of Kidney and allied diseases, and of other troublesome afflictions peculiar to womanhood. In such cases of disorders peculiar to women we do not care to publish testimonials at large, but ladies interested therein can obtain full information from a descriptive book which is furnished free by the importers of Alkavis. The good results of using this new botanical discovery in such cases are indeed most remarkable.

Dr. A. R. Knapp, a well-known surgeon and physician of Leoti, Kansas, voices the opinion of the doctors and writes:

"The case I ordered Alkavis for has improved wonderfully. I believe you have in Alkavis a complete specific for all Kidney troubles."

Mr. R. C. Wood, a prominent attorney of Lowell, Indiana, was cured by Alkavis of

Rheumatism, Kidney and Bladder trouble of ten years' standing. He writes:

"I have been treated by all our home physicians without the least benefit. My bladder trouble became so troublesome that I had to get up from five to twelve times during the night to urinate. In fact, I was in misery the whole time and was becoming very despondent. * * * I have now used Alkavis and am better than I have been for five years. I know Alkavis will cure bladder and kidney trouble. * * * It is a wonderful and grand, good remedy."

And even more wonderful is the testimony of Rev. John H. Watson, of Sunset, Texas, a minister of the gospel in thirty years' service, stricken down at his post of duty by Kidney disease. He says:

"I was suddenly stricken down on the 22d of June with an acute attack of kidney trouble (uric acid gravel). For two months I lay hovering on the border line of life, and with the constant care of two excellent physicians, I only received temporary relief. My family physician told me plainly the best I could hope for was temporary respite. I might rally only to collapse suddenly, or might linger some time. But the issue was made up, and as I had for years warned others to be ready, so now more than ever I must needs put my house in order and expect the end. Meantime I had heard of Alkavis and wrote to an army comrade (now principal of a college) who had tried it. He wrote me by all means to try it, as it had made a new man of him. At the end of two months, and then only able to sit up a little, I dismissed my physicians and began the use of Alkavis. In two weeks I could ride out in the carriage for a short time. The improvement has been * * * constant and steady. I am now able to look after my business. I feel I owe what life and strength I have to Alkavis. * * * I am fifty-five years old, have been a minister over thirty years, have thousands of acquaintances, and to every one of them who may be afflicted with any kind of kidney trouble, I would say, try Alkavis."

Another most remarkable case is Rev. Thomas Smith, of Cobden, Illinois, who passed nearly one hundred gravel stones under two weeks' use of this great remedy, Alkavis.

Church Kidney Cure Company, 418 Fourth Avenue, New York City, so far are the only importers of Alkavis, and they are so anxious to prove its value that they will send a Large Case by mail free to Every Sufferer from any form of Kidney or Bladder disorder, Bright's Disease, Rheumatism, Dropsy, Cystitis, Gravel, Female Complaints, or other afflictions due to improper action of the Kidneys or Urinary Organs. We advise all readers to send their name and address to the company, and receive the Large Case by mail free. It costs you nothing, and you should surely try it.

BUTTER AS A SUBSTITUTE FOR MEDICINE.

It is one of the problems which constantly have to be solved by our doctors how to supply sufficient food to lubricate the human machine, which is an absolute necessity, especially in winter, remarks a contemporary. Young people, growing quickly, nervous invalids, all suffer from wasting diseases, such as influenza, and are often condemned to a course of cod-liver oil, which, however, seldom agrees with a weak digestion. Our medical men have lately bit upon the pleasant fact that butter is almost, if not quite, as nourishing as cod-liver oil; and as it is much easier to assimilate, large doses can be given with impunity. A quarter of a pound of good butter, spread upon very thin slices of bread, can be taken with ease in the day by a patient who cannot digest cod-liver oil, and is now ordered with the best results, where exhausting illness has reduced the body, or quick growth needs extra nourishment. This fact is given by the *Dairy*, the leading dairy paper in England, and is worthy of thorough investigation. If the statement can be established and verified by careful experiment as an actual fact, it should prove a rich bonanza for butter-makers. The thing, however, is at least worth investigating.—*Southern Cultivator*.

NEW CHAMPION BINDER.

Very strong claims are made for the peculiar merits of the CHAMPION Binders and Mowers, and some features are so radically different from all others that they are well worth investigating. A great saving of labor is claimed in the Binder, because the lower elevator canvas extends only to the top of the master wheel, and by an unusual easy slope, while the upper canvas forces the grain from the top of the lower canvas across the master wheel and clear down to the packers, so there can be no delay of grain from the time it is cut until it is bound and the bundle discharged. And in the binding a peculiar wheel is used where the hub is not in the center, by means of which increased power is obtained for compressing the bundle, and the work is made just as easy when binding is going on as at any other time.

The CHAMPION Mower is unique also in having a gyrating instead of a revolving gear, which saves half the number of cog-wheels usually required, dispenses with any frame or machinery in front that might collect the grass that has been cut, and does away with the ordinary pitman, giving thereby more force for the cutting of grass. One beauty of this Mower is that it is almost noiseless, and this is an indication that there is no waste of power.

These are some of the claims made for these remarkable machines. There are more of them that we cannot give space to mention now or explain. We know the manufacturers are reputable and honorable men, who have been long in the business, and have ample means and large facilities. Advertisement may be found elsewhere in this paper.

Our Farm.

"THE BEST FARM IN THE WORLD."

POSSIBLY there are many of the readers of the FARM AND FIRESIDE who would be loath to admit that the best farm in the world cannot be found in some part of the United States; and it is just possible that the particular spot of ground entitled to this eminent distinction would be variously designated according to the individual views of the particular reader. However, we may state in all fairness, and certainly without desire to belittle our American agriculturists—and even granting them the opportunity to defend themselves against the charge of not being the owners of the "best farm in the world"—that this title has for some time been held by what is known as the world-famed Longbeach Estate, and that it is located in New Zealand. Early in February the harvest season was at its full height at Longbeach, and the enterprising *Weekly Press*, published at Christ-church, sent a special representative with instructions to furnish the paper with a replete report of the interesting event, as disclosed by the operations upon this renowned estate. "Longbeach," says the *Press*, "is a busy place at almost all times of the year, and particularly so during the harvest. Plowing, sowing and other operations occupy large numbers of men and horses, but they are spread over several months of the year, whereas the climate of the district brings the crops to maturity within a period of less than a month, and in that space of time the grain must be secured. Small farmers, contractors and others—many from the immediate vicinity, others from almost all parts of Canterbury, and some as far as Otago—find work at Longbeach during this busy time, and useful harvest hands flock thither, sure of a job. Employment at Longbeach has always been sought after, there being no better employer in New Zealand than Mr. John Grigg, the owner of the estate, and it can be said that no employer has better workers, whether permanent or casual. Many under both categories have worked for him for a great number of seasons, and many snug farms and homes in various parts of the colony were founded by the earnings at Longbeach." The *Press* representative was impressed with the long line of McCormick harvesters and binders at work in the various paddocks, "there being as many as seventy reapers and binders, and a corresponding number of drays, with upwards of one thousand horses, and quite an army of men. This season, it is said, the area in wheat, oats and barley amounts to somewhere about 7,000 acres, and the crops are as promising as have ever been seen on this fertile estate. The McCormick harvesters, as they came up side by side, following one after the other, cutting, tying and delivering the big, heavy sheaves of grain with the most perfect regularity, and without the slightest trouble or the least sign of a hitch, presented a very pretty harvest picture. During the three or four days I was there, I saw them working in heavy, tangled crops, with a good deal of undergrowth, in heavy, bright, clean crops, and in crops of such a nature as would most thoroughly test the strength and general capabilities of any machine. They did really good work in the heavy, tangled crops, but when they got into a clean piece, the 256 acres of Tuscan, for instance, they delivered most neatly bound, even-butted sheaves, leaving a beautifully clean, close stubble, with a very marked absence of litter. Each machine, drawn by a team of two horses only, cut, tied and delivered the heavy sheaves of grain with the greatest regularity, everything running smoothly and almost noiselessly, and the draft being so light that even in the heaviest and greenest of the crops, the two horses were never distressed, blazing hot as the weather was." Just prior to the harvest season, Mr. Grigg bought a train-load of McCormick Harvesters from Messrs. Morrow, Bassett & Co., of New Zealand, "and," continues the writer, "this house is to be congratulated on having so many of the McCormick machines holding the pride of place on this splendid estate, for if they give, as they are doing, unqualified satisfaction on Longbeach, there is no fear of anything approaching failure in any other direction. As an instance of the produce which annually goes off Longbeach, it may be stated that at Winslow, a small hamlet, and the nearest railway station to Longbeach, there is yearly paid a sum of £5,000 (about \$25,000)

for freight. Where the interest involved is of such magnitude, every risk is, of course, reduced to a minimum. Men—as already mentioned—horses and machinery must all be of the best type. The breakdown of a single reaper and binder for a day might expose a hundred pounds' worth of grain to danger from the capricious elements. Consequently no visitor should miss seeing the implements and machinery, for what finds favor at Longbeach may safely be taken as thoroughly reliable and efficient."

EXTRACTS FROM CORRESPONDENCE.

FROM GEORGIA.—The interest of ex-Union soldiers all over the nation has been centered in the wire-grass region of Georgia for many months past. The colony of Fitzgerald is a reality, and thousands of actual settlers are now on the spot, while many more thousands of relatives and friends of the colonists are waiting anxiously to know the results of success or failure. Even in like manner there are many kindly and anxious inquirers in this state, as to the probable results of the movement. I have recently visited that section of the state, and mingled freely with both the colonists and their neighbors, the native farmers, many of whom have been there more than half a century past. The most sensible thing I have found among the new-comers was that contingent of them, limited as to numbers, who left their own allotment of wild land, and rented from some neighboring farmer a suitable quality of land already under cultivation, and obtained at the same time suitable directions for its cultivation. The climate and soil are so different here from that of his former home that the new settler has to go to work and learn his trade all over again. Only those who patiently and persistently seek to learn this lesson from the prosperous native farmer can expect even a moderate success. Their former education and predilections must all go for nothing, and new ideas and new methods be adopted. There are many objectionable features attendant on the aggregation of such a vast number of strangers and "many men of many minds," as go to make up the new colony. Some of the first men to land on the new site for a city were bad men, and some of them continue to trouble the good people who followed after. All, or nearly all, are total strangers to each other, and in case of sickness or other misfortune, few of the fortunate are able, and many are unwilling, to look after those in trouble, as would the people of a settled and old neighborhood. It is far better for the immigrants from other sections of the Union to settle or make their homes among the native farmers of Georgia, scattering here and there as they may be led to decide, and be thus surrounded by those who are both able and willing to "lend a helping hand," as their necessities or condition may require. Another very important consideration at this late day, too, is the fact that the great influx of buyers of land has put the prices of land in the neighborhood of the colony out of all proportion to that of other portions of the state. I shall visit the colony again in a few weeks, and perhaps be able to write you a better letter than this after that time. W. W. B. Macon, Ga.

FROM IOWA.—I live in Davis county, about six miles from the Missouri line. Bloomfield, the county-seat, is a quiet town, with no saloons, a fine court-house, public-school buildings and the Southern Iowa Normal, Scientific and Business Institution. The public schools of the county are of a high grade. The county is also supplied with good churches of nearly all denominations. The people are, as a whole, thrifty and energetic, although some lag behind, as they will in all communities. It is said there are more sheep raised in Davis county than in any other county in the state, and it is a profitable occupation. Hogs, cattle, horses and mules are raised for the market, and find ready sale. Corn was the principal crop raised last year, giving from 40 to 80 bushels per acre. Timothy-seed is also an important product, and generally sells for from \$1.75 to \$2.25 per bushel. Wheat, rye and oats are raised in large quantities. Apples, pears, peaches, plums, grapes and berries grow in abundance where well tended. The soil is a dark, sandy loam. Good farms may be bought for from \$25 to \$50 per acre, according to improvements and location. I am not a real-estate agent, nor have I a farm for sale, but think this a good place for an industrious man with some money to come and get rich; but for the lazy man we have no room. Good farm-hands get from \$16 to \$20 per month, with board. The average yearly rainfall is about thirty-six inches. Mark, Iowa. J. F. K.

FROM ONTARIO PROVINCE, CANADA.—Wellington and Waterloo counties are drained by the Grand river, which makes its course almost directly through the center of these counties and flows into Lake Erie, about fifty miles below. The soil along the banks for many miles is good clay mixed with gravel, making it the best of land for the production of fall wheat and for roots of all kinds. The average yield of grain per acre last season, although it was an exceptionally dry one, was:

Wheat, 25; barley, 35; oats, 40; peas, 29, and turnips, 360 bushels. This country is generally interested in grain-growing and stock-raising. The main line of the Grand Trunk railroad, running from Chicago to Montreal and Portland, runs through Guelph and Berlin, the county-seats of Wellington and Waterloo counties. Guelph is beautifully situated on the Speed river, and is the main market for Wellington, and the home of many industries. This city was settled in 1827. At Elora (known as the "City of the Rocks"), thirteen miles north of here, the Grand and Ervin rivers form one, which makes its way through a narrow gorge of rock eighty feet high. The falls of Elora are just at the head of this gorge, and in the center stands Inlet Rock. The rolling land of Wellington and Waterloo counties, when settled in 1830, was all covered with a vast forest of elm, beech, oak, cedar and maple, which has been nearly all destroyed by fire and the woodman's ax. In this dense forest was the hunting-ground of Chief Brant's band of Indians, one of the twelve tribes of the Six Nations. Flint battle-axes and arrow-heads can be found by the score on the banks of the Grand. In Ontario, winter lasts from December until April, and much pleasure and time is spent by the youth in tobogganing and snow-shoeing. It is very pleasant in summer, although the heat is intense. J. J. Salem, Wellington county, Ontario, Can.

FROM ALABAMA.—Morgan county was organized in 1818. It is one of the most important counties in northern Alabama. Its area is seven hundred square miles. Proceeding southward from the Tennessee river, which forms the northern boundary of the county, there are four terrace-like plains, each with characteristics peculiar to itself. The first of these is the bottoms which lie in close proximity to the Tennessee river. The soils here are porous and productive. Then comes the valley of the Tennessee proper. This is elevated above the bottoms about seventy-five or a hundred feet, and possesses the red or brown soils which mark the great valley from limit to limit. All the grains are produced here that are produced elsewhere in this region. Ascending to the next natural formation, one is from seventy-five to one hundred feet above the valley, and upon the summit of a range known as Little Mountain. From this elevated plain which commands the view of the Tennessee valley, and going southward, there is a perceptible descent to the foot of Sand Mountain. This is the fourth district division of the county. The width of this terrace varies from one to twelve miles. All the hardy fruits, such as apples, pears, peaches, and the various berries are grown abundantly, and are usually of superior quality. The water supply of the county is superior. The Tennessee forms the whole northern boundary of the county, while Flint creek and its two forks penetrate every portion of it, and not only supply it with water, but contribute greatly to the enrichment of the soils. There is an abundance of wood for all purposes in the county. Vast districts have scarcely been touched by the woodman's ax. Facilities for transportation are found in the Tennessee river, the Louisville & Nashville railroad, and the Memphis & Charleston railroad. Considering these competing lines, its superior soil, its climate and medicinal waters, together with its numerous social advantages, Morgan county is the peer of any other in the great cereal belt. The people regard with favor and encouragement the settlement of men of studious, industrious and frugal habits. Leesdale, Ala. G. T. B.

FROM NEBRASKA.—Rogers is a station on the Union Pacific railroad, sixty-three miles west of Omaha, located in the Platte river valley and surrounded by a farming country which is hard to beat west of the Missouri river. The soil is a rich, black loam, from four to twenty feet in depth, underlaid with a clay subsoil. Corn, cattle and hogs are the principal products of this section of Nebraska. Corn averages forty to seventy bushels per acre, although last year, on account of the dry season, the crop was light, running from twenty to fifty bushels. Oats average from forty to sixty bushels, and wheat twenty bushels per acre. The prices of grain are very low, corn being worth, at the elevators for shipment, fourteen cents, oats eleven cents, and wheat forty cents per bushel. Most of the grain raised is fed at home or at the numerous large feeding-ranches, and the feeders are now paying as high as eighteen cents for corn. One concern of this kind has eleven thousand head of cattle feeding at present. Land ranges in price from \$25 to \$50 per acre, according to location and improvements, and commands a cash rental of from \$2 to \$4 per acre. This is a good place for a man with some means to engage in farming or stock-raising. We have never had a total failure of crops here, and only three partial failures in the last twenty-four years, so we are as sure of a crop as any part of the United States. G. L. Rogers, Colfax county, Neb.

FROM FLORIDA.—Magdalene, eight miles north of West Tampa, is in the lake region, there being between twenty and thirty lakes within two miles of the town. The lakes are a great protection against cold, as was proven by the orange crops in this vicinity in 1895. We have lands here suitable for growing nearly everything that is grown in this climate, such as corn, oats, rice, sugar-cane,

sorghum, kafir-corn, millet, peanuts, sweet and Irish potatoes, cabbage, beets, tomatoes, onions, lettuce, pumpkins, squashes, egg-plants, peas, beans, cucumbers, radishes, turnips, carrots, melons, etc. In fruits, we have oranges, lemons, limes, peaches, pears, plums, grapes, guavas, persimmons as large as teacups, bananas, mulberries, blackberries, strawberries, for all of which there is a good market in Tampa. A person can raise from three to five crops per year here on the same land. The coldest weather we had last winter was thirty-four degrees above zero. Seventy-eight million cigars were manufactured in Tampa for the year ending June 30, 1895. Tampa with her suburbs has a population of 25,000. She has hundreds of cigar and other factories in active operation, more than fifteen miles of electric street-railways, gas and electric light plants, the finest system of waterworks in the state, three banks, and a number of hotels, one, the "Tampa Bay," being among the finest in the world. I mention all these things to show that Tampa is a good home market for everything in the farm or truck line. People from every state in the Union visit Tampa nearly every winter to hunt and fish and enjoy the beautiful climate. Cattle and hogs live in the woods here all the year without being fed. Lumber is cheap, running from \$8 to \$15 per thousand. Land is very cheap here. Eight miles from Tampa beautiful lake fronts can be had now for \$10 per acre, in tracts from ten acres up. The water is soft and healthful. I think it a delightful country to live in. N. H. F. Magdalene, Hillsboro county, Fla.

FROM TEXAS.—I came to the great fruit belt of the Texas coast more than a year ago. We are about midway between the two cities of Houston and Galveston, in the northwestern part of Galveston county. The larger part of the population of this part of the county is northern and eastern. Religious and educational interests are well represented. Nearly all denominations are established here, with regular church services and Sunday-school. The people are engaged in fruit-growing, stock-raising and general farming. This is within the "pear belt" of Texas, and thousands of acres are already set to pears. We have seen Waldo peach-trees only ten months from the seed that were loaded with bloom. One station near us, on the G. C. & S. F., up to April 3, 1896, had already shipped five car-loads of strawberries. Berry-growers realize from one to three hundred dollars per acre. The climate is excellent. Being near the bay and gulf, the breezes from them give us a mild winter and a pleasant summer. The salt atmosphere seems to be death to disease germs. And in many hundred miles' travel on this coast, I have never seen as much as one acre of bog or swamp land. The best land for fruit and general farming can be had for from \$20 to \$30 per acre. It is prairie, or part prairie and part timber. Cattle and horses do well on the range winter and summer; and hogs on the timber land do well the year round without feed. T. H. L. Clear Creek, Texas.

PROSPEROUS FARMERS.

Yankton *Press* and *Dakotian*: In Yankton County, South Dakota, there are at least one thousand farmers who came here poor as the proverbial turkey of Job, and who to-day count their worldly possessions by thousands. Many of them started in with a house built of sod, and almost empty handed so far as horses and cattle go. To-day they occupy fine dwelling houses, have large barns, fine horses, cattle, hogs and sheep, granaries filled with grain, fruit orchards, and money in hand. We mention this to show that South Dakota farmers are the prosperous class. Prosperity is the rule—not the exception. With fair prices for grain and live stock they would be rolling in wealth. Prices, however, have nothing to do with the fertility of the soil and the favorable character of the climate. These natural advantages are here to stay and assure prosperity to the farming classes.

A copy of an illustrated pamphlet on "Irrigation in South Dakota," just issued by the Chicago, Milwaukee and St. Paul Railway, can be had by addressing Roht. C. Jones, Traveling Passenger Agent, Cincinnati, O.

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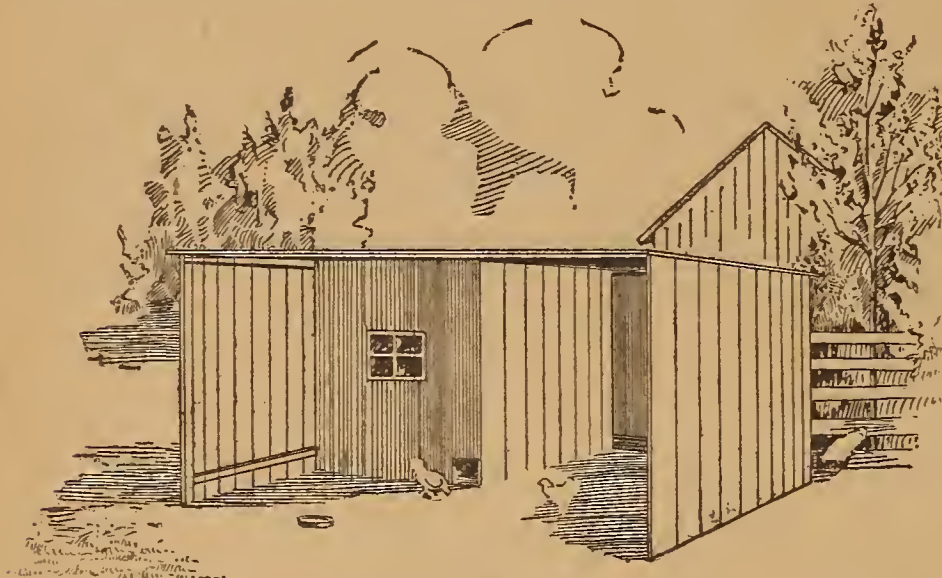
Conducted by P. H. Jacobs, Hammonton, New Jersey.

HATCHING IN SUMMER.

WITH a little care in providing for the sitting hen, she should bring off a full brood in the summer. When she shows a disposition to sit, it will be an advantage to induce her to go on a new nest, and in a location away from the other hens, as a precaution and prevention of lice. The hen herself should be held up by the legs and fresh insect-powder dusted profusely through the feathers, while a few drops of melted lard should be well rubbed on her head, face and neck; or some of the advertised remedies may be used. The nest should also be dusted with insect-powder. These preparations will insure better hatches, because the hen will be more comfortable, and the chicks will be free from lice when they are hatched. The eggs should be selected from those that were laid by hens, rather than those from pullets, as the pullets may not be fully matured, and because chicks from eggs laid by hens are stronger and more vigorous than chicks from pullets. During the summer there will usually be plenty of eggs from which to select a clutch, and they should be of normal size and shape. Large eggs that are rather round seldom produce chicks, and it should be the object not to waste a single egg, but aim to have them all hatch.

COMBINED HOUSE AND SHED.

A large shed, with the inclosed portion in one corner of the shed, is a combination that gives a large space at a small cost. It affords shade in the summer and a sheltered



COMBINED HOUSE AND SHED.

yard in the winter. The inclosed portion is for roosting and laying. As the front of the shed is open, there is a saving of lumber, thus permitting of securing a larger covered area at the cost of one entirely inclosed. It is an excellent open-air arrangement. The roosting-room has a door on the side, but only one small window is required to light the interior, the warmth of the sun in winter being secured in the shed. For a flock of thirty hens, the shed should be 16x16 feet (the depth being important), and the roosting-room 8x8 feet, or 6x10 feet; in fact, the roosting-room may be of any preferred shape, even reaching entirely across the rear portion (4x16 feet), if desired. The shed may be eight feet high in front, and six feet at the rear, the roof being covered with waterproof paper.

PAMPERING THE FOWLS.

Overfeeding and underfeeding are the banes of the poultry business. What is meant by underfeeding is not an insufficiency of food, but too much of one kind, such as grain, the fowls receiving an abundance of food that is practically useless to them. Overfeeding is the giving of the fowls an excess of any kind; that is, the keeping of feed before them at all times, or the constant feeding of them under the mistaken supposition that "the more food the more eggs." When fowls are pampered by poultrymen it is not always intentional, for the breeder or poultryman who takes an interest in his flock finds a certain pleasure in supplying all their wants, and in treating them kindly; but he gets them out of condition by pampering, and does not find out until too late that one of the best methods of keeping a flock is to com-

pel the hens to make an effort to help themselves. The best egg-producing material will be a huge pile of leaves or litter on the poultry-house floor, in which the hens can scratch.

ECONOMY IN FEEDING.

Every dollar saved in the food is an addition to the profit; but economy should never be practised in using any foods that induce production. As long as an article is giving satisfaction it pays to use it; and when the hens begin to fall off in laying, it indicates that they require something else. To practise economy, the cost of the food must be considered from the standpoint of profit. If corn has given good results, and the hens cease to lay, then corn is no longer cheap. It may no doubt be purchased at less outlay than any food that can be used, but it will not be cheap, because it is of no further use after the hens reach a condition in which they demand a new article of diet. Lean meat, fresh from the butcher, is an expensive food when it cannot be conveniently procured, yet if the hens demand it, and the results are favorable, it is cheaper than corn. There is no saving in buying grain because of its cheapness, when better foods are demanded, and it is this point that the poultryman should keep in view. He should feed for eggs, no matter what kind of food may be required.

BONE AND MEAT FOR EGGS.

There is no kind of food that will answer for summer unless it is free from fat or starch. If the flock is confined, food must be provided, and then a proportion of grain may be allowed; but if the hens are on a range they should be given no food. There is one kind of food that will make hens lay, and that is lean meat. And it may be allowed that those who use bone-cutters, and can secure fresh bone from the butch-

ers, can provide the cheapest and best food that can be given. A pound a day for a dozen hens is ample. It costs but a small sum for a cutter, compared with the saving of food, and though operating a bone-cutter demands labor (as a bone is not easily reduced), the gain is more than the expenditure. We probably refer to this summer feeding very often, but the tendency is to feed too much, and it is difficult to convince poultrymen of the fact. Meat stands first of all egg-producing foods, and is the cheapest in proportion to results obtained.

THE BEST DUST BATH.

During the summer season the best mode of providing a dust bath is to dig out a space in the poultry-yard, three feet square and about six or eight inches deep. When the dirt is dry, sift it back into the place from which it was taken, and when so doing, sprinkle a little carbolic acid over it, to give it the characteristic odor. After each rain, stir the dirt and make it fine, but it need not again be sifted. The hens will resort to it, and rid themselves of lice. If the poultry-house is kept clean, and a dust bath is provided, the hens can keep their bodies free from lice with its use.

BE INDEPENDENT!

Don't stay poor all your life! Get a farm of your own, and in a few years you will wonder why you remained in the cities and paid rent. You can secure good homestead land of the United States government, free of cost, along the line of the Lake Superior division of the Chicago, Milwaukee & St. Paul Railway, in Northern Wisconsin and Upper Michigan, or you can buy at low prices, on easy terms. Address C. E. ROLLINS, 161 La Salle St., Chicago, Ill.

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LICE AND CLEANLINESS.

Strange as it may seem, a large majority of poultrymen refuse to recognize the existence of lice. They examine the poultry-houses to-day, and find but few, yet in a week, if the weather is warm, there may be millions of lice, so small as to be seen only with difficulty. If the hens can have fine, dry dust to roll in, they can drive the lice away from their bodies, but as soon as they enter the poultry-house they are covered again. They lose rest, their bodies are made sore, and the daily torture becomes unbearable. Death ends their sufferings, and the farmer loses his fowls. There are also the large head-lice, which cause constant annoyance. The poultry-house must be kept clean. Drench the house, walls, roof, yard and fences with kerosene emulsion twice a week, or oftener if necessary.

SOILS FOR POULTRY.

A sandy, dry soil is best for poultry, as such soils, if very porous, will be cleaned by the rains carrying down the filth into the soil, and because there is less mud and dampness in winter. Nearly all of the large duck-farms are on sandy soils, and as the use of such soils for the raising of poultry is profitable, there should be an opportunity for those who have farms composed of light soils that cannot be made to pay otherwise, to devote them to poultry, especially if near markets can be conveniently reached.

WHAT TO DO WITH FAT HENS.

When the laying hens reach that condition in which they have an excess of fat, and not only will not lay, but have bowel disease, the quickest and safest mode of getting them in condition is to withhold all food for a week, with the exception of about one half ounce of lean meat once a day. Heroic treatment is necessary. If an attempt is made to reduce them by gradually diminishing the regular food, it may require a month or more to get them in proper laying condition again.

INQUIRIES ANSWERED.

Overfeeding.—N. S. S., Oklahoma City, Okla., writes: "My fowls have dark combs, legs are weak, they droop, refuse to eat, have diarrhea, and are affected this way summer and winter."

REPLY:—They are probably overfed, causing indigestion. As the season is now warm, give them no food at all, thus compelling them to forage. Add a teaspoonful of tincture of nuxvomica to every half gallon of drinking-water for a week.

Feeding Green Rye.—R. E. C., Catonsville, Md., writes: "Is it necessary to give grain and other foods when the hens have access to green rye?"

REPLY:—Rye when very young is laxative, and the fowls should be turned upon it only for a short time during the day. They should have a full meal of mixed ground grain at night, given warm. If they show symptoms of diarrhea, remove them from the rye altogether for awhile.

Feeding Blood and Wheat.—S. G. P., writes: "1. Is blood from slaughtered animals valuable for poultry, and if so, how is it used? 2. Is wheat considered better than corn?"

REPLY:—1. Blood is one of the best egg-producing foods that can be provided, and should be given as fresh as possible. Mix it with corn-

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meal and ground oats, feeding once a day, removing all that is uneaten. 2. Wheat is more nitrogenous than corn, and is considered better for spring and summer use.

Ducks.—Subscriber writes: "Give me a few points on raising ducks for market."

REPLY:—They should have a grass-plot and be fed once a day, giving soft food, a mixture of cooked potatoes, bran and ground meat being excellent. They should be kept on a dry floor at night. Ducklings may be fed in the same manner, but should be given three meals a day, with plenty of drinking-water, and a mess of cut green food once a day. Dry quarters are important, as damp floors are detrimental to them.

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Our Fireside.

THEM GOOD OLD TIMES.

BY MRS. M. A. OHLINGER.

The weaklin' boys don't grow up now as we boys used t' grow;
We didn't dress an' primp so much, an' do so much for show.
'Twas awful hard: we had to work—an', too, had lots of fun—
We didn't spend 'most half our time in gittin' nothin' done.

We jnst pitched in with all our might, with hearty, right good will
(We didn't need to dose with salts, nor swaller any pill);
An' I don't know 's 'twas all in work, but the cheery way we had,
That got the work along so fast, and kep' us always glad.

'Twas choppin' trees, an' splittin' rails, an' haulin' logs on snow.
An' lots an' lots o' hard-like work, as hoys now'days don't know;
But best of all the good old times was when the sap had riz—
I say again, the fellers now don't know what good times is.

For we'd two kinds o' lasses then—what taffy-pulls, my land!
An' ev'ry gal that lived about was glad to take a hand;
Sich rosy cheeks an' sparklin' eyes! You boys don't often see
Sich healthy, hearty-lookin' gals 's them gals that us'd to be.

I git so 'cited 'bout them times, when once I do begin,
I feel like startin' right away to hunt 'em up agin,
An' hardly know what I am at till in my chair I'm riz
I'm minded that I'd better stop—I'm stiff with rheumatiz.

I'm gittin' 'crepit, old an' gray, can sca'cely walk a bit,
An' this old shuck's 'bout done for now, an' 'tison't very fit
To drag it round to hunt them things—the task'd he too sore—
I'd better sit here by the fire, an' think 'em out once more.

The apple-parin's, spellin'-schools, the huskin'-bees an' sich
'S enough to keep one lmsy now—it's better'n lein' rich.
An' all that's left the boy inside—the hoy with grizzled hair—
Is t' think them good old times agin, a-sittin' in this chair.

Don't think that I'm complainin', now—that I don't want to do,
For we old folks have had our day, and they can have them, too;
But when they git as old as me, will they sit round an' whine,
Or will they live on bygone days, as I'm livin' now on mine?

A FAIR TRIAL.

BY WILDER GRAHAME.



Our boys will find out one thing before you are two years older, and that is, that your business don't pay in this country."

Peter Martin looked up at his elder brother half dubiously as their well-meaning

neighbor fired this parting admonition at them. After all, was it not a little presumptuous in them to persist against the universal opinion of the old settlers, when they were themselves such recent arrivals? But Paul was of a firmer disposition. With a thorough knowledge of the apiary as conducted in the East, he had looked carefully about him and failed to see a single legitimate reason why beekeeping should not pay in their new western home.

Mr. Martin was an eastern business man in moderate circumstances, and like many another of his class, had felt the close times of the past year severely. Just in the midst of the pineh, too, a friend for whom he had indorsed notes failed; forcing him, in order to save himself, to foreclose upon a piece of western land when he could least afford such an investment.

Regrets were useless, and as Mr. Martin never lost an opportunity to educate his boys in self-dependence, it was decided to place the management of this unwelcome acquisition wholly into their hands, and "see what was in them."

To Peter country life was a new experience, but Paul had been so much at his grandfather's that he understood eastern farming quite as well as many country lads. Particularly had he been interested in beekeeping. He read every obtainable book upon the subject, subscribed to one or two bee journals, and insisted while at the farm on having charge of the few colonies there. As a result, he had a very complete theoretical and quite a good practical knowledge of the subject. It was

not remarkable, then, that he was somewhat prejudiced in favor of a business that all his neighbors united in assuring him was unprofitable for that vicinity.

"Look the ground over carefully. See, if possible, why it has been unprofitable, and whether it can be remedied. Then decide for yourself, and stick to your decision. Whatever you conclude, don't shift about." That was what his father wrote when appealed to for advice.

So the bees came, and it is doubtful whether the long rows of "newfangled" hives or the bees themselves excited the greatest local contempt. More than once Peter's heart misgave him after some such interview as that which opens this story, and he felt almost anxious to give up to public opinion. But Paul was still obstinate.

"We are fairly into the business now. If we are wrong, we will find it out soon enough without guessing at it. If we are right, we cannot know it for a certainty until we try. I shall give this a fair trial before I give it up."

There was something so assuring in the boy's manner that Peter was more than half convinced on the spot that they were right, but could he have seen what was passing in his brother's mind he would have felt more uneasy than ever. Were they to fail, after all? Already the summer was about over, and the bees had not stored enough of the sweet nectar for their own use. They must be fed, and that meant at least five hundred pounds of sugar for the fifty colonies. Would it be advisable to risk more in a business that all about them condemned? It seemed like throwing more money down the same hole so much had already gone. But in the midst of his perplexities there came his father's parting words, "Whatever you go into, give it a fair trial; don't vacillate." And Paul sent in his order for the sugar.

As winter came on, people laughed again at the two boys, or pitied them, as their dispositions prompted, confident from past experience that no bees would stand the winter in those open, unprotected plains. But a surprise awaited them. Before cold weather began, a neat board shanty went up on the Martin premises, and all of those hives were carried within its sheltering walls. Here, undisturbed by storm or drift, the little workers rested from their somewhat fruitless efforts of the past season.

It was an open secret during the months of winter that the Martin boys were busily engaged in making new hives and getting everything in readiness for the next season, "for all the world as though they expected those bees to live through. Plenty of time for them to prepare in the spring, after they know for certain how many they will have." This was the burden of the comments.

In the midst of it came sad news from home. The panic was on, and Mr. Martin was forced to the wall. He had finally been able to fix matters up temporarily, but unless five thousand dollars could be raised within the next twelve months, they must lose their home.

Instinctively, the younger brother looked up at Paul's face. The lad had risen, and stood at the open window, leaning out across the sash. Before him lay the grain farms of his neighbors—men who had grown old in their present homes. And in the midst of these unbroken stretches lay his own fields, cut into various little patches, each showing up in different color through the receding drifts of snow. Someway, the scene, the bracing air, the sight of returning spring, but most of all the message of distress from home, aroused all his manhood and nerved him with a courage not his own. All question of failure was banished in that supreme moment of self-assertion, and with determined purpose in every movement, he seized his cap and rushed suddenly out to the long shed in which the hives were stored.

Ten minutes later Peter saw him walking briskly toward the village. When he returned it was in the grocer's wagon, the owner of another barrel of sugar. That afternoon the hives were all opened up and feeding renewed.

"Why, some of them have plenty of honey yet," protested Peter.

"Yes, for the present. But if we want early swarms and the most honey they can give us, we must let them fill their own combs up with this and have them all ready to work in the supers as soon as the first flowers open."

The opening of spring convinced Paul more than ever that he was right in placing the failure of his neighbors in beekeeping to the credit of poor pasture. For miles upon miles, almost without a break, stretched those unending fields of grain, and the poor bees were left without a blossom from which to sip nectar, excepting the stray flowers that chanced to grow along the roadside or that graced some nature-loving housewife's garden. The sight was not encouraging, and the boy smiled as he wondered at the credulity of any who had ever hoped to make beekeeping pay under those conditions.

In spite of the fact that there was no woman there to look after things, it was noticed that the Martin yard was earliest and most profuse with bloom. In fact, it seemed as if the boys had studied the time of blossoming, and had so arranged their flower-beds that as one ceased to bloom another took its place. Indeed, they had; and their bees were jubilant over the uninterrupted flow of honey.

It was not to the yard and garden, however, that the boys had confined their efforts. In

the fields, one crop of honey-producing bloom was almost immediately succeeded by another, and at the same time every crop was valuable for itself. A field of white clover was followed by a field of Mammoth red clover. About the same time another field of alsike was on hand, but just before it bloomed the boys harvested it, and a second crop of blossoms resulted in August, at a time when honey-plants were scarce. By constant management like this the boys succeeded in providing work for their bees throughout the season, and kept them well supplied with room to work in.

Of course, the swarming season was a busy time, and at its close one hundred and twenty-five colonies had taken the place of the original fifty. This checked work in the supers for a little while, but by using full sheets of foundation both in the brood-racks and the sections, even the young swarms were not long in getting ready for active work.

And the boys? Even the bees were hardly busier than they. Plenty of empty sections must be kept on if the bees were to do their best; it was sometimes all that both could do to keep the demand supplied. They could not have done so had their preparations been less complete the preceding winter. At best they were not wholly able to take care of their bees and cultivate the place as they would like to. Weeds would start up and grow surprisingly, making the Martin premises not always the neatest in appearance, but even the weeds furnished honey, as the bees were not slow in announcing, so their presence was not wholly without compensation.

So thoroughly occupied were the brothers in the more pressing duties about the apiary, that marketing their honey as it was made was out of the question. Occasionally a super would be removed from each colony to the store-room, but a good deal of it remained upon the hives through the entire summer.

In the eastern home the struggle against debt went bravely, bitterly on. There was no prospect of success, but Mr. Martin was not a man to be cast down at once by probable failure. At all events, he hoped, the boys were thoroughly established and capable of caring for themselves. Reports indicated that they were doing nicely, and had probably raised enough, independent of their honey, to pay expenses. Whatever the honey came to would be clear profit, and so much the better start for another year. Even when the time of settlement came and he was still fifteen hundred dollars short in funds, Mr. Martin did not seem wholly downhearted.

"The fight is over," he wrote to the boys, "and this is my report: Cash from all available resources, \$3,500; liabilities, \$5,000. You see, the home must go. That will pay it all and something more. Now let us have your report, and see if there is room for us all out there."

"Yes," wrote Peter in reply, "there is plenty of room here for all, but I don't think there is quite work enough. People here said we would fail, but we stuck to it and succeeded. Paul is in Chicago now; went there to market the honey. But I have just received his report, which I inclose. Sticking to it is a great principle; that is, if one has looked the ground over carefully enough first. Say, don't you think you had better stick to the old home? Putting two and two together—I mean the two reports—I think it would be quite possible."

The inclosed report read:

125 colonies averaged 168 lbs.....	21,000 lbs.
21,000 lbs. @ 10 cents per lb.....	\$2,100.00

It is needless to say that Mr. Martin's principle of "sticking to it" was made to apply to his old home, where he still lives. Peter is in college now, but Paul still clings to his chosen work among the bees. Sometimes disappointments come to him, for the business is full of them; but he is pretty certain never to let a temporary discouragement shake his faith in the grand old principle of constancy; of picking his ground thoughtfully, carefully at the start, and then refusing to retreat from it until every effort to win victory has been tried and failed.

A MYSTERY SOLVED.

A True Story.

Shep was a large, tawny-colored shepherd-dog, the pet of the Morris family and a trained servant of the farm. Every evening about five o'clock she left the yard, climbed to the hill-side pasture and brought in the cows and the small flock of sheep. She seemed to count them and to know the number well, for never one was left behind. She was gentle with them, too, and they never showed the slightest fear of her.

At night, chained to her little kennel near the stable-yard, Shep kept guard and warded off the strange dogs that for several weeks had been devastating the flocks of neighboring farmers. The Morris stock had as yet not suffered from these depredations, partly because of being locked up in a yard so near the house and partly because of Shep's close watch. Several times she had aroused the family at night by barking, and the advent of one of the household had been followed by the hurried departure of one or more strange dogs through a gap in the garden fence. These alarms had usually occurred early in the evening—as it were passing calls of the dogs

on the way to their hunting-ground in the neighboring pastures, where, several hours later, they held high carnival.

Judge, then, of the anger of the family when, in spite of her fine record, Shep was accused by a neighboring farmer of being herself one of the marauders. Mr. Scott was certain of it. He had been on the watch, and in the bright moonlight had recognized her as she made off from the fields in company with a dog of low degree.

"It's impossible," argued Mr. Morris in return. "How can she get away when I tie her up each night and loose her in the morning? Of course, it's some other dog of the same size."

Soon, however, other sheep in a different locality were killed, and again Shep was charged with the crime. The affair took on a mysterious tinge. The strange dog was too wary to be closely approached, yet those who had seen it flash by them in the dim light declared it was the very image of Shep, who was at the time chained in the Morris yard.

The family made much of their pet in those days, because she was charged with another's wrong-doing. Besides, the dog was not well; it seemed weak and ailing in the morning, and had no appetite for food. Yet the neighbors persisted that she was the guilty party.

A man, angry and short of breath, aroused Mr. Morris at two o'clock one morning, vowing that he had just driven Shep from the scene of a new slaughter. Hurriedly dressing, the master of the house accompanied his neighbor to the kennel, where Shep came quickly out to greet them. The two men examined closely the chain and fastenings, but all were secure, and the nonplussed neighbor took his departure. Sheep-killing continued, and several tramp and farm dogs suffered justly for their faults, but the worst of them all, Shep's counterpart, could not be caught.

One evening Mr. Morris was unexpectedly called away on business, and being detained, did not return home until midnight. After putting up his horse, he walked hack toward the house, passing the dog-kennel on the way. The dog did not appear or give any alarm, and surprised at this, for she was an excellent guard, Mr. Morris stepped up and looked in. The chain was drawn into the kennel as if the dog were inside, but to his utter astonishment, Shep was not there. The collar was still buckled, but the dog had vanished.

Perhaps an idea of the truth came to the farmer; at any rate, he concealed himself in a little outbuilding that gave a view of the kennel, and awaited developments. Hours passed. Far off in a pasture a shot was fired, and a dog howled. The light began to appear just sufficiently to distinguish objects. Then suddenly from the back lane came a slow-moving figure, staring stealthily about and working gradually toward the kennel. It was Shep.

She reached her house, put in one paw and hauled out the collar. Then she crouched down, turned the collar on end between her fore paws and began to poke her head through it. It was a tight fit, but she worked at it with her paws, rubbed her head on the ground or against the side of her hut, until at last the collar slipped into place. Then, after licking off a guilty stain of blood here and there, she crept in and lay down.

Mr. Morris, as he was an honest man, had some settlements with the neighbors the next morning, but he refused to abide by their demands and kill Shep; he could not bear to do that. He punished her severely, however, got a tighter collar with special straps, and thought all was secure.

For a week everything went well. Shep went about with her tail between her legs, as though in utter repentance for past misdeeds. In the afternoon she went for the home stock, as usual, and never troubled them. By night she barked frequently, as if to show us she was on hand.

But the eighth night Mr. Morris awoke and found the stillness so profound that he determined to investigate. Alas! the empty collar lay on the ground, and Shep was gone. She had not been able to resist the terrible habit that had fastened upon her.

Toward daylight she came back, and found her master waiting for her. She seemed to shrink into the ground for an instant; then, before he could touch her, she flashed by him and was gone, unheeding all his calls and commands. Day after day passed, and she was not seen, though men hunted for her everywhere. Appearing in some flock at night, to kill, she would disappear at once, not to be traced.

After ten days, however, early one evening something scratched at the home door, and the prodigal had returned. Such a poor, miserable sinner she was, as she crouched at her master's feet, not daring to look him in the face. Her eyes were sharp, her sides hollow; she was lame and footsore, and a bullet had scarred her shoulder; her hair, torn and unkempt, was a mass of mud and burrs.

In spite of her misdeeds, she aroused pity. But the family dared not keep her longer, and it was decided to send her away. Smuggled into a farm-wagon, she was carried to a distant station and shipped to a city friend, who would care for her, and allow her no chance to indulge the habit that had proved too strong to be broken.

As for sheep-killing in the neighborhood, it stopped suddenly from the date, according to the neighbors, of the strange disappearance of Shep.

ERNEST L. THURSTON.

TAKING SUMMER BOARDERS.

"I've jest come from Aunt Lowizy's. Lawzy, but she's hed a hard time this summer."

My visitor took off her sunbonnet, and settling herself comfortably by my side, commenced helping shell peas.

"You see, she tuk it into her head to take summer boarders so't she'd hev a lot o' spendin'-money, an' they've jest about run her out o' house an' home. I wasn't there only to the endin' up on't, but I seen enough to make me downright sorry for aunt, an' she told me the rest."

"Did they run away without paying their board?" I asked.

"No, but that would be jest a drop in the bucket; what with the idjet an' the twins, an' the quarrelin', an'—but I'll begin right in the beginnin', where Aunt Lowizy did, when she set right down in the middle of the floor an' cried, an' took on, an' told me all about it.

"You see, she put a advertisement in a Chicago paper about a country home through the summer, an' plenty o' fresh milk an' eggs an' chickens; an' knowin' that lots o' boardin'-houses objected to children, she thought it would be a drawin'-card if she'd say that children was preferred. So she did. She was mighty tickled when an answer come right away that she'd hev a famby to stay all summer, an' she went to work furbishin' up an' everything—though what ain't spick an' span around Aunt Lowizy don't hev no call to be.

"Well, they was to come of a Monday night, an' aunt got up at three o'clock, an' hed her washin' all out, done, an' her ironin', an' baked cakes an' cookies an' pies, an' enough so't she could take it sort o' easy fur two or three days an' visit, if so be they wa'n't too stuck up, though Aunt Lowizy's great on style herself, an' always wanted to live in the city.

"Well, they looked splendid when they clumb out o' the wagon—Aunt Lowizy was awful mortified because she didn't hev no buggy to go arter them—all but the boy. He looked for all the world like Cy Hodgkins, she said—he that died o' dropsy, an' hed to be tapped sometimes as much as eight times a day. But Mrs. Van Ransellar-Jones (that was her name—awful high-soundin', all but the last, hain't it?) said he was sick, an' he'd better go right up to his room, an' she'd fetch him his supper, 'cause she didn't want to give no trouble. But aunt fixed up a little lunch, that dainty, an' tuk it up to him. An' when she come back down to the table, if you'll believe it, it looked like a Kansas field arter a grasshopper raid! An' Aunt Lowizy said she rubbed her eyes fur a minute, she was that dumfounded; fur when they all got through an' left, they was plenty an' to spare. An' then the next thing she heard them children all a-rattlin' up the stairs; an' if you'll believe it, they hed their pockets filled! Uncle was out in the shed when they sneaked back to the table. But la, poor young 'uns, they couldn't help their brother—the dropsy one—hevin' a tapeworm!

"But I hev'n't told you the worst of it yet. He had fits! An' one time, the very first time he went out to the bar, he hed one, and he fell on uncle's calf an' killed it. It never moved arterward, an' they buried it where it lay. Uncle set a store by tbat calf—it was a Jersey, an' he felt awful bad about it; but he said an accident tbat way, he couldn't ask them to pay fur it.

"The two twins was awful cute, an' Aunt Lowizy tried to furgit about the other things, an' take comfort in them. They could recite an' dance; but she got awful mad at 'em one day. She said fits wasn't nothin' to it. You see, she hed lots o' trouble gittin' enough aigs, an' she didn't know what was the matter. She said she knew some one was a-stealin' o' 'em, fur they wa'n't hardly any any more; an'

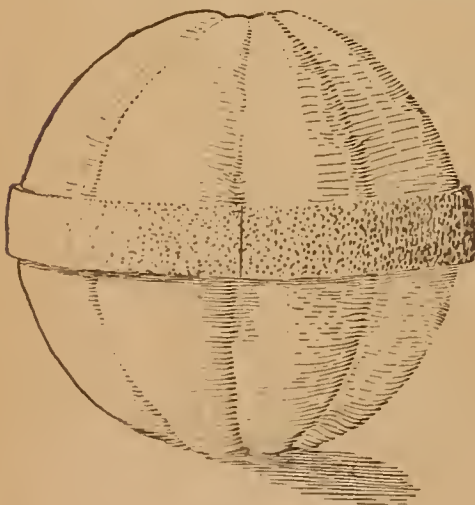


FIG. 1.

one day, what do you think? She clumb up in the haymow, and there set her hens in a row all around the wall lookin' that mournful, an' a-settin' on chiny aigs—yes, ma'am, a-settin' on chiny aigs! Uncle had bought a bushel basket of a peddler onct, at wholesale—uncle hain't got a bit o' sense about some things. Well, Aunt Lowizy bursted right out an' give the twins fits, an' switched 'em; an' they cried an' howled so that some movers golt' by hurried on to town an' told aroun' that somethin' awful was golt' on out to the first farm—that

some one was cryin' murder an' help, an' they'd better send a constable out right away. An' he come. Uncle felt awful meachin' about it, an' aunt, too; and she didn't say a thing when them twins got onto the colt an' made it sway-backed—yes, ma'am, it's back was all dented in from jest that one time!

"But as provokin' a thing as any was when they done their washin' up in their room, an' usin' the backs o' aunt's parlor chairs to hang the things on. Aunt hed taken them up from the best room when they first come, an' what with them a feedin' o' the parrot, an' scatterin' crumbs and aigs all over the carpet, an' the boy keepin' hevin' fits from one end o' the house to the other—his mother said when he killed the calf that she wa'n't goin' to let him go out o' the house any more—not to mention his tapeworm, or the last fit he hed when he fell onto the chiny-closet an' broke it down an' smashed almost all the dishes, Aunt Lowizy's cup was nigh about runnin' over. But she bore up till she really got 'em started, an' then she jest set down an' looked aroun' at the wreck o' everything, an' laughed an' cried au' took on real hystericky.

"Then uncle come home from a-takin' 'em to the depot. He looked real smilin', but sheepish, too, an' he had a package in his hand. Aunt Lowizy asked him what it was, an' he said it was a book with her and his pictures in, an' their lives. Aunt Lowizy knew somethin' about uncle, an' she asked him kind o' sharp how much it cost; an' then uncle tried to show her the pictures an' not answer; an' that made her ask more than ever—fur he'd gone an' sent an old tintype fur her picture, where she didn't look a bit dressy, no frizzes nor nothin', an' one o' these old-fashioned fringed neckties. An' his picture looked dreadful, too—jest like a corpse. Well, come to find out, Mr. Van Ransellar-Jones was agent fur them books, an' he put uncle up to hevin' their pictures an' their lives put in; he said it would be such a nice surprise fur Aunt Lowizy. An' he got him to sign a note fur twenty-five dollars more'n all their board come to fur the summer.

"Well, Aunt Lowizy jest took to her bed. She's been under the doctor's care now comin' on ten weeks, an' he says if they can't do somethin' to keep her from figgerin' up on how much butter-money and aig-money, an' how many turkeys she'll hev to raise, an' a lot o' other things, to pay fur the privilege o'

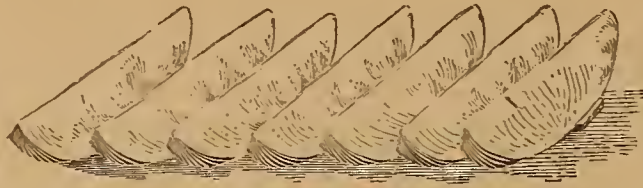


FIG. 2.

hevin' boarders that summer, an' the corpse-pictures, not to speak o' the calf, nor the colt, nor the chiny bill, nor the doctor's bill, she'll hev brain fever sure."

The clock struck eleven.

"Mercy!" my visitor said, "I must go. But do come over an' make me a visit."

Shaking out her apron, she left me pondering on the instability of human affairs in general, and "Aunt Lowizy's" in particular.

ELEANOR ROOT.

THE DAINTIEST WAY TO SERVE ORANGES.

The very daintiest and most satisfactory mode of serving oranges requires time and painstaking care, but the result is both beautiful and pleasing.

With a sharp knife describe a circle near the center of the orange. About half an inch from this line describe another circle; between these lines a band of rind will extend around the orange. Carefully remove all the rind except this central band, as seen in Fig. 1, being careful not to break the delicate white membrane incasing the sections. Just over one of the divisions of the sections cut a line across this band of rind, as seen in Fig. 1. With the utmost care, separate one section from the other, leaving each close-grown to the rind band, so that when all are carefully divided each will stand in its place upon the outstretched strip of rind, as seen in Fig. 2. The tiny sections can be removed easily, and eaten singly with the greatest daintiness imaginable.

Perhaps the prettiest way to serve oranges prepared in this way is to choose a square, flat dish. A pale blue china cake-tray, flat, with dull gold handles, made a lovely dish on which to serve oranges in this manner. The separate strips, each bearing its number of translucent sections, were laid side by side upon the china tray. The width of the dish was just the length of the strips. Upon this foundation other strips were placed, a third layer upon this second, each layer having fewer strips, until a single strip or two crowned the whole. Such a dish under lamplight looks like a tray of jewels. It is such a simple matter, too, to lift the strips by either end to one's own plate.

A second manner of serving oranges so prepared is only second in effect to that just described, and is sometimes more practical. After the little sections have been carefully separated upon the strip of rind, they are closed together, assuming the form of the orange before cutting. A ribbon, wide enough

to cover the band of rind and long enough to tie in a pretty bow, is tied around each orange, with the bow just where the ends of the strip come together (Fig. 3). Orange, yellow or green ribbons are especially appropriate in keeping with the color of oranges and leaves. When the bow is untied the fruit may be eaten with the same ease before mentioned.

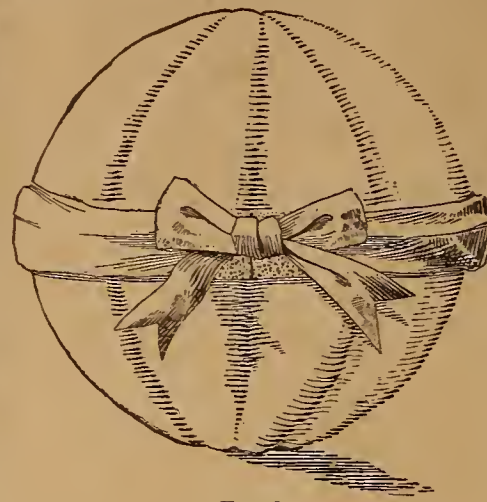


FIG. 3.

No one can fail to be pleased with oranges served in these ways. In no other way are the same convenience, daintiness and artistic effects possible.

J. L. B.

EDUCATION OF WOMEN.

There is no question, perhaps, that has been more vigorously debated than that of education of women. The best and most intellectual men and women of this and other countries have given their opinions on the subject, but as yet there is no agreement.

There was scarcely a college, a score of years ago, that freely opened its doors to women. Now she is admitted to all institutions of learning, while colleges have been founded especially for her. She cannot be barred from the pursuit of any study on the ground of intellectual inferiority, for man is her superior only in physical power. He, by endurance and strength, can enter those fields of research, studying the branches which make lawyers, physicians, ministers, chemists and the like, as necessity demands. If a woman takes up this work, she is seeking to do what properly belongs to man.

That God has appointed for woman a sphere different from man's is without question. She was created his companion and helpmate, not his rival. What education, then, shall she obtain that will best fit her for her place in life? Let her strive to become great as a woman, not as a man. She should be educated to be interesting to all; to be useful in her home; to exercise the very best influence upon those about her; to feel that there is something higher in life than striving to become an accurate representative of a fashion-sheet or leader in society; to elevate her mind and ennoble her character.

She should pursue mathematics and the languages, in order to develop her mind, the practical in science, the best in literature, music and art. Some branch should be given special attention, for a fine education is not of much value if there is not some part of it which may be the means of a livelihood. Let her education, then, be practical.

If she is ambitious or unusually intelligent, and wishes to enter some of the learned professions, she may do so, depending for success upon her physical strength.

There are women who, from adverse circumstances, are forced out into occupations that have hitherto been assigned to men. They can fill them, and nobly, too, if they but remember that they are women, and seek to make the position honorable. They have rights, but in asserting them must not forget duty. All honor to the noble band of working-women! To them is given opportunity for doing great good, if they make their work mean blessing to mankind as well as bread and butter to themselves. May they all prove what is good and true and pure in women, that men may look to them for reward and not in rebuke. But woman's proper place is in the home. True, man is the supporter, but woman is the maker. She should make the place where sisters, brothers, parents, husband or children dwell the center of love, purity and goodness. Would she exchange her place for a man's, who must labor away from the home, amid disagreeable scenes and selfish, unfeeling companions? Because she is domestic, has she not time to sing, to read and talk and think on the grandest subjects?

So, then, the sum total of a true, high education for woman is one that broadens her mind, uplifts her soul, and makes of her a great, noble, real woman, not a poor imitation of a man. It will give her the dignity of a queen, the love and respect of everyone, and, more than all, satisfaction that she is a woman.

MRS. T. F. LEONARD.

Lincoln will stand in the memory of the world among the most forbearing, kindly and gentle, whose generosity toward the most bitter foes is without a parallel among successful rulers and conquerors.—Warren Hathaway.



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SECURING A BOARDING-PLACE IN A STRANGE CITY.

To a lady of refined tastes, choosing a satisfactory boarding-place in a strange city is a matter of much importance and seriousness. If she have letters of introduction to well-known people, the question is greatly simplified, temporarily at least. But if she be a person of true refinement, and yet a perfect stranger in a city, a different problem is presented to her.

Perhaps she will never feel a greater sense of security in pushing inquiries under these circumstances than when she has obtained a number of addresses from the minister of the church with which she intends to identify herself. His address can be easily learned, and if she have the outward manner of a lady, he will invariably be most kind in giving her such addresses as he may think of as desirable ones.

Considerable time will then be needed to investigate the places named, for she will have certain requirements in mind as to locality, room, table, personalities, prices, etc. Only by making a round of the places named can she obtain the full information she desires.

Upon presenting herself at the various boarding-places, the fact that the well-known minister furnished the addresses will in a sense recommend her to those of whom she makes her inquiries. She has the advantage in this case of knowing certainly the acceptability of the persons and houses whose addresses she holds; and perfect frankness in regard to herself is but right and fair upon introducing herself.

Should some one place among the number be apparently desirable, always the question as to the kind of table, the quality of food, and the manner of its serving, will remain unanswered until she has partaken of the meals the place affords. If before making a final decision she can upon some pretext, such as being at a great distance from her hotel at meal-time, take a single meal at the place in view, she will know most fully what to anticipate in the future in that line, and in all others, indeed; for the quality and serving of things at table is a sure index of all things else in a household.

When all investigations possible have been made, it will be best to reserve the decision to another day; otherwise, under pressure of weariness, or some strong personality, she may make a hasty choice which may cause much after-regret.

When "looking up" the various places, there will be many things which will serve as a basis upon which to form a judgment. First, the general appearance of the street, locality and house will receive consideration. Second, the servant that answers the door will all unconsciously throw light upon the matter. If she be pleasant, neat and apparently well trained, one may expect similar manifestations in others yet unseen; and a nice, well-trained servant at the front door argues a wise, refined mistress.

Then the general aspect of the room into which one is ushered to await the mistress of the house will likewise tell its own silent story. If it be cheery, neat, tasteful, comfortable, something of those qualities is promised for all parts of the house. Finally, the appearance and manner of the one who is in charge of the boarding-place, more than all else, will indicate what may be expected in all things. If she be ladylike, considerate, giving information clearly and definitely, there will be much to hope for. Just here it will be important to have some power of reading character from tones of voice, expression of face, outline of features and figure; also dress and manner. So, too, from all surroundings and every incident of the visit some knowledge will be gained by the skillful observer, which will aid in getting a true view of the place under consideration.

When all possible facts have been learned in regard to each place, in some hour when the weariness of the search has been fully relieved, a careful comparison of all places may be made far from the scenes in question, and a decision reached in regard to the most desirable.

The only satisfactory plan for a total stranger is to visit each place on her list of addresses; and as this requires time, a wise way is to make some temporary arrangement until she shall have finished all investigations. It is as well to have as many desirable addresses as possible, for some things will suit at one place, and others at another; but among many one can usually be found which will meet all, or nearly all, requirements.

When the one in search of a boarding-place is in a strange city to attend an art or musical school, or for any similar purpose, much desired information can be gained from those in connection with the school or institution. When, however, she is merely, for some reason, making a change of homes from one city to another, it is less easy to obtain the facts desired.

The Young Women's Christian Association in most cities can furnish information and homes especially suited to those of the most limited means. In a few cities there are club-houses and apartment-houses, in which busy women may have rooms, with meals at a cafe, at a reasonable price. This is especially adapted to the needs of women workers of various kinds who need the protection and companionship that such a place affords, without the expense which the same accom-



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modations would necessitate in a private family. Strangely enough, in only a few cities are there such much-needed institutions. Every city should be able to offer such a home to deserving women.

Woman's way through the world is oftentimes beset with difficulties, and it is a pleasure to speak a word which may open to her life's paths.

JANE LAYNG.

FLORAL THOUGHTS.

If one has but little space for flowers, that little should be used to the best advantage, as you will want to furnish your table with cut flowers, and yet have a continuous supply of bloom. A few varieties of vines are always desirable. Madeira tubers are cheap, and they soon produce a handsome, luxuriant shade-vine, with fragrant flowers. Select vines that have handsome foliage, and that make a good, close screen.

I find any of the moon-flowers, especially the Childs, that was introduced by Childs, the florist, a very desirable climber, and the flowers are beautiful and have a delightful odor. The Ipomoea Learri, commonly known as the dawn-flower, because of its beautiful deep sky-blue color, is a fine climber, makes a rapid growth, and is a mass of bloom until frost cuts it down. The Balsamina Momordica is another fine climber; the flower is insignificant, but it has a handsome orange-colored fruit that is used as a vegetable by the Chinese, and is also fine for medicinal purposes. These vines are desirable because they are strong and rapid in growth, and have showy flowers as well as foliage. I would choose them from the hundreds of vines that the florists offer. As to the flowers, mignonette, sweet alyssum, snapdragons, nasturtiums, verbenas, the pompon marigolds, Chinese pinks, pansies, and the newer sorts of fringed and blotched petunias, are all favorites, and will afford one a continuous supply of cut flowers; the verbenas especially, as a packet of mixed seed will give you a fine variety of colors. The pinks, purples and crimsons, with large, white eye, are very handsome, and the florists now sell seed of a fragrant, pure white variety, with very large trusses of bloom.

It is best to buy verbenas from a good firm, pay a little more, and secure the newer and handsomer sorts. A packet of double mixed balsams should also be included in your list. They look lovely in a large, shallow bowl, alternated with sweet alyssum. A little moss, such as florists use, should be placed in the water, in which the short stems of the balsam can be inserted.

AIDA.

HOME-GROWN COCOANUTS.

Quite a number of tropical fruits have recently been introduced into cultivation in this country. Already on the east coast of Florida are growing 250,000 cocoanut-trees, 42,000 being on one plantation. It is believed that the first trees of this kind in the state sprouted from nuts brought from Central America and the West Indies by the Gulf Stream. At Key West and about some of the old forts cocoanuts were planted at an early day, as certain ancient trees now standing bear witness. In 1877 a bark freighted with cocoanuts was caught in a storm off the coast of Florida and beached near Lake Worth. Several thousand of the nuts were saved and planted, the satisfactory growth of the seedlings giving an impetus to cultivation.

The first importation of cocoanuts of named varieties was made in 1889, when the secretary of agriculture obtained through the state department two shipments of selected nuts from the Philippines. These with two other shipments in 1890 from the same islands comprehended fourteen varieties. To get so many varieties was no easy task, inasmuch as not more than two or three kinds grow in any one district or island of the archipelago, and they were collected by a skilled botanist, who made a tour for the purpose. The nuts thus received were forwarded to growers in Florida. Certain specimens from the islands of Albay and Misamis were of the smallest known variety, which yields little oil and is of inferior flavor. The shells are carved by the natives into beautiful drinking-cups. The meat, of a variety called "tayomamis," is prepared as a delicious sweetmeat with yams and syrup. Another variety, on account of its extreme hardness, is known as "bahau," which means millstone.

The word cocoanut is derived from the Portuguese "coco," meaning monkey, because the base resembles a monkey's face. The tree was known to the people of Ceylon as early as 160 B. C., the milk being used by them for making cement. The cocoanut is one of the most useful of plants; root, trunk, leaf, sap and nut are made to yield tribute to man.

The fiber of the husk furnishes excellent yarn, and is preferred to horsehair for stuffing beds, cushions, chairs and saddles. It is stronger and more elastic than hemp. The Polynesians twist small cords of this fiber, which serves in the construction of houses and canoes where Europeans would employ nails. The green nuts are grated for medicinal use. Grated cocoanut forms an ingredient of the East Indian condiment, curry. In the Maldiv islands labor is usually paid for in cocoanuts.

The chief manufactured product derived from the cocoanut is oil, valued at seven cents per pound by the hoghead. Most of the cocoanut consumed in the United States is manufactured in this country from imported nuts. It is valued in the making of candles and soaps; it also serves as a substitute for butter. It is used by natives of the Pacific islands for burning in lamps. The kernels of the nuts, broken and dried, are called "copra." One thousand cocoanuts yield five hundred pounds of copra, from which are obtained twenty-five gallons of oil. A good tree yields one hundred cocoanuts annually, worth four cents apiece. The worst foe of the planter is the black rat, which builds its nest in fruiting trees and destroys the nuts. To protect the trees against the enemy the trunks are incased in broad sheets of galvanized iron.—*Boston Transcript.*

THE TOUCH OF A LEAP-YEAR HAND.

At 9 o'clock last Saturday evening Algernon stood at the front door of the house of the girl he loved, but to whom he dared not say the word.

For a long time he had been sparring for points, but to the bashful these things do not appear in a clear light, even though they clearly exist.

He had rung the bell once, twice, thrice, but there had been no answer.

Nervously he stretched forth his hand to ring again, when the door was opened by the one being in all the world who made his life worth living.

"Why, Algernon!" she exclaimed, "if I had thought it was you, I wouldn't have kept you standing out in the cold so long."

He thought of how long he had been standing out in the cold, and wondered when the courage would come to him to go in out of it.

"You know," she continued, as she drew him inside and closed the door, "that the servants are out to-night, and some of the family have to answer the door-bell."

He thought he saw a chance to make a start in the right direction without alarming her. That had been the trouble all the time with Algernon; he was in mortal terror of frightening the girl by some emotional precipitancy or other, thus destroying his hopes forever.

"Why, Miss Dora," he said, in tender, insinuating tones, "don't you know my ring yet?"

She looked down at her empty fingers, where no jeweled setting shone, and then looked up into Algernon's face.

"No, Algernon," she said, blushing, "I do not. But don't you think it is almost time that I did?"—*New York Sun.*

THE FUTURE OF SIBERIA.

Baron Nordenskjold is of opinion that in the coming century Siberia will occupy the same position as a bread-producer for Europe that America has held for a long time past. He says that north of the parallel of about 60° the country is mostly immense deserts, without forests, and so cold as to forbid cultivation. But south of those deserts there is the greatest forest belt in the world, extending most of the way from the Ural mountains to the Pacific coast. South of this forest belt, up to about 50° of latitude, are the great Siberian plains, having a black soil of unsurpassed fertility. At comparatively small cost this soil could be made to produce each year great crops of wheat, rice and maize. These could be exported during the summer season through the waterways of the Irtysh, Obi, Yenesei and Lena, with their numerous branches, and in the winter by the Siberian railroad, which will touch all points of importance on these fertile plains. The rivers and their branches will be connected by numerous canals and the railroad finished early in the next century, and then an era of enormous development in Siberia will have begun. Port Dickson, at the mouth of the Yenesei, in the Siberian sea, which was discovered by Nordenskjold, is named by him as one from which navigation to the Atlantic ocean can be performed without much difficulty when it has been connected by telegraph with the coast stations, so as to receive information about the rapidly changing ice conditions in the Siberian sea.—*Chicago Tribune.*

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Recent Publications.

THE WASHINGTON POST ALMANAC FOR 1896. A cyclopedia of historic and statistic facts for the office, farm and household, giving also an outline of Prof. Tice's electro-planetary theory of weather changes, with predictions for every day of the year. Price 25 cents. Published by the Post Company, Washington, D. C.

KAREZZA—Ethics of Marriage. Price, in cloth, \$1. Alice B. Stockham & Co., 277 Madison St., Chicago, Ill.

CATALOGUES RECEIVED.
The Deming Co., Salem, Ohio. Illustrated catalogue of spray pumps and nozzles, containing recipes for insecticides and fungicides.
The Minneapolis Threshing Machine Co., Minneapolis, Minn. Illustrated catalogue of improved threshing machinery, including traction-engines, separators, self-feeders, automatic stackers, weighers, hoppers, wagon-loaders, etc.
The De Laval Separator Co., 74 Cortlandt St., New York. Handsome catalogues of the Alpha-De Laval power and hand cream-separators, containing much of interest to the progressive dairyman.

MORMONS AND GENTILES.
One of the most thrilling serial stories ever written is by the celebrated author Leon Lewis, and is entitled "Mormons and Gentiles," being a complete expose of many of the terrible secrets of Mormonism hitherto unpublished. Although the tale involves Danites and their secret crimes of twenty years ago, the publishers of the story are receiving many threats of vengeance by Mormons. You can get this powerful story (based on facts) and the magazine, one full year, if you send ten cents to **FIRESIDE GEM CO., Waterville, Me.**

Our Household.

PARTING.

If thou dost bid thy friend farewell,
But for one night though that farewell may be,
Press thou his hand in thine.
How canst thou tell how far from thee
Fate or caprice may lead his steps ere that
to-morrow comes?
Men have been known to lightly turn the
corner of a street,
And days have grown to months, and months
to lagging years,
Ere they have looked in loving eyes again.
Parting at best is underlaid
With tears and pain.
Therefore, lest sudden death should come
between,
Or time or distance clasp with pressure firm
The hand of him who goeth forth;
Unseen, Fate goeth, too.
Yes, find thou always time to say some
earnest word
Between the idle talk,
Lest with thee henceforth,
Night and day, regret shall walk.

—*Lover's Yearbook.*

HOME TOPICS.

ALMOND CAKE.—This is one of the most delicious cakes. Beat together one cupful of butter and two cupfuls of sugar; stir into the mixture the yolks of six eggs, one at a time; add one cupful of sweet milk, a teaspoonful of best almond extract, and three cupfuls of flour sifted with one heaping teaspoonful of baking-powder. Beat the whites of the eggs very light, and add them the last thing. Line tins with buttered paper, and pour in the batter. While the cake is baking, blanch half a pound of almonds, and split them. Frost the cake as soon as taken from the tins, and spread the split almonds over the top. Last winter I was making a spice-cake one day, when I thought I would try adding a half teaspoonful of almond extract.



Everyone who ate of the cake pronounced it excellent—an improvement on common spice-cake.

CLAM POT-PIE.—Some one at the dinner-table remarked that the season for oysters was now over. "Yes," I said, "but clams are in season now." Then Miss S asked if we had ever eaten clam pot-pie. We never had, but as she assured us that it was delicious, I give the recipe: Chop a dozen large clams, and put them to cook

with the clam liquor and a quart of water. Let them cook ten minutes; season them with salt, pepper and a tablespoonful of butter. Put in six potatoes, cut small. Then to two cupfuls of flour add two teaspoonfuls of baking-powder, a quarter of a teaspoonful of salt, and sweet milk enough to make a very stiff batter, so that when dropped from the spoon the dumplings will keep their shape. Drop these dumplings over the top of the potatoes as soon as the water is boiling after the potatoes are put in. Cover the pot closely, and let it boil fifteen or twenty minutes; then serve, pouring the clams over the dumplings. If there is not gravy enough, add a teacupful of cream or milk after the dumplings have been taken out, and let it boil up once before pouring it over the dumplings.

THE CHILDREN'S HOME SOCIETY.—I was reading not long since of this society, its work and aims. It originated in Nashville, Tennessee, I believe, but is now in operation in over twenty different states, and it is estimated that by its aid over nine thousand homeless little waifs have been placed in Christian families and given an opportunity to become good citizens, instead of growing up in poverty and vice to swell the ranks of criminals. After all this, it is believed that only about twenty per cent of the homeless children of the land are provided for, and yet there are childless homes and loving hearts scattered all over the country, that might make some little one happy, and save it, perhaps, from a life of evil. There is no better way of serving the Master than to care for one of his homeless little ones, for has he not said, "Whoso receiveth one such little child in my name receiveth me?"

MAIDA McL.

CLOTH COSTUME.

This very pretty gown is suitable for a young girl, in any of the new materials, using Persian or Dresden silk for the front.

GRADUATING-DRESSES.

The favorite material for these dresses lies between organdie, white mull over silk, white lansdowne or white alpaca. They should be made very simply and with as few furbelows as possible, using ribbon decorations at the neck and waist. The skirt should be perfectly plain and untrimmed. If the lining is of silk, the outside should hang separate from it. The silk skirt could be lined with the new rustle percaline, which serves to keep the dress out well.

L. L. C.

THE GOSSIP.

"The gossip resembles the bee, as she is always busy, and carries a sting to her tale."

So says some one who would deserve to be congratulated on the excellency of the simile, were it a known fact that a bee possessed a tail.

It is not at all likely that any of us think this term "gossip" will apply to ourselves individually, though we are perhaps willing to think of various instances where it might be applicable to our acquaintances.

There are gossips, and there are gossips—some actually malicious, some mere busybody gossips, some thoughtless—but they all carry the sting to their tales, though, of course, in different degrees of harmfulness.

The really malicious gossips, or slanderers, are the fewest in number. It seems impossible to think of any good reason, or, for that matter, any reason at all, why people should become that most detestable of all things, a malicious gossip; but nevertheless the fact remains that there are many such.

The mere busybody gossips do a great deal of harm, too; not really maliciously, but with a certain amount of enjoyment in the fact that they have been the ones so fortunate as to circulate a nice titbit of news that will create a sensation wherever repeated. It gives them some little importance, apparently, and a cordial welcome into many houses and circles where, perhaps, they would not otherwise be even tolerated.

Mrs. Receptive finds it so dull this warm afternoon; her children are at school; all necessary calls have been made; her house work and sewing have been carefully attended to; it is really quite tiresome and stupid.

She walks over to the window, and looks up and down the street rather wistfully; if only some one would come and relieve the monotony of a quiet afternoon in a quiet town. A small, dark speck comes into view; it grows larger, and finally can be distinguished as Mrs. Gossip, who is one of the most energetic news-mongers in the town.

Deep in her heart Mrs. Receptive despises gossips, but it is so dull, and one must be at least polite to a caller. It is noticeable, however, that the "at least polite" really amounts to a very cordial welcome, and the afternoon tea aids in drawing out her guest, though, to be sure, the drawing-out process would be an easy one in any case, so ready is Mrs. Gossip to tell her choice (?) bit of news. By the time she is ready to go, some one's reputation has suffered more or less by what she has told, embellished to suit her own vivid imagination and powers of oratory.

Nor do they trust their tongues alone,
But speak a language of their own;
Can read a nod, a shrug, a look,
Far better than a printed book;
Convey a lie in a frown,
And wink a reputation down;
Or, by the tossing of a fan,
Describe the lady or the man.

—Swift.

"It is really too bad!" says Mrs. Receptive, "and I wouldn't have believed it of her. I am very sorry." And she probably is sorry.

"Yes, yes!" says Mrs. Gossip, gathering her wraps and edging nearer the door, in view of other similar calls to be made that afternoon. "Yes, it's a pity; but what



could one expect, considering her family?" And Mrs. Gossip is never slow in accepting the invitation to call again.

Mrs. Receptive may or may not be a busybody gossip; in fact, she may only be a thoughtless one. By evening she has reviewed the matter pretty thoroughly, changing it a little here and there, according to her own interpretations, and at tea-time has it all nicely arranged for her husband's benefit.

Probably a neighbor or two drop in during the evening. Mrs. Gossip has also called on them during the course of the day; consequently, hostess and guests discuss the bit of scandal, perhaps not very animatedly, still with more interest than is usually given to the misery of some destitute family.

Then again, Mrs. Receptive always makes it a habit to question the children after they have been to a neighbor's, or to a party, etc. Children are quick to see that a bit of news is interesting; so they develop the virtue (?) of noticing everything—every little act or word—and bring many a scrap of news into the house—news which is afterward so misinterpreted by the older members of the family as to be hardly recognizable.

Such are the thoughtless gossips; thoughtless in what they do themselves, and thoughtless in the careless training of their children to become future busybodies.

This may or may not apply to you, reader, but if it does in any form, for the love of those near and dear to you, whose words and actions and affairs you would not wish subjected to similar discussions, for the love of them refrain from news-carrying or news-hearing.

Good name in man and woman, dear my lord,
Is the immediate jewels of their souls;
Who steals my purse, steals trash; 'tis something, nothing;
'Twas mine, 'tis his, and has been slave to thousands;
But he that filches from me my good name,
Robs me of that which nothing enriches him,
And makes me poor indeed.

—Shakspeare.

EMMA L. HAUCK.

THIS WILL INTEREST MANY.

F. W. Parkhurst, the Boston publisher, says that if anyone who is afflicted with rheumatism in any form, or neuralgia, will send their address to him at Box 1,501, Boston, Mass., he will direct them to a perfect cure. He has nothing to sell or give, only tells you how he was cured. Hundreds have tested it with success.

Buttons, either of brass or pearl, are largely used this year on all dresses for young people.

FIG-LEAVES.

Yes, Eve called my attention to them the other day, while passing through one of our great mercantile and dressmaking establishments. She brought out for my inspection a ravishing costume just finished, and intended for one of fortune's favorites. It was a darling dimity of a



pale and heavenly blue. The very wide skirt was made perfectly euchaunting by four tiny bias ruffles, all edged with narrow Valenciennes lace, while the top ruffle was headed with it.

The waist—well, there wasn't much waist, it was chiefly sleeves; for no matter what theories are advanced, the big sleeves just continue as well as ever. The sleeves were made by the new bishop pattern, dreadfully full, unlined, and terminating in a broad, lace-trimmed band which hooked, or might be tied with ribbons, as fair fortune might decide. The waist was simply full at the neck and belt, and the broad plait running up the front was edged with Valenciennes lace. A high, lace-edged stock finished the dress.

Red satin slippers, red undressed kid gloves and a red parasol, or white kid walking-shoes, white gloves, white parasol, and a huge white hat trimmed in black and white plumes, pale roses and violets, finished this dream of an angel in blue.

Then this wily daughter of Eve shook out the folds of a grass-cloth. Chic? Why, you just held your breath. If that first costume would have stamped the wearer angelic, this last would have transformed



her a woman of the world. The skirt swung with that peculiar stylish fullness, and its swing—oh, its hang was simply perfect!

Around the bottom was an exceedingly full double ruche of crimson wash-silk ribbon. Sleeves, bishop, banded with a ruffling of the ribbon, while the waist was full at the throat and belt, and trimmed with ruchings of the ribbon in graduated

lengths, the two side ruffles reaching almost to the shoulders and just below the bust line. A high crimson stock completed this fetching combination.

By the way, do you know that old-fashioned grass-cloth is to be the sweep of the summer? It has already begun to advance in price, while the new grass-cloth shirt-waists sell at enormous prices, and folks—that is, beauty and fortune—are glad to secure them at almost any price. Grass-cloth is so terribly swell, you know. **CARRIE O'NEAL.**

SLUMBER-ROBES.

Different materials are now employed for these. Many are using the color-striped lawns and batiste, and when made after an elaborate pattern they serve as occasional house wrappers; and being partly of a color, do not look so entirely like a night-robe. Lace ribbon and embroidery enter very largely into the make-up of all.

MANUFACTURE OF PEARL BUTTONS.

This is but a recent industry in America. There is but one factory in Ohio, and that is in Cleveland. Formerly, all pearl buttons were made in the old countries, Vienna, Austria, being a great center of the business. The buttons were made largely in the homes of the workmen, the principal dealer in them giving out the shells to his employees and receiving the completed, or nearly completed, buttons in return. But little machinery was used, and that was propelled by hand. The McKinley tariff made it possible for this business to be carried on in this country. The invention and application of some simple machinery manipulated by girls reduces the price of labor to a level of that formerly paid to men working with their hand-machines in the Old World.

The factory already referred to has a capacity for turning out one hundred and fifty gross of buttons per day. From thirty to thirty-five girls are regularly employed, the average pay of whom is four dollars per week. In carrying out this work two principal experts are employed, one a man who is a thorough master of the entire business, the other a young woman who sorts the buttons. Both are natives of Vienna. The man can talk English very brokenly, the woman not at all. The latter was not only trained to the work of assorting buttons, but she inherits her skill and taste in the art from a long line of ancestors who, from remotest times, were engaged in the business of button manufacture from shells.

The assorting of pearl buttons is the last process before they are sewed onto cards; and while it seems a very simple process, it is said to require a keen eye and a quickness to perceive the slightest tinge of shade or coloring, as only the pure white have the highest market value. Those slightly colored pass as second grade, while the third, or poorest quality, are exposed to some chemical process by which they become the "smoked pearl" of commerce.

The shells used in the manufacture of buttons are similar in nature to a common oyster or clam shell, only much larger and finer. They are obtained principally from Egypt and India; the finest and whitest coming from Australia. Whether tiny or large, each individual button must be handled several times. First, it is put on a bit of machinery that cuts the buttons out, then it is passed to another machine which smooths the back of it. Next, the groove is made for the holes, and lastly the holes are made. Then a lot of them are dumped into a barrel with some chemical that polishes them, after the barrel has been subjected to repeated turnings. They are then passed on to the sorter; she hands them to a girl who tacks them on cards at the price of three cents a gross. An expert can tack about thirty-five gross per day. The nationalities represented in this establishment are principally Irish and German, but with one or two exceptions, American-born. The principle of "gathering up the frag-

IVORY SOAP

IT FLOATS

Dingy carpets can be cleansed and brightened on the floor. Sweep thoroughly, spread a stiff lather of Ivory Soap over a small surface at a time, scrub with a clean scrubbing brush and wipe off with a damp sponge.

THE PROCTER & GAMBLE CO., CINTI.

ments, that nothing be lost," is generally observed in all manufacturing establishments of to-day. The rough part, or outer rims, of the shells used in button-making is put through a mill that crushes it into small pieces. It is then sold to poulterers, and is said to possess wonderful egg-producing qualifications. The fine powder which comes from smoothing the buttons is sold for a scouring material, the finest being sifted through bolting-silk, the same as flour. This is used as a silver-polish.—*J. E. Snow.*

TRAVELER'S HOLD-ALL ORNAMENTED WITH BURNT-LEATHER ENGRAVING.

The inside of this hold-all, made of light calfskin bound and fastened with brown woolen braid one half inch wide, is ornamented with a burnt engraving of apple-blossoms and birds. Two pieces of



calfskin, each ten and one quarter inches wide, and sixteen and one quarter and ten and one quarter long, rounded off at one end, are required. The longer outer part is then turned over at the straight end, to form a pocket three inches wide, while the other pockets and straps are put onto the inner shorter piece of the leather foundation. About three and one quarter inches from the straight end of this appear two small pockets coming opposite to each other, and composed of two pieces of leather four and one half inches high and five and one half inches wide, folded together three inches wide, like bellows. The flap covering them both, rounded off on each side, is three inches wide and four and three quarters long, and fastened with elastic loops and buttons. A flat pocket five and one quarter inches wide is now put over the round end of the hold-all, and in the open space between, two straps, each one inch wide and six and three quarters long, are stitched on at distances of one and three quarter inches, and in divisions of different sizes, to hold brushes, jars, small boxes, etc. The inner part is now completed and slipped into the pocket of the outer one, both parts being caught in by the binding. The same design can be used in making a case of heavy gray canvas, the ornamentation done in brown linen floss, using a conventional design.

CROUP IS QUICKLY RELIEVED, and Whooping Cough greatly helped, and its duration shortened by Dr. D. Jayne's Expectorant, the old family stand-by for Coughs and Colds, and all Lung or Throat affections. The best family Pill, Jayne's Painless Sugar-Coated Sanative.

OLD COUNTERPANES.

"Oh, dear!" sighed the weary housewife, "it seems as if I never could mend that old spread again," as she ruefully surveyed a much-worn counterpane; not so ragged, but very, very thin.

"Don't try," said Nellie; "give it to me, and I will put it to better use. Don't you know how quick the table-cloths wear thin at the edges? I'll fold that spread through the center, either way that it will best cover the table, and leave about an inch or so projecting on each side; then pin it to the quilt-frames, cover one side with bleached cheese-capping, and quilt in squares of three inches or more (and the stitches do not need to be very fine, either), remove from the frames and run the edges together. This quilting is not necessary, but will greatly aid in quickness of washing, as everything is held in place.

"Use this mat under the table-cloth, and you will be surprised to see how much longer it will wear, and how much nicer it makes the table-cloth look; it seems to be heavier and finer. Some wealthy people use heavy felt lining over the table, to give softness and thickness to the table-cloth, but an old counterpane answers the same purpose, if worked over as described." **GYPSY.**

BEREA COLLEGE.

That the best education is within reach of all has been demonstrated in the history of Berea College. This is a non-sectarian Christian institution, beautifully situated among the foothills of the Kentucky mountain range, 130 miles from Cincinnati. It was founded before the war by anti-slavery Kentuckians, and has a most romantic history. The climate is a special inducement to northern people, and it has many students from northern states. Reduced railroad rates make the trip inexpensive. The remarkable thing about this school is that the tuition is free, although three college courses are given, with the privilege of instruction in special branches. Board is astonishingly cheap, and yet the fare is wholesome and abundant. Berea is the ideal educational institution, not only for people of limited means, but for those seeking such advantages as healthful climate, delightful scenery, homelike hospitality and the best moral influence. Persons desiring information about Berea College—and there is much to be had that is of peculiar interest—should write to President William G. Frost, Berea, Ky.

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to wash as clean as can be done on the washboard and with much more ease. This applies to **Terrill's Perfect Washing Machine** which will be sent on trial at wholesale price; if not satisfactory money refunded. Agents Wanted. For exclusive territory, terms and prices write **PORTLAND MFG. CO., Box 4, Portland, Me.**

SIDE COMBS
These side combs are over two inches long by one inch wide, triple silvered, now very fashionable. **Sample Pair by mail TWO CENTS.** ADDRESS **LYNN & CO., 45 BOND ST., NEW YORK.**

Our Household.

ONLY A PICTURE.

Something to show me? Well, my lass,
Make haste, I have no time to idle.
The hours and days they seem to pass
Like colts which scorn the bit and bridle.
A picture? Well, if that is all,
I can't—nay, child, don't look so sorry,
I'll come and see, although I call
The whole thing only waste and worry.

But have your nonsense while you may,
Your brushes, your paints and long-haired
master;

They're pretty whims for you who see
Such beauty in a canvas plaster;
But as for pictures, there's but one
Could win from me an hour's gazing;
It comes sometimes when day is done,
And dusk falls on the cattle grazing.

A long, low house, that fronts the sea—
You saw it when you made that visit—
But I have not since ninety-three;
No wonder I am homesick, is it?
The dear old farm-house, built of stone,
The sunlight falling on the gables—
What's this? Hurray! Good luck! Well done!
Ah, lassie, you have turned the tables!

Know it? Aye, see the chimneys all,
The open door, the bench beside it;
The rose-tree climbing up the wall—
I almost see the hand that tied it.
Know it? Aye, know each blade and stalk,
Each grassy knoll, each sward cover;
Why, every flower beside you walk
Has had in me a faithful lover.

I've loitered in that yew-tree's shade,
I've climbed that hedge, have jumped those
ditches;

I planted with my little spade
That willow rich in yellow switches.
The days of boyhood are the best
This old world holds, 'tis my opinion;
And England—I'll not say the rest—
Our Canada is a fair dominion.

To think your clever hand, my dear,
Did this to give your old dad pleasure,
Makes me feel choked—there goes a tear
To christen now my pretty treasure.
It seems to me the windows throw
The old-time look of pleasant greeting,
And in my heart I feel the glow
Of days that were too bright and fleeting.

The dear old faces, one by one,
Come with the memories swiftly thronging;
Oh, picture of my boyhood's home,
My eyes are dim with love and longing!
—Jean Blewett, in *Canada Farm and Fireside*.

IT PAYS TO LEARN THE ART OF DARNING.

I SHALL always thank my dear old grandmother for teaching me the art of darning, which should be an essential part of girls' practical home training. A young housekeeper and subscriber to FARM AND FIRESIDE wished to know how I kept my lace curtains looking like new ones, after using them so many years—that hers looked older in a year's wear than mine of many years. I promised to write out my method of laundering and taking care of them for her benefit, and if it helps any other young housekeeper, I will be glad. I think first darning the



smallest rent that appears in one's curtains is an item, and to do this you must look over them carefully every few days, to see if any one has accidentally or otherwise torn a small place—the larger ones are apt to show for themselves—and then immediately take a fine number of cotton floss and darn as neatly as if you were embroidering a delicate bud or flower. When you are ready to take down your curtains to wash them, shake out all the dust and dirt the first thing, then have the patience to go all over the curtains care-

fully, to see if there are any small rents; do not miss a broken thread in the lace, for it will lead to worse wear, and darn the smallest break.

Then have a tub of hot rain-water ready in which to wash them, get a bar of good white laundry soap, make a foamy suds, and wash them clean, rubbing through two soapy waters, then rinse them out in warm water. After wringing them well, clap them (one curtain at a time) in your hands, so as to get them damp all over. If you have frames, you can finish them up with very little trouble, but otherwise just put old sheets down in the spare room on the carpet, and pin or tack them down securely. Then stretch your curtains and pin them to the sheets evenly and smoothly, and let them remain until perfectly dry. They will be just the right stiffness and color, and not torn to pieces, as when they go to the cleaner.

SARA H. HENTON.

DID YOU EVER TRY IT?

Unless your children are "perfection," I opine that they sometimes become cross. Perhaps a little wholesome discipline will relieve them of their momentary pet. But when they have a "spell of the fusses," which continues for several days, be assured something is wrong, and decide that this is not a case "of mind over matter," but of matter over mind. Nine cases out of ten you'll find the difficulty lies with their digestion; something must be done, and that quickly. Bear in mind that there is a difference between indigestion and constipation. The former consists of separating the food into nutritive and non-nutritive elements, the preparing it by the action of the various juices for conversion into blood. It is possible for one's food to be quite thoroughly digested, and yet the person be troubled with constipation. The non-nutritive substances may be so crowded into the narrow space allotted them as to cause great difficulty and much pain.

When this alone is the case, as I have said in a former article, there is nothing so beneficial as the use of glycerin suppositories. But where the trouble is with the stomach, something of a different nature is required. And for this purpose I recommend senna tea; not merely for children, but for grown people as well. From any druggist procure a dime's worth of senna-leaves, using about the same amount of these as for common tea. Steep in the same manner, then pour off; flavor with sugar and cream, and drink. (Use plenty of milk or cream.) This tea, when made as weak as it should be for children, has a very pleasant taste, and is a most efficacious medicine; the more so because the little ones do not imagine for a moment that it is medicine. Administer this each eve, or allow them to drink it for supper for a few days, and you will find that their peevishness disappears most effectually.

ELLA BARTLETT SIMMONS.

EMPIRE CHEMISE.

For this garment use fine cambric. As much as possible of it should be made by hand. The band should be finished at the edge with two tiny cords; the waistband an insertion of embroidery through which a ribbon can be drawn, each side of a lace insertion.

CALCIMINE FOR WALL AND CEILING.

Soak one quarter of a pound of glue over night in water. Add a pint of clear water in the morning, set in a tin vessel, and put it in a larger one of boiling water on the fire, stirring until dissolved and decidedly thin. Put five and one half pounds of Paris white into a large pail; pour over it hot water, stirring all the time until it is the consistency of a very thin paste; stir in the glue, mixing the whole thoroughly, and taking care to have it smooth. If too thick, add hot water. Dip your brush in very often while at work, and stir frequently. Too much glue will cause it to crack. Apply with a good whitewash-brush, making a thin layer. Before coating the wall, all cracks should be filled and

smoothed over with plaster of Paris. Calcimine may be tinted easily by mixing with it yellow ochre, Spanish brown or indigo. Squeeze through a bag into the water.
M. E. SMITH.

BUTTERCUP CENTERPIECE.

The flowers are worked in three shades of yellow and the stems in green. The edge is worked in white. This design is eighteen inches square, and sells in stores or bazaars for fifty cents.

We will send this centerpiece, stamped on an excellent quality of linen (Premium



No. 576), to any address, postage paid, for 25 cents; or with FARM AND FIRESIDE one year, 50 cents.

CURE FOR BURNS.

Every housekeeper, and all the mothers especially, should know the best cure for burns—severe burns, I mean—for such cases as a physician is generally called to attend. I once saw a child, five years old, writhing in agony on his bed, and moaning piteously. On inquiring of his mother what ailed him, she said he had "pulled a teakettle of boiling water over on his leg." She then began to remove the bandages to show me the limb, but on attempting to take off the last one, the poor child screamed so that I begged her not to take it off. The limb up to the knee was almost purple, and swollen fearfully; and when the cloth was removed, blood burst from every pore. "The child has eaten nothing, nor slept," said the mother, "for two days and nights."

I hastened home and prepared the "cure" of which a friend had informed me, and sent it to the mother, with directions for use. She sent me word soon after that "in half an hour after the application was made the child went to sleep, and had no more trouble with the burn."

The recipe is as follows:

Upon a piece of soft, half-worn muslin, two inches larger every way than the sore, spread common pine-tar with a knife, a quarter of an inch thick, being careful to have the tar cover enough surface to completely cover the burn. Melt a spoonful of clean lard, into which dip a piece of old lawn or paper-muslin, large enough to cover all the tar. Wring it out as dry as you can, and spread it smoothly over the tar, and lay the greasy side on the burn. Wrap closely with other cloths outside, so as to exclude the air, and do not remove the application for three days. At the end of that time the sore may be examined. If no inflammation is in it (which you can determine by the absence of redness), it is ready to be healed; but if any inflammation exists, put on a fresh application of tar, prepared as before. When all redness disappears, spread a soft cloth with a mixture of mutton tallow and olive-oil, one part of each; this will rapidly finish the healing work.

The common remedy that physicians use is cotton batting and linseed-oil. The cotton adheres to the sore, and a long time is necessary to dress it, causing too much exposure to the air, thus retarding the healing process. With the tar treatment all this is avoided. It draws out all the inflammation, generally with the first application, and the pain ceases within a short time after it is put on.

I wish the readers of the FARM AND FIRESIDE would give this remedy a fair trial. I am sure it would save heavy doctor bills, and a large amount of suffering as well.
GRACE McF.

CONTRIBUTED RECIPES.

SOFT POTATO YEAST.—

1 cupful of flour,
¼ cupful of sugar,
1 tablespoonful of salt,
1 cupful of warm water,
1 yeast cake (dissolved in water).

Set this in the morning, and let rise until noon; seed, pare and cut small one quart of potatoes; boil, drain, mash fine; add three pints of water; then add this to the first, when cool enough to not scald it; keep warm until light and foamy. This should make two quarts of yeast. Stir this thoroughly each time before using.

SOFT POTATO YEAST BREAD.—For four loaves of bread, take two cupfuls of yeast and two cupfuls of blood-warm water; stir in flour until it is the thickness of griddle-cakes. (In cool weather I usually stand this in warm water and let it rise, which it will do in little more than an hour.) Now mix into loaves, rather stiff, and let it rise again, which will not take much longer than before. Then lard your hands, mold, and put in pans with only a dusting of flour on your board. This will soon be ready for the oven, which should be hot enough to count twenty when the bread goes in. Try buttering it as it comes from the oven, and not covering it. Begin this in the morning, and you can always have your baking done before noon of the same day. This takes so little time, and is so simple, all can have good bread, and enjoy the making of it. I hope to hear good results from the many readers trying this method, and am sure if they do try it they will say it was worth the price of this paper for one year to them, and many years to come.

Mrs. E. A. W.

When Jack and Jill

fell
down
the
hill,

Jill got no bruises shocking;
For CUPID Hair-Pins held her hair,
And saved her head a knocking.

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THE Handy Tablet

requires neither sugar nor spoon to make healthful and refreshing drinks the moment it touches water. Sample by mail, 10 cents.

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High grade wheels at popular prices, \$45, \$55, \$75. Also, our superb Syllips at \$100, forming an absolutely complete line. Agents wanted. Exclusive territory. Estab. 1864. Cata. Always free. Huse, Hazard & Co., Mfrs. 32 E. St. Peoria, Ill. Reliable



High Arm MY HUSBAND Cant see how you do it.
\$60 Kenwood Machine for - \$22.00
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Standard Singers - \$4.00, \$11.00
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ENTIRELY NEW—A combination Bread Knife, Meat Knife and Saw. Sells at sight; sample prepaid fifty cents. E. M. Vogleson, Canton, Ohio.

PARKER'S HAIR BALSAM
Cleanses and beautifies the hair. Promotes a luxuriant growth. Never fails to Restore Gray Hair to its Youthful Color. Cures scalp diseases & hair falling. 3c, and 1.00 at Druggists

Inflicted with SORE EYES Use DR. ISAAC THOMPSON'S EYE WATER

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One box \$1.00; three boxes (and guaranteed cure) \$2.50, at all druggists, or sent direct on receipt of price. Write for free booklet and proofs. EUREKA CHEMICAL & MFG. CO., LaCrosse, Wis.

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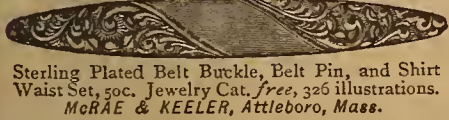
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SALARY COMMISSION AND With allowance for expenses, to one live, wide-awake man or woman in each town or city, to introduce goods on a brand-new scheme, never before worked, resulting in quick sale at almost every house. Steady work for the right person. Address at once, LOCK BOX 488, Springfield, Ohio.

STERLING SILVER BELT PIN, 10c.



Sterling Plated Belt Buckle, Belt Pin, and Shirt Waist Set, 50c. Jewelry Cat. free, 326 illustrations. McRAE & KEELER, Attleboro, Mass.

WE WILL GIVE a beautiful picture, size 16x22 inches, in rich colors and gold, absolutely free to any person who will promise to show it and try to get orders at 25c. each. When you have taken 6 orders we will send six pictures on credit, which you deliver and get paid for; you send us one half the money and keep the other half for your trouble. Send 12c. to pay postage & adv'tg. Home Art Picture Co., Chicago, Ill. Mention this paper.

GOLD RINGS FREE! We will give one half-round Ring, 18k Rolled Gold plate & warranted to anyone who will sell 1 doz. Indestructible Lamp Wicks (need no trimming) among friends at 10c. each. Write us and we will mail you the Wicks. You sell them and send us the money and we will mail you the Ring. STAR CHEMICAL CO., Box 412, Centerbrook, Conn.

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In every town and neighborhood to solicit subscriptions for

Farm and Fireside

In connection with popular premiums. Liberal commission given. Write for terms and sample copies at once.

Mast, Crowell & Kirkpatrick, Springfield, Ohio.

Our Sunday Afternoon.

KEEP A MERRY HEART.

No use to whine and worry
'Cause the sun don't shine to-day,
No use to fume an' flurry
'Cause shadows cloud the way,
The skies will surely brighten,
The shadows all depart.
Jes' go on straight an' learn to wait,
An' keep a merry heart.

There is no use o' growlin';
It costs no more to smile.
Tho' winter's storms are howlin',
Spring'll be here after while.
There is no use o' kickin',
Jes' go on with your part;
Be stanch an' true in all you do,
An' keep a merry heart.

There is no use o' wearin'
A melancholy air;
The world is not a-carin'
Your grief an' woe to share.
Altho' some grievous sorrow
Should cause a tear to start,
Jes' let good cheer drive back the tear,
An' keep a merry heart.

—Chicago Record.

HENRY WARD BEECHER'S ADVICE TO HIS SON.

FROM a letter once written to his son by the famous preacher, we take the following wise hints, which are good for all young men—and young women, too:

You must not go into debt. Avoid debt as you would the devil. Make it a fundamental rule: No debt—cash or nothing.

Make few promises. Religiously observe the smallest promise. A man who means to keep his promises cannot afford to make many.

Be scrupulously careful in all statements. Accuracy and perfect frankness, no guesswork. Either nothing or accurate truth.

When working for others, sink yourself out of sight; seek their interest. Make yourself necessary to those who employ you, by industry, fidelity and scrupulous integrity. Selfishness is fatal.

Hold yourself responsible for a higher standard than anybody else expects of you. Demand more of yourself than anybody expects of you. Keep your own standard high. Never excuse yourself to yourself. Never pity yourself. Be a hard master to yourself, but lenient to everybody else.

Concentrate your force on your own business; do not turn off. Be constant, steadfast, persevering.

The art of making one's fortune is to spend nothing; in this country any intelligent and industrious young man may become rich if he stops all leaks and is not in a hurry. Do not make haste; be patient.

Do not speculate or gamble. Steady, patient industry is both the surest and the safest way. Greediness and haste are two devils that destroy thousands every year.

Lastly, do not forget your father's and your mother's God. Read often the proverbs, the precepts and duties enjoined in the New Testament.

TO STRUGGLING YOUNG MEN.

Take care of yourself; nobody else will take care of you. Your help will not come up two, or three, or four flights; your help will come through the roof, down from that God who, in the six thousand years of the world's history, never betrayed a young man who tried to be good and a Christian. Let me say in regard to your adverse worldly circumstances that you are on a level now with those who are finally to succeed. Mark my words, and think of it thirty years from now. You will find that those who, thirty years from now, are the millionaires of the country, who are the poets of the country, who are strong merchants of the country, who are the great philanthropists of the country—mightiest in church and state—are now on a level with you, not an inch above, and with you in straitened circumstances now. Herschel earned his living by playing a violin at parties, and in the intervals of his playing he would go out and look up at the midnight heavens, the field of his immortal conquests. George Stephenson rose from being the foreman of a colliery to be the most renowned of the world's engineers.

No outfit, no capital to start with! Young man, go down to the library and get some books, and read of what won-

derful mechanism God gave you in your hand, in your foot, in your eye, and in your ear; and never again commit the blasphemy of saying you have no capital to start with. Equipped! Why, the poorest young man is equipped as only the God of the whole universe could afford to equip him.—Talmage.

WHO CONQUERS MUST SUFFER.

Crowns only adorn the heads of those who have carried crosses. The parable of the diamond and the wheel may comfort some overladen with troubles. It is recorded as follows:

"Alas!" cried a diamond to the wheel upon which it was being cut, "here I have been tortured for the last three days. What a misfortune it was that I ever came your way!"

"Say not so," replied the wheel, in encouraging tones. "The last stone that came to me was so rough and dull that you could scarce tell it was a diamond; but when I had done with it, it was placed in a king's crown."

"A king's crown!" exclaimed the astonished stone. "And do you think that I shall ever adorn the brow of a king?"

"It is quite possible; but if not allowed to enjoy so great an honor, you may find some other exalted and brilliant position; but you will never see the glories of a royal house unless I do my utmost for you."

"Then grind away," said the gem, as it nerved itself to endure the trial. "I'll stand it if it means an increase of beauty and promotion."

THE BEST ADVICE.

I am more and more convinced, the longer I live, that the very best advice that was ever given from friend to friend is contained in these four words, "Mind your own business." The following of it would save many a heartache. Its observance would insure against every sort of wrangling. When we mind our own business we are sure of success in what we undertake, and may count upon a glorious immunity of failure. When the husbandman harvests a crop by hanging over the fence and watching his neighbor hoe weeds, it will be time for you and me to achieve renown in any undertaking in which we do not exclusively need to mind our own business. If I had a family of young folks to give advice to, my early, late and constant admonition would be always and everywhere, to "mind your own business." Thus should they woo harmony and peace, and live to enjoy something like completeness of life.—A Wise Man.

NUMERICAL STRENGTH OF DIFFERENT RELIGIONS.

There has been computed, "on the basis of the latest scientific and statistical sources accessible," a suggestive table of the distribution of the people of the globe according to their religions. The table is published in the *Deutsche Kirchenzeitung* (Berlin). The population of the earth is estimated at 1,500,000,000, distributed as follows: Europe, 381,200,000; Africa, 127,000,000; Asia, 354,000,000; Australia, 4,730,000; America, 133,670,000; total, 1,500,000,000. The leading religions are represented by the following figures: Protestant Christians, 160,000,000; Roman Catholic Christians, 235,000,000; Greek Christians, 105,000,000; total Christians, 500,000,000. Jews, 8,000,000; Mohammedans, 180,000,000; heathens, 812,000,000; total non-Christians, 1,000,000,000.

There are not many of our readers appreciate the amount of agricultural implement business done with foreign countries. At the present time there are large shipments of wind mills being made. The Challenge Wind Mill & Feed Mill Co., Batavia, Ill., write us that they are making some very heavy shipments to foreign countries, are just now getting ready a carload for South America, and also have on the floor at the same time two shipments for Scotland and one for South Africa. This concern is doing a remarkably good business. They recently added a galvanizing plant, being the largest and best equipped owned by any wind mill concern in the country. This enables them to produce goods very fast. This concern are patrons of our advertising columns, and they are a thoroughly reliable firm, and in their manufactures, every means is used to produce very best machinery. One of their very latest and best mills for farmers' purposes is "Dandy," fully described in their catalogue, which they will mail free on application to all who mention this paper.



Class in History—Stand Up!

QUESTION—Who invented the first successful Reaper?
ANSWER—Cyrus Hall McCormick, in the year 1831.

Q.—Who builds the best grain and grass-cutting machinery at the present time?
A.—The McCormick Harvesting Machine Co.

Q.—Were their machines operated in the World's Fair field tests?
A.—They were.

Q.—Were the machines of their competitors so operated?
A.—They were not.

Q.—Why?
A.—Because they were afraid of the McCormick.

Q.—What proportion of the world's annual supply of harvesting machines is made by McCormick?
A.—About one-third.

Q.—Why did the farmers of the world buy 60,000 McCormick Mowers in 1895?
A.—Because the McCormick No. 4 Steel Mower is the best grass cutter ever built—that's why.

The new McCormick Light-Running Open Elevator Harvester and Binder, the McCormick No. 4 Steel Mower, and the McCormick Corn Harvester are unequalled for capacity, light-draft, efficiency of service and long life. Built, sold and guaranteed by the McCormick Harvesting Machine Co., Chicago.

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Wanted—An Idea Who can think of some simple thing to patent? Protect your ideas; they may bring you wealth. Write JOHN WEDDERBURN & CO., Patent Attorneys, Washington, D. C., for their \$1,800 prize offer and list of two hundred inventions wanted.

Will \$500 Help You Out? If so, you can have it! We offer you the Sole Agency for an article that is Wanted in Every Home and Indispensable in Every Office, something that SELLS AT SIGHT. Other articles sell rapidly at Double the Price, though not answering the purpose half so well. You can make from \$500 to \$700 in three months, introducing it, after which it will bring a Steady, Liberal Income, if properly attended to. Ladies do as well as men, in town or country. Don't Miss this Chance. Write at once to J. W. JONES, Manager, Springfield, Ohio. Mention this paper.

DEAFNESS and Head Noises relieved by using Wilson's Common Sense Ear Drums. New scientific invention; different from all other devices. The only safe, simple, comfortable and invisible Ear Drum in the world. Helps where medical skill fails. No wire or string attachment. Write for pamphlet. WILSON EAR DRUM CO., Offices: 301 Trust Bldg., Louisville, Ky. 1122 Broadway, New York.

ON 30 DAYS' TRIAL. THIS NEW ELASTIC TRUSS. Has a Pad different from all others, is cup shape, with self-adjusting Ball in center, adapts itself to all positions of the body, while the ball in the cup presses back the intestines, just as a person does with the finger. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free. C. H. EGLESTON & CO., 1205 MASONIC TEMPLE, CHICAGO. Mention this paper.

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A HOME IN FLORIDA.

Only a very small per cent of the people who have visited, lived or invested in Florida have seen the beautiful hill and dale country of Leon County, in which is located Tallahassee, the capital of the state, and when visiting this lovely section are invariably surprised that such high, rolling and productive clay lands could be found within the boundaries of the state—lands upon which are growing immense oak, Hickory and other hard-wood trees. Clear-water streams meander through the valleys, reminding one so much of similar existing conditions in many sections of the North, and which cannot be found in any other section of Florida.

These lands, which are reasonable in price, in many cases have been in almost constant cultivation for years previous to and since the war, still producing remunerative crops without the aid of commercial fertilizers, and this, too, under the most primitive system of farming that is still in vogue with the old settlers or their descendants. However, where improved methods of culture have been introduced by the Northern men, distinct, progressive and satisfactory results are the universal verdict. And all this is accomplished in a climate so salubrious and favorable to growth that flowers, blooming in the open air, may be gathered every day in the year.

The old crops of corn and cotton are still raised, but the new conditions of things have added to the list the growing of fine crops of tobacco, as well as oats and other grains, together with immense crops of pears, peaches, berries and other fruits. In fact, tropical fruits, such as the orange, have in the past found a genial home here, and were no more damaged than are the peninsular, a long distance south of this point.

Having in the past visited every important section of Florida, from Key West up, also being engaged in the orange industry in its most favored section, I have, after seeing this locality, permanently located here, which I consider by far the most healthful and the only really farming district in the entire state where a Northern man can and does feel at home and able to secure an income and an immediate living from the products of the soil.

At this point immigration is setting in rapidly from the North, the people who are investing being of a class that for intelligence and push will compare favorably with any of the suburban or farming districts of the North. Some are coming to regain their health, others to escape the intense cold and sudden, unhealthy changes of temperature always prevailing at the North, while others are coming to build up a semi-tropical home while engaged in some one or more of the lines of farming suitable to the favored locality.

Should other information be desired, will gladly answer all questions to the best of my ability. (Signed) L. D. SNOOK, Tallahassee, Fla.

TALLAHASSEE, FLA., April 24, 1896.

TO THE FARM AND FIRESIDE,

Chicago, Illinois.

Gentlemen:—I came from Holland to Florida in 1884. I had no friends or acquaintances in the United States, but looking over the map, I thought that Northern Florida would be a suitable country for any European. I landed at New York, thence by steamship to Fernandina, from Fernandina to Jacksonville. Neither of these points I found suitable for farming, and came to Tallahassee. On the day of my arrival here with my family (and it became known that there was a family here from Holland, who wanted to go to work), and although not one of us could speak a word of English, I was offered work on a large farm about three miles from Tallahassee, and took this work to start on the first of January, 1885. From the first of January to the first of May I took charge of the cattle, and learned to speak and understand something of the English language, which, I will say, I learned very quickly.

This first summer was a very warm one; indeed, the warmest of all summers I have experienced here, and through my own carelessness I had some fever. The milk from the cows was given me, out of which my wife made butter and cheese, for which we always found a ready market at good prices, selling butter at thirty cents per pound and cheese at from twenty to thirty cents per pound. I cannot speak too highly of the hospitality accorded to me at all times. Two of our children were just of school age, and though their schoolmates had a good deal of fun out of their speech, they were very quick to learn English, and were soon up with any of them.

My first work, when I moved to my great farm, was to look well after the cattle, keeping the calves from sucking the rich milk. I sowed some land in oats, and when I took the oats off in May, I found a crop of very fine grass, out of which I made a great deal of very fine hay. The following year I sowed forty acres in oats, and from four acres of these oats I gathered two hundred and forty bushels of seed-oats. The balance of the oats I sold, and got seventy cents per bushel for them. After these oats were off, I plowed and barrowed the land, which came up in natural grass, from which I cut and saved four tons of hay, which I sold for \$20 per ton. I find hay crops are very fine. I always make more than I need, for which I always find a ready market.

The sweet potato was to me an unknown crop, but I found it to be a very prolific and paying one. I find them to be, besides a fine table product, a fine food for cows, hogs and horses. Turnips, sown in the wet part of August, are a sure crop, and the yield is fine. Rye, also, sown at the same time, on good land, is a very successful crop, making a good pasture and feed for the cattle during the winter months. But I have now learned a better winter feed for cattle, which is indeed the best of all—that is a big silo, and feed ensilage, in which any quantity of feed can be stored and fed the stock during the winter months, at a cost not to exceed \$1.00 per ton.

I also raise chickens and turkeys with profit on my farm. I have my hog-pastures divided off into parts and planted in peanuts, sweet potatoes, chufas, etc., and allow the hogs to do the work of gathering from November to March. I find a ready market for all my hog products, selling my pork at six cents per pound net. I make three hundred gallons of syrup per acre, and sold my last crop of syrup at twenty-five cents per gallon. I have many varieties of fruit-trees on my farm, and I find a ready market at reasonable prices for everything that I have been able to raise; and I have raised everything here with success that I have attempted to raise. My Irish potatoes are now in bloom, and will soon have a fine crop. Some of this crop is, of course, for home consumption.

I think dairy-farming the most profitable, as upon the dairy-farm other successful crops can be grown out of which money can always be realized. I raise corn, potatoes, peas, oats, rye, vegetables and garden truck, pork, beef, turkeys, chickens and eggs. I have fine cattle and fine horses on my farm. I have been here now nearly twelve years, and have enjoyed the blessings of health to myself, my wife and six children. Our two eldest are now away from home; one is in the hardware business in Kentucky, the other at the State Agricultural College, at Lake City, Florida.

Five of our summer months are warm, but at all times refreshed by delightful breezes from the Gulf. The fall and spring months are lovely, and winters are incomparable. We have good water, good health, good society, good schools, good churches and a hospitable people.

This is all I will say in my letter, but if any reader will come to see me he will find me at home with my cattle, my horses, and looking after the interests on my farm that are here mentioned, all of which he will find to be true. My farm is three miles southwest of Tallahassee, and any visitor shall be welcome.

Very truly yours,

(Signed) JOHN DUNK.

CREEFORD, MANITOBA, CAN., April 13, 1896.
TO THE PUBLISHERS OF FARM AND FIRESIDE.

Gentlemen:—I have read everything you have published in the FARM AND FIRESIDE relative to the land owned and controlled by the Clark Syndicate Companies in the Tallahassee region, Florida. The evidence given was so full and strong as to the richness of the soil, the salubrity of the climate and the unusual facilities for successful agriculture, that I could not doubt the truthfulness of your statements.

However, as I am troubled with a little of the proverbial "can'ty Scotch cantion," doubtless inherited from my ancestors (though not born in "the land o' cakes" myself), I thought it best to go down to Tallahassee and view the land and inhale the piny-saline breezes for myself before deciding whether or not that Southern land should be my home. I went down on March 10th. I saw the land, felt the ozone, investigated the facts, and I am compelled to say that, so far as I am able to judge, you have not overdrawn any of your pictures relative to the climate, the capabilities, the opportunities for industrious agriculturists, etc., of that land.

As a pioneer in the mission work, as well as farming in the Northwest land, I have had opportunities of viewing some of the finest scenery. I have also traveled through some of the most imposing and picturesque sceneries in the midland and northern countries of England, as well as many of the level, classic grounds of southwest and north Scotland, where the martyrs fell, all impressive and beautiful to the eye. Yet I must say that in all my travels I have never looked upon lovelier landscapes than those to be found in the highlands of Tallahassee country, in Florida. One cannot describe them on paper; they must be seen to be appreciated. Here I would add for the guidance of those who may read my letter, and who may be seeking a new home with happy surroundings, go, view the land for yourselves, and be convinced as I have been, for, God willing, my home and the home of my family will be there as soon as I can make all necessary arrangements to go.

Further, if your valuable space will permit, allow me to say that the Clark Syndicate Companies are particularly fortunate in the choice of their agents in Tallahassee. Two more courteous and kindly gentlemen than the Messrs. Swearingen and Taylor one does not meet with in a lifetime of fifty years. To them we felt ourselves deeply indebted for the unraveling of many mysteries that necessarily pop up in inquiring minds relative to the present and future of that country, and they could not well have done more for our pleasure and comfort while viewing the lands.

Yours respectfully,

(Signed) F. LAMB.

Our Miscellany.

THE largest mastodon in this country is in the process of mounting in Rochester, N. Y. This monster was found in New Jersey, and it is supposed the huge beast wandered through the forests three thousands of years ago, and sank in the mud so deeply that it perished. Its height is from twelve to thirteen feet, and with tusks, its length is twenty-four feet.

A SEVEN-ACRE tract of muck on All Gottshall's farm, in Harrison township, near Logansport, Indiana, has been burning for more than a year, and even the recent heavy rains have failed to extinguish the fire. Holes have been burned to a depth of eight or ten feet. The tract is a perfect honeycomb and the ground is almost ruined.

SUMMER HOMES.

In the Lake regions of Wisconsin, Northern Michigan, Minnesota, Iowa and Dakota, there are hundreds of charming localities pre-eminently fitted for summer homes. Nearly all are located on or near lakes which have not been fished out. These resorts are easily reached by railway and range in variety from the "full dress for dinner" to the flannel-shirt costume for every meal. Among the list are names familiar to many of our readers as the perfection of Northern summer resorts. Nearly all of the Wisconsin points of interest are within a short distance from Chicago or Milwaukee, and none of them are so far away from the "busy marts of civilization" that they cannot be reached in a few hours of travel, by frequent trains, over the finest road in the Northwest—the Chicago, Milwaukee & St. Paul Railway. A description of the principal resorts, with list of summer hotels and boarding houses, and rates of board, will be sent free on application to ROBT. C. JONES, Traveling Passenger Agent, 40 Carew Building, Cincinnati, O.

EPOCHS IN MEN'S STRENGTH.

The muscles, in common with all the organs of the body, have their stages of development and decline; our physical strength increases up to a certain age, and then decreases. Tests of the strength of several thousands of people have been made by means of a dynamometer (strength-measurer), and the following are given as the average figures for the white race: The lifting power of a youth seventeen years is 280 pounds, in his twentieth year this increases to 320 pounds, and in the thirtieth and thirty-first years it reaches its height—350 pounds. At the end of the thirty-first year the strength begins to decline, very slowly at first. By the fortieth it has decreased eight pounds, and this diminution continues at a slightly increasing rate until the fiftieth year is reached, when the figure is 330 pounds. After this period the strength falls more and more rapidly until the weakness of old age is reached. It is not possible to give statistics of the decline of strength after the fiftieth year, as it varies to a large extent in different individuals.

WONDERFUL RESULTS FROM THE USE OF HOT AIR AS APPLIED TO SECURING THE GREATEST NECESSITY ON A FARM.

Water is the greatest necessity on a farm. It is not a difficult matter to find the supply, but to convey it where required becomes a question of much importance to a farmer. Dependence has heretofore been placed on the windmill, but you cannot always have the wind. There is a pumping engine specially designed for pumping water that is taking the place of the windmill. It is so simple in construction that a child can manage it. It is absolutely safe, requires no steam and has no valves. All that is necessary is to start a fire. The hot air from the fire starts the engine and keeps it going, and with proper piping water can be sent anywhere on the farm—to the house, barn, garden, etc. If any of our readers want to know about this engine they should write for free catalogue to the manufacturers of the De Lamater Rider and De Lamater Eriesson Hot Air Pumping Engines. Address De Lamater Iron Works, 467 West Broadway, New York, N. Y.

AIMED AT THE WOMEN.

One of the banks of Buffalo advertises in a daily paper of that city that it is in the center of the shopping district; that it has a woman's department; that it pays out only new bills and coins; and that it makes change "whether you have an account or not." This is a new departure in advertising, aimed squarely at the shopping women; and it makes two striking demonstrations: First, that the good will of the shopping woman is worth a great deal to many lines of trade besides the dry-goods trade, and next, that even the most conservative lines of business are beginning to recognize in publicity a subtle force capable of being applied directly to the development of their interests.—Philadelphia Record.

If You Have Rheumatism write to me, and I will send you free a package of a simple remedy which cured me and thousands of others, even cases of 33 years standing. Address, John A. Smith, Milwaukee, Wis.

A SERMON BY RUSKIN.

It is, or used to be, the heart's desire of nearly every Scottish parent that one son of the family should be a minister, or, as they say, "wag his pow in the pulpit." Perhaps it was owing to some such feeling as this that Mr. Ruskiu's father and mother were most anxious he should enter the church. Years afterward, when the son had grown famous as a writer on art, his father declared he would have been a bishop by that time had he taken holy orders. When Ruskin was a child, however—and there may have been talk at home of what he was to be when a man—he did preach at least one homily. The little boy got a red cushion, and then, standing up and thumping it, he delivered this sermon: "People, be good."

TRUE MERIT WINS.

The cost of fences on a modern farm is an item which forms no little part of the owner's "stock in trade;" indeed, on such a farm it usually amounts to more, in value, than all the implements combined. No doubt many of our readers have noticed with more or less interest the incoming of the woven wire fence, which is playing an important part in the matter of farm fencing. There is also no doubt concerning the desirability of this class of fence, both as to efficiency and durability, provided, of course, it is honestly made, and the wire thoroughly galvanized. Such a fence will last a lifetime, and extraordinary reports come to hand regarding its ability to withstand abuse of all descriptions. As the season approaches for repairs and rebuilding, we draw the attention of our readers to the advertisement of the DeKalb Fence Co., DeKalb, Ill., which appears in this issue of FARM AND FIRESIDE. Their picket lawn fence, as well as their cable, field, poultry and hog fences, also their steel posts, rails and gates, have attained wonderful popularity. The immense business this company have built up is a good illustration of the fact that "true merit wins;" their success has been altogether due to the care they exercise in making their goods. Send for their catalogue, and mention FARM AND FIRESIDE when you write.

MEXICAN millers have to pay thirty-two separate taxes before they can get wheat from the field to the consumer in the form of flour. This is of a piece with the whole system of taxes in Mexico.

A LABOR SAVER.

The most labor saving of farm implements to-day, considering cost, is the low Metal Wheels with wide tires. By using low wheels the wagon is lowered so as to save one man's labor in loading and unloading. Wide tires prevent cutting of ruts on farm, also make hauling easier for horses. The Metal Wheels also save expense of resetting tires, no blacksmith bills to pay. Are made in any size wanted and any width of tire, hubs to fit any skel or axle. We suggest that every reader write to The Empire Mfg. Co., Quincy, Ill., and get their catalogue.



Climax Dish Washer.

FREE We lead them all. See our list of testimonials. Best Machine made. More of them being sold. The verdict of the people has been given, they will have the Climax. They can't get along without it. Agents wanted, Men or Women. All can be convinced by reading testimonials from hundreds of people, and experience of Agents now in the work. You can get full particulars by writing the... Climax Mfg. Co., COLUMBUS, - OHIO.



FREE To introduce our New American 14L Gold Electro Filled Watch, we will for the next 60 days, give FREE an elegant ladies or gent's chain and charm with every order. This is a genuine American made hunting case, fitted complete with a genuine full plate, stem-wind, stem set, Springfield movement. Cut this out and send it to us with name and address and we will send this watch to you by express for examination, you examine it at the express office and if satisfactory pay agent our sample price \$4.85, and carriage, and it is yours, otherwise it will be returned at our expense. A guarantee sent with every watch. Mention ladies or gent's size. National Manufacturing & Importing Co., 328-334 Dearborn St., (9) Chicago.

SCHOOL OF —ART, LITERATURE, ORATORY. EXPRESSION Summer Term, Plymouth, Mass., July 8. Catalogue free; also specimen copy of the new review, Expression, S. S. CURRY, Ph.D., or Expression, 458 Boylston Street, Boston.

WANTED AGENTS to sell Sash Locks & Door Holders. Sample Sash Lock free by mail for 2c stamp. Best sellers ever invented. Best weights, \$12 a day. Write quick. BROWARD & CO., Box 83, Philadelphia.

FREE! A DRESS. Every woman who reads this can get a dress FREE by writing at once to L. N. Cushman & Co., Boston, Mass.

SALESMEN wanted to sell to dealers; \$100 monthly and expenses; experience unnecessary; enclose stamp. ACME CIGAR COMPANY, 96 Fifth Ave., Chicago

ELECTRICAL 50 cents year; instructive to everybody. Sample copy 5c. E. DOINGS 15 Cortlandt Street, New York.

SPEX BIG MONEY IN SPECTACLES. Send for our Optical Catalogue—just out, New goods. Cut prices. F. E. BAILEY, Chicago, Ill.

Queries.

READ THIS NOTICE.

Questions from regular subscribers of FARM AND FIRESIDE, and relating to matters of general interest, will be answered in these columns free of charge. Querists desiring immediate replies, or asking information upon matters of personal interest only, should inclose stamps for return postage. The full name and post-office address of the inquirer should accompany each query in order that we may answer by mail if necessary. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Queries should not be written on paper containing matters of business, and should be written on one side of the paper only.

Solder for Copper.—H. P., Cardonia, Ind. For solder for copper, melt together equal parts of zinc and copper. For a flux, use chlorid of zinc, or resin.

Paint for Kitchen Floors.—A. W., Lewiston, Mont. A good paint for kitchen floors is made of linseed-oil, one quart; yellow ochre, one and one half pounds, and sufficient japan drier. Fill the cracks with a mixture of putty and lithrage. Allow the paint to become hard and dry before using the kitchen.

Sweet-potato Culture.—A. D., Delaware, Ohio. Set out sweet-potato plants after danger from frost is over. Set the plants eighteen inches apart in low, broad ridges three feet apart. Cultivate frequently and keep free from weeds and grass until the vines are well started, and ridge up at the last cultivation.

To Destroy the Corn-worm and Cabbage-worm.—In answer to a query for a remedy for the worm that works on the ears of sweet corn, Mrs. E. W., Odell, Ill., writes: "When the ears are setting and the worms appear, sprinkle with a strong solution of alum, made by dissolving pulverized alum in hot water. Apply with a common sprinkling-can. The alum-water will also destroy the cabbage-worm."

Butter Query.—J. E. G., Dewatte, Wash., writes: "What is put into cream to make all the butter come out of it when churned? My buttermilk is like cream."

REPLY:—You probably refer to some of the butter nostrums that were advertised so extensively a few years ago. They are all frauds. Put nothing in the cream, but take proper care of the milk and cream, and follow the improved methods of making butter.

VETERINARY.

Conducted by Dr. H. J. Detmers.

To regular subscribers of FARM AND FIRESIDE, answers will be given through these columns free of charge. Where an immediate reply by mail is desired, the applicant should inclose a fee of one dollar, otherwise no attention will be paid to such a request. Inquiries should always contain the writer's full address. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Subscribers may send their veterinary queries directly to Dr. H. J. DETMERS, 1315 Neil Avenue, Columbus, Ohio.

Note.—Parties who desire an answer to their inquiries in this column, must give their name and address, not necessarily for publication, but for other good reasons. Anonymous inquiries are not answered under any circumstances.

Lame Pigs.—C. E. R., Mancelona, Mich. The swill fed to your pigs undoubtedly was too sour; besides this, your pigs lacked exercise. See numerous answers in recent numbers, headed "Rachitis."

Corns.—J. F. L., Asher Rapids, La. Yes, horses are subject to corns. Have your horse examined by a good blacksmith, and if he finds corns, let him cut them out, and then shoe the horse in such a way that there will be no pressure upon the sore spots.

A Paralytic Sow.—A. F. H., Portersville, Ohio. Paralysis, or, as you call it, stiffness (inability to stand and to use and control the locomotory apparatus), especially in hogs, may have various causes, and as long as I do not know any more about the particulars of the case than what you communicate, I cannot answer your question.

Result of an Injury.—J. H., Bonner Springs, Kan. The enlargement on the coronet of a fore foot of your horse, which you say resulted from an injury produced by a barbed wire, "seems to be fast to the bone" and causes lameness, is probably equivalent to a ringbone. If so, the lameness will require the same treatment, and the enlargement, which cannot be removed, may somewhat diminish in size in the course of time.

Stiff.—A. B., Blaine, Wash. The nature of the stiffness of your ten-year-old horse does not appear from your statement. It may be that the ailment is of a rheumatic character, although it does not proceed from your communication, which latter also does not show any connection between the swelling of the parotid glands and the stiffness. In horses, such a general stiffness most frequently results from overwork, and is caused by a degeneration of the muscles, and then, of course, is incurable.

A Raw and Ugly Sore.—A. S., Germantown, Ohio. You say you have a cow which has had a raw and ugly sore on her right hind hoof for six months, which does not heal and which makes her lame. Now, what parts are injured? Where does the sore lead? What is its character? How was it produced? These are all essential questions, which must be answered before a diagnosis can be made and before a treatment can be prescribed. The best you can do will be to have your cow examined and treated by a competent veterinarian.

A Fistula.—M. E. McG., Ulysses, Kan. What you describe may have been caused by a gunshot, but is now in every respect equivalent to a fistula, which is always, especially in a case like yours (of two years' standing), best treated by a competent veterinarian, because one not familiar with the principles of surgery and with the anatomy of the parts affected, even though receiving the very best general directions, will hardly ever succeed in bringing such a case to healing; and besides that, will soon lose patience and become negligent.

Probably a Fistula.—L. E. W., Canaan, Ohio. If you make a close examination, you will probably find a fistulous canal in the center of the luxuriant granulation (so-called proud flesh) where your mare was injured by the barbed wire, on the posterior surface of the foot just above the hoof, leading to severely injured tissue, or perhaps to a foreign body. Taking into consideration the anatomy of the injured parts, the best advice that can be given to you will be to have the injured foot examined and treated by a competent veterinarian.

Results of an Injury.—M. E. A., Chapman, Kan. If the wounds made by the mowing-machine in your mare's legs have been brought to a healing, and all lameness has disappeared, you can reduce the existing swelling by bandaging the swollen legs every evening, by keeping the bandages on until morning, and by giving exercise to the animal during the day. After the general swelling has disappeared, the local swellings in the places where the wounds have been will gradually, in the course of time, decrease in size, but it is doubtful whether they will entirely disappear.

Small Collar-boils.—J. W. E., Baker, Kan. What you describe are degenerated or diseased sebaceous glands and sweat-glands in the skin. The prevention consists in using none but well-fitting and perfectly smooth collars, and in keeping the collar and the skin of the horse perfectly clean. The treatment will depend upon the state of degeneration. If the small boils, or tumors, are old, hard and solid, it will be best to remove them either by means of the surgical knife or with a pair of sharp scissors bent over the surface. After this has been done, the horse, of course, cannot be used until all wounds have healed.

Copious Discharges from Both Nostrils.—R. H., S. D. Copious discharges from both nostrils may have various causes. You say your mare, which is old, had distemper last fall. This is hardly probable, because distemper scarcely ever affects older horses. It is, therefore, more likely that she suffered from some other disease of the respiratory passages, possibly of a catarrhal character, from which she never fully recovered. If such is the case, it will be advisable to send her to pasture as soon as there is sufficient grass to support her. The young and juicy grass will do her more good than medicines.

Drops the Food After it has been Masticated.—G. V. E., Davin, Assa. If your horse drops his food (hay) after it has been masticated, there are two causes possible. There is either paralysis of the cheeks or of some of the organs of deglutition, which disables the horse to form a morsel (if the cheeks are more or less paralyzed), or to swallow the same after it has been formed (if the paralysis affects the organs of deglutition); or else the horse has one or more diseased molars, and in consequence suffers from toothache. Let your veterinarian make an examination, but a thorough one. If a tooth is found diseased, it should be pulled out.

A Diseased Eye.—G. C., Comstock, Oregon. If the dam of your seven-year-old mare is affected with periodical ophthalmia, it is to be presumed that the eye disease of the latter is the same thing, and this becomes an almost absolute certainty if the cornea of the diseased eye is morbidly contracted, and if the turbidity has its seat in the anterior chamber, particularly in the lower part of the same. If this is not the case, your description is much too indefinite to afford a basis for a correct diagnosis. So-called "wolf's-teeth" are very innocent, and what you describe as wolf's-teeth are no wolf's-teeth at all, but simply small tusks, often found in aged mares.

Probably a So-called Malignant Wart.—G. U. D., Gid, Ark. What you describe appears to be a so-called malignant wart. If the morbid growth has a plainly developed neck, the simplest way to remove it may be to apply an elastic ligature around the neck, as close to the skin and as tight as possible. You may do it in this way: Get from a druggist a thin rubber tube, about a foot or fifteen inches long, draw it out as long as you can, and while thus stretched out, tie it as close to the skin and as tight as possible around the neck of the morbid growth. If you perform this little operation successfully, the rubber tube will continuously contract, and soon the whole growth will die and drop off.

Swine-plague—Vitiating Appetite.—H. C. L., Peach, Iowa. In very rare instances, it has been observed that a hog has become affected with a second attack of swine-plague, or so-called hog-cholera. Such a second attack is nearly always a very mild one, and I do not know of any case in which it became fatal, and as already said, it is very rare, and observed, as far as I know, only in a very severe epizootic.—The vitiating appetite of your sow which is crippled and eats dirt has undoubtedly another cause. It is possible that the food she receives lacks essential constituents. If it were a case of swine-plague, some of your other hogs would also be affected. If you are sure your sow is free from trichinosis and from so-called measles, and she is not too much crippled to graze, she will undoubtedly be benefited if you drive her out to pasture, especially to one in which she can get clover.

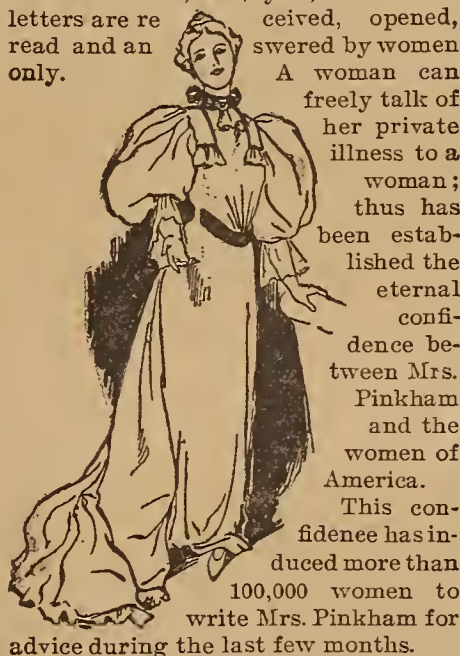
Old Collar-boils.—A. H. F., South Newberry, N. H. Such old collar-boils, especially if bard or callous, are best treated in the following way: First secure the boil, or tumor, between the thumb and index finger of the left hand; then with a sharp and pointed knife cut a hole of uniform width into the center of the tumor. This done, insert into the hole a crystal of sulphate of copper, measuring about one fourth as long and one eighth as thick as the diameter of the tumor. The sulphate of copper will soon dissolve and will destroy the whole fibroid growth, which latter will slough out in shape of a so-called pipe. The wound, which will be much smaller than one produced by an excision of the tumor, will heal without any difficulty, and if kept clean, will not require any special treatment. That the horse cannot be worked until everything has healed, and afterward that the collar must be so adjusted as not to press upon the scar, is self-evident.

Umbilical Fistula.—S. N., Seguin, Texas. What you describe is an umbilical fistula, but your description does not indicate whether it is the urachus or the umbilical vein that has remained open. If it is not yet too late, and your colt is yet alive when this reaches you, you may proceed as follows: Throw the colt on its back, let one or two men hold its head and feet, then by careful probing ascertain where the fistulous canal is leading—forward into the vein or backward into the urachus. If it is into the latter, probe carefully and gently, and mark the point at which you meet with slight resistance, which will be at the entrance of the bladder; then take a stick of lunar caustic and insert it into the fistulous canal up to the point at which you meet with the slight resistance, but no further, so as not to get into the bladder. Before you use the lunar caustic, you must make sure that the natural opening for the urine is not closed. If it is, the operation, of course, will be useless. If it is open, the lunar caustic will soon effect a closing of the urachus, and the colt will recover. Immediately after the lunar caustic has been inserted, the colt may be kept on its back for about a minute, and then be allowed to get on its feet. It may happen that soon after the operation the colt will show slight colicky symptoms, indicating that a little of the lunar caustic has passed into the bladder. If these symptoms disappear in a few minutes, they do not indicate that serious damage has been done; but if they continue and grow worse, the bladder has been seriously injured and the animal is apt to die. If the fistulous canal extends into the umbilical vein, the latter must be split open up to the point where it enters the abdominal cavity, and then a stick of lunar caustic must be inserted as far as it will go without using much force. This done, the animal must be kept on its back for two or three minutes, and then may be allowed to rise. If the operation is performed in time and is well executed, the animal will soon recover. It is advisable to have the operation performed by a good veterinarian, if one is available.

AN INVITATION.

It Gives Us Pleasure to Publish the following Announcement.

All women suffering from any form of illness peculiar to their sex are requested to communicate promptly with Mrs. Pinkham, at Lynn, Mass. All letters are received, opened, read and answered by women only.



A woman can freely talk of her private illness to a woman; thus has been established an eternal confidence between Mrs. Pinkham and the women of America. This confidence has induced more than 100,000 women to write Mrs. Pinkham for advice during the last few months.

Think what a volume of experience she has to draw from! No physician living ever treated so many cases of female ills, and from this vast experience surely it is more than possible she has gained the very knowledge that will help your case.

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Smiles.

A SUGGESTIVE EPITAPH.

You may rest here ere passing on, This much I will allow; In life I oft was sat upon, And will not mind it now.

-New York Press.

EVERY MAN HIS OWN POET.

You build a sonnet on about this plan: Your first line ground out, take the next one—so: And make it rhyme with this one, just below; Then, next, you match the first line, if you can, Don't hurry the machine. The lines must scan. With steady motion turn the crank. You know 'Tis not a sonnet if it limps. Go slow. Now find some rhyme for "scan"—for instance, man.

-Chicago Tribune.

THE SAME OLD STORY.

The painter brings his ladder and his paint and brushes fine, He starts in work at 8 o'clock and disappears at 9; Comes back at just 11:15—he'd "gone to get a brush"— And then until it's 12 o'clock works with a feverish rush; Knocks off at 12 and eats till 1—then has to mix his paint, Producing awful odors that make everybody faint; Flirts with your servant for one hour until you interfere, And uses twenty minutes more to get a can of beer. Then says the job will take two days, as he goes off to sup, Leaving his pots and brushes just where they will trip you up.

-New York Recorder.

PROVIDED FOR THE NEXT GENTLEMAN.

A LITTLE negro gamin passing along Bay street yesterday morning saw a stump of a cigar fall on the sidewalk in front of a store. He made a second-base slide for it, and when he had it safely corralled beneath him, he rolled his eyes around the points of the compass to see if another gamin had also seen the stump fall.

"Dat war in Cuba is making Havan's skeep, an' you can't take no chances," he remarked, as he brushed off the ash and blew away the sand and dirt from the coveted snipe. Going into the store, he said to Charley Ellis: "Boss, gimme a match, please, sah?" "Matches are not here to give away, but to sell," said Mr. Ellis, assuming a look of intense severity.

"Dey is, eh?" "That's what they are." "Well, how much is dey er box?" "One cent."

The gamin tilted the stump in one corner of his mouth, held to the band of his pantaloons with one hand, and the other hand in his pocket and pulled forth a copper. "Gimme a box." And he laid down a cent. He got the box, struck a match, lit the stump so well that it poured forth volumes of smoke, and then handing the box back to Mr. Ellis, assumed a look of intense severity, and said: "Put dat box on de sheff, an' de nex' time a gemman come in hyar an' ax you for a match, you gin him one outen my box."

TRUTH'S FABLES UP TO DATE.

"I notice, said a thoughtful man to a sheep one day, "that you are still raising wool." "Cert," said the sheep, "and why shouldn't I?" "Because the tariff has lowered the price of wool so there is no money in raising it. You might as well cease your efforts." "I do not raise wool for money," replied the sheep, as he picked a cockle-burr out of his tail. "I raise wool because when the north wind doth blow through my Pefferian adornments, I need an overcoat. Discussing the tariff may make you warm, but I am not built that way." Moral: Some folks talk about silver, now.

MIXED.

An Edinburgh minister preached one Sunday in a country church. At noon the elder heard one old woman say to another: "Hoo liket ye the sermon to-day?" "Vera weel; but I didna ken til noo thot Sodom and Gomorrah wasna mon and wife." The elder told the parson, who was so tickled that he told the story at his next dinner-party. A simpering young woman commented, "Oh, well, I suppose they ought to have been if they were not."

A STROKE OF GENIUS.

"And by the way," said the bustling correspondent of a New York paper, "does any one ever escape from this place?"

Satan flicked the ashes off the end of his cigarette, and smiled with the air of one who is conscious of his superior cleverness.

"No," he replied, "not since we fitted up the entrance with swinging doors, such as they have in modern office buildings. They are all afraid to try."

THE LATEST CUBAN WAR REPORT.

Hobbs—"There has been another great loss of life in Cuba."

Dobbs—"How many killed?"

Hobbs—"Over a hundred."

Dobbs—"You don't mean it! Spaniards or rebels?"

Hobbs—"About an equal thing, I guess. All of them were captured deserters."

WHERE THEY DIFFERED.

Zigley—"Have you got the right time?" Zabley—"I've got it exact to the minute." Zigley—"So have I; but I'd like to see yours, so's to find out how much we differ."

-Roxbury Gazette.

DOING HIS BEST.

Mrs. Slocum (to her husband's chum)—"Tom, I wish you could break George of playing poker."

The Chum—"I did break him, only last night."

LITTLE BITS.

A colored philosopher is reported to have said, "Life, my breddern, am mos'ly made up of prayin' for rain, and then wishin' it would el'ar off."

Lawyer (a few years hence)—"Make your mind easy; the jury will disagree."

Prisoner—"Snre?"

Lawyer—"I know it. Two of the members are man and wife."

Hunker—"Staggers has a pretty easy time of it."

Spatts—"In what way?"

Hunker—"His wife drives bim to drink, and a cahman drives him home."

Hoax—"My wife and some of her friends are going to organize a secret society."

Joax—"Nonsense! The idea of women in a secret society."

Hoax—"You misunderstand. They are to meet to tell secrets."

"Mary," asked the old man, "whose picture is that on the front of the paper you have?" "That is a picture of President Cleveland," said she.

"Great Caesar's ghost!" exclaimed the old man; "has he been-cured of something, too?"

"This," said the mother, in her best instructive voice, as she guided the child through the museum, "this is a praying-machine, used by the benighted heathen."

"I don't think that is half as nice as having your praying done by the preacher, like we do, do you, mama?" asked the small girl.

"So you are having your house redecorated, Mr. Hawkins?"

"Yes; the workmen began last week."

"Are you making radical changes?"

"Yes, very."

"What is to be the main feature of the new house?"

"You, if you'll consent."

"Ah," said he, rising and gliding toward the cage, "what a pretty parrot! Can it talk, I wonder?" And he pointed his finger at Polly, as he was wont to do at the star boy in the Sunday-school class. "Polly want—" The bird looked at him.

"D— it, mau!" said Poll, severely, "don't ask me if I want a cracker."

"Any quail about this neighborhood?" inquired a tourist, who was about to register at a western Texas hotel.

"Quail!" said the proprietor, with an indulgent smile; "they have got to be a nuisance. The cook complains that she can't throw a piece of toast out of the back window but four or five fat quails fight to see which one shall get on it."

"Maw," said the little boy, "Johnny is such a mugwump that I don't want to sleep with him any more."

"A mugwump!"

"Yes, mana. Didn't you tell me that a mugwump was some one who would not take either side? And that's the way with Johnny. He always wants to sleep in the middle of the bed."

CONSUMPTION CURED.

An old physician, retired from practice, had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all Throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints. Having tested its wonderful curative powers in thousands of cases, and desiring to relieve human suffering, I will send free of charge to all who wish it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail, by addressing, with stamp, naming this paper, W. A. NOYES, 820 Powers' Block, Rochester, N. Y.

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MODENE

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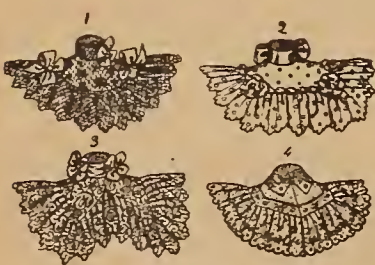
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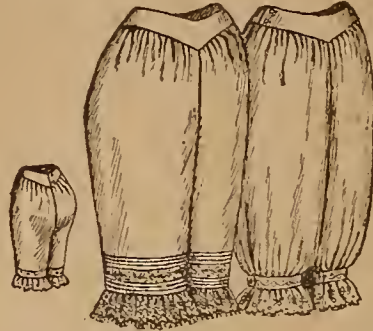
No. 6742.—BOYS' KILT SUIT. 10 cents.
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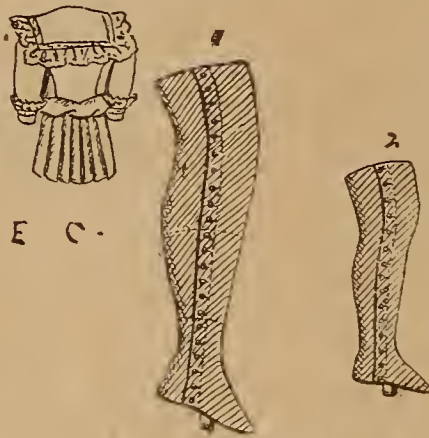
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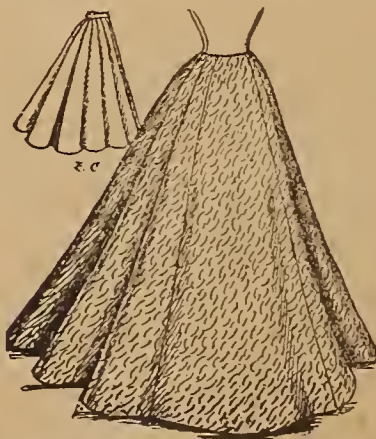
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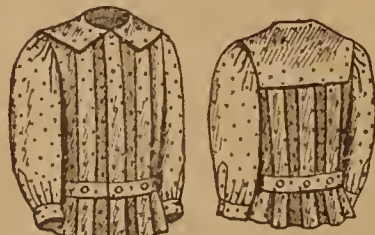
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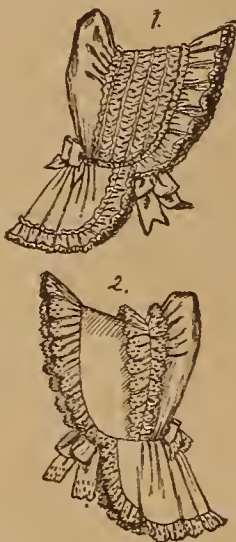
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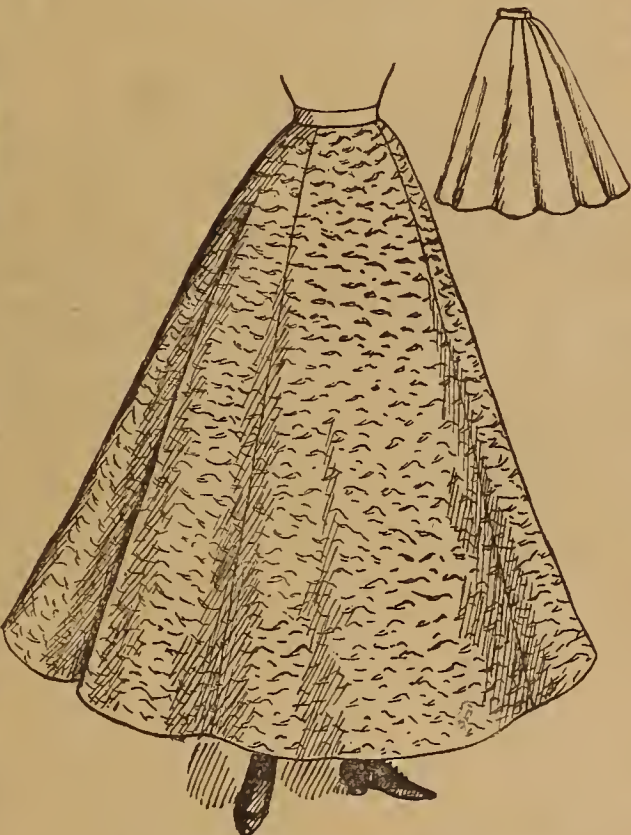
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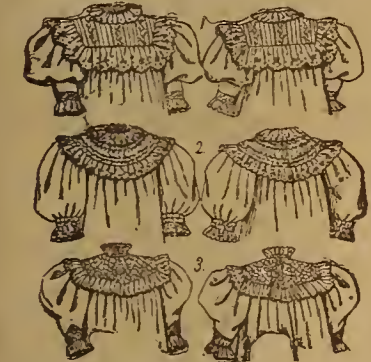
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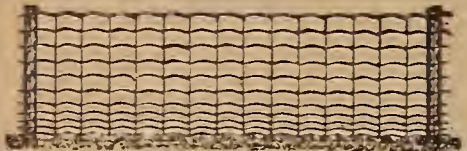
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Humor.

SLIPS OF THE TONGUE.

A youth who had in a performance of "Richard III." to recite the words, "My Lord, the Duke of Buckingham is taken," came in shaking with stage fright, and brought down the house by shouting out: "My Lord, the Buck of Dukingham is taken!"

An English clergyman, who was given occasionally to such transpositions, used one day in a sermon, as an illustration, the scene at Lucknow, when Jessie Brown calls out, "Dinna ye hear the pibroch and the slogau?" But he pronounced it: "Dinna ye hear the slobroch and the pigan?"

He did not know that he had made the blunder until a friend told him of it after the service; and then he was so much humiliated that at the close of the evening service he took occasion to say to the congregation: "I am told that this morning I said 'slobroch and pigan.' I meant to have said the 'sibroch and the pogau.' Receive the blessing."

Another minister could never say, "Sweet for bitter, and bitter for sweet," and as the service called for the utterance of these words on occasion, his congregation had to steel themselves to hear without a burst of laughter the phrase: "Switter for beet, and beet for switter."

Macready has told of an actor who, in rendering the words, "the poisoned cup," constantly said "the coisoned pup," to the great delight of his audiences. At last he managed, by much practice, to control his utterance, so that in a public performance he pronounced the phrase correctly.

Instantly there was an uproar; the audience missed its customary fun, and would not let the man proceed until he had given the "coisoned pup" instead. Then he was consoled with shouts of applause.—Youth's Companion.

THE DIFFERENCE.

He—"You know I love you?"
She—"Yes."
He—"And you say you love me?"
She—"Yes, dear; yes."
He—"And you will marry me?"
She—"Of course, darling!"
He—"Then we are engaged."
She—"Yes, dearest, we are engaged. But—"
He—"Then why not announce it?"
She (decidedly)—"That is just what I do not want to do."

He (persistently)—"But why not?"
She (desperately)—"Well, if you must know, I will tell you. Just as soon as people hear you are engaged, all the girls in town will be running after you."

He (with a little smile of vanity)—"But, my dear, you have confidence enough in me not to doubt me, even if they do run after me, have you not?"

She (doubtfully)—"Oh, yes, but—"
He (triumphantly)—"Then we'll consider that matter settled; and—"
She—"No; not by any means. There is something else."

He (impatiently)—"What is it this time?"
She (hesitatingly)—"Well, if you must know—just as soon as it is known that I am engaged—"

He (with a world of tenderness)—"My darling, don't you think that I, too, can trust you?"

She (very calmly)—"I was going to say that just as soon as it is known that I am engaged, not a man in our set will have anything to say to me!"—Puck.

AS TO CLIMATES.

"What terrible winters you have up here?" exclaimed the shivering southerner.

"Yes, they're tough," said the Chicago man. "And when we have such a morning as this I've got to watch this left ear of mine mighty close."

"What's the matter with it?"
"I froze it when I was down in Georgia last winter."

BARGAIN PRICES IN FEMININE POLITICS.

"What is the amount of the poll-tax, John?" asked Mrs. Cawker.

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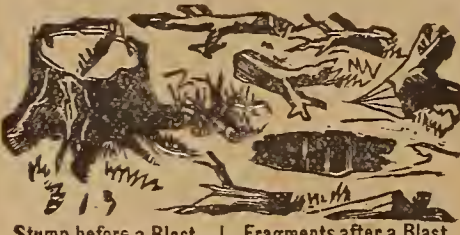
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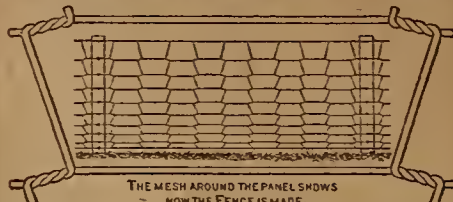


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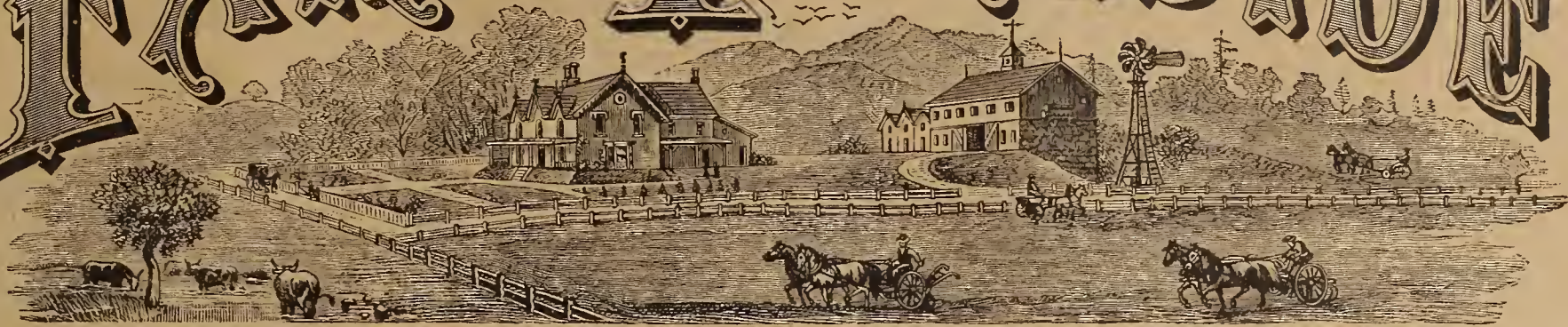
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ACCORDING to a recent bulletin of the department of labor, if the aggregate wages paid in the manufacturing and mechanical industries of the United States, as shown by the census of 1880, be divided by the total number of employees to whom the wages were paid, the quotient will be \$47, thus determining the average annual wages paid to the employees in the manufacturing and mechanical industries of the country as \$47. In the same way, taking the census statistics of 1890, it is found that the average annual wages per employee was \$45.

In the ten-year period between the census reports of 1880 and 1890, the average annual wages per employee in the manufacturing and mechanical industries of the country increased from \$47 to \$45, or over twenty-eight per cent. But this increase of \$98 a year in the nominal wages does not tell the whole story. Nominal wages are expressed in dollars and hours; the real earnings of labor is what the wage-earner can buy in the markets with the nominal wages. If prices of commodities had advanced in the same ratio as his nominal wages, the \$45 received by the wage-earner in 1889 could have been exchanged for only the same quantity of commodities as \$47 in 1879, and his real earnings would have been exactly the same. But, in fact, during this same ten-year period there was a decline of over thirteen per cent in the average prices of all commodities, due to decreased cost of production and distribution, brought about mainly by improvements in machinery and new processes. Therefore, if the nominal wages had remained the same—\$47—there would have been an increase in the real earnings of labor, because the average prices of all commodities being lower, \$47 would have bought more in 1889 than in 1879. Both the nominal wages and the purchasing power of the wages increased, and they must be taken together to determine the actual increase in the real earnings of labor.

Returning to the bulletin, we find that, dividing the aggregate value of all the products of manufacturing and mechanical industries by the number of employees engaged therein, as given by the census of 1880, the quotient is 1,965, showing that the average product per employee was \$1,965. Now, \$45 is 17.7 per cent of the gross product per capita. By the census of 1890, it will be

found that the gross product per capita was \$2,204. Of this, 20.18 per cent—\$445—went to labor, 55.08 per cent for materials, and 24.74 per cent to miscellaneous expenses, salaries, interest, profits, etc.

During this ten-year period, labor's share of the total product per capita increased from 17.7 per cent of \$1,965 to 20.18 per cent of \$2,204. Labor not only produced more, but received a larger share of the increased product. When wages increase at the same time prices of commodities decline, and when wage-earners receive an increasing share of an increasing product, it is evident that they are sharing in the benefits that flow from invention, discovery and the use of improved machinery and processes. Whether they receive a fair share or not may be questioned, but it cannot be questioned that they do receive a share.

THE records of the Cincinnati station of the weather bureau show a deficiency of 8.44 inches in rainfall from January 1 to May 18, 1896. The records also show a rainfall deficiency of 14.31 inches in 1894, and of 11.56 inches for 1895. The normal yearly rainfall at this station is about 40 inches. These figures will apply substantially to a large area, in which the rainfall deficiency during this period of nearly two and a half years is unprecedented in the records of the weather bureau.

In this area farm crops are now in a critical condition, because they are absolutely dependent on timely and frequent showers from now on to the time of their maturity. There is no moisture in the soil or subsoil to carry them through even a short rainless period. It is possible for heavy rains to fall and make up in a few days the deficiency of the past five months. It is also possible that the summer showers may be frequent and heavy enough to furnish the water needed for the growing crops. But the probabilities are on the side of the usual summer showers and rainless periods. There are few seasons in which the summer rainfall alone is sufficient for the needs of the crops. They are now dependent on the possibilities, and the chances are against them. It is useless to talk about conserving soil moisture when there is none to conserve. Unless the possibilities occur, the farmers in this drought-stricken territory must be on the alert to make the most of the summer rainfall that does come, by promptly providing, through surface cultivation after every shower, the fine earth mulch necessary to prevent rapid evaporation of water from the soil.

IN the *Forum* for May, Clare de Graffenried attracts attention to an instructive article on the need of better homes for wage-earners, by the following unique introduction: "The two civilizing agencies of highest value for laboring people, next to industrial training and baths, are bay-windows and front-door bells. Putting effect for cause, somebody will object. The bay-window and front-door bell arrive only after the working-man has reached assured comfort and a degree of independence; they are signs of rather than helps to advancement. Not at all. The toiler's home, as a rule, is built for him. He has to live where he is put or where his work lies—in manufacturing colonies, in city tenements. He is tenant, not landlord, with surroundings that he can seldom modify, created, not to better his condition, but to get money from his pocket; and usually he is provided with only the barest necessities of living—four walls, doors, windows and a flue. Sometimes even the flue is lacking, stovepipes protruding through bricks or weatherboarding or window-panes. The front-door bell means privacy, family life, household gods, home, as opposed to the common tenement hallway and all its evils. Where the bell stands guard, decency and domesticity may reign. A bay-window marks the first departure from the merely useful and useful, the first outreaching for beauty and the ideal. It establishes a standard to live up to. Unmade beds, unswept floors, coarseness and bad habits are out of keeping with bay-windows."

In the body of the article the writer strikes a key-note that can be heard in this wealth-acquiring age. "Apart from sentiment, sympathy and higher ethics, proper home surroundings for wage-earners are of vital importance, because the health of the nation is its wealth. If the mass of the people must live in a way which interferes with physical strength and soundness, the productivity and commercial value of labor are lessened. Moreover, the cost alone of supporting hospitals and public institutions for the blind, deaf and dumb, who are victims of scarlet fever and measles, would abate almost every tenement nuisance which causes these scourges. The interests of society at large demand the betterment of the unhealthy, dangerous surroundings in which the deserving poor of great cities live."

After recounting experiments which demonstrated that it pays financially to better the housing and surroundings of the poor, the author concludes as follows: "In the light of such experiments it cannot be denied that beauty brought into the homes of the people, and sanitation secured for thousands of operatives, pay. Economically possible, this is also morally important. To shirk responsibility for the evils at our door on the false plea that, because American wage-earners are prosperous, those who suffer and are ill-housed are the left-over and undeserving, beclouds the public conscience. Wherever a group of people live neglected, in want and squalor, their misery lowers the whole social level. Impaired vitality, relaxed moral and religious standards, ignorance and crime result. If the well-being of one redounds to the welfare of all, the wretchedness of some becomes the care of all; and the relation of landlord and tenant, of neighbor, of citizen, to be effective must be socialized, and, better still, Christianized in the spirit of 'whatever ye would that men should do to you, do ye even so to them.'"

WHEN a new farm crop is under consideration, attention is directed almost solely to its probable yield, market price, cost of production and profits. The relation of the new crop to others, and its direct and indirect effects on them, becomes manifest after it has been introduced and established. Sometimes the new crop benefits the old staple farm crops and live-stock interests to an extent that was not even suspected before its introduction. The sugar-beet industry is a case in point.

The *Sugar Beet* says: "We frequently hear of how lands in the West have, in many instances, doubled in value since the introduction of sugar-beet cultivation. The same changes have been noticed in Europe. For example, in Germany, fifty years ago, it was possible to rent the very best Prussian farming lands for \$5 an acre; now they rent for \$10 and even \$15. Under these circumstances everything else has increased in the same proportion. The fact is, these same lands give employment to double the number of people, and feed three times the number of animals as hitherto. This also applies to wheat, the yields of which have increased twofold. To meet these demands a stimulus has necessarily been given to the manufacture of agricultural implements. Subsoil plowing is an example to the point. Prior to the absolute demands for this method of working the soil, farmers hesitated to spend the money. They realized, however, the importance of the operation, but the returns from their lands did not appear to justify a new departure from old methods. Prosperous sugar-beet cultivation soon showed that it was of first necessity. This was followed by deep manuring. While chemical fertilizers answered the purpose for many years, and thus avoided the trouble of cattle-raising, it has been discovered that in the end the results are not the same as they are with barn-yard manure. Chemical fertilizers may be considered as plant-foods, but they do not open up the soil for their absorption. Herein is where the organic manures offer their assistance. The color of the soil on which it is worked becomes darker, which is in itself an advantage. By proper methods it is possible to take an almost moistureless, sandy soil and transform it into one yielding a satisfactory crop of beets; hence, districts where farming was unknown have now become thrifty."

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FARM AND FIRESIDE,

Springfield, Ohio.

The Advertisers in this Paper.

We believe that all the advertisements in this paper are from reliable firms or business men, and do not intentionally or knowingly insert advertisements from any but reliable parties; if subscribers find any of them to be otherwise we should be glad to know it. Always mention this paper when answering advertisements, as advertisers often have different things advertised in several papers.

Spraying for Fungous Diseases. The Secretary of Agriculture, Washington, D. C., will send to all applicants Farmers' Bulletin No. 38, entitled "Spraying for Fungous Diseases."

Three New Forage Crops. The following reports on the flat pea, sacaline and spurry are from a recent bulletin by the agriculturist of the Ohio experiment station, on forage crops:

Flat Pea. After repeated trials, covering three years, I have about concluded that the flat pea is a flat failure. Upon thin, sandy soil where vegetation is sparse and difficult to start, the flat pea may afford a solution to the problem as to how such soil shall be reclaimed and fitted for cultivation. Being perennial in nature, hardy in endurance, and last, but not least, a nitrogen-gatherer, fits it especially for thin, sandy soils, where time and patience go hand in hand. But on the relatively fertile soils of Ohio, I doubt if it ever finds a husbandman with sufficient patience to develop such a slow-growing legume, while others, equally efficient, can be grown in from one half to one fourth as much time.

We have planted the seed the last two years early in May; the first season it was forty days before it could be seen pushing its way through the soil, and last year it required forty-three days to make the same progress. This slow growth seemed excusable, because the seed had an extremely hard outer covering, but in three months of relatively good growing weather during the early summer of 1894 this plant did not make a growth exceeding seven inches, and this, too, on land that made the same season at least forty bushels of corn to the acre.

There are, possibly, within our state a very few localities where the flat pea might be a valuable plant to grow; but on account of its slow germination and delicate growth the first season, the average farmer cannot afford to spend time and effort with it, so long as he can grow any of the other leguminous plants. It is possible to have, at the end of three years after planting the

seed, a patch of flat peas, but any one expecting to get a stand in a shorter time will be disappointed.

Sacaline. This plant belongs to the buck-wheat family. It is one of the most recently introduced forage plants, and has been most extravagantly praised in the catalogues of several seedsmen during the last two years. An effort was made to grow it in the spring and summer of 1894, and on account of the great claims made for it special pains were taken to get it started, that the record for it might be confirmed; but like the flat pea, I found it a very slow and discouraging grower. It was carried far enough and studied over sufficient time to find that it would require more time, pains and means to secure a crop than the average farmer would give. From the experience gained I believe it could not be started on a ten-acre field short of two years' time, and then only after spending a great amount of money and labor for a return which, to say the least, would be of doubtful utility.

Spurry. Several letters have been received asking about spurry and its adaptability to Ohio soils. Two years ago it was tried. It was found that the seeds germinate very quickly, and that it made a very slow growth after starting. It failed to make any appreciable growth during the first summer. In the spring of 1894 it was tried again, but the results were very much the same as those of the year previous. It is certainly not adapted to clay soils. Indeed, this could hardly be expected, since it is known as the "clover of sandy soils;" but it is not a clover, belonging to the pink family.

"Onion Culture" is the title of Farmers' Bulletin No. 39, published for free distribution by the United States Department of Agriculture. The introduction of the bulletin reads as follows:

"There are few vegetable crops of more importance to the rural population of the United States than the onion crop. The relatively large profits which it is possible for the skillful grower to obtain from a limited area have rendered the cultivation of this bulb especially popular with those possessing small tracts of land, while gardeners residing in localities where soils and climate are pre-eminently adapted to onion culture have found it profitable to till large areas. Twenty-five to one hundred acres in one field is not an unusual thing in such localities. Large yields overstock the market some years, resulting in very low prices; but the prices received during a series of years make onion culture, as a rule, a profitable enterprise where the soil and climatic conditions are favorable.

"Notwithstanding the extensive production of onions in the United States, hundreds of thousands of bushels are annually shipped to our ports from Bermuda, France, Spain and Cuba. This fact demonstrates that the home demand at all seasons of the year is not yet fully supplied by growers of our own country. The bulbs of foreign varieties are superior in quality to those originated in this country—such as the Yellow Danvers, Red Wethersfield and Silver Skin. The imported bulbs are also placed on the market before the gardeners in the North can mature their crops, but the long season of California and certain parts of the South renders it possible for these sections to cultivate successfully the foreign varieties, and mature the onions almost, if not quite, as early as the countries named."

Formulas. For the convenience of numerous inquirers the standard formulas of insecticides and fungicides from the latest authorities are here given in a group, with the suggestion that they be preserved for reference:

BORDEAUX MIXTURE.

Copper sulphate..... 6 pounds
Quicklime..... 4 "
Water..... 40 gallons

Dissolve the copper sulphate by putting it in a bag of coarse cloth and hanging this in a vessel holding at least four gallons, so that it is just covered by the water. Use an earthen or wooden vessel. Slake the lime in an equal amount of water; then mix the two, and add enough water to make forty gallons. It is then ready for immediate use. For rots, molds, mildews and all fungous diseases.

AMMONIACAL COPPER CARBONATE.

Copper carbonate..... 1 ounce
Ammonia..... Enough to dissolve the copper
Water..... 9 gallons

The copper carbonate is best dissolved in large bottles, where it will keep indefinitely, and it should be diluted with water as required. For same purpose as Bordeaux mixture.

COPPER-SULPHATE SOLUTION.

Copper sulphate..... 1 pound
Water..... 15 gallons

Dissolve the copper sulphate in the water, when it is ready for use. This should never be applied to foliage, but must be used before the buds break. For peaches and nectarines use twenty-five gallons of water. For fungous diseases.

PARIS GREEN.

Paris green..... 1 pound
Water..... 250 gallons

If this mixture is to be used upon peach-trees, one pound of quicklime should be added. Repeated applications will injure most foliage unless lime is added. Paris green and Bordeaux can be applied together with perfect safety. The action of neither is weakened, and the Paris green loses all caustic properties. For insects which chew.

LONDON PURPLE

London purple..... 1 pound
Water..... 250 gallons

Same proportion as Paris green, but as it is more caustic, it should be applied with the lime or with the Bordeaux mixture. Do not use it on peach or plum trees. For insects which chew.

HELLEBORE.

Fresh white hellebore..... 1 ounce
Water..... 3 gallons

Apply when thoroughly mixed. For insects which chew.

KEROSENE EMULSION.

Hard soap..... ½ pound
Boiling water..... 1 gallon
Kerosene..... 2 "

Dissolve the soap in the water, add the kerosene, and churn with a pump for five to ten minutes. Dilute ten to fifteen times before applying. For insects which suck, cabbage-worms and all insects which have soft bodies.

NOTES AND COMMENTS.

Overproduction of the recent number of *Fruit Growers' Journal* (Illinois), the following paragraph appears:

"The strawberry fever has largely subsided east of the Mississippi river, in the states of Illinois, Kentucky and Tennessee. Men in those states no longer think that success in this life and a happy transit to the next depends upon their having ten or twenty acres of strawberries. The east winds, however, have wafted the strawberry malaria across the river, and the fever is at present raging in Arkansas and Missouri. When they have to use the cathode rays to find the profit the fever will subside. It may be that 'Uncle Sam is rich enough to give us all a farm,' but he is not able to make all those farms profitable when they are all set to strawberries. The fever in Illinois now is the Ben Davis apple; but the time is not far distant when the fever will end up with a congestive chill."

There are frequently fruits produced in some localities in excess of the local facilities for distribution. While this overproduction may be decidedly local, it is overproduction just the same. Like the tariff, it may be "a local question," but it involves a serious problem for the soil-tiller. Farmers annually produce a great lot of stuff, which, not being salable, is of no value, and represents just so much loss in labor and expense. This is only the natural consequence of the spasmodic changes from one crop to another, as this or that crop seems to give more than ordinary profits. The problem is how to avoid these sudden rushes into special enterprises. The one safe rule is to plant lightly when the great majority plant heavily, and to extend one's planting of anything that the majority are afraid of. In perishable fruits, however, the conditions of the local markets are to be consulted in the first place.

In my immediate vicinity, for instance, it would be entirely safe to plant strawberries on a large scale. Our berries always had a local reputation in the Buffalo market, and they have seldom failed to

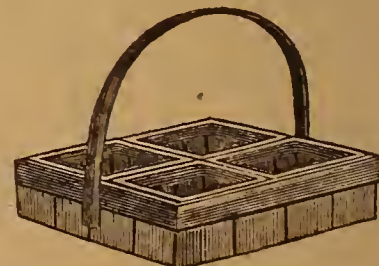
bring remunerative prices. The Niagara Falls land and power boom has driven many of our growers away from here, and the chances for those who will grow good berries seem to be as good as ever. I know many other places, too, that have never had an oversupply, and are not likely to get it very soon. Strawberries can be grown at two cents a quart, and picked and marketed at not more than three cents more, making the cost five cents per quart.

But here again comes this overproduction of poor stuff. So many people raise half crops, and get half prices—the latter even then being more than the fruit is worth. Few growers have any idea what a lot of berries a piece of land when well manured and well cultivated can produce. And these berries are the ones that, being large and attractive, will sell quickly at outside prices. Usually, we cease working among our new strawberry plantations in mid-summer, when we should keep up cultivation until fall.

Apples and Pears. Just at present the outlook for a big crop of apples and pears in western New York is most flattering. The failure of the peach and plum crops may help to bring good prices for pears this year, but I have an impression that we are going to have a period of pear glut (overproduction) in the near future. Apples will again bring the money. The repeated failures of the apple crop have discouraged many growers, and orchards have been shamefully neglected. For this reason I think we will have a plethora of poor apples, and the really choice fruit will sell well. I have rented a twelve-acre apple orchard on an adjoining farm for a number of years. The trees have just come into full bearing, and are now loaded with fruit. But the ground underneath is a wilderness of tough wild grasses. My aim is to see what can be done by applications of chemical manures, thorough tillage and spraying. Have sprayed once with simple solution of copper sulphate. But what a lot of work it is to get this land broken up and shaped again! I also have an acre or two of Bartlett pears on the same farm, likewise in a neglected condition, and to be brought under proper cultivation. Results will be watched with a great deal of interest, and reported to the readers of FARM AND FIRESIDE in proper time.

A Personal Request. Like many others, I would like to know what are the fruit prospects in the great fruit districts of the Union. Readers in such localities can do me a great favor by giving me a short postal-card report about the outlook in their vicinity for the apple and pear crops. Just tell me whether they promise to be a full crop, or a half crop, or a quarter crop, or a failure, so I can form an idea, and tell our readers later on about the outlook for the whole country. Address T. Greiner, La Salle, New York.

Berry-picking Stands. The berry-picking season is fast approaching. One of the conveniences for the home grower (and a necessity for the commercial fruit-grower) is a number of picking-stands, something similar to that shown in the accompanying illustration.



Some years we have had just enough strawberries for our own use. A little while before meal-time, during the strawberry season, one or two of the family start for the patch carrying a stand filled with empty quart boxes, and soon come back with boxes filled. You can buy such stands at about fifty cents a dozen. Or you can make them. Some people prefer the four-quart size; others would rather have a six-quart size. We have some six-quart stands made of sheet-iron, the edges just bent up (at right angles) enough to keep the baskets from sliding off. A piece of hoop may be riveted on for a handle.

T. GREINER.

Our Farm.

FARM THEORY AND PRACTICE.

THE SWEET POTATO.—The market for sweet potatoes has been increasing rapidly of late. This country produces probably fifty millions of bushels annually. While the crop is essentially a southern one, yet tens of thousands of farmers in the great Ohio valley grow the sweet potato for use on their tables and for local markets. At Marietta, Ohio, single farms produce from three to five thousand bushels every year. The quality of these northern sweets is not quite so sweet as the Jersey-grown, especially in late winter, but when grown in proper soil the difference in flavor is slight. For early fall use there are several good varieties, but the Yellow or Red Jersey is the only one in demand by growers who store their crops for the winter market. Quotations for Jerseys usually run about one dollar per barrel higher than those for other varieties.

THE KIND OF SOIL.—Nine farmers out of ten will tell one to select a sandy soil for sweets, and in the East we do know that sand is all right; but it is a noteworthy fact that the extensive growers of Ohio choose a rather hard gravel land that appears unpromising to the inexperienced. The sandy land often has a loose subsoil, and that is not best for the sweet potato. In the fertile sandy strips of land on the banks of our streams an immense growth of vine is obtained, but the roots are long and stringy. The tight subsoil of the gravel land checks the growth downward, and the gravel raises the temperature of the soil. Ground slightly rolling is always selected, and the ridges are made up and down hill, so that water will not stand on the surface of the field. For making the ridges, I have found nothing better than two large disks set to throw in, and well weighted. With such an implement one can ridge four acres a day.

TIME OF SETTING PLANTS.—The common mistake in the North is to put the plants in the ridges too early in the season. Two years out of three we have a cold rain near the middle of May that damages early-set plants seriously, turning the stems partly black—the result of a disease—and stunting the growth. While any time after May 20th is accounted safe, one can safely continue setting plants until the middle of June in the Ohio valley, and in one case I know of the finest potatoes being grown from plants set on the Fourth of July. If the season is dry, it is difficult to get plants started in midsummer, and I do not advise such late setting, but the latter half of May is as early as is at all safe. Watering the plants when setting is impracticable in field setting, but a better method under all circumstances is to puddle the roots when first drawn from the bed. The puddle is made of clay, droppings from the cow-stable, and water, the mixture being made of the consistency of a thin batter, so that it will adhere readily to the fibrous roots.

DISTANCE BETWEEN PLANTS.—In the North I believe that a maximum yield can probably be gotten by setting the plants fifteen to eighteen inches apart in rows thirty or thirty-three inches apart. In the South, greater distances give good results. At the Georgia station a distance of two feet between plants in ridges three and a half feet apart gave the best results, but our largest northern growers want a larger number of plants per acre. Last year I set one acre with two feet between plants, but the result was not satisfactory. Eighteen inches is the rule in field culture. In order to secure uniformity of distance when a number of hands are setting, a hand-marker should be run across the ridges. The number of plants that a man can set in a day depends much upon the condition of the soil, and more upon the man. When the soil is moist, some men set five thousand plants per day, but many cannot set three thousand if they do the work well. At the distances named for the North, about ten thousand plants are put on an acre.

CULTIVATING AND DIGGING.—The ridges need not be high, and when they are not, the most of the work may be done with a cultivator. The Planet Jr. outfit is a very good one for the cultivation of sweets. Usually, one hoeing is a necessity, but if

the soil is reasonably free of weed-seed, all other cultivations may be given with horse and cultivator. There appears to be no material advantage from keeping the vines from rooting to the ground at joints later in the season. The sweet-potato growers of a number of states were asked their opinions on this point by the Department of Agriculture, and the replies were summed up as follows: "Moving the vines after cultivation ceases costs too much labor to be advantageous, except possibly when cultivation is discontinued early, or when—on rich, moist soil—a heavy rain falls within about two weeks after the last cultivation."

I find a breaking-plow the best digger. A rolling cutter is fastened on the beam, and if the ground is hard, an extra man is put at the end of the beam to hold the plow down. The ridge is turned upside down, the tips of the clumps of potatoes showing where the hills are. The potatoes do best when exposed to the sun or wind a few hours before being gathered in bushel boxes.

MARKETING OR STORING.—When the potatoes are intended for late fall market, they should be stored not over one foot deep in a dry, cool building, preferably on an earth floor. The idea is to prevent sweating as much as possible. On the other hand, when potatoes are stored for winter, it is best to put them in considerable quantities together and let them warm up as soon as possible. The sweating in bulk, if all cold air is secluded, toughens the potato and improves its keeping qualities. When a small quantity, exposed to the outside air, goes through a sweat, rot usually follows. Our smaller towns consume large quantities of Jersey potatoes, and it is not a difficult matter for a farmer to build up a good trade with merchants if he can convince them that he has a palatable winter potato. A town of three thousand inhabitants, supplied with good sweet potatoes at fair prices, will consume many hundreds of bushels from August until November, when outside storage becomes hazardous. Two hundred bushels of sweet potatoes per acre is not a large yield, and fifty cents per bushel is a low price.

DAVID.

PICKED POINTS.

All veterinarians agree that charcoal is very desirable for swine. It seems to act as a vermifuge and to keep the digestive organs in order. Every swine-raiser admits this; but charcoal is difficult to procure. Any one who has corn-cobs can make it. Dig a hole in the ground, throw in a little dry wood, and fire it, add cobs as they get to blazing, until the hole is full, and then cover with sheet-iron. In twenty-four hours the cobs will have been changed into charcoal. It may be fed in a self-feeding box. The animals will not eat more than their systems require for health.

With me, at latitude 42½°, crimson clover withstood the winter as well as wheat. On April 15th it was six inches tall, the ground well covered with vigorous growth, and it would be fine pasturage if used for such. In this latitude the clover should be sown about July 20th, to get a good root for winter. It should be sown alone. It may follow early potatoes, or any other crop that comes off at that time. It will not give satisfaction if sown among corn at the last working, nor with anything else that makes a dense shade.

At this season of the year, when the farmers' horses are at hard work, their shoulders are very liable to gall. A man who works his team notoriously hard in the spring never galls them. Calling at his stable to learn the reason, I had no occasion to ask a question. The team had just returned from the field, and the farmer was engaged at one horse and his hired man at the other, sponging their shoulders with water. This is done every time they come into the stable after hard work, and freedom from shoulder abrasions and consequent comfort of the animals is the natural result. When horses return from hard work, it may be noticed they try to rub their shoulders against the stall to allay irritation. A humane man will not withhold the soothing influence of the application of a little water.

A subscriber asked what kind of a wire fence I would advise for sheep. It certainly

would not be barbed wire. Sheep will put their heads through to get a fresh bite on the other side. I have known them to get their necks cut seriously in consequence. A lamb got fast on a barb and died. Walking down the railroad track one day, I saw even a frightened woodchuck get impaled on a barb and held fast as he attempted to skip through the fence. Barbed wire is dangerous. I would use smooth wire, and not have the wires over six inches apart for two feet up, and stay them in this relative position midway between the posts with a fine wire wrapped perpendicularly about the others. A barbed wire or two at the top would be likely to shut out predatory dogs. A slat-and-wire and a wove-wire fence are excellent, but more expensive.

If a butter-factory takes cream or milk from fifty farmers, it is fair to suppose that more or less of them are in some respects filthy with their milk; and this must in a degree contaminate the entire butter output. On the contrary, in taking butter from a single dairy, there is only one chance, instead of fifty, of getting unclean butter. It is therefore getting to be common for city people to go out among farmers and inspect their mode of feeding, milking, caring for the milk and making and putting up butter; and when they find all conditions as they should be, contracts for a regular supply are offered, and at an advanced price. If the right consumers and producers meet, it is largely for the interests of both, and the farmers very much prolong their time for eating the proverbial "peek of dirt." When a city man "noses around" a farm dairy, one may know what it signifies.

GALEN WILSON.

PROFITS FROM SWEET POTATOES.

The sweet potato is perhaps the favorite vegetable in the home gardens of the South, but is very little grown in the private garden in northern states. Truckers grow them to some extent around large cities in the North; the average farmer does not grow them for the market.

The sweet potato is not very easy to keep through winter unless properly managed, and this is the great drawback to their being universally grown, like the Irish potato. The latter may be indifferently handled, but the sweet must be hauled in a spring-wagon, and neither scarred nor bruised. One portion of the Irish potato may be damaged and the other part sound. When a portion of the sweet potato is affected, the whole root is injured. The sweet potato may be apparently in a sound condition, and yet unfit for table use. Decay, however, soon results. A most important point, then, in growing the sweet potato, especially for the winter and spring market, is careful handling, prudent management and proper storage. This point, more than any other, will affect the profit and loss.

When sold on the early market, the difficulty and danger of keeping them is avoided. I have always made larger profits from early diggings than from any other—often as much as \$100 per acre. I plant early settings the last of April and the first of May, when danger from frost is past, and dig and market in August and September. The general harvest here is the first of October. Prices then are lowest—often as low as fifteen cents per bushel. I usually average from forty to eighty cents a bushel on early diggings. Grabbling is not advisable. It is better to wait until later, and dig. Really, early diggings are not to be recommended. The difference in yield will have to be made up in higher prices to be profitable, and there are not many buyers at fancy prices.

Prices usually range well in late winter and early spring—from 25 to 75 cents per bushel. Under average conditions, 40 and 50 cents per bushel are very remunerative prices; more so than corn at 50 cents, wheat at 75 cents and cotton at 7 cents.

Heavy, black loams, undrained lands, alkaline soils and soils strongly impregnated with ammonia are not so well adapted to the sweet potato; but the average soil gives satisfactory results. It is best suited to clay soils and sandy clay loams. On a strong, sandy clay loam, well drained, the sweet potato, say the Queen, should yield ordinarily from 200 to 300 bushels per acre. Some soils that are too poor for anything else will give satisfactory returns with the sweet potato.

The variety has much to do with earliness, productiveness, market demands and

adaptability to soil and climate. The Queen type suits southern taste, and the southern markets demand it. The Nansmond suits the northern taste, and the northern markets demand it. The old-fashioned southern farmer thinks there is nothing on earth that will equal the Yellow Yam, while the northern consumer sees nothing remarkable about it. The South likes a soft, juicy potato, while the North prefers a dry, mealy root. There may be a difference in the way they are prepared for the table that makes a difference in tastes; there may be a natural difference in taste, or the climate, soil or customs may have an influence. But whatever the difference, the trucker, market gardener, commission merchant and retailer have to adapt themselves accordingly.

I individually prefer the Yellow Yam to bake in an oven—especially the old-fashioned fireplace oven—the Nigger Choker to fry and the Queen for general use. I prefer the Queen for the market, for there is more demand for it in the South, and I prefer the Nansmond to ship North. For early market I grow the Strasburg, Queen and Shaughai. The Queen and Queen type, to which belongs the Shaughai, are the easiest to cultivate, the most productive, the best keepers, and, on the whole, the most satisfactory for general purposes and the most profitable for market. In fact, there is practically no other sweet potato on the southern market.

The Shanghai is not so good in quality as the Queen, but is equally as thrifty and hardy in growth, fifty per cent more productive, and cannot be distinguished from it. Its fine appearance makes it sell well, and its productiveness makes it early. It will, perhaps, produce edible roots further north than any other variety. This variety is not very widely known. For stock it is especially to be recommended on account of its enormous yields. I find it the most profitable potato in my list.

The Strasburg is a good early potato and very productive. It has but few roots to the hill, which soon attain a marketable size. The roots are large, rough and unattractive, and the plant is rather frail. The plant does not stand upright, which is an objection in cultivating. This variety is advertised under other names.

The Vineless, or Bunch, yam is very profitable to gull a credulous public, especially for seed purposes. It is a novelty, a very good potato, but does not have by any means all the good qualities that a sweet potato is capable of having, nor nearly so many as some people think it has. In quality it is fairly good; in productiveness, very good if under favorable conditions, but I think it will always be a failure for market purposes. The vine bears many roots, which are mostly small. Very far north, or in soils or climates not congenial, the roots will be nothing but mere strings.

The Hagman is an excellent potato of the Queen type. It might be called an improved Queen, having all of the good qualities of the Queen and being about one third more productive. Both originated in South America.

The cultivation of the sweet potato is easy, simple and not expensive. All that is necessary is to keep the ground loose and the patch free from weeds and grass until the vines get well started. No vegetation will take the sweet-potato patch when the vines have covered the ground. Total cost of cultivation should not exceed \$15 or \$20 per acre. Cultivation, however, is a matter in which a good deal of economy can be used.

The insect enemies of the sweet potato are few. The cutworm, flea-beetle and a small striped beetle injure young plants. Late settings are rarely disturbed. Such pests as the cabbage-maggot, harlequin cabbage-bug, Colorado beetle, and chinch-bug are harmless. There is a borer in Louisiana and other extreme southern states that sometimes does injury to the roots. This insect is limited to the extreme South, and does no serious damage. The sweet potato has, perhaps, the fewer insect enemies of any other vegetable of the field or garden.

The South would do well to raise the sweet potato more largely for northern shipment. The North would find it a paying crop for the market. Even Canada can raise edible roots from some of the early hardy varieties. My advice to persons contemplating growing them for market would be to go on a limited scale until they are familiar with handling, keeping and marketing the root. A reckless adventure might prove expensive.

Tennessee. JNO. C. BRIDGWATER.

Our Farm.

NOTES FROM GARDEN AND FIELD.

THE NEWEST POTATO CULTURE.—Our scientific journals are sometimes very unscientific. Recently an article giving the particulars of a new method of growing potatoes appeared in a number of our agricultural papers. The *Scientific American* also had an article on this "remarkable potato-growing," as practised by a Mr. Ford, in Texas, with photo-engraving showing the crop of Early Roses grown at the rate of three thousand bushels per acre. The idea of raising such an amount is surely fascinating to ordinary people who barely grow one hundred bushels to the acre. If we could do it, there would be big profits in potatoes even at fifteen cents a bushel. Of course, I felt rather skeptical about the whole business, and finally wrote to Mr. Ford, without, however, being favored with a reply.

Mr. Ford, so it is stated, sprouts his potatoes to the size of English peas or marbles before planting, and then raises a crop in from four to six weeks, all of large size, without a peck of small potatoes to the acre. The sprouting and planting process is given in his alleged description, as follows:

"By sprouting your potatoes, you have eating potatoes in less than one half the time it takes under the old style of planting. It takes from four to six weeks to sprout the seed-potato to the size of peas. The sprout-room I keep warm by a small charcoal fire in a bake-oven. One barrel of charcoal will be plenty for the whole time. I put my potatoes into old barrels or small boxes, so as to get them warm easier than in a big heap or bunk. The smaller the boxes, the easier and quicker they will sprout. When the potatoes get large enough, I knock off the hoops, take down the staves, and there are thousands upon thousands of small potatoes from the size of a bird's eye to that of peas, and a few the size of marbles. The whole mass is held together with small roots. I take a handbarrow (not a wheelbarrow) and carry the seed down the row, and another person breaks off as many as you wish—not less than twenty to forty—and lets them fall on the balk in the water-furrow. Then I give two plowings. My sprout-house has double walls, and is filled in between with sawdust, also overhead, and has double doors."

Dr. A. M. Ragland, editor of the garden department of a Texas agricultural weekly, makes the following comments on this new potato culture:

"P. T. Barnum, the great showman, was wont to say that American people were fond of being humbugged. This appears to be as true to-day as it was when it was first uttered. Only a few days ago a friend was telling us of some wonderful apples a traveling agent had sold him at fifty cents each, with the story that they would bear the second year, and produce larger, finer fruit than anything known. So elated was he over his purchase that he declared he would not take five dollars each for them. These trees he could have bought at any Texas nursery for ten cents each. A fellow by the name of Ford has been humbugging the horticultural and agricultural press with wonderful stories about a new method of growing Irish potatoes, by which he could produce five or six crops a year, and thus get 2,000 to 2,500 bushels off an acre in one year. So much noise was made about this, we wrote to a responsible gentleman who knew Mr. Ford, and he replied that he is well acquainted with Mr. Ford, but that there was no truth in his potato story."

THE GROUND-CHERRY.—Last year I noted in the *Gardeners' Chronicle* (London, England) a picture and description of the Japanese ground-cherry (*Physalis Francheti*), and I confess I was at once tempted to make efforts to get some seed for trial. Many of my readers undoubtedly are acquainted with the ground-cherry, or strawberry-tomato (alkekengi); or if they are not they should be. Provided that this plant of the tomato family were not possessed of great value for market, or for other practical purposes, it is surely a most interesting thing. In "How to Make the Garden Pay" I gave the following description of it: "Fruits yellow, of size of

cherry, growing inclosed in a husk; of sweetish, fruity flavor. Sometimes grown for preserves. The plant when once grown is apt to reproduce itself year after year, from self-sown seed." Many persons like the sweetish taste, even when eaten raw. To myself it is a rather "sickish" sweet, but I rather like the fruit when preserved with plenty of sugar. Children are always attracted by the unique appearance of the plant and fruit. A few of our seedsman catalogue it, one or two under fanciful names (Barbadoes gooseberry, etc.)

A NOVELTY.—The new Japanese form, *Physalis Francheti*, is now catalogued by Mr. Dreer, of Philadelphia, as a "fruit, vegetable and ornamental plant." The following is Mr. Dreer's description: "It is of a very striking appearance, producing bright red fruits, which are inclosed in a semi-transparent calyx or leafy capsule of an oval, conical shape, generally measuring about three inches in length and from seven to eight inches in circumference, and varying from bright orange-scarlet in color when nearing maturity. The plant is of sturdy habit, upright, unbranched, and grows about one and one half feet in height. It should be treated in the same way as tomatoes, to which it is related, and will make a fine display during the fall months." Of course, I have some plants growing, and can show them to all who will favor me with a visit this summer or early fall.

WHITE BEAN VARIETIES.—A reader in Iowa sends a description of a white bean which he has grown for some years, and of which he does not know the name. They are of medium size, the bush only eight or nine inches high and full of pods, ripening in August. By carelessness he has lost the seed, and would like to know what they are, so as to get a new supply. I confess I "do not know beans;" at least not from so general a description. There are many varieties and strains. Perhaps the bean in question is the "Medium," which I would advise him to try, together with others of the ordinary field-beans. T. GREINER.

ALFALFA IN NEBRASKA.

Red Willow county is justly called the "great alfalfa region." Many fields were cut four times last year, in spite of the drought, and the yield for the season was seven to ten tons per acre of excellent hay, and this without irrigation. Three crops of hay were cut from some fields that were sown last April. A patch sown June 20th was cut twice, and the third crop grew up eight inches. I sowed five acres the first of July, and cut it August 6th, when some of it was twenty inches high. This patch was sown on upland, where it is two hundred feet to water. It is the first thing to start in the spring and the last to dry up in the fall. One acre will furnish as much feed as two or three acres of clover. For hogs or any kind of stock I prefer alfalfa to any other pasture crop. Hogs have weighed three hundred pounds at nine months old. Horses and cattle will keep fat on the hay all winter. Give cows all they will eat, and they will give nearly as much milk in the winter as in June on clover. Hogs will eat the hay in winter like calves, and will keep in good condition on it. Bees prefer it to all other bloom.

It is a rapid grower, and is ready to cut about every thirty-five days, from June 1st until the fourth crop is cut. I measured some of thirty-five days' growth last year, and it had made a growth of forty-three inches. The soil, climate and conditions are extremely favorable for the successful culture of alfalfa. A season's growth of alfalfa can pretty safely be estimated at \$25 an acre per year. I know of a good many instances where the hay and seed of a single season sold for \$40 to \$50 per acre, and some even more than that. That was the season of 1894, when the hay sold readily at \$10 per ton.

There is a large area of small grain, and it is in fine condition. I have been farming here fourteen years, and I never saw the soil in better condition than it is now. I have not seen a more promising outlook for good crops than the present. Fruit prospects are very good. W. C. McCook, Neb.

WATER FOR FRUITS AND VEGETABLES.

Fruits and vegetables are composed mostly of water.

No component part of same is so plentiful, yet so difficult to supply in proper quantity.

The fruit-grower should then know how to guard against seasons of drought and preserve the natural moisture of the soil.

This can be done in two ways.

First, by irrigation, which is practicable only in certain favored localities by ditches and canals and by various pumping devices, pipes and drains, necessarily limited in extent, and then only with considerable expense.

Success by these methods requires about one thousand barrels of water per acre for each application.

Second, by retaining moisture already in the soil by mulching. This may be practised by all.

Well-prepared ground receives sufficient moisture in spring to fully mature the largest crop.

Tons of moisture from every acre are escaping daily in the growing season.

The best and most practical way to preserve this moisture and place it just where it is most available for plant use is by frequent shallow cultivation, forming a fine earth mulch.

This applies to gardens and all hoed crops. Where soil cannot all be cultivated, as with small fruits, then use manure, leaves, straw, clover, marsh hay, or any material to shade the ground and retard evaporation.

With coarse mulch close around fruit-plants, and a fine earth mulch between the rows, large crops may be carried safely through severe droughts. Commence at once, and continue until products are mature.—*Thayer's Berry Bulletin*.

EXTRACTS FROM CORRESPONDENCE.

FROM COLORADO.—Grand Junction is located at the junction of the Grand and Gunnison rivers. It has a population of 4,000. It is in the great fruit belt of the state. We raise all kinds of fruit, such as peaches, apples, pears, plums, prunes, cherries, apricots, nectarines, and the soft-shell almond, and small fruits in abundance. Everything grows by irrigation. We have canals for distributing the water through the valley. We have here a valley about twelve by thirty-five miles that is hemmed in on all sides by mountains. Its elevation is 4,500 feet above the sea-level. Railroad facilities are good, this being the terminus of four. Fuel is cheap, there being an abundance of coal in the hills. Improved land is worth from \$150 to \$1,000 per acre; unimproved, from \$20 to \$100. L. E. J. Grand Junction, Col.

FROM GEORGIA.—Lowndes county is certainly the poor man's country. There is plenty of wood. The winters are mild. Cattle are seldom housed during the winter. Sugar-cane, sweet potatoes and Sea Island cotton do well; in fact, this is conceded to be the best county in the state for long staple cotton. Peaches, pecans, pears, plums, apples, figs, pomegranates, grapes and small fruits do well here. I do not know a more healthful country. Renters here can make more by running the farm on shares, for they are not at any expense. Let the man who is looking out for a good, cheap home try this county. Good farms in this neighborhood can be bought cheap. Improved land sells for \$7 to \$10 an acre. T. C. W. Cat Creek, Ga.

FROM OKLAHOMA.—This country consists of three grades of land, bottom, valley and upland. The bottom land is that which is on streams, and is very productive. The valley and upland is that back from the bottoms, and is also very productive. There is not so much difference here as in other countries between bottom and upland. We have two kinds of soil, red and black, which are very rich, the red soil being the most productive. We raise crops of all kinds, but some crops are better adapted to one country than others. We raise wheat, oats, corn, millet, Kafir-corn, castor-beans, cotton, cane, flax, sweet potatoes, Irish potatoes, watermelons, muskmelons, alfalfa, turnips and all kinds of garden truck. Alfalfa is a wonderful crop for hay in this country. This is a great stock-raising country. The prairie-grass is fine for grazing. We have long seasons, and the grass lasts from early in spring to late in fall. We have a mild climate, short winters and long summers; hence, we do not have to feed long, on this account. Our summers are not hot and sultry like those in the East; we have cool breezes and cool nights. There is plenty of timber to supply everyone; all streams have timber extending out from them. Fruit does well; peaches are the best crop. Very large orchards are being put out

here. Many thousand tons of prairie hay are shipped to eastern and southern markets. Our market for shipping is north to Kansas City, south to the Gulf cities. This country, once a widely extended prairie, is now settled and farmed successfully. Improvements have been rapid. This bids fair to be a prosperous country in every way. Many who before they came here were renters, have now a quarter-section of land, a home, and are pleased. The water is excellent; wells are from fifteen to thirty feet deep. Springs are numerous. Our minerals are coal, lead, copper and silver; gold has been discovered in Noble county, near Perry, but not in paying quantity. H. I. Cherokee Strip.

FROM OREGON.—This is one of the finest stock countries in the Northwest, with its abundance of grass and water. It is amazing to see how quickly stock get fat in the spring. Cattle get fat in two months from the time they are put on the range; and horses can do an immense amount of work on grass alone. This is the poor man's country, and we want to try to settle this part with honest, enterprising people. There is a large amount of government land open for settlement. The cereals raised here are wheat, oats, rye, bald and bearded barley; the vegetables are potatoes, turnips, carrots and cabbage. Timothy and clover do very well. We have fine timber. People have good health all over the country, owing to latitude and altitude, and to mild winters and pleasant summers. There are good schools all over the country. Our lands are comparatively smooth. The roads are very good. The stage makes its semi-weekly trips; so we have regular mails, although seventy miles from a railroad. Flora, Wallowa county, Oreg. W. E. R.

FROM WASHINGTON.—Franklin county is in that portion of the "Evergreen," or "Sunset," state east of the Cascade range of mountains. It is bounded on the west by the Columbia river, and on the east by the Snake river, the latter emptying into the former three miles from Pasco. The United States government expects to have the locks at The Dalles, Oreg., completed soon. A boat railway is under contemplation at Celilo, when the Columbia river will be navigable by boats from the ocean to Priest rapids, ninety miles west of here, at all seasons, except a short time some winters. The Snake river is navigable to Lewiston, Idaho. Thus we will have direct connection with all the countries of the world by water. The Northern Pacific railroad gives us direct connection with St. Paul, Tacoma, Seattle and Portland. We also connect with the Union Pacific at Wallula, Wash., sixteen miles south of Pasco. Our climate is very mild and healthful. The altitude here is only about 350 feet above sea-level. Our winters are usually about eight weeks long. To carry on farming successfully here, it is necessary to irrigate the land; but with irrigation a failure of any crop is the fault of the rancher. About one third of this county is sage-brush land, and with irrigation it is the finest fruit land in the world. All kinds of fruits, such as apples, peaches, pears, plums, quinces, apricots, nectarines, cherries, etc., and all kinds of small fruits grow to perfection, and are very profitable. Alfalfa is a very profitable crop, yielding five to ten tons per acre each year; six tons is considered the average. It can be cut from three to five times in this locality each year, and retails for \$9 a ton at this point. I have seen fifty bushels of corn raised to the acre, without any cultivation, it being subirrigated by the river in June. An irrigating-plant is now being put in at the rapids in the Columbia river, six miles above this place, to furnish water for one thousand acres. The land is fine and level, and will look like a park when irrigated. The price asked for the land at present is \$25 per acre, and one dollar per acre per year for the use of water. Pascoe, Washington. J. C. H.

Tired

All the time; weak, nervous, out of sorts. This is the condition of thousands in the spring. The cause is found in the blood. It is loaded with impurities. It is depleted in quality. It is thin and poor, and it fails to carry sufficient nourishment to the

Nerves

Muscles and organs of the body. Therefore the nerves are weak, appetite is poor, and the person is "all played out." Eureka and purify the blood with Hood's Sarsaparilla, and health, vigor and vitality will return. Be sure to get Hood's because

Hood's Sarsaparilla

Is the One True Blood Purifier. All druggists \$1.

Hood's Pills are the only pills to take with Hood's Sarsaparilla.

Our Farm.

MILLET.

SOIL AND PREPARATION FOR THE MILLETS.—Millet will grow on a moderately fertile soil, but does best on a warm, gravelly, strong land. This should be well plowed, thoroughly harrowed and free from clods. The seed should not be sown earlier than the first of June, or until after the ground is well warmed. These grasses are natives of warm countries, and require a warm soil to insure best development. For forage or hay, at least three pecks of seed should be sown to the acre; for seed, one half bushel to the acre is plenty. If sown thickly, it grows a finer stalk, which makes better hay, than when grown more sparsely. After sowing the seed, which may be done by spreading it broadcast, the ground should be lightly harrowed or run over with a drag to cover the seed. The crop will not need further attention until cutting-time. Should it be wanted for soiling purposes, it will probably do to cut in about sixty days from time of sowing. For early sowing, take German millet; for late sowing, Hungarian grass.

TIME TO CUT AND METHOD OF MAKING HAY.—If it is intended for hay, it should be cut before the seed matures. It is better to cut as soon as the blossom goes off; the stalks will be less woody, and therefore more palatable. Hungarian and other millets are ordinarily regarded as hard to cure into hay. This, I think, is more due to the season than to the plant. At the time of cutting and curing millet, the days are shorter, the sun has less force, and the ground is usually more dewy than in midsummer, when other hay is made. In addition to these, millet is cut when greener than other crops intended for hay, and if good, produces more tons per acre, and for this reason lies thicker on the ground, which only adds to the complication of causes for its being harder to cure than other grasses.

After cutting, if the weather is fair, it should be allowed to wilt for a few hours, then use the tedder two or three times, after which the partly cured hay should be thrown into cock and allowed to stand two or three days, then opened out and well aired, after which it may be hauled in and stored in the mow. Should the millet be allowed to dry on the ground, the leaves become hard and more brittle than when it is sweat-cured. When well cured and housed, millet makes a most excellent substitute for hay, especially for cattle. Our cattle when fed on it for two months continuously, with no other rough feed except silage, did as well, apparently, as if they had been eating timothy hay or corn fodder. For horses it makes a good feed, and they are fond of it, but if it is allowed to ripen its seed, or even mature it sufficiently so that it would grow, horses as a rule will not do so well on it as they will on timothy hay.

The indications are that the matured millet contains a diuretic principle that causes a too free action of the kidneys. It does not act as quickly on some horses as on others; in fact, we have horses that could seemingly subsist on millet from month to month without being in the least affected, but others in the same stable, after eating millet two weeks continuously, are frequently seen standing in position attempting to urinate for five or ten minutes at a time.—Ohio Experiment Station.

STARVATION!

THE NEIGHBORS COULDN'T BELIEVE IT, BUT IT WAS SO—HOW PEOPLE STARVE BEHIND LOCKED DOORS.

Young, beautiful, alone. She lay as if quietly sleeping. Kindly neighbors came too late with food and nourishment. They questioned with unbelieving wonder:

"Dead: Can it be?"
 "Starvation? Impossible! O, if we had only come in yesterday! But the door was locked, we could not get in. Our own tables over-ru with plenty while this poor and proud young heroine lay alone and starving. O, the pity of it; and it never need have been!"

What is starvation? How few understand it. How many starve unknowingly with plenty all about them. Is starvation a lack of bread and meat and milk and nourishing diet? Not always. Think of the thousands of consumptives who die every year surrounded with the choicest delicacies which loving hands can supply.

The daintiest and most nutritious food, full of life-giving elements which somehow never reach the wasting lung tissues. Why not? Can you answer? No matter how much food is eaten, nor how well it is prepared. The patient gains no vitality, no energy, no nourishment, but grows weaker and sicker from day to day. The delicate food might as well be locked outside the door for all the good it does. Can you understand it? Do you know what is at the root of the trouble? The lungs are crying for healthy blood; they do not get it; they are starving: consumption is lung starvation.

There is no need of nine out of ten of the annual deaths from consumption. It can be cured; it is cured. There is no more necessity of lung starvation than there is of any other kind of starvation. When the lungs are fed with healthy blood, they heal; they are restored; the patient recovers. This is not an imaginary case, not a mere theory; it is a proven fact. Thousands of so-called incurable consumptives are completely and permanently cured every year by Doctor Pierce's Golden Medical Discovery. It makes rich and healthy blood. It enriches the circulation with life-giving red corpuscles; it recharges and vitalizes the lung cells with a pure, fresh health-giving current which nourishes, renews and builds up the tissues; heals the lungs, sound and strong; strengthens and repairs the throat and bronchial tubes, and invigorates the entire constitution.

In all the diseases of blood starvation the difficulty is to get to the starving



tissues the nourishment for which they are perishing. It is at hand, but the diseased system will not take it. The doors of life, as we may say, are obstinately locked against relief. "The Golden Medical Discovery" unlocks them. It imparts power to the blood-making glands to extract sustenance from the food and manufacture an abundance of pure nutrition. "The Discovery" makes the stomach do its digestive work and the liver perform its cleansing functions. Fresh life is poured into the circulation and the foul poisons are forced out.

All bronchial and throat affections and lingering coughs; debilitated, "run-down" nervous conditions; digestive and bilious disorders; liver-complaint; scrofula and other obscure diseases of malnutrition are simply different forms of starvation. Every cough is a call for nourishing blood; every twinge of pain is the cry of a starving nerve. Nervous prostration is only the starvation of the nervous system. Supply the circulation with healthy blood and every nerve will drink up life and power. No nerve food or emulsion was ever invented to equal the "Golden Medical Discovery" in marvelous restorative influence on a shattered and broken-down nervous system.

Corpulent people, whose superfluous flesh is only a burden, find the "Discovery" a tonic and strengthener which does not add one ounce of adipose tissue or flabby fat; but by its clarifying effect upon the blood, maintains the even standard of robust, active, energetic health, creating force, hard muscle and solid flesh.

The life-long reputation of Dr. Pierce as a widely experienced practitioner and eminent authority on the treatment of

chronic diseases, makes his "Golden Medical Discovery" a recognized standard remedy throughout the world. For nearly thirty years he has been chief consulting physician to the Invalids' Hotel and Surgical Institute at Buffalo, N. Y., the model sanitarium of America. During this period he with his staff of physicians has treated many thousands of patients and has probably had a wider practical experience with obstinate chronic diseases than any living physician. His prescriptions are universally esteemed as the product of rare familiarity with the *materia medica*, a deep understanding of human physiology and unique genius in adapting powerful, natural remedies to the cure of special diseases.

Woman-kind, by tens of thousands, have testified their gratitude for Doctor Pierce's Favorite Prescription for the cure of diseases peculiar to the special organism of women; and his "Pleasant Pellets" are everywhere accepted as the most perfect laxative and are a permanent cure for obstinate constipation.

The unparalleled superiority of these remedies is so well understood that the efforts of some unscrupulous druggists to substitute other medicines in place of Dr. Pierce's is unsuccessful with intelligent purchasers. They realize that the attempt is a direct imputation upon their own good sense and judgment of what they prefer, and resent it accordingly.

"I was so sick with dyspepsia that I could not eat anything for four months," writes Mrs. Rebecca F. Gardner, of Grafton, York Co., Va. "I had to starve myself,

as nothing would stay on my stomach. I tried almost everything that people would tell me about and nothing did me any good until one day in November last my husband got his mail and in it was one of your little books. I noticed the testimonials of some persons who had tried your 'Golden Medical Discovery.' I was so badly off I could not eat even a cracker but it would nearly kill me. I thought I was going to die. I weighed only eighty pounds. I took two bottles of the 'Discovery,' and, thank God, and your medicine, I am as well as I ever was, and now weigh 125 pounds. I have got a bottle of 'Favorite Prescription' now, and that is a wonderful medicine for female weakness. I tell everybody about my cure, and all those who live close to me think it miraculous that I am looking so well. I was in bed most of the time. Could not do any work four months ago, now I do all my housework and attend to some outdoor work, such as attending to the cows and fowl."

"I feel like taking you by the hand and saying, 'thauk God, you have saved my wife,' for we had given her up." Thus writes Mr. Thomas McGill, of Blue Rock, Muskingum Co., Ohio, to Doctor Pierce. "We sat by her when the doctor said she could not live till morning; so bad was her lung disease. Doctor Pierce's Golden Medical Discovery cured her."

When Mrs. McGill's case was reported to the specialists of the Invalids' Hotel she was suffering from pain in the chest, struggling for breath, hard dry cough; jarring hurt the chest; short breath; back-ache; uterine disease; feet and ankles swollen; was confined to house; was given up by her home physician. Her disease

began six years before and was attended by bleeding from lungs.

"I can gladly recommend Dr. Pierce's Golden Medical Discovery to all suffering from diseases for which you recommend it," writes Mr. John M. Hite, of Audubon, Audubon Co., Iowa. "In the summer of 1888 I took a severe cold, which settled on my lungs and chest, and I suffered intensely with it. I tried several of our best physicians here and they gave up all hopes of my recovery, and my friends thought I would have to die, and I thought so myself, as the doctors did not know what was the matter with me. In the morning, on rising, I would cough and spit blood for two hours, and I was pale and weak and not able to work any. I then ran across Dr. Pierce's advertisement and came to the conclusion I would try the 'Golden Medical Discovery,' as it was so highly recommended. I was greatly discouraged when I began the use of the 'Discovery,' but after I had taken four or five bottles I then noticed I was getting better, and I could stand it to work some, and kept on taking it till I took about twenty bottles. It has been five years since I took it and have had no return of that trouble since. I gladly recommend your medicine, for I know it saved my life."

"I was troubled with throat and lung disease for about two years and lost strength so that I was unable to do much work," writes Mrs. Julia White, of Willow Creek, Blue Earth Co., Minn. "I took four bottles of Dr. Pierce's Golden Medical Discovery, and can say that it did more good than any other medicine that I ever took. I am now able to do my work, and enjoy good health."

"I am feeling well at the present time," writes Mrs. Traphagen, of No. 6 Front Street, Poughkeepsie, N. Y. "I took fourteen bottles of Dr. Pierce's Golden Medical Discovery. I had chronic sore throat, hoarseness, sore chest, rheumatism in my arms, and was very much run down. The doctor here at home said one lung was affected and that I had symptoms of consumption. I know that the 'Golden Medical Discovery' was the cause of my regaining my health."

"Having felt it a duty to write of the good I received by taking your medicine," writes Mrs. Mira Mills, of Sardis, Big Stone Co., Minn., "I now would say, that one year ago I was given up by my family physician and friends; all said I must die. My lungs were badly affected, and body reduced to a skeleton. My people commenced to give me your 'Medical Discovery' and I soon began to mend. It was not long before I became well enough to take charge of my household duties again. I owe my recovery to Dr. Pierce's Golden Medical Discovery."

"Before taking the 'Golden Medical Discovery,'" writes Mrs. John Lincoln, of Glen Auan, Huron County, Ont., "I would have four or five bad coughing spells every day and would cough up mouthfuls of solid white froth, and before I took one bottle it stopped it. I could not walk across the room with the pain in my back and sides; but soon the pain was all gone, and I could sleep well at night. My general health is much better since I have taken the 'Golden Medical Discovery,' although I have been obliged to work hard on a farm."

One of the most instructive and interesting works of the day is Dr. Pierce's free book, The People's Common Sense Medical Adviser, a thousand-and-eighty-page volume of sensible, professional advice and accurate description of human physiology in every detail. Written in plain English, and with numerous receipts and prescriptions for home-treatment of simple diseases, and illustrated with over 300 wood-cuts and colored plates. It is a complete family medical library in one volume. 680,000 copies were sold at \$1.50 each. The profit enables Doctor Pierce to send out the present edition of half-coupons absolutely free to any one who sends 21 cents in one-cent stamps (to pay the cost of mailing only) and the little NUMBERED COUPON printed here, to the World's Dispensary Medical Association, Buffalo, N. Y., of which he is the President. The book is precisely the same as that sold for \$1.50, except that this free edition is in heavy paper binding. If you prefer French-cloth, embossed covers, send ten cents extra (31 cents in all) to pay the additional cost of this more handsome and more substantial binding.

COUPON No. 239

Our Farm.

THE POULTRY YARD.

Conducted by P. H. Jacobs, Hammoncton, New Jersey.

HAMBURGS AND REDCAPS.

EVERYWHERE in England the visitor finds the Hamburgs and Redcaps. They are known as "egg-layers," and are not regarded as choice birds for the table. In fact, they receive no consideration as being valuable for any purpose but that of producing eggs. When the Englishman wants a fowl for his table, he uses the Dorking as his choice, and next the Game. He does not attempt to keep one breed that is expected to produce an abundance of eggs and also be superior fowls for the table, as long experience has taught him that such a combination is one that cannot be easily obtained. The Hamburg and Redcap are very similar, the former having a rose-comb, and the latter what is termed a cup-comb. The Redcap is also a trifle larger than the Hamburg, and fully equals it in egg production. In this country the two breeds are known to be equal to any for the purpose desired, and they are among the most beautiful of the breeds; but they are not as hardy in this climate as in England, the heaviest loss occurring among chicks. They must be hatched after the mild weather of summer begins, as dampness makes sad havoc among them. Neither Hamburgs nor Redcaps are regarded as reliable winter layers, but they begin early in the spring, and keep at work until late in the fall, giving an average for the year which is seldom exceeded by any other breed. They are non-sitters, and lose no time hatching broods.

ADVANTAGES OF ONE BREED.

If one has a large number of fowls, all of one breed, there is a saving of fences and space, as there will be no danger of contamination should they be turned out together in the orchard or allowed to run at large. The uniformity of the flock in color, size and general characteristics lessens the labor required, as one can more easily understand how to manage, for breeds differ, and the best mode for one may not be suitable for another. Better prices can be secured when a coop of chickens is sent to market containing a uniform lot, and the eggs from hens of one breed will be more uniform, also. When two breeds are kept, they will soon become mixed and cross-bred, as it is almost impossible to keep them separated, the result being that the breeds will degenerate into scrubs. As we have before stated, just as soon as the farmer or poultryman begins to cross pure breeds his flock becomes destroyed. There is no necessity for crossing or for keeping two breeds. A single breed, kept up in vigor by careful selection, will remain pure and uncontaminated, and will not only give more satisfactory results, but also more pleasure to the poultryman.

POTATO-BUGS AND POULTRY.

It is unsafe for fowls to eat the adult potato-beetles, as the beetles will remain alive in the crops of the fowls; but the young, soft bugs may be eaten by the hens, if they can be induced to do service in the potato-field. All kinds of poultry seem to have a repugnance to the potato-beetle as food, and if the arsenites have been used on the potatoes, there is danger in allowing the hens in the field, as both London purple and Paris green are poisonous to all kinds of poultry.

NOW AND THEN.

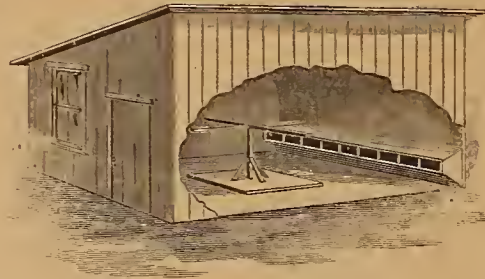
It is wonderful when you think of the difference in the cost of articles manufactured now compared with the prices some years ago. The Beethoven Piano & Organ Co., of Washington, N. J., Box No. 628, came into possession of an Organ a few days ago that was made in their factory some years ago, and sold for something like \$150.00. They informed us that with their present method of doing business and the improved machinery, they could now sell just as good an Organ for only \$50.00. Just think—one third of what it could be sold for a few years back. They also informed us that about the same reductions would apply to Pianos. They are now selling a first-class \$350.00 Piano for only \$159.00. It is fully warranted for twenty-five years. Drop them a postal-card for catalogue and you will see some bargains that will surprise you.

SELLING DRESSED FOWLS.

The proper way to dress fowls is to first pick them clean, without scalding, and then carefully remove the pin-feathers. Having done this, the next thing to do is to remove the animal heat from the bodies, which is done by dropping them into ice-water, allowing them to remain in the water all night, and then hanging them up to drain a few hours. This process is known as "plumping" them, and it gives the carcasses a better appearance. Before shipping to market, pack them in clean barrels or boxes, using no cloth, paper or other packing material, sending by express. Do not mix the poor fowls with those that are fat. If they are not all in prime condition, assort them, for the poor carcasses, if put in with the others, will bring down the price of the whole; but it never happens that fat birds bring up the price of the poorer ones. It is seldom farmers assort the fowls, but send all together, and they do so because they prefer to ship but one box or barrel, though it is a mistake to do so, as the difference in cost of transportation saved will not compensate for the loss on the whole lot due to the presence of a few inferior fowls.

A MOVABLE ROOST.

A roost that can be placed anywhere in the poultry-house, and which may be lifted up and carried outside to be cleaned, is shown in the illustration. It may be braced on a wider platform, or more arms may be added, if preferred. In winter it may be set closer to the wall, and brought nearer



the window or door in summer. Our readers can no doubt improve on the design, the object being to convey an idea how to easily keep lice off the roost by greater facility in cleaning. If this roost is taken outside, lightly sponged with kerosene, and a lighted match applied, the lice will surely be destroyed.

TWO SIDES TO PRICES.

When the markets are well supplied, the least desirable goods bring very low prices. It is then that the poultryman ventilates his opinion of the commission merchant and charges him with many sins that should be laid at the door of the poultryman himself. If everything sold in the market depended on quality, much light would be thrown on the business of buying and selling. The farmer has many advantages, however, if he only used them. If he had a reputation as one who made a practice of selling choice poultry and eggs, he would soon find the commission merchants seeking his articles, and they would compete with each other in the endeavor to secure his trade. It would require some extra time and labor for the farmer to establish his reputation, but that is no more than is required of men engaged in any other industry. Make a reputation, however, and it will last for life, or as long as the farmer maintains it. Prices can be kept up by quality, and if the merchant quotes one price, the farmer can then demand more. There are always two in a bargain, and the one who has the advantage will dictate the prices.

GREEN-FOOD METHODS.

The feeding of green food to poultry demands some attention, especially if the fowls are confined in yards. It is usually the custom to chop green food to a fine condition, and place it where the fowls can reach it. Such a practice is the best for winter, but in summer it is a saving of labor to use a spade and take a large sod to the fowls. They can thus pick at it to advantage, and will be better satisfied, not ceasing until they have eaten tops, leaves, stems and roots, as well as scratching the earth to pieces. Even clover is given in this manner, and vegetables need not be cut if they are acceptable. One thing connected with feeding green food is that the hens do not bite the grass, but

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pull it; consequently, when they receive green food they can supply themselves much more easily when the sod is given. A bunch of clover would simply be pulled about the yard and eaten with difficulty, but if the earth is attached to the roots the fowls will easily manage it.

FORAGING IN SUMMER.

It is natural for poultry to forage and seek their food, and our domesticated birds much prefer to do so. It is customary for the enterprising farmer to feed his flocks and keep them in good condition, but so far as the hens are concerned, it is more detrimental than beneficial to do so in summer, if the hens are on a range. They are scavengers, and find a large share of their food from material that would be wasted but for their efforts. It is in that respect that a flock always pays on the farm. They do not require assistance in the shape of food in summer, and the eggs are then nearly all profit, as the expense of production is but a small item so far as the food is concerned. If a flock of hens forage over the fields, and each individual appears active and busy, there will be a good showing in the egg-basket. It is the active and busy hens that lay the largest number of eggs, and for that reason the active breeds should be selected as egg-producers, if the hens are not to be confined, but have full liberty on a range.

USING THE WEEDS.

There is no better food for ducks and geese than some of the well-known weeds. Plautain, purslane, ragweed and pigweed are only a few of the delicacies for the aquatic birds, and they will require no other food. Both ducks and geese prefer to forage on green food rather than to subsist on grain, and this fact should encourage the keeping of a flock of ducks or geese in order to utilize the foods that would be of no service but for their aid in consuming them.

AN INDICATION OF LICE.

When you notice a hen seeking to dust herself in some place where there is but little dust, it indicates that you have not provided a dust bath, and that she is annoyed by mites and also large head-lice. Whenever the hens are busy dusting, go into the poultry-house and make a thorough examination, and lice will probably be found in large numbers.

CLEANING THE POULTRY-HOUSE.

In winter it is somewhat disagreeable work to clean out a number of poultry-houses, and those who go about such operations carry a scraper, spade, wheelbarrow and shovel. They first scrape the droppings into a pile, and then do much unnecessary work in the thorough cleaning of the floors. If cut straw or leaves are used, or the floor is covered with dry earth, only a broom is necessary. Simply sweep the floor, add more cut straw or dirt, and the work is done in a few

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minutes. Do not aim to save the droppings, except to throw them on the regular manure-heap, as it will be the best place for them. Under the roosts, where the droppings accumulate at night, the dry earth or other absorbent material should be used liberally. No poultry-house can be kept in good condition, however, unless it is cleaned at least three times a week, even in winter.

CORRESPONDENCE.

EGGS FOR PROFIT.—I was a farmer's daughter, and am now a farmer's wife, so am particularly interested in all the different branches of farming, dairying and poultry, and in these I have made a success. I also have raised small fruits, such as strawberries, currants and grapes, with the help of the FARM AND FIRESIDE. It is an easier task to ask questions than to correctly answer them, and I am often asked the question, "Does poultry pay?" I will give you my experience: We kept a average of seventy-five head of poultry, a mixture of White and Brown Leghorns, and White and Speckled Plymouth Rocks. I sold \$119.54 worth of eggs; I received \$9.15 for chickens, making \$128.69. Then the eggs used for hatching and eating made \$20 more, besides raising young stock that is now filling the egg-basket. Their feed consisted of all kinds of grain, and garden vegetables, cooked with wheat bran or middlings, and salt, red pepper and sulphur were added. I fed milk, with plenty of clean water.

A FARMER'S WIFE.

A LICE REMEDY.—As quite a number ask a remedy for lice, I will give mine: One peck of freshly slaked lime, five pounds of sulphur and one ounce of carbolic acid. Use it in the dry condition, sprinkle it on the floor, walls, etc. G. B. Washington, Pa.

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Or its equivalent in cash will be given to any active, wide awake and energetic young farmer, who will sell a section or more of the best farm lands along the lines of the Chicago, Milwaukee & St. Paul Railway in South Dakota, at prices ranging from \$7 to \$12 per acre; one half cash, balance on time.

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Our Fireside.

A DAY-DREAM.

BY LUIS LANESI.

I chanced one day to see at play
Some children by a dusty way.

Their tinkling laugh, like golden chaff,
Was scattered by the breezes waft.

It seemed to be, drawn by their glee,
That childhood's days returned to me.

The rapturous ring the robins sing,
That ruddy-throated welcome bring;

The sparkling tiara and rainbow hints
That rising sun on dewdrop glints;

The wondrous ways of life's young days
Came to me from time's misty haze.

I saw again the magic plain
I've studded off with spires from Spain.

The charmed bliss of mother-kiss
That led me back from paths amiss,

And to my sight her vision bright
Rose like a star from out the night.

But at my feet the children meet,
Their frolic crowding wide the street.

I close my eyes on Paradise,
And wonder why my noonday skies

Should lack so much of gold and such
That glows where life and morning touch.

WILLIE'S FIFE.

A SKETCH.

BY "THE COLONEL."



NEVER had thought there was any music in a fife until I heard Willie Graf play it.

It was early in November, 1863, when I reached Chattanooga, and was welcomed by my old friend Col. C., who, while I was up North recovering from the effects of a piece of rebel lead which I had had the misfortune to run against at Chickamauga, had appointed me adjutant of his regiment, the —th Illinois.

I came into camp one rainy night, at about "taps," tired and hungry; and after receiving C.'s congratulations on my recovery and arrival, and devouring the scanty portion of crackers and warmed-over coffee that Pont, the headquarters' cook, apologized for, I turned in with the quartermaster, Lieutenant Baker, whose tent was next the Colonel's on the left, and was soon in the land of dreams.

How long it was I can't say, but I know on my first awakening my military instinct revolted at the idea of music after taps, and I called over to Baker (who, as I saw by the dim light of the smoky lamp, had his eyes wide open) to know what it meant.

"Sh— Listen! It's Willie's fife."

And not understanding but that Willie's fife might be some new fangled "order of the day" (or night) that Gordon Granger had, in his mighty tactical wisdom, lately instituted, I listened.

I had always been extremely fond of music, and boasted some little skill on various instruments, particularly the violin. I had heard the best musicians of the day, and believed I appreciated only the finest of them; but for beauty of expression, depth of feeling, touching, heart-moving pathos and tenderness, I never heard anything like that fife.

I lay there awhile, staring at the dim light, and then carefully raised myself so as not to lose any of the beautiful strains, and sat up in my cot. Baker had turned over and buried his face in his pillow. I quietly got up, and opening the tent-flap, looked out. The sentinel on headquarters' beat was standing between the Colonel's tent and ours, at parade rest, with his chin on his hands, apparently listening intently. Assuming a severity I was far from feeling, I demanded an explanation of the music. He brought his gun sharply to his shoulder, and said, in a subdued voice:

"Beg pardon, sir, none of the headquarters' gentlemen interferes with Willie's fife. He's sick, and plays at odd times. It's company for us, sir."

He had imperceptibly emphasized the word "gentlemen," and the implied rebuke struck me squarely. I dropped the tent-flap as Baker growled:

"Go to bed, adjutant. That fife is outside of regulations."

The fife wailed, cried, sang and prayed, grew stronger, then weaker, and finally, in a few minutes more, died away in a thread of beautiful angelic melody. Baker heaved a long sigh, and I lay awake half the night hugging the recollections which the music had conjured up.

Next morning after guard-mount I accompanied the chief bugler to his quarters in the rear of the line of headquarters' tents. It was a lovely morning after the rain of the previous night, and the bugler's tent-front was tied back, and the rear of it tucked up, to give free circulation to the crisp, invigorating air.

Our color line was out toward Mission Ridge, and the non-commissioned staff and musicians' line of tents was on a little elevation behind headquarters, so that the whole beautiful panorama was before us. They were a little

slow with guard-mount over at Fort Wood, and the inspiring strains of "John Brown's Body," as the band marched in review, were brought clearly to us by the brisk breeze, which blew the fleecy clouds in hurrying procession along the face of the ridge, and behind the bold front of Lookout on our right.

Propped up on the end of a cot, with his arms resting on a cracker-box at each side, and his back and head supported by another box fortified with a knapsack, over all of which were thrown army-blankets and overcoats, forming a sort of rude throne, and with a blouse lying over his feet, which rested on a drum, sat a boy with a face like an angel. He reminded me of a picture I had seen of Mozart, only more spiritual. The deep blue eyes seemed fathomless, and the soft, wavy, brown hair swept back from a brow white as marble. His smile was sweetly sad as the trumpeter presented me, and a somewhat pained expression came into the wonderful eyes as he said:

"The boys told me you were annoyed at my playing last night, sir; but I don't sleep very well, and they have let me play to help pass the time. Most of them say they like it, but I'll not do it any more, sir, if it bothers you."

Immediately I disclaimed any annoyance, and explained, as well as I could consistent with my dignity, my late arrival, etc. For I had discovered that morning that I was likely to become unpopular in my new regiment by reason of my supposed interference with the music of the night previous. In fact, the Colonel had quietly intimated to me that Willie Graf was "the real commander of that regiment," and I had better square myself with him at the earliest opportunity. I was therefore particularly careful to insist that the fife-playing, under the circumstances, was not contrary to regulations, and hoped that he would not think for a moment that I wanted it discontinued. His shyness seemed gradually to disappear in response to my continued efforts to show good will; and when I left him I felt that I had at least removed my "handicap," and should hereafter have an even chance with the balance of the regiment in gaining his regard.

As the days wore on—and they did "wear," I can tell you—I came to consider my morning call at Willie's quarters a necessary and agreeable part of my daily duties. The weather all through November was simply execrable; rations were bad, the Colonel cross, the men and officers surly and restless, and it was always a soothing, quieting pleasure to sit awhile each day in the daylight of Willie Graf's soul—for that's what you saw in his face, and talked to when you spoke to him. The men all seemed to recognize it without mention, and insensibly a purer atmosphere collected about that portion of the camp. Within a certain gradually widening radius of Willie's tent loud talking, quarreling, swearing or fuss of any kind was found to be out of place, not in accord with the surroundings, and subject to immediate and summary punishment.

Poor little Gallagher, the Colonel's hostler, found this out to his sorrow, when, on the afternoon of the sixteenth, returning from town, big with the news that he had seen Sherman, and full of enthusiasm and sutler's whisky, he took to shouting just as he reached the mess-tent, not fifty feet from Willie's quarters, and, as it happened, just about the time of day that Willie took his nap. In an incredibly short space of time he was strapped to the mess-table, with a dish-towel in his mouth, and nearly drowned with dirty water and cold soup, while the chief bugler and headquarters' cook stood over him taking turns objugating him in a competitive struggle as to who should construct the choicest epithets descriptive of his misdemeanor. He had to promise all sorts of things, sign the pledge, beg the cook's pardon on his knees, agree to polish the bugler's boots for a week, and steal a pair of sweetbreads for Willie's Sunday breakfast, to expiate his crime.

This latter task, apparently impossible in the midst of an army, was rendered comparatively easy by the knowledge of exactly where sweetbreads were to be found. This knowledge was possessed by a dozen men of the regiment, and, in fact, there was a regularly organized system for discovering the whereabouts of delicacies that would have done credit to a detective agency of the first class. A bill of fare that would have been creditable to any New York restaurant was daily brought to tempt Willie's failing appetite, and the articles that composed it, to be obtained from the surrounding camps and in town, were located as accurately on the cook's map of the situation as was Bragg's headquarters on W. F. Smith's topographical chart of Chattanooga and surroundings.

Yet with all this attention and careful nursing, and in spite of his cheerful assurance that he was feeling splendidly, it was plain to see that Willie was gradually failing. The fife music seemed to me to grow sweeter and more tenderly, touching each succeeding night, and although no one spoke of it, because no one wanted to acknowledge it, even to himself, yet we all tacitly accepted the fact that he was slowly sinking.

On the twenty-first the Colonel showed me the orders which directed us to break camp and prepare for an immediate advance. Of course, we had all been looking for a movement of this kind ever since Sherman had come up, but we were jubilant all the same, and Willie

especially so. The news seemed to have a wonderful effect on him.

He insisted on getting up and helping to make ready for the advance, and an hour after "retreat," when I went over to see him, he had not yet lain down, and appeared to me not even tired by his exertion. I easily persuaded him to go to bed, by telling him the orders had been countermanded, and that we should not move in the morning. It was raining and blowing, and had been all day, and it seemed that it never would stop. I suppose the terrible weather caused Sherman to miss connection, and thus we had one more night in camp.

And what a revelation Willie's fife was that night! The pathos and pain and sweetness seemed forgotten, and it was wild and shrill, strong and grand and exciting. It made one's blood tingle to hear it, and as he ended up with a flourish something like an illuminated glare, in which "Yankee Doodle" and Pleyel's hymn were mixed up in a lot of blazing rifle-cracking variations, some fellow over in B.'s quarters gave an irrepressible yell, and in a minute the whole camp let loose in indescribable bedlam. Men ran out of their tents and danced and hugged each other; some laughed, some cried, and all seemed, for the moment stark crazy. Men from other commands came over to see what the row was, and we came near creating a panic before we could get the people quiet, as some of the sentinels in an adjoining brigade thought the "rebs" were attacking, and were near having the long roll sounded.

Willie was frightened at the mischief he had created, but the Colonel, usually a cool-headed old fellow, was just now as frisky as a young colt at the prospect of a fight, and sent over word that it was all right, and Willie could play that kind of music just as long as his wind held out. The fact is, the old man wanted to "holler" a little himself.

The next day we lay awaiting orders, and the bugler afterward told me that Willie never said a word, ate a mouthful, or, as far as he knew, moved all day.

That night there was no music. We left him in camp when we moved out of our intrenchments, and had our grand dress-parade fight on the twenty-third. A couple of the band-boys who were detailed for hospital duty went to see him that night, and reported that he had smiled when told of our success of the day; but he had said nothing, and had hardly turned his head since we went away from him.

We had no fighting on the twenty-fourth—only kept what we had gained the day before, and waited for the other fellows to catch up with us. Hooker was pounding away on Lookout mountain; we could hear him, but the clouds and mist did not permit a sight of him. On the other side of us, Howard had gone down to meet Sherman, and we could hear old "Uncle Billy" talking loud in that direction. Our time was to come when they got well grounded; but they did not seem to get into line that day, and it was well past noon on the twenty-fifth before we received orders that six guns from Fort Wood would mean go ahead.

It was just twenty minutes to four by Baker's watch when crack! crack! crack! bang! boom! boom! came the signal, and looking back at Fort Wood we could see the crowd of officers spurring in all directions, as though the shots were dispersing them. Immediately the line moved forward with a yell, and everything was forgotten in the mad rush. The batteries banged away over our heads, and the "rebs" pounded back from the hill in front. Inside of a minute everything that could make a noise seemed to let go, and I was conscious only of going forward as if propelled by some constantly increasing vibration of the sound-laden air about me. When I realized what I was about, I found that we had captured the line of breastworks under the hill, and there we were. Nobody seemed to know exactly what to do. Baker and I kept together on the flank of the regiment in the charge, and we had gotten over ground so fast that both of us were about "winded."

"Well," I said, between puffs, "what next? We can't stay here long, that's certain. It doesn't look as though we could go forward, and I'll be dashed if I like to go back."

As if in answer, clear and incisive out of the pandemonium about us came the wild notes of the "Marsallaise."

"My God, look there!" said Baker. "It's Willie!"

I looked where he pointed down the line, and there, sure enough, in front of the color company, bareheaded, with his back to the enemy, and his long, fair hair blowing about him, stood the boy. I could almost see the flash of his glorious eyes as he looked into the men's faces while he played that wonderful fife. Away up and above the roar of the battle that weird, thrilling hymn of blood and fire trembled and tore through the air, overturning reason and making a contempt of prudence and caution, as it had done a century before.

"How did he get there?" said Baker. "God put him there for a purpose," answered the grave sergeant of Company G, standing near us, who acted as right general guide.

It certainly seemed so, for as we looked he jumped on the embankment of the rifle-pit, behind which he had been standing, and began walking backward up the hill, still playing. The men near him, who were simply wild with excitement, led by the color-sergeant with the flag, followed; and then, as if by

some irresistible impulse, the whole regiment moved up, and in less time than it takes to tell it, the entire line was in motion.

The rest of the story everybody knows. There were no orders, no commands. From that time on it was a battle of impulse. All along the face of the ridge one could see those V-shaped bands of men, with the regimental color in the apex of the inverted V, struggling forward in the magnificent race for everlasting glory and honor.

How we got there no one can tell; and whoever tries must recognize the futility of endeavoring to depict emotion in language. We of the dear old regiment only remember following that flag we had carried through so many exciting scenes, with the notes of the French battle-hymn ringing in our ears, until we reached a tall maple near Bragg's headquarters.

There, with the beautiful smile that was so magnetic in life wreathing his Raphael face, his fair hair tossed from his brow, lying peacefully asleep at the foot of the tree, was our hero's clay. There was not a scratch on him. His last breath had gone out in the moment of victory. His last sublime effort of life was for the laurel of eternal glory. But the fife in his left hand was cracked from end to end.

IN THE SOFA-PILLOW.

BY FRANCES E. WADLEIGH.

"Tired? Of course you're tired. You look all beat out. Lie right down on the sofa and stay there until supper-time," said Mrs. Garvin, shaking up one after another of the sofa-pillows as she spoke.

"I must have caught cold, too, I think, or that walk to Miss Hunter's would not have made me so weary," answered Alice.

"Mebbe you have. Here, let me put this pillow—"

"No, no; not that horrid thing! I can't bear the sight of it!"

"How queer you are, Alice! You thought that sateen was very pretty when you bought it. I'm sure you can almost smell the pink roses on it. Well, if you don't want it I'll take it away. You must have a nap and wake up fresh. I've made you such a nice birthday cake."

"Oh, mother, you were real good, but I don't intend to keep any more birthdays. I am twenty-two—almost an old maid. Hark! I hear Bell Tracy's voice in the yard; call the child in and give her the cake; it is her birthday, too. Please do, mother."

Mrs. Garvin knew that Alice was in earnest, so with a sigh she went to the side door and called to little Bell, who was with a small brother. After talking to the children awhile, Mrs. Garvin determined to go down cellar and look over some apples, and it was more than an hour before she returned to the sitting-room.

When she was alone, Alice took the offending sofa-pillow—a large, plump one, covered with very pretty sateen—and threw it across the room out of sight.

"If mother only knew what memories that pillow brings to me, she would hide it in the attic," she said, half aloud, and wiped a tear from her soft brown eyes.

Just one year ago she had covered that pillow herself, and in every stitch she took she sewed a thought of George Elliott; and between each stitch she had looked up, expecting to see him coming up the path whistling some cheery tune.

As he had parted from her at the front door the preceding evening, he had pressed her hand and whispered:

"I shall call on you about dusk to-morrow to ask a very important question. Be sure and be at home, unless you intend to say no to me."

He could say no more at that time, for her mother and two or three cousins had walked home from church with them, and there was no opportunity for private conversation. However, there was no mistaking the meaning of what he had said.

Yet she had never seen him since that evening. She heard, a few days later, that he had gone to South America on some business for the firm which employed him. She wondered at his sudden departure, and expected him to write to her, but no letter ever came.

This was her reason for hating the pillow, and for refusing to "celebrate" another birthday. But her mother did not know that.

Meantime, the little Tracy children betook themselves homeward with a hop, skip and jump, carefully carrying the precious cake. Their way led past the little railway station, and as they neared it they were much surprised to see a long train of cars standing motionless.

"Less go see what they're waitin' for," proposed Bell.

When they reached the platform they heard people complaining because they were delayed. Said one lady:

"If I had thought of the possibility of a freight-train being wrecked and detaining us in this wilderness two or three hours, I'd have had my dinner before the dining-car was taken from our train."

"So would I," said another. "I am famishing for some tea. How do you feel, mother?"

It was a clear day, and most of the passengers were on the station platform, close to the children.

"I want some tea, too, but I'd be glad of anything; I'm starving," answered an old lady.

That was too much for little Bell's tender heart. Pulling the old lady's dress very timidly, she held out her cake and said:

"Please, ma'am, take this; it's real good!"

"Bless your little heart! Is it your own cake?" was the reply.

"Oh, yes'm, my very own. This is my birthday, and Mrs. Garvin just gave it to me. Miss Alice always has her birthday when I have mine."

At the mention of these names a young man suddenly spoke up:

"If Mrs. Garvin made that cake, you can depend upon its being good."

"Oh, do you know her? Does she live near here?" asked the old lady. "Do you suppose she would give us some tea? Could I pay her for it?"

The young man, who was none other than George Elliott, demurred about taking the ladies to Mrs. Garvin's, but they insisted upon his doing so, and would not listen to his suggestion that little Bell could be their escort. They must be introduced.

In the meantime, Alice Garvin had waked from her nap, and rose from the sofa just as her mother returned from the cellar. How little she dreamed that her recreant lover was so near!

"This pink sofa-pillow is the softest of them all," Mrs. Garvin said, as she took it and restored it to its place. "There, no wonder you don't like it!" she suddenly added; "here's a piece of stiff paper in one corner. Queer I never noticed it before. Give me the scissors and I'll rip an opening and take it out."

"What is it?" Alice asked, carelessly, as her mother handed her a small folded paper.

"Oh, just one of those notes George Elliott was always sending you. I suppose it dropped in— What's the matter?"

Mrs. Garvin's question was caused by the sudden rush of color to her daughter's pale face.

"A note he sent me just one year ago to-day, explaining that he could not call because he had to hurry to New York, and asking me to go down on the train with him. He—he wanted to tell me something. How came it here?"

"I'm sure I don't know," returned Mrs. Garvin. "But I remember he gave me a note when I went into his uncle's store to buy your birthday flowers, and he said something about being in an awful hurry. I came home and found you looking after the chickens, so I laid it right on the piece of that pillow-covering you were sewing, and forgot to tell you about it."

"I don't understand how it got inside the pillow, unless Bell Tracy poked it in for mischief. She was playing here that day. You know she always comes on our joint birthday. But, mother, look out the window. Here comes Bell now, bringing four strange ladies and—oh!"

"Land sakes! so she does. And if that isn't George Elliott, too! I'm glad to see his cheery face once more. Wonder if that pretty girl is his wife! Well, I must hurry and open the door."

Alice Garvin turned hot and cold by turns. She wanted to hide, but she also wanted to know the worst at once. The pretty girl, chattering so eagerly to George Elliott, looked very happy, and very bride-like, too, in her stylish brown traveling-dress. George did not look as happy as the girl did, however.

The visitors fairly filled the cozy sitting-room, and as they all talked at once, apologizing for the intrusion, admiring Alice's magnificent Angora cat, and raving over the windowful of blossoming plants, it was impossible to catch their names, though George introduced them all.

In a few moments Mrs. Garvin had spread for them an appetizing luncheon—cold roast pork, bread and butter, pickles, doughnuts, cake, pie, cheese and hot, strong tea—and as each visitor called on another to taste some delicious dainty, Alice drew a long breath to find that the pretty girl was a Mrs. Burke, and that there was no Mrs. Elliott present.

"Alice," said Mrs. Garvin, presently, "go down cellar and bring up that cold corned beef. I know Mrs. Burke don't really like pork."

As Alice went down the cellar stairs, she was startled to hear George Elliott's step behind her.

"Alice," he said, eagerly and rapidly, "a year ago I vowed I'd never speak to you again, but my heart is not so tough as I thought. I must ask why you took no notice of my last note?"

"I never received it until a few minutes ago," she answered, nervously.

"What! How was that?"

She told him the queer hiding-place his note had found, and then he said:

"I'll trust to no more chapters of accidents. Alice, darling, I love you. Will you marry me?"

"Alice, where are you?" Mrs. Garvin called. "Coming, mother," she replied. "Oh, where is that beef?"

"Hang the beef! Give me just one word, darling. Will you marry me? Say yes; say yes!" pleaded George, excitedly.

"Have you found the beef?" Mrs. Garvin again called.

"Yes, m—"

The Angora cat, which had followed Alice down cellar with the milk-pan in its mind, was startled by a queer little sound just then. But it is not to be supposed that a cat would

recognize the sound of a fervent kiss, or understand its meaning.

The ladies had to go away on the train without George Elliott. He said he should never leave the village again until he could take his wife with him. And he kept his word.

MISMATED.

A new family had moved in across the street, and my next-door neighbor "felt in her bones," ere they had been there a month, that there was a skeleton in the closet; and I am quite sure she had reached a mental decision as to the particular kind of horror that hung over this home, at the same time.

She is no "busybody," this warm-hearted friend of mine, but if there is a heartache in the neighborhood, it cannot be hidden from her. In fact, it is always, sooner or later, confided to the dear old soul by the sufferer, and well do we all know that nothing can wrest these confidences from the lips of her who has only wisest counsel for us all.

Mrs. Brown, the new neighbor, proved no exception, for there came a morning when her burden grew too heavy to bear, and she sought the neighborhood helper for comfort and counsel. It was only the old, old story—a mistaken marriage.

"We have grown apart, until nothing, nothing can ever make us happy again."

"Oh, if young folks would only get acquainted, instid o' courtin'; only study 'em-selves an' each other, instid o' talkin' nonsense, there'd be no more o' this mismatin' an' misery," said she, as she gathered the wretched little woman in her arms and pillowed the poor aching head on her bosom. "Jist lie there an' hev yer cry, an' make b'leve as how I'm yer own mother, an' we'll talk it all over together; maybe it's not so bad as ye think."

"It could not be worse."

"Oh, yes; uothin' is ever so bad thet it can't be worse. Hev ye gone over the hull ground an' found no place whar ye could make a change in yerself thet would bring back the ol'-time happiness?"

"You don't understand; our love is dead, dead. Nothing could bring it to life."

My next-door neighbor's lips trembled while she smoothed the pretty, dark curls from the throbbing temples.

"Poor child! My only sister went through this. I tried to comfort her; I'll try to find comfort fer ye, too."

"There can be no comfort fer mistakes. We repent of our sins and find pardon and peace; but fer mistakes—lifetime mistakes—there is nothing—but death."

"Hush, dear! ye air no coward to think, not fer one minute, o' that way out o' it all—not 'till yer work's done here an' the Master calls ye. There's divorce," she added, masteringly.

"Don't! I could not. Besides, that would not udo the wrong."

"No. Two wrongs never made a right. All the divorces in christendom wouldn't do away with the fact thet ye air husband' an' wife, an' these chilern common property. Neither o' ye hev the right to give 'em or take 'em away; neither the right to take away from them a father or a mother. No, whar ther's chilern, or whar the man's wuth savin', an' the woman capable o' savin' 'im, the only thing fer the woman to do is bear it an' make the best o' it."

"But there is no best to it."

"Maybe not; but there's a better."

"Life is a burden—bear it;
Life is a thorn-crown—wear it."

"This is true of the happiest of us, an' the truest, bravest woman is her as bears the most, an' says the least about it. Ther' be hurts an' hurts; some sink deep, but they heal. Some seem to sink into our very souls, an' we feel as if life itself will go out with the pain. These be given by them as was our own; they never heal. We plaster 'em over with duty or family pride, or some such makeshift, an' we hide 'em with watchful care, but the hurtin' is always felt; an' so long as we still keep our faith in God an' humanity, they'll strengthen an' sweeten us."

"My dear friend, I don't find much comfort in all this."

"If ye was a-goin' on a long journey down a stream whar I'd traveled, would you want me to tell you o' the fine scenery ye'd find, or would ye ruther I'd give ye a map o' the snags an' sand-bars?"

"Give me the map. Tell me of the children. As they grow up, will they have the same love for me as they would have if—if—"

Gently the hand stroked the bowed head, and a tear dropped upon the curls, but there was no answer.

"Tell me," she pleaded, not daring to look up.

"How I wish I might say 'yes,' but they won't. Just as yer true womanliness and motherliness wins 'em they'll love ye. But thet reverence as is the birthright o' every right-born child, ye must not expect; that is the heritage o' them as air one, as God intended each an' every pair should be, an' can come only whar father an' mother both hev it, each fer the other. Win an' keep their confidence. Be jist the best mother it is possible fer ye to be, an' yer chilern will be a source o' pleasure to ye—will rise up an' call ye blessed; but to be jist what they might o' been, don't expect it."

"This is cruel! What is there left to live for?"

"Everything. Because the sweetness an' bloom is taken out o' life, it doesn't follier thet

we owe the world an' them as air given into our keepin' no debt o' duty, nor thet we may not crowd a hull lot o' quiet enjoyment into our days, after all. Husband' an' chilern an' home an' the world outside—all to be lived fer an' worked fer. Work, work, work, thet is a good remedy fer heartache. But it must be somethin' more than yer round o' household cares, fer thet will not take yer mind off'n yerself. The best medicin' in the world is to help some one else in trouble. The world is full o' sore hearts an' hunger—hunger o' soul an' mind an' body. Let yer own sorrow be the blessed key as shall open eyes an' heart an' hands to them as hev more to bar then ye hev, an' into yer life will come a peace an' content thet ye now think ye shall never know.

"There will come times when the hunger fer sympathy, appreciation, confidence an' companionship—which is the life an' soul o' married life—will come over ye like a great black wave, an' yer heart will 'most stand still at yer sense o' loss an' loneliness. At such times go to yer room alone an' hev yer cry an' a long, trustin' talk with the Father, an' ye will come out again ready to take up yer work in the strength he gives to his chastened ones. Take up each duty as it comes to ye, cheerful-like, not in the martyr-like way thet some hev, an' thet allus brings all the ol' Adam ther' is in a man to the surface. In yer talks together don't refer to the past; don't think of it. Interest yerself in his affairs. Don't let him outgrow ye, an' try to not-outgrow him, an' it may be thet for ye two, as for others I have knowed—

"Out of all the bitter past
Shall come a friendship that shall last
Life's journey through."

AUNT LOUISA.

HOW DESERTS ARE BEAUTIFIED.

The terrible eruption of Krakatoa, in the Sunda strait, in 1883, furnished the opportunity for illustrating the ease with which nature can replant with vegetable life a district that has become completely desolated. The volcanic eruption was one of the most destructive recorded in history, the loss of human life being estimated to exceed 100,000. Of the thirty-five volcanoes on the near island of Java, twenty-six were in violent eruption at the same time. The center of disturbance was the island volcano of Krakatoa, which emitted molten lava and burning ashes in such abundance that every living thing, whether animal or vegetable, on the island was destroyed, and an observer from a ship which approached close to the land declared that the whole island was red hot. Four years from the date of eruption the island was visited by an eminent naturalist, who found that the ashes and lava had cooled to such an extent as to permit the beginnings of vegetable life, and on making a closer examination he discovered that during the brief space of four years nature had stocked the island with two hundred and forty-six different kinds of plants.

There are many seeds which seem, by their formation, to be especially designed for transmission through the air, and of these, several are quite as good illustrations as the thistle. The seed of the common dandelion, a plant to be seen on every common, has wings which will carry it away on the slightest breath of air. The wings are very slight filaments, radiating backward from the seed, so that when the latter finally lodges, it falls tip first, in the most favorable position for taking root. Country children in the United States often find amusement in blowing the seeds from the stalk and watching to see how far they will go before falling to the ground, but whenever there is even a moderate breeze the experiment is uniformly a failure, as the fleecy seed fly out of sight and are gone in an instant, and the next season a dandelion springs up in somebody's lawn where the plant was never seen before. The common tumble-weed is another example of the winged seed. The plant grows in a woolly bunch, which, when dried, is easily separated from the stalk, and a light breeze sets the ball rolling over the ground to scatter its seed wherever it goes.

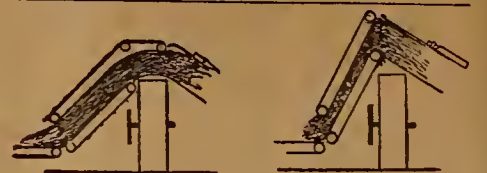
The seeds of many ferns and microscopic plants are so constructed as to be readily lifted and carried away by the wind, while some of considerable size are provided with an elaborate arrangement for aerial transportation. The common maple is an example of the last kind, for projecting from its large head is a membrane closely resembling in size, shape and general appearance the wing of the locust. When the seed is separated from the tree, even if the air be quite still, it does not fall directly to the earth, but by its peculiar construction acquires, in falling, a spiral motion that takes it several feet from beneath the starting-point; and when a brisk breeze is blowing, one of these winged seeds has been known to twirl through the air for six miles before its journey came to an end and it sank to the ground, there to germinate and start a maple grove.—*St. Louis Globe-Democrat.*

THE REASON WHY.

Mr. Gotham (of New York)—"I am never so happy as when I am in Philadelphia."

Mr. Quay-Kerr (of Philadelphia)—"I am so pleased to hear you say so."

Mr. Gotham—"Yes; I am so happy I don't have to live here."—*Puck.*



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WHAT'S the matter with the elevators of all other Binders except the CHAMPION?

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All the canvases are too close together.

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The CHAMPION is the only Binder that gives ample space between the needle and top of elevator, and therefore no straws drag down over master wheel.

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All other elevators must be steep, because of their plan of going over the master wheel.

When steep, canvas belts must be close together to hold the grain tight enough to be elevated.

This tight grip shells so much grain that some try making the elevators narrower and open at the back, leaving the heads stick out behind the canvas, but then the heads are shelled by shafts, chains and other operating parts.

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FARMS—SOUTH, EAST AND WEST.

IN THE BLUE-GRASS OF KENTUCKY.

In no part of America does the country present a more picturesque appearance than in central Kentucky. The whole region is like a vast park; on every side are seen rolling, grassy fields broken here and there by woodlands. The stately country mansions are like no others so much, perhaps, as those seen in England. The conditions of life in the blue-grass are in many ways similar to those of the English country life.

These great fine blue-grass farms, given over in large measure to the rearing of choice stock, belong for the most part to an educated and cultivated class of farmers. Their homes, as compared with those upon the farms in most sections, are handsome and luxurious. Roomy, comfortable family carriages roll over the even country roads, bearing their occupants to neighboring farm-houses or to the villages. Between these farmer's families a fine exchange of hospitalities is customary; also between the country people and the refined and cultured families of the towns and villages a similar sociability is shown. Nowhere else among country people are the conventionalities of city life so much observed as in such sections of our southland.

With these farms at the same time are combined certain local customs which seem especially suited to the conditions of life existing in these regions.

The roads in the blue-grass—or pikes, as they are called—are very like city pavements, and are well adapted to the tastes and pleasures of a people fond of social life, of fine horses and of driving. These pikes are main thoroughfares, and extend for hundreds of miles in the same irreproachable condition. Unpaved roads—"dirt roads," so called—are few; indeed, the network of by-roads so common in some states is not seen in the blue-grass.

Nothing adds more to the picturesque quality of this rich and splendid country than the low stone walls which are seen on both sides of the "pikes," and serve as fences for the great fields which stretch far away on every hand.

Some ask why this is called the blue-grass region, and the answer often received is because the grass is so green, such a rare and emerald beauty has the blue-grass! But the truth is that at one season of the year, when the grass is in bloom, the fields have a certain bluish cast, which they receive from the countless grass-heads in blossom; for a greater portion of the time, however, the grass is a clear and perfect green.

Mention should be made of the lavish hospitality of these Kentucky country people. A dinner presenting whole baked hams, gigantic roast turkeys, roast shooat, and all else in proportion, is but an outward expression of the free and generous natures of these people.

IN THE LAND OF THE PENNSYLVANIA DUTCH.

Wholly different are the appearances and conditions upon the farms of Pennsylvania. Instead of being like a park, the country resembles a well-kept garden. Among the Pennsylvania Dutch, simple and plain are the tastes and habits. Thrift and energy produce splendid results in the way of abundant harvests from the well-tilled soil.

Houses neat and comfortable and unpretentious give evidence of the simplicity of these people. Their tables groan with well-prepared and abundant food. An occasional round of visiting satisfies the quiet social nature, which finds its deepest enjoyment, perhaps, in the demands which the church puts upon its earnestness.

The marvel is how much the land is made to yield by these sturdy, energetic farmers. No smallest amount of available ground is wasted. Some child, viewing the mosaic formed by the crops of varied color, exclaimed that it was "God's crazy-quilt." And, indeed, the little one reverently described the appearance which these farms present. Wheat, oats, buckwheat, corn, meadows and plowed fields are joined as in a marvelous patchwork.

So that while some other sections resemble parks, this is always like a beautiful garden. Nor are all the country people Dutch. There are, indeed, whole settlements of them, and greater or less numbers in most localities; but they are by no means the only class of farmers. Everywhere, however, country life is a simple, earnest, tireless existence, yet having its own quiet pleasures.

If the barns in parts of this section seem to be of mammoth proportions, it is but a visible sign of the power of a sturdy people to force large returns from the soil, for when large barns are built, it is because large harvests are stored therein.

IN SOUTHERN CALIFORNIA.

Southern California is like neither a garden nor a park. Instead, it is like a vast orchard combined with endless vineyards. But the first and continual impression is that of a boundless orchard.

The absence of grass, except where it has been deliberately grown and cultivated by the aid of irrigation, is one of the most noticeable things. For this wonderful fruit region was but a short time ago a desert, showing little else than sage-brush and cacti by way of vegetation. Under the power of irrigation it yields apparently whatever the will of man commands.

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America, and having strange and foreign names, are among the commonest in southern California. The eucalyptus and the ariscaris, the guava and the pomegranate are familiar in appearance and name to the tiniest children.

The orange-groves are, of course, the most conspicuous feature of this land; the crisp, glossy green of the leaves and the rich orange color of the fruit form a contrast which attracts immediate notice; this effect is heightened when, as happens in the spring, buds and blossoms, green and ripe fruit adorn the trees at the same time.

The peach orchards are not less numerous, but excepting in the brief time of lovely pink blossoms, are less noticeable than the orange-trees.

Hundreds of acres in a single vineyard command attention to the grapes, whose blossoms and fruit are borne upon low trunks of vines, perhaps four feet high, formed by continually cutting the vine hack.

Every kind of fruit has a place in this land of fruit; but the apples, if fine in appearance, are most indifferent of all in quality. But so perfect is all other fruit that little thought is given to the apples. Peaches, plums, pears and the small fruits leave nothing to be desired in the appearance and quality.

Over waste places and outlying fields, in February and March particularly, the wonderful yellow poppy glorifies the land. Of a deep orange color always—sometimes the lemon color is seen—they glow in rare beauty with their satin-like petals. The poppies are single and low, and are well worth an overland journey to see, especially when they cover hundreds of acres, as they sometimes do, in a flaunting mass.

One unique feature of the country in California is the great number of Chinese laborers in the fields. The gardens, also, are almost wholly under their cultivation.

Extensive is the fruit drying and canning done by the people of this fertile region.

Looking up from these wonderful southern California valleys, always there is the grandeur of the mountain views, which render the country scenes sublime beyond anything that is to be seen elsewhere in America.

In the blue-grass the beauty of the rich farm lands is in the park-like finish it presents on every side. In Pennsylvania and in southern California the distant views are the most impressive because of the variety which is given by hills and mountains. The grandeur of the southern California views under a sky more wonderfully blue than the Italian sky cannot be surpassed in any farming country.

California farms are known as ranches, whatever the size may be; and when they receive, as they so often do, the musical Spanish names, such as are borne by the mountains, hills and streams, the result is most pleasing. Sauta Auita Rancho, San Raffello Rancho and others are among the attractive names borne by these California lands.

J. L. BOULDEN.

THE "QUIZ PARTY."

We were all invited—Sue, Lisette, Madge and I, and, for aught we knew, half the town besides. Just Miss Nelson's compliments and the invitation, without a word of explanation, and we had never heard of a "quiz party."

What would it be like? Were we to quiz or to be quizzed, and upon what subject? Alas! no one to whom we appealed seemed well enough posted on quiz parties to answer our eager inquiries.

"Of one thing we may be sure," ventured Sue, "it's head-work that's expected of us, and not hand-work, so we needn't take our thimbles."

"I wish we might," replied Madge, "heads are so uncertain; mine always takes 'French leave' in an emergency, and should I be quizzed to any extent, be sure of this, girls: I shall be like the 'headless huntsman,' for I shall have my head to hunt before I can make an intelligible answer."

Evening came, and aside from the meager facts, as stated by one of Miss Nelson's special friends, that it was to be a very informal little affair, and that both sexes would be equally represented, we knew absolutely nothing about the "quiz party."

Upon reaching the pleasant home of our destination, we found nearly all the guests assembled, and on the face of each a look of puzzled expectancy, as if to say, "What next?" Tables were placed in parlors and hall, each table arranged to accommodate four persons. At each table lay a writing-tablet, a pencil, and a card upon which a name was written; but before the company were allowed to seat themselves, card-trays were passed, each person choosing therefrom a card also bearing a name. Then what a hubbub arose.

"My card says 'Prue,'" vouchsafed the damsel commonly known to her familiar friends as "Sue."

"I am 'The Lady,'" quothed Madge, "The Irrepressible."

"I'm glad you have credentials to that effect, but your card should have stated 'for one night only,'" came in a stage whisper from Lisette, nicknamed, by her volatile sisters, "The Prude."

After the cards had been duly examined and compared, the guests were asked to find their own places, and told that a card corresponding exactly with the one in hand would indicate to each his appropriate place. After a deal of laughing and chatting, all were at last seated.

"Romeo" beamed upon "Juliet" from the opposite side of the table; at right angles the significant pronoun "I," represented by a tall masculine figure, looked smilingly over at "Prue."

"Cinderella" and the "Prince" found themselves in the same happy proximity, while "The Lady" sat opposite "The Tiger," who, in frock coat and trousers, and evidently well fed, looked like anything but the ferocious beast behind the door, in Mr. Stockton's thrilling tale.

Some of the other partners were "Lady of the Lake" and "Fitz James," "Jonas" and "Pomona," "Josiah" and "Samantha Allen," etc., and, as may readily be imagined, the discovery of one's partner at the table afforded more genuine amusement than anything else on the program.

The tables were named for different subjects of study, and at one, called the "Miscellaneous Table," any question could be asked.

Quizzers had been appointed, one for each table, and the same number of questions was asked at each. After one set was exhausted—the answers having been written out upon the tablet by each person—the page was torn off, handed to the quizzer, and the four moved to another table. When each individual had answered questions at all the tables, the game, if we may call it such, was ended.

Some knowledge of the subjects chosen was required in most instances in order to make correct answers, but a few of the latter involved a play upon words, some happy local hit sure to raise a laugh, or could be written in different ways, the best being accepted.

At the "Geography Table" questions were asked regarding the location of places where important current events were occurring or had recently occurred; also others of an entirely different nature; for example, the following:

"What state in the Union represents a planet?"

Answer: "Texas." (Lone Star.)

At the "Arithmetic Table" we had great sport, although no one was allowed to see the written answers of another. The questions were arithmetical problems (?) not difficult to solve, yet admitting of a difference of opinion regarding the correct solution. The following is an example:

"A man went into a shoe-store and was fitted to a pair of shoes, the price of which was \$3. He presented in payment a \$5 note, which the dealer was unable to change, so took it to a grocer next door for that purpose, and returned, handing \$2 to the purchaser, with the shoes. Shortly after, the grocer came to the shoe-dealer, bringing back the \$5 note, which he pronounced a counterfeit and demanded good money in exchange. This the shoe-dealer was obliged to give him on the spot. What was the total loss of the shoe-dealer?"

Seven different answers to the above were given.

At the "Miscellaneous Table" some of the questions occasioned much amusement; for example:

"What small bird has been known to carry off a man?"

Answer: "A lark."

Another answer to the above, considered by many as equally good, was "One swallow."

In order to answer most of the questions in history, both English and American, a fair knowledge of the subject was necessary.

Prizes were awarded the lady and gentleman who answered correctly the greatest number of questions, also a "booby" prize to that person making the fewest correct answers.

The examination-papers handed in by the "booby," however, were so extremely funny, they were read aloud for the benefit of the guests, and I looked around just in time to catch the eye of our beloved Madge, as with a demure air and polite bow she accepted a copy of "Mother Goose."

Then refreshments were served, and a social hour followed.

"Let's propose a similar entertainment for the final meeting this season of our literary club, the Coterie," said Lisette, as we walked homeward.

L. A. W.

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SELECTING HORSES.

The British government has the following set of rules for those who select horses for cavalry service. They are called "points of rejection," but will answer equally well as points of selection:

Reject a horse whose fore legs are not straight; it will not stand wear. Stand behind the horse as it walks away from you, and you will be able to notice these defects if they exist.

Reject a horse if he is light below the knee; the conformation is essentially weak. Or a horse with long or short or upright pasterns. Long pasterns are subject to sprains; short or upright pasterns make a horse unpleasant to ride, and on account of extra concussion are apt to cause occide deposits. Or a horse with toes turned in or out. The twist generally occurs at the fetlock. Toes turned out are more objectionable than toes turned in. When toes turn out, the fetlocks are generally turned in, and an animal so formed is very apt to cut or brush. Both, however, are weak formations.

Reject a horse whose hind legs are too far behind; good propelling power will be wanting, and disease as a result may be expected in the hocks. And a horse which goes either very wide or very close behind, and one with very straight or very bent hocks. The former cause undue concussion; the latter are apt to give way.

Reject a horse that is "split up," that is, shows much daylight between the thighs; propelling power comes from behind, and must be deficient in horses without due muscular development behind the thighs.

Reject a horse with flat or over-large feet, or with very small feet; medium-sized are best; also, a horse with one foot smaller than another.

The following example of a quaint philosophic Scotch character is related in *The Scottish American*: The season had been an exceptionally bad one for farmers, but in a country church not one hundred miles from Arbroath the office-bearers had resolved, according to custom, to hold the annual harvest thanksgiving service. It was noticed that on that particular Sunday Mr. Johnstone, a regular attendant and a pillar of the church (whose crops had turned out very poorly), was not in attendance. The minister, in the course of the following week, met Mr. Johnstone and inquired of him the reason of his absence from church on such an important occasion.

"Weel, sir," replied Mr. Johnstone, "I didna care about approachin' my Maker in a speerit o' sarcasm."

Our Household.

MY STRAWBERRY.

O Marvel, fruit of fruits! I pause To reckon thee. I ask what cause Set free so much of red from heats At core of earth, and mixed such sweets With sour and spice; what was that strength Which, out of darkness, length by length, Spun all thy shining threads of viue, Netting the fields in bond as thine; I see thy tendrils drink by sips From grass and clover's smiling lips; I hear thy roots dig down for wells, Tapping the meadow's hidden cells; Whole generations of green things, Descended from long lines of springs, I see make room for thee to bide, A quiet comrade by their side; I see the creeping peoples go Mysterious journeys to and fro; Treading to right and left of thee, Doing thee homage wonderingly. I see the wild bees as they fare Thy cups of honey drink, but spare; I mark thee bathe, and bathe again, In sweet, uncalendared spring rain. I watch how all May has of sun, Makes haste to have thy ripeness done, While all her nights let dews escape To set and cool thy perfect shape. Ah! fruit of fruits, no more I pause To dream and seek thy hidden laws. I stretch my hand, and dare to taste In instant of delicious waste On single feast, all things that went To make the empire thou has spent.

H. H.

PAINTED FRAME.

PAINTING on wood may be decorative or in the nature of fine art. In the latter case the wood is entirely covered with paint, just as canvas is covered when it is the foundation of a picture. There is a story, pretty generally believed by art students, that Raphael's "Madonna of the Chair" was painted on the end of a barrel. The picture is circular, and just about the size of a barrel-top. A gentleman who is an Englishman, although long an inhabitant of America, told me that in his father's house was a portrait of John Wesley painted on a dinner-tray, and it was a likeness of extraordinary excellence. These instances prove that good artists do not wait to have their instruments fault-



less, but seize whatever comes to hand and impress it with a masterpiece.

Amateur artists who aim only to make some pretty object to give brightness and variety to home can use little wood paucels with good effect. The wood should be well seasoned and finely planed. I have seen a few pleasing fruit pieces painted on wood in a way that was half decorative and half realistic. The wood in these

pictures was of oak, the highly polished grain making the background, and just enough shading rubbed in below the fruit to give relief to the picture.

It is in best taste, however, merely to decorate wood with painting as linen is decorated with embroidery. Do not attempt to make a picture on it. An example of a really beautiful object is a mirror-frame painted with chrysanthemums. The wood should be ebonized. The flowers are red and yellow, with dull green leaves. Use oil-paints thinned with turpentine for the outline and first painting. After that it would be well to use a little drying-oil, as it will impart a glaze, which is desirable.

K. K.

EVERY-DAY DRESSES FOR CHILDREN.

Once upon a time within the memory of man, frivolous Fashion announced an edict which all sensible people hailed with delight. Now should her votaries again do obeisance, for she has just given us a most sensible and serviceable gown for children, and one which it is to be hoped all mothers will fully appreciate. Fashion not only makes the little frock sensible, but really handsome, too. Just last year she stepped to the front and invented a costume for little boys that was a perfect godsend to mothers. Now she comes forward again with another designed for little maidens. It is, as before, the despised but ever useful denim. (When will the possibilities of denim be exhausted? I actually believe some women could furnish a house with one chair and a half yard of denim.) Make the little frocks with a yoke, plain or pointed, upon which plait or gather a short skirt. The sleeves are cut large and severely plain. Then you have a dress that will stand anything and survive the severest service. Briers cannot tear it. If berries or grasses stain it, what difference does it make? It is easily washed, and if necessity demands, requires no ironing at all. If you want to make it pretty, trim it in ecru lace, and shoulder-knots of ribbon, or cover the yoke with lace.

And, by the way, you needn't even make it with a yoke if you do not wish. Just gather it around the neck as you did your baby's silk dresses a year or so ago, and you will have a cute and cunning as well as stylish little dress, while its possibilities in regard to service are unlimited.

MARGARET M. MOORE.

DRESS ECHOES.

At times one wants something other than a shirt-waist, with a black skirt, and at the same time cool. A full waist of grenadine over a thin silk lining makes a comfortable change. The sleeves can be full and soft, the only trimming a big collar trimmed with several rows of white Valenciennes lace. Those who wish to make a change in their bodices can add the ripple back.

It need not come entirely to the front, and should be lined with silk like the general trimming of the dress.

Full vests can be worn over any waist, and are combinations of silk and lace in all fancies.

Hats with wide brims at the front and narrow at the back are trimmed with deep ruches of embroidered chiffon or lace. Smart bows of ribbon and black ostrich-feathers enter into the adornment. All colors of flowers bunched together in one bunch are a favorite trimming. Wings and birds are disdained by many

ladies, who consider ribbon and flowers more appropriate as a head-gear. What beauty a dead bird can have as an ornament upon a woman's hat is questioned far and wide by good dressers; and when it is quoted that millions of birds are slaughtered every year for millinery purposes, it is time women refuse to be a party to such wholesale cruelty.

While ribbon, lace, flowers and ostrich-

feathers are left us we need not care for more.

LOUISE LONG CHRISTIE.

STRAWBERRIES.

"My thoughts go back to the delicious strawberries you used always to have, put up in little cups. None others ever tasted so good." So writes a friend. This is the way I do them: I only attempt two quarts at a time. I find if I handle them in quantities they are never so good. Make a syrup of one quart of sugar and a half pint of water. Let it get boiling hot. I find I have the best results by using a large-bottomed tin pan. This gives a good deal of surface. When the syrup is hot, put in the strawberries, which you have stemmed, and washed by putting them in a colander or sieve and pouring water over them. Let them cook about twenty minutes, occasionally tipping the pan and shaking around the berries; do not stir them.

Lift the berries carefully with a silver spoon, and allow about three quarters of a cupful of berries, filling all the cups with the berries first; then return the juice to the stove and let it cook about five minutes longer. If it runs short, make more, and put in some strained berry-juice. It ought to be nearly jelly when it is poured on the preserves. Allow them to stand till next day. If they have shrunk somewhat, fill up again. Then tie them up as you would jellies. Mine keep nicely, though some years they will disappoint me; but it is usually when we have a wet summer. Keep them in a very dry place

favorite way is to eat the berries alone, and leave out the short-cake entirely.

CHRISTIE IRVING.

SPINACH.

Those who have never raised spinach do not know what a treat they miss, if they



are fond of greens. It is easy of cultivation, grows rapidly, and very much resembles beet greens in flavor. It is claimed to be one of the healthiest greens grown. Try some.

GYPSY.

TESTED RECIPE.

I have taken FARM AND FIRESIDE several years, and have found many useful things in it, but have never seen the following recipe. If you think it worth putting in, I shall be glad. They will keep in hot weather, and some think the older they are the better. It is so handy for us tired, over-



or they will mold. We make short-cake in winter that tastes as good as in summer.

STRAWBERRY SHORT-CAKE.—If you make good biscuits, I think that is the best dough for short-cake. Bake it in two layers, putting butter between, so you can lift off the top one and spread the crushed berries between. Serve with cream.

Another good recipe is to line a deep pan with puff paste dough, let it bake, then fill in the shell with strawberries, well sugared, and cover the top with soft icing. This is liked by many around us, although it is richer than the other way. But my

worked farmers' wives to have something we do not have to make fresh every day:

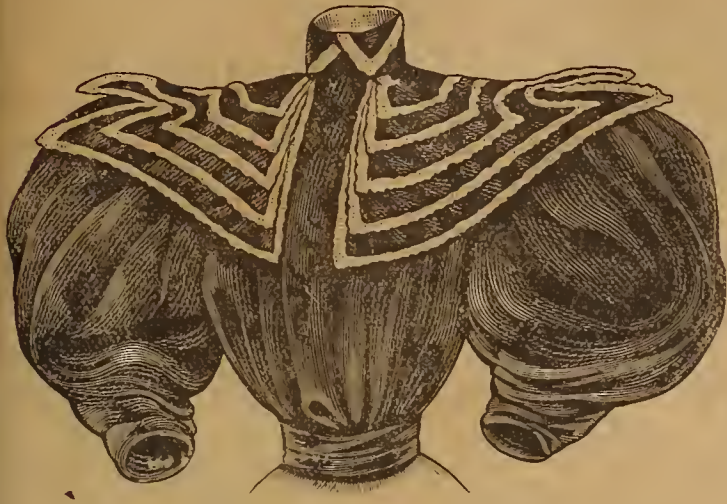
SPICE PIES.—

- 1 cupful of molasses,
1 cupful of sugar,
1 cupful of vinegar,
1 cupful of flour,
1 teaspoonful of cloves,
1 tablespoonful of cinnamon,
3 eggs,
1 nutmeg or not, according to taste,
4 cupfuls of water,
Top and bottom crust.

This quantity will make seven good pies. Try them. MRS. M. C. S.

SPRINGTIME HELPS.

With the coming of the pleasant spring days there are many extras in the way of work, not a few of which are connected with the spring house-cleaning, and which at best are hard, unpleasant tasks. But that many of these can be lightened or



made less repulsive is illustrated by the practice of more than one housekeeper, some of which we copy from "real life."

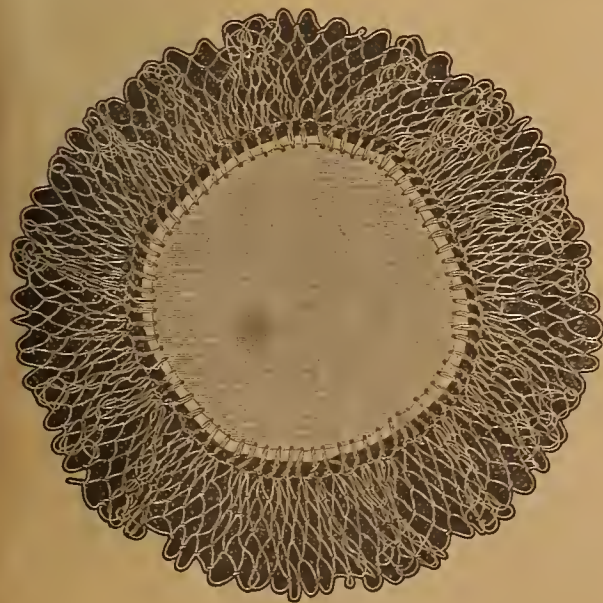
Frequently, in changing carpets at house-cleaning time, it becomes necessary to do some piecing. This is, as a rule, hard work that does not give good satisfaction, but by adopting the following method it can be successfully done:

If an ingrain, overcast the edges so they will not ravel, then lap one over the other and stitch securely. This will leave a raw edge or end on each side. Turn these under and blind-stitch down with coarse thread. Dampen, lay a paper over the seam, and press hard with a hot iron. If the pattern matches, the joining will scarcely show. Rag carpet may be pieced in the same manner.

To piece a Brussels, lap the ends and seam securely in the same way as the ingrain; then carefully trim the edges so that none of the body will show, and closely buttonhole-stitch over with fine worsted yarn of as nearly the same shade of the carpet as possible.

Washing carpets is another bngbear in so many homes where there are several children, but by following this plan the work may be materially lightened, and the results be just as satisfactory; oftentimes more satisfactory than by the old way, as the colors are not apt to fade if the carpet is treated as herein suggested:

Select a warm, pleasant day in the spring; provide for an abundance of hot water, and move a large table—the kitchen work-table is a good one—onto the porch or in the yard, with a large wash-tub beside it, on the opposite side from where the worker will stand. Have the carpet thoroughly shaken, to remove all dust possible, and ripped apart for convenience in handling; lay one end of a width across the top



of the table, and tack it to the edge, to hold it securely and prevent its slipping backward. Set the mop-pail, half full of hot suds or with one of the very many excellent washing-powders in it, on the table beside it, and with a clean scrubbing-brush scrub the carpet precisely as you would scrub the top of the table. After

the first yard or so is scrubbed, it will not need to be tacked, as the weight of the wet carpet hanging over the table will prevent the rest from slipping. As you work, slip the scrubbed carpet over into the tub, to prevent making a mess on the floor. When a breadth has been scrubbed, carry it—in the tub—to the clothes-line, and pin it the long way on the line, pinning closely, and lapping only just enough to hold it; then with a pailful of hot water and a dipper, walk along and dash the water over it thoroughly, to rinse it. Go over it once or twice with hot water, as seems necessary, then finish with cold water until it is clean.

One who has tried it affirms that a woman of average

strength can wash fifty yards of carpet in a day, and do her regular house work, and that it is cleaner and more satisfactory when done so than in any way in which it can be washed.

Brussels carpet can be cleaned by using benzoin instead of soap and water, but as it is a very inflammable material, it must be used out of doors, or in a place where there is absolutely no fire or light.

A neighbor cleans her comfortables in the



same way as carpet, only washing them on both sides, and rinsing thoroughly and completely with boiling water, to kill any disease or other germs that may have found a lurking-place in the cotton.

After becoming thoroughly dry, each comfortable is hung before a brisk fire, and changed as needed until every part is heated perfectly hot, as the intense heat lightens the cotton, making it almost as soft and fluffy as when new.

CLARA SENSIBAUGH EVERTS.

DOILY WITH NETTED, FLUTED BORDER.

This border is especially adapted to centerpieces or doilies to be used under glass. The design here illustrated is a tumbler or wine-glass doily. The center is first cut from linen and narrowly hemmed. Then a row of double crochets with two chain between is worked all round. Into each of the spaces thus made is worked two loops. Then six more rows are netted, which finishes the border. The edge may be made to keep its ruche form by first dipping it into borax-water, and when nearly dry, pulling it into shape with the fingers.

GRACE McCOWEN.

PARSNIPS.

Parsnip-seed are very slow to germinate, and the plants are weak little things on first appearance, so that one of two things are apt to happen after

planting. Either the gardener makes up his mind they are not coming, or forgets where planted, and the ground is hoed up for some other vegetable. Or the seed is not planted thick enough so there will be enough combined force in the little sprouts to break the crust of earth.

Mix radish-seed with the parsnip.

IVORY SOAP

99 44/100 PURE

"Wax Yellow," "Light May Green," "Fashionable Brown," and "Fine Orange" are artificial soap colors used by manufacturers. Do you not prefer your soap as you prefer your butter, of good natural color?

THE PROCTER & GAMBLE CO., CINCINNATI.

These come up quickly, will mark the rows plainly, to prevent forgetfulness, will soon mature, and the pulling of them for table use thins out the rows of growing parsnips so as to make ample room for those later in the season. The same plan is recommended for onions and beets.

GYPSY.

A FOURTH OF JULY MENU.

- Chicken Okra Soup.
- Lettuce Salad.
- Roast Lamb, Mint Sauce. Peas.
- New Potatoes, with Butter and Chopped Parsley.
- Cherry Pot-pie. Lemonade.

ANNE NEWCOME.

OBLONG JEWEL DOILIES.

These handsome designs are to be worked as follows: The edge in white, the jewels in the various shades, and the fine lines in washable gold thread. These designs are just the right size for celery or olive dishes. Each design is ten inches wide and fourteen inches long, and when purchased in stores or bazaars, cost fifty cents.

We will send both of these doilies, stamped on one piece of excellent linen (Premium No. 573), to any address, postage paid, for 25 cents; or with FARM AND FIRESIDE one year, 50 cents.

HOW TO WASH CHILDREN'S HEADS.

Using any nice toilet-soap, castile being preferable, make a weak suds. Place the child in a high-chair; then fasten a towel around the neck and begin operations. With a soft nail-brush apply the suds, and brush and scrub, and scrub and scrub, until the scalp is perfectly clean, which will be accomplished in a very short time.

Rinse well and dry thoroughly. Children never object to this method of proceeding, as the water does not get into eyes and ears. It is much less laborious for the mother, and less inconvenient for the children, than any method I have ever tried.

ELLA BARTLETT SIMMONS.

NETTED LACE AND INSERTION.

No. 30 thread and three sizes of mesh-sticks. Make five rows with the medium-sized mesh-stick, then one row with largest mesh, then one with the medium-sized one, putting needle through two loops at once; another row with the same mesh plain. Then use the largest, and put two stitches in every loop. Now make two rows with the medium mesh, then one with the largest, putting two loops in everyone of the preceding row; then make one row with the smallest mesh. For the insertion, instead of the last two rows for the lace, make three rows with the medium-sized mesh-stick.



same mesh plain. Then use the largest, and put two stitches in every loop. Now make two rows with the medium mesh, then one with the largest, putting two loops in everyone of the preceding row; then make one row with the smallest mesh. For the insertion, instead of the last two rows for the lace, make three rows with the medium-sized mesh-stick.

GRACE McCOWEN.

HOW TO EXTERMINATE BEDBUGS.

"Oh! but I never have them," I hear some of you exclaim.

Well, neither do I, only as I move into a house inhabited by them.

Corrosive sublimate has been pronounced by some physicians injurious. Hence, many use carbolic acid on the bed. But when the bugs are not only about the beds, but around the room as well—and it is a fact that they breed in some of this western lumber, and cabins are not infrequently built with them in the very boards—clear the room of all matches or anything of that nature, then apply a coat of gasolene over all the cracks and crevices of the beds. Not only may the beds be treated thus, but picture-frames, window-casings and base-boards, where the paper, canvas or plastering is broken.

Do not be fearful of injuring your furniture, frames or paper; not the least injury will result to them from its use.

If it is possible to do so, close the room tightly, and leave until the next day; or if done early in the morning, then aired thoroughly in the afternoon, the beds may be slept in the same night.

The little pests take the hint, and betake themselves to more congenial quarters, and nevermore return to the gasolene.

E. B. S.

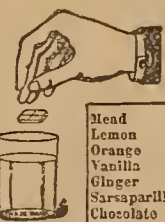
See-saw, Margery Daw,
Jenny shall have a new
master;
She put CUPID Hair-
Pins in her hair,
And they stick like a
porous plaster.



Richardson & DeLong Bros., Philadelphia.

There is fun in the foam, and health in the cup of HIRES Rootbeer—the great temperance drink.

Made only by The Charles E. Hires Co., Philadelphia. A 25c. package makes 5 gallons. Sold everywhere.



2 Minutes for Refreshments

THE Handy Tablet

requires neither sugar nor spoon to make healthful and refreshing drinks the moment it touches water. Sample by mail, 10 cents.

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"I made it myself—the Lightning Freezer" RUNS EASY

is the reason for its excellence."

Makes light, smooth, velvety Ice Cream with surprising quickness. FREEZERS AND FREEZING, a little book about it, contains recipes by MRS. S. T. ROBER (free).

NORTH BROS. MFG. CO., PHILADELPHIA.

Lincoln knew his opportunity. He did not take a step till it was time to take it—did not take it to retrace it. He took no backward steps, but from the first moved steadily forward toward the great end, all the while gaining ground and never losing it.—Isaac E. Carey.

Our Household.

EASY ENOUGH TO BE PLEASANT.

It is easy enough to be pleasant
While life flows by like a song,
But the man worth while is the one who will smile

When everything goes dead wrong.
For the test of the heart is trouble,
And it always comes with the years,
And the smile that is worth the praises of earth
Is the smile that shines through tears.

It is easy enough to be prudent
When nothing tempts you to stray;
When without or within no voice of sin
Is luring your soul away.
But it is only a negative virtue
Until it is tried by fire,
And the life that is worth the honor of earth
Is the one that resists desire.

By the cynic, the sad, the fallen,
Who hath no strength for the strife,
The world's highway is cumbered to-day;
They make up the items of life.
But the virtue that conquers passion
And the sorrow that hides in a smile,
It is these that are worth the homage of earth,
For we find them but once in awhile.
—Ella Wheeler Wilcox.

BONNETS FOR LITTLE GIRLS.

Nothing is so comfortable for a small girl as a close cap or bonnet. A hat is always being knocked off by passing people, or if worn while riding, it takes up too much room. The models illustrated are made of thin silk, either in white or pale colors, as one fancies. Fig. 1 is accordion-plaited, and is of white India silk, trimmed with lace and ribbon. A close cap to fit the head is used as a foundation; a cord being run in a small hem around the face, which must be drawn to fit the face. The outside can then be easily adjusted. Fig. 2 is of pale blue silk, trimmed with gauze ribbons. The face-ruches are both edged with lace.



FIG. 1.

FIG. 2.

BOILED DINNER.

There are boiled dinners, and boiled dinners, and one does not wonder that the coarse, greasy and sometimes soggy boiled dinners common in some households should offend not only the nostrils, but the palates of the diners.

Always remember that pieces of charcoal, put into the water in which either cabbage or onions are boiled, modifies and sometimes overcomes the disagreeable odors that tend to make these useful vegetables strangers in many homes.

Skim the corned beef well; be careful that it is not boiled to pieces. The liquor in which it is boiled makes an excellent stock for lean and onion soup, or for potato and turnip soup.

Potatoes and cabbage should each be boiled separately, and served separately.



Drawn butter makes a good gravy for meat and vegetables.

A fruit pie or a fruit tapioca pudding makes a fitting finish to such a dinner.

ANNE NEWCOME.

Just as the blood and wounds of contending armies were drying up and healing on those silent and deserted battle-fields, the chair of state sinks into the bier of death, on which lies that which was once the warm and useful life of Abraham Lincoln.

—David C. Coddington.

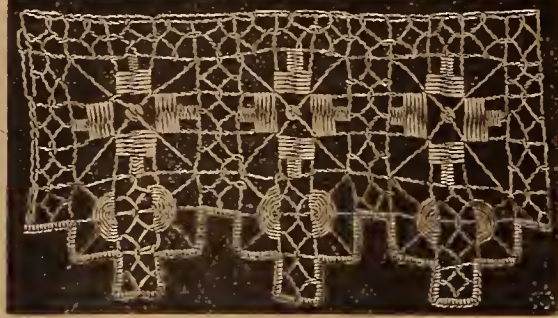
HOME TOPICS.

BAKED RHUBARB.—Wash and cut the rhubarb into inch pieces, without peeling it. To a quart of the sliced rhubarb allow two cupfuls of sugar. Put the rhubarb and sugar into an earthen or granite dish, in alternate layers. Do not add any water, but cover the dish and let it stand an hour, then set it into the oven, still covered, and let it bake until tender. The juice will be a clear, pink syrup, and the pieces will all retain their shape, and be of delicious flavor.

RENOVATING PILLOWS.—If the feathers need renovating, as well as the ticks, put the pillows into a tub of suds, and press and heat them, turning them over frequently, until they are thoroughly soaked. Rub any soiled spots there may be on the ticks, and when they are clean, rinse them through two waters; press out all the water that you can, and then pin them to a line in the shade. Turn them upside down occasionally, and let them hang until they are dry. When nearly dry, beat and rub the pillows to loosen the feathers, and do this again after they are dry. Pillows should never be put in the sun, as the heat will bring out the oil of the feathers, and be liable to give them an offensive odor.

If you only wish to wash the ticks, rip about twelve inches in the end of the tick, and sew the opening to the end of a pillow-slip, sewing the remainder of the slip together. The feathers can then be shaken from the tick into the pillow-slip. Afterward baste both slip and tick across below

feet, too, can save so many steps, cheerfully running up-stairs or down cellar; and if mama will only say, "You are a dear, good child, and help mama very much," they are fully repaid. Children are particularly sensitive to both praise and blame, and while it is necessary at times to censure, we must be careful to neglect no



opportunity to give praise when it is deserved, lest they become discouraged and unhappy.

MAIDA McL.

DARNED NETTED LACE.

To those who have carefully followed the lessons on netting the accompanying designs will need but few explanations, as the illustrations will clearly reveal the method of darning. To finish the lower edge the scallop is first defined by several rows of thread woven back and forth through the meshes; this gives a firm edge, over which is worked a close hutton-hole-stitch. The remaining meshes are then cut away. Long lengths of netting may be basted on waxed cloth for darning, but when possible, an iron or steel frame should be used. If you cannot obtain these, have a blacksmith make one for you. Common galvanized wire, such as is used for fences, will do. It should be bent in the form of a square, with slightly rounded corners, and the ends soldered securely. The frame should be first wound with cotton hating, or, better still, with tow, which may be secured at any furniture-store. This should be wound on very tightly with cord, and the joining evenly done. Next wind with a wide braid, being careful to have each row overlap the previous one. Sew the ends neatly together, and you will have a frame that will not only save time, but will warrant evenness and beauty of work. Of course, all pieces of netting will not fit evenly in the frame; and when such is the case, strips of stout muslin should first be sewed round the netting, turning corners evenly, and then sewed onto the frame.

Netted laces are expensive, and she who would preserve them must see that their laundering is carefully done. Nothing works such swift and sure destruction to these laces as careless washing. Give them the care with which you treat your modern laces, and they will reward you with years of useful service.

GRACE McCOWEN.

FRUIT POT-PIES.

Desserts for the summer months are best of well-ripened fruits fresh from bush or tree. But in spite of advanced knowledge on the subject, memory turns fondly to strawberry short-cake; and we would not willingly forego the gustatory delights of an occasional cherry pot-pie, the queen of all fruit pot-pies.

For a family of four, cover a pint of cherries with boiling water, in a covered saucepan. When these boil, put over the top a light biscuit-dough made of a pint of flour. Keep well covered, allowing space in the saucepan for the dough to rise, and be sure that there is plenty of boiling water to add to the pot-pie, as it must have plenty of juice. When it is removed from the fire and put into the dish for serving, add sugar and butter.

Pot-pies are excellent made of any fruit, dried or fresh. They are wonderfully nice for supper, where one warm dish is always approved.

ANNE NEWCOME.

MOTHERS MUST GUIDE.

Should Watch the Physical Development of Their Daughters.

Information They Should Furnish at the Proper Time—Knowledge by Which Suffering May Be Avoided.

Every mother possesses information of vital value to her young daughter.

When the girl's thoughts become sluggish, with headache, dizziness, and a disposition to

sleep, pains in back and lower limbs, eyes dim, desire for solitude, and a dislike to the society of children: when she is a mystery to herself and friends, then, her mother should come to her aid.

Lydia E. Pinkham's Vegetable Compound will, at this time, prepare the system for the coming change. See that she has it, and Mrs. Pinkham, at Lynn, Mass., will cheerfully answer any letters where information is desired. Thousands of women owe their health to her and the Vegetable Compound, and mothers are constantly applying to her for advice regarding their daughters.

FREE! A DRESS. Every woman who reads this can get a dress FREE by writing at once to L. N. Cushman & Co., Boston, Mass.

FREE! Cut this out and send to-day for free catalogue. \$2.75 buys natural finish Baby Carriage with plated steel wheels, axle, springs, one piece boot handle. 3 years guarantee. Carriages sent on 10 days FREE TRIAL. BUY FROM FACTORY & SAVE DEALERS' PROFITS. OXFORD HDSE. CO., 340 Wabash Ave., CHICAGO.

EVERY WOMAN Can buy a **WORLD'S WASHER** on trial and no money paid until it is perfectly satisfactory. Washes easy. Clothes clean, sweet and white as snow. Child can use it. I pay freight. Circulars free. **C. E. ROSS, 10 Clean St., Lincoln, Illinois.**

MY HUSBAND Cant see how you do it. \$50 Kenwood Machine for - \$24.00 \$50 Arlington Machine for - \$19.50 Standard Singers - \$9.00, \$11.00, \$15.00, and 27 other styles. All attachments FREE. We pay freight anywhere on 30 days free trial, in any home without asking one cent in advance. Buy from factory. Save agents large profits. Over 100,000 in use. Catalogue and testimonials free. Write at once. Address, (in full), **CASH BUYERS' UNION, 158-164 West Van Buren St., B 7, Chicago, Ills.**

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PARKER'S HAIR BALSAM Cleanses and beautifies the hair. Promotes a luxuriant growth. Never Fails to Restore Gray Hair to its Youthful Color. Cures scalp diseases & hair falling. 50c, and \$1.00 at Druggists.

40 Cent Patterns for 10 Cents

Any FOUR Patterns, and this paper one year, 60 cents, post-paid.

These patterns retail in fashion bazaars and stores for twenty-five to forty cents each, but in order to increase the demand for our paper among strangers, and to make it more valuable than ever to our old friends, we offer them to the lady readers of our paper for the remarkably low price of only 10 Cents Each.

The patterns are all of the very latest New York styles, and are unequalled for style, accuracy of fit, simplicity and economy. For twenty-six years these patterns have been used the country over. Full descriptions and directions—as the number of yards of material required, the number and names of the different pieces in the pattern, how to cut and fit and put the garment together—are sent with each pattern, with a picture of the garment

to go by. These patterns are complete in every particular, there being a separate pattern for every single piece of the dress. Your order will be filled the same day it is received.

You can order any of the patterns offered in the back numbers of this paper. For ladies, give BUST measure in inches. For SKIRT pattern, give WAIST measure in inches. For misses, boys, girls or children, give both BREAST measure in inches and age in years. Order patterns by their numbers.

Satisfaction guaranteed or money refunded. To get BUST and BREAST measure, put the tape measure ALL of the way around the body, over the dress close under the arms.

Price of each pattern, 10 cents. Postage one cent EXTRA on skirt, tea-gown and other heavy patterns.



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No. 6773.—MISSSES' OUTING JACKET. 10 cents. Sizes, 12, 14 and 16 years.



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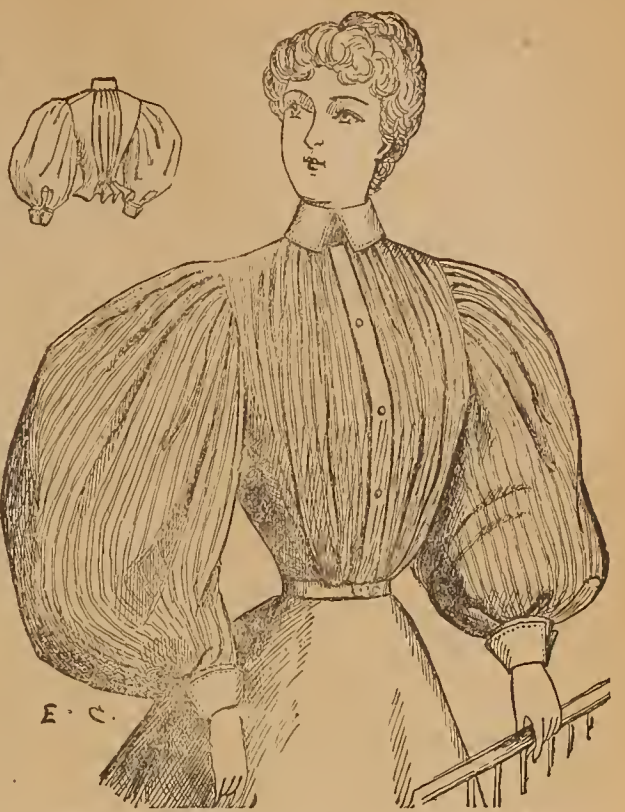
No. 6722.—CHILD'S BLOUSE, SAILOR COSTUME. 10 cents. Sizes, 4, 6, 8 and 10 years.



No. 6765.—LADIES' SHIRT-WAIST. 10c. Sizes, 32, 34, 36, 38, 40, 42 inches bust.



No. 6741.—CHILD'S GIMPE DRESS. 10 cents. Sizes, 2, 4, 6, 8 and 10 years.



No. 6761.—LADIES' SHIRT-WAIST, WITH BLOUSE FRONT. 10 cents. Sizes, 32, 34, 36, 38, 40 and 42 inches bust.

NOTICE.

We receive many orders for patterns without any name or post-office address signed, hence we cannot fill the orders. If any of our readers have not yet received their patterns, and will write us a letter giving the full particulars so we can verify their order, we will be glad to look them up and fill them immediately.

Do not fail to give size wanted.



No. 6762.—MISSSES' SHIRT-WAIST, WITH BLOUSE FRONT. 10 cents. Sizes, 10, 12, 14 and 16 years.



No. 6707.—MISSSES' BLOUSE. 10 cents. Sizes, 10, 12, 14 and 16 years.



No. 6731.—LADIES' TEA-GOWN. 11 cents. Sizes, 32, 34, 36, 38, 40 and 42 inches bust.

WE HAVE OFFICES IN NEW YORK CITY, SPRINGFIELD, OHIO, AND CHICAGO, ILLINOIS.

NOTICE.—Send all orders for patterns direct to our central office, to FARM AND FIRESIDE, SPRINGFIELD, OHIO, where our stock of patterns is kept.

Our Sunday Afternoon.

STANTON'S LATEST.

SING YOUR SONG.
Take the old world as you find it;
Drift along!
Blight or blossom—never mind it;
Sing your song!
See that sky, of dark or blue?
Good Lord beat it over you;
See the sunlight streamin' through—
Sing your song!
Take the old world as you find it;
Drift along!
With the rainbowed roses bind it;
Sing your song!
For the daisy falls the dew;
From the rose love wrests the rue;
Good Lord made the world for you—
Sing your song!

LOOK TO YOUR DAUGHTERS.

WE read and hear a great deal about the importance of making homes pleasant and attractive for the sons, so that they may spend their evenings at home rather than elsewhere. But we do not hear so much said about the influence of a pleasant home upon the daughters. It may be for the reason that girls are naturally more domestic than boys, and so it is taken for granted that no great exertion is necessary by father and mother to make the home a pleasant one for them. I think the influence of a home has just as much, and perhaps more, to do in shaping the future of the daughters as of the sons, for it is she who has the most important part to perform in making a home for herself after she has left the parental roof.

Now, there is a great difference in the ideas of what constitutes a pleasant home. Here, for instance, is a young girl surrounded by all the luxuries and privileges which money can procure. She has servants to come and go at her bidding. She has no care upon her young shoulders; she is taught to play, sing, paint and embroider. To be sure, she does nothing for the pleasure and happiness of those around her, but what of that? She is accomplished, and is that not enough? When she is of a suitable age, she makes her debut in society. Then, of course, her time is occupied with all the pleasures which society gives. Thus she grows into womanhood. Is this true womanhood? Is she now prepared to fight the battles of life and win the victor's crown? If adversity comes to her, as it is liable to come to us all, will she be prepared to meet it as she should? Ah, no! It would have been far better if she had been taught more of self-reliance and self-culture.

Put some care upon your daughter. It will do her no harm. It will make her feel that there is some responsibility resting upon her. Teach her that character is higher than intellect, and that by practising a little self-denial once in awhile, she will not only make others happy, but will increase her own happiness and become less selfish.—*Domestic Monthly.*

IMPORTANCE OF THE WORM.

Apparently, what can be more helpless or useless or unrelated than an angle-worm? But one has well called them "plowers before the plow." They render the earth fruitful. They are immense subsoilers. They change the deep earth into surface earth, and so renew the soil exhausted by much harvest-yielding. By careful computation it has been found that in a certain section on the west coast of Africa, by the poor angleworms sixty-two thousand and more tons of subsoil are brought to the surface of each square mile each year.

Here is the story of their doings, as another has told it: "The most insignificant insects and reptiles are of much more consequence and have much more influence in economy of nature than the incurious are aware of. Earthworms, though in appearance a small and despicable link in the chain of nature, yet if lost would make a lamentable chasm. Worms seem to be the great promoters of vegetation, which would proceed but lamely without them, by boring, perforating and loosening the soil, and rendering it pervious to rains and the fibers of plants; by drawing straws and stalks of leaves and twigs into it; and, most of all, by throwing up such infinite numbers of lumps of earth called worm-casts, which, being their excrement, is fine manure for grain and grass. The earth without worms would soon become cold, hard-bound and void of fermentation, and consequently sterile."

BE HAPPY CHRISTIANS.

In order to be happy believers we must be lovers of Holy Scripture. After my conversion, in 1825, I used to read the Bible, but it was not until four years later that I was a lover of God's holy Word. I believe this is one chief reason that I have been kept in happy, useful service, because I have been a lover of Holy Scripture; and I love it more now than ever I did. It has been my habit to read the Scriptures through four times in a year; and it is important to read it in a prayerful spirit, to meditate upon what we read, and apply it to our own hearts. "Do I understand this? Do I obey this? What has this word for me?" Then we must practise what we find in the Scriptures, and the result will be a happy man, a happy woman. I have been for sixty-nine years a happy man, and I desire for my beloved brethren and sisters that they may be happy, happy, happy, ten times more happy than ever I have been in my life; for it is impossible to tell what God may give to us in this way if we are thus lovers of Holy Scripture.—*Geo. Muller, of Bristol, England.*

WHAT THE BIBLE IS.

I see in your columns, as in other literary journals, more and more buzzing and fussing about what M. Renan has found the Bible to be, or Mr. Huxley not to be, or the bishops that it might be, or the school-board that it mustn't be, etc.

Let me tell your readers who care to know, in the fewest possible words, what it is. It is the grandest group of writings existent in the rational world, put into the grandest language in the rational world, in the first strength of the Christian faith, by an entirely wise and kind saint, St. Jerome; translated afterward with beauty and felicity into every language of the Christian world; and the guide, since so translated, of all the arts and acts of that world which have been noble, fortunate and happy. And by consultation of it honestly, on any serious business, you may always learn—a long while before your Parliament finds out—what you should do in such business, and be directed, perhaps, besides, to a work more serious than you had thought of.—*John Ruskin, to the Pall Mall Gazette.*

MISTAKES.

It has been said that the people who never make mistakes are in the graveyard. Next to the desirability of making no mistakes is that of getting the most good from our mistakes. Horace Greeley once said, "I have made plenty of mistakes in my life, but they were always new mistakes." It is not only the part of wisdom to avoid making the same mistake twice, but to also study the disposition and tendencies that lead to mistakes, and seek to make correction there. It is bad enough to have the pipes foul for our water supply, but it is even worse to have the fountain-head unclean. Only One has ever lived of whom it could be said, "He hath done all things well." (Mark vii. 37.) He cannot only help us to rectify the mistakes we have already made, but he is able to so change the heart and control the life as to spare us from errors which have greatly marred our peace and blessing in the past. "He that walketh uprightly walketh surely." (Prov. x. 9).—*The Christian.*

JESUS.

A successful young minister who has gone faithfully through some fifteen volumes of systematic theology, says that his own systematic theology has condensed itself into the name Jesus, thus: J, justification, for we are justified through his blood and saved from wrath by him; E, eternity, the immortality and future condition of the soul. These shall go away into everlasting punishment, but the righteous into life eternal. S, Savior, for the Son of Man has come to seek and to save that which is lost; U S, universal sin, for all have sinned and come short of the glory of God. The young minister says if we will stop hair-splitting and quarreling, and make this system the basis of our work, we will save souls and conquer the world to Christ.

THE TWO RULERS.

"The Bible is so strict and old-fashioned," said a young man to a gray-haired friend who was advising him to study God's word if he would learn how to live. "There are plenty of books written nowadays which are moral enough in their

teaching, and do not bind one down as the Bible."

The old merchant turned to his desk and took out two rulers, one of which was slightly bent. With each of these he ruled a line, and silently handed the ruled paper to his companion.

"Well," said the lad, "what do you mean?"

"One line is not straight and true, is it? When you mark out your path in life, do not take a crooked ruler."—*Christian Intelligence.*

ARE YOUR EYES ON JESUS?

"I press toward the mark for the prize of the high calling of God in Christ Jesus." In passing through a field it is difficult to pursue a straight course unless the eye is fixed upon some immovable object toward which the person is moving. Persons lost on the prairies, having no landmarks, frequently wander in a circle for hours, and sometimes for days, without making any definite progress. If one moves toward some object, keeping that only in view, he will be very likely to make a straight path.

Christ is the mark for every Christian. Set your eyes on him, and allow nothing else to attract your attention. If you do this, you will make a straight path.—*The Firebrand.*

GOOD ADVICE FROM A HEATHEN.

A little watchfulness over ourselves will save us a great deal of watchfulness over others, and will permit the kindest of religions to drop her inconvenient and unseemly talk of enmity and strife, breast-plates and cuirasses, battles and exterminations. To produce as much happiness as we can and to prevent as much misery, is the proper aim and end of true morality and true religion. Only give things their right direction: there is room, do but place and train them well.—*Epictetus.*

SHUN TEMPTATION.

There is no ground so rank to bear weeds, no gunpowder so ready to take fire, as the heart of man is to conceive sin and be inflamed by temptations; wherefore all that would avoid sin have cause to resist it in the very first temptation. To resist beginnings of the evil of sin is as useful to be observed for a rule against diseases of the soul as to withstand evils of pain in their beginning is needful in diseases of the body.—*H. Scudder, Sixteenth Century.*

POOR ECONOMY.

"We have spent nearly \$470,000,000 in building churches in this land, and \$500,000,000 in building jails. It costs \$50,000,000 a year to run the churches, and \$400,000,000 to run the jails. We pay eight times as much for running our fellow-men down and jailing them as we do in trying to make them better, so that they will not need the jail. It takes the world a long time to find out that men are not made better by force."

SADLY TRUE.

Dr. Josiah Strong says that nowadays the response to the divine command is not, "Here am I, send me," but, "Here is my check, Lord, send some one else;" and many people forget to offer the check.

A poor Japanese woman came to a Christian teacher and begged her to care for a ragged, forlorn child, saying, "Please do take the little baby. Your God is the only god that teaches us to be good to little children."

BEREA COLLEGE.

That the best education is within reach of all has been demonstrated in the history of Berea College. This is a non-sectarian Christian institution, beautifully situated among the foothills of the Kentucky mountain range, 130 miles from Cincinnati. It was founded before the war by anti-slavery Kentuckians, and has a most romantic history. The climate is a special inducement to northern people, and it has many students from northern states. Reduced railroad rates make the trip inexpensive. The remarkable thing about this school is that the tuition is free, although three college courses are given, with the privilege of instruction in special branches. Board is astonishingly cheap, and yet the fare is wholesome and abundant. Berea is the ideal educational institution, not only for people of limited means, but for those seeking such advantages as healthful climate, delightful scenery, homelike hospitality and the best moral influence. Persons desiring information about Berea College—and there is much to be had that is of peculiar interest—should write to President William G. Frost, Berea, Ky.

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At Druggists.

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All return this advantage with order and we will send by express C.O.D. this beautiful EXTRA Heavy Gold Plated Hunting Case, Stem Wind, American style Watch which you can sell for \$15.00. If you think it a bargain, pay express agent \$3.25 and express charges and keep it, otherwise return it. These Watches are jeweled and adjusted to keep accurate time, look equal to a \$25.00 Watch and for service just as desirable. Warranted 5 years. Chain Free. Give full name, express and P. O. State size wanted. Address, Kirtland Bros. & Co., 111 Nassau St., N. Y.

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Our Miscellany.

"THERE is always one way," observed Higgins, "to make a man acknowledge the coru."

"How is that?" queried Barker.

"Step on it," said Higgins.—*Harper's Bazar.*

THE religious returns of the census of 1890 have just been published, and show the existence of one hundred and forty-three denominations and one hundred and fifty-six independent organizations, with a total of 20,612,806 communicants. In five of these denominations there are over 17,000,000 communicants out of the whole number. The Roman Catholics foot up about three tenths of the whole, and make, with the Methodists and Baptists, seven tenths of the amount. About one half of the Roman Catholics are in the one hundred and twenty-four cities with a population of 25,000 and upward. Nearly one half of the members among the Methodists are in the cities, and the Episcopalians are largely an urban population. New York takes the lead in the number of communicants, and in the value of its church property, which is estimated at \$55,000,000. Philadelphia has the first number of church edifices. The returns of the Protestant denominations show an increase since 1880 of 3,895,128, which is twenty per cent greater than the increase of population.—*The American.*

MILLIONS of dollars in gold, says the *Manufacturers' Gazette*, are annually taken from rude heaps of base-looking quartz by the flowing of water over huge piles of broken rocks that contain the precious metal; and the water used by miners in bringing gold from piles of mineral-bearing quartz is charged with a simple chemical which has the potency to dissolve gold and hold it in solution—the sparkling liquid which flows over hundreds of tons of quartz, trickles through the mines, and finds its level, laden with gold, is charged with a deadly poison, cyanide of potassium, a drug which ferrets out the minutest particles of the yellowish metal and dissolves them, bringing the precious burden to the vats for conversion into refined gold again. The cyanide process is as noiseless and unerring as the laws of gravitation; the method is based on the fact that even a very weak solution of cyanide of potassium dissolves gold and silver, forming, respectively, auro-potassic cyanide and argento-potassic cyanide, the solution being separated from the solid material, and the gold and silver precipitated in metallic form. Precipitation is effected by the use of fine pieces of zinc, so arranged that when the rich waters flow over them the fine gold clusters in rich deposits over the zinc, for which it has an affinity—the gold depositing itself in the form of fine dust on the plates of zinc.

FLORIDA IN SUMMER.

The almost universal idea among Northern people is that Florida is a place to be visited in the winter season, and that in the summer it is so unbearably hot that one cannot live there with any degree of comfort. It may not be generally understood that Eastern and Western Florida bear the same relation to each other as the sands of Cape Cod do to the hills of Western Massachusetts. What is known as the Tallahassee region, in Western Florida, is a rich, rolling, hilly country, in which the thermometer does not rise as high during the summer as it does in the state of Minnesota, and that instead of being unbearably hot, the undulating character of the land, and the breezes that come from the Gulf of Mexico, which lies only fifty miles south of Tallahassee, render that region a very comfortable abiding-place, even for the average Northerner, during the summer months, and it may be truthfully and emphatically stated that the shores of the Gulf of Mexico, south of Tallahassee, and in the region of Lanark on the Gulf, furnish a cooler and more delightful summer retreat than can be found anywhere on the Atlantic coast south of the city of New York.

Lofty trees of pine, hickory, magnolia and oak, from 40 to 60 feet high, grow within twenty feet of the shores of the Gulf, so that the Southerner can find a cool and delightful seaside resort superior in point of coolness and comfort to the Long Branch shores, within a few hours' ride of his own Southern home.

It would therefore seem that a region which offers to the new settler a soil which will grow anything that can be produced in California, and is within 30 hours' ride of New York City; that also offers a climate not surpassed by that of Italy or California, and in addition to this, every facility of transportation by water and rail; supplements all these advantages with good schools, churches, people, and then winds up the whole with a price for land of not more than one fifth of what the same can be purchased for in any other section of the country, that such a region ought to be peopled by the most thrifty farmers that this country holds.

We invite the attention of our readers to what has been published so often in this paper concerning the great advantages of the Tallahassee country—soil, climate, people, transportation, cheapness, and, above all, no danger of freezing to death in the winter.

FLOORED BY THE "DORKIE-BIRD."

One Sunday evening, at one of the large Presbyterian churches on the south side, a specially attractive service was held. It had been widely advertised, and every seat was filled. In one of the forward pews sat a young person who eagerly waited for the proceedings to commence.

The opening number on the program was a voluntary beginning, "A day in Thy courts is better than a thousand. I had rather be a doorkeeper in the house of my God than to dwell in the tents of wickedness." But the young person hadn't a program, and she didn't know.

A woman's beautiful voice rang out clear and strong, and the young person taxed her ears to catch the words. At first they eluded her exasperatingly, but by patience and close attention she finally grasped the situation. The singer considered a day in the courts of the Lord to a thousand spent elsewhere. So far so good. But the next sentence staggered the young person. The singer trilled forth that she had rather be a "dorkie-bird" in the house of her God than to occupy an elevated position in a less righteous place.

The young person pondered. Since her early infancy she had been fed on verses and chapters from the Bible, but somehow she couldn't seem to remember any reference to a "dorkie-bird." She must be mistaken in the word, she thought, and settled herself to listen to the tenor, who was now warbling the sweet melody. Surely he would sing the words plainly. But no, the rendition was as before—"dorkie-bird." The contralto and bass made no change in the version, but sang it as the soprano and tenor had done.

The young person's mind was perturbed. She could not fix her thoughts on the prayer which followed, but bowed her head and meditated on the various biblical combinations. No, she could not recall the least reference to a "dorkie-bird," but if the choir sang about it, surely there must be such a thing. She wondered if it were anything like an English sparrow. Evidently, it was a humble member of the feathery tribe, for it was used in an unimportant connection.

During a subsequent vocal number she leaned toward her escort. "What is a dorkie-bird?" she whispered, softly.

"A what?" he inquired.

"A dorkie-bird."

He turned on her a pair of interested eyes.

"A what?" he asked again.

"Oh, never mind," she whispered, nervously. "It's nothing. They are going to pray."

To the exclusion of all else that idea of the unusual bird occupied her attention during the remainder of the service. When she reached home she rushed to her room and seized her Bible. After an arduous search she found the place and read, "A day in Thy courts is better than a thousand. I had rather be a doorkeeper—"

"Doorkeeper! Oh!" she said, faintly, and sat down on the edge of the bed.—*Chicago News.*

A KANSAS CHURCH OF SOD.

The Methodists of German township, Smith county, worship in a sod church. As its name indicates, the walls are built of sod taken from the prairie which surrounds it. The neighbors, regardless of denominational belief, met, decided there ought to be a church in the neighborhood, and with their own hands laid up the walls, and from their own pockets took the money to finish, furnish and light the building. The building is twenty by thirty feet, and the walls are eight feet high. It is covered with boards and roofing-paper; the interior supports are made of neatly smoothed posts, and the inside walls are plastered as neatly as any walls could be; comfortable home-made seats are furnished for pews, the pulpit is covered with velvet, and the platform is carpeted. It is said that when one is on the inside everything is as neat and tidy as the finest church could be. When the building was dedicated there was not a dollar of indebtedness upon the church, or on any of the furniture or fixtures.—*Smith Center Pioneer.*

IN AMERICA AND JAPAN.

The little Japanese children are noted especially for their good manners. A gentleman who has been in Japan many times tells this story: He says a friend of his, a Japanese gentleman, bought a beautiful piece of carving two hundred years old. This piece of carving he placed on his front gate on the street. The American gentleman expressed surprise that so costly and beautiful a thing should be placed where it was exposed to rough treatment and perhaps destruction. The owner was amazed that his friend should think this possible. He told the traveler it was perfectly safe. Three years afterward the traveler was in that Japanese city again, and as he came to his friend's house he saw that the beautiful piece of carving was as perfect as when it was first placed on the gate.

The other day I passed a house where for several weeks workmen have been putting a very elaborate stone balustrade around the area and up the steps leading to the front door. These steps are at right angles to the sidewalk. For weeks working-men have been working under canvas, and I knew from the clicking sound that they were carving the stone. At last they were through, and the

canvas was taken down, and there was a group of dancing children, with garlands of flowers, in a panel of the balustrade. They were so chubby and so full of joy and play that it made you happy just to look at them. Two weeks after I went to see these happy stone children again. One, the dearest, happiest of them all, the leader, had lost the thumb of his right hand. The whole panel was marked with chalk, and disfigured. What should have been a beautiful thing, delighting all passers-by, was made ugly and unattractive by some rude children who could not appreciate its beauty. It made me wish that American children had the good manners of the Japanese children, and their love of beauty.—*Grace Thompson, in The Outlook.*

A SCARCITY OF \$10,000 GREENBACKS.

There is only one \$10,000 United States note in existence, and that has never been issued, but is kept in the treasury as a specimen.—*Chicago Record.*

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Queries.

READ THIS NOTICE.

Questions from regular subscribers of FARM AND FIRESIDE, and relating to matters of general interest, will be answered in these columns free of charge. Querists, desiring immediate replies or asking information upon matters of personal interest only, should inclose stamps for return postage. The full name and post-office address of the inquirer should accompany each query, in order that we may answer by mail if necessary. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Queries should not be written on paper containing matters of business, and should be written on one side of the paper only.

Gingseng.—M. F. W., Ahrams, Wis. Apply to Secretary of Agriculture, Washington, D. C., for Bulletin No. 16 of the division of botany, entitled "American Gingseng: Its Commercial History, Protection and Cultivation."

Peanuts.—F. B., Wood River, Neb. Plant and cultivate peanuts just as you would beans. You need not cover the blossoms with earth. Keep the soil mellow, and the pods will push their way into the ground when the proper time comes.

Weevil, Prairie-dogs and Ants.—J. T. S., Boston, Ga.; M. D., Friend, Col.; A. F. G., Milton, Oregon. The best thing for destroying the pests named is bisulphid of carbon. Send to E. R. Taylor, Cleveland, Ohio, for free pamphlet on the use of this exterminator.

Wood-ticks.—H. L. C., Maryville, Mo. Wood-ticks live on bushes, and are most numerous in uncultivated lands. They attach themselves to animals for a feast of blood; when gorged, they drop off. The only preventive that we know of is to keep stock away from infested pastures. To the animal affected apply thoroughly, with a brush, oil of tar, one ounce; whale-oil, twenty ounces.

Streaky Butter.—C. R. S., Deer Lodge, Mont., writes: "What makes home-made butter streaky?"

REPLY:—The usual causes are incomplete working and uneven distribution of the salt. The cream should be ripened and churned and the butter should be worked at the proper temperature. The butter should be thoroughly worked, but not overworked. The salt used should be of the best quality, and evenly distributed.

To Keep Milk Sweet.—T. J. H., New Orleans, La., writes: "Please send me a recipe to keep milk sweet, and the directions for using the same."

REPLY:—There are chemicals which will keep milk from souring, but their use for that purpose is strongly condemned, and is prohibited by the laws of some states. For keeping milk sweet for supplying city customers, your best plan is to use ice.

Verbena.—P. H. S., San Francisco, Cal., writes: "Which is the best way to propagate verbena? I tried it from cuttings."

REPLY:—Verbenas may be readily propagated from seeds. The seeds are slow in germinating, and should be sown about four months before the plants are wanted. The seeds should be sown in hotbeds or in the greenhouse early in the spring. You can probably obtain the plants from a florist cheaper than you can raise them. Set the plants out in rich loam soil.

Dry Cellars.—H. M. S., Wallingford, Conn., writes: "Do you know of a good way to keep a cellar dry?"

REPLY:—Drainage and ventilation. If your cellar is located in damp, heavy clay soil, the first thing necessary is drainage. Around the outside dig down below the foundation of the walls and put in a tile-drain, with sufficient fall and a good outlet. Fill up the trench with gravel. Then arrange the windows to provide for proper ventilation, and you can have a clean, sweet, dry cellar.

To Destroy Canada Thistles.—E. P., Delavan, Wis. The following method is recommended in Prof. Beal's "Grasses of North America": "Canada thistles have long roots, which store up nourishment in the latter part of summer and fall to feed the spring growth. I kill the thistles without the loss of a crop, as follows: Have the land rich, if possible; at least, have it well seeded to clover, and by top-dressing with plaster, ashes, or by some means, get as good growth to the clover as possible. As soon as the clover is in full bloom, and here and there a thistle shows a blossom, mow and make the crop, thistles and all, into hay. After mowing, apply a little plaster, to quickly start the growth of clover. You will find this to come much more quickly than the thistles. As soon as the clover has a good start, from July 20th to August 5th, plow down, being careful to plow all the land and to fully cover all growth. Then roll and harrow at once, so as to cover every thistle. But few thistles will ever show themselves after this, and they will look pale and weak. When they do show, cultivate thoroughly with a cultivator having broad, sharp teeth, so as to cut everyone off under the ground. In two days go over with a sharp hoe and cut off any that may have escaped the cultivator. Watch the thistles, and use the hoe and cultivator until freezing weather. You will see them getting scarcer and scarcer each time, and looking as though they had the consumption. By plowing the land just before freezing, you will have the land in the finest condition for a spring crop. This plan not only kills thistles, but ox-eye daisies and other weeds. It is much better than a summer fallow, and without the loss of any crop."

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VETERINARY.

Conducted by Dr. H. J. Detmers.

To regular subscribers of FARM AND FIRESIDE, answers will be given through these columns free of charge. Where an immediate reply by mail is desired, the applicant should inclose a fee of one dollar, otherwise no attention will be paid to such a request. Inquiries should always contain the writer's full address. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Subscribers may send their veterinary queries directly to Dr. H. J. DETMERS, 1315 Neil Avenue, Columbus, Ohio.

NOTE.—Parties who desire an answer to their inquiries in this column must give their name and address, not necessarily for publication, but for other good reasons. Anonymous inquiries are not answered under any circumstances.

Wind-sucker.—H. P. L., Barton, Fla. Your horse appears to be a wind-sucker. No cure.

About a Jack.—J. G., Neely, Ark. To use a young jack, only eighteen months old, in that way is surely not beneficial to the animal.

Paralytic Parturition Fever.—A. M. D., Anderson, Mo. If your cow was down with paralytic parturition fever a week on April 23d, she either has recovered, or has been dead for over a month before this can reach you.

A Bleeding Wart.—S. G., Cincinnati, Ohio. If your Jersey bull has a bleeding wart on the inside of the hind leg, the best you can do is to have it removed by a competent veterinarian. It will not be difficult to find one in a city like Cincinnati.

Wood-ticks.—C. B. B., Spring Valley, Mo. Wood-ticks are easiest killed and warded off by any fat oil. Cotton-seed oil will answer, but the oil must not be applied too liberally, nor over the whole body of the animal. If it is, the latter will have to suffer, and may even die.

A Fistula on the Withers.—J. W. M., Guion, Texas. Please see the answer given to U. V. S., under the heading "Fistula," in the present issue. Unless you employ a good veterinarian, you cannot expect to meet with success in the treatment of an old fistula of two years' standing.

Polyuria in a Cow.—R. E. B., Cobham, Pa. Polyuria in a cow has undoubtedly the same causes it has in a horse; namely, mussy and spoiled food, or food contaminated with and spoiled by fungi. The remedy, therefore, consists in a radical change of food and in avoiding everything affected with fungous growths.

Probably Tuberculosis—Swine-plague.—E. L. J., Silver Creek, Neb. Your cow, it seems, died of tuberculosis, and your hog, very likely, of swine-plague. If your post-mortem examination had been a little more thorough, I have no doubt you would have found more morbid changes, especially in the lungs.

Probably Indigestion.—W. H. W., Reedsville, Ohio. All I can learn from your communication is that your cow suffers from indigestion, which should have been attended to long before this can reach you. If your cow is yet sick, the best you can do is to employ a veterinarian and have her examined and properly treated.

A Morbid Growth.—E. J. N., Panaca, Nev. The morbid growth of the size of a walnut in the corner of the eye of your mule can be successfully removed only by a surgical operation. If no good veterinarian is available where you live, ask a surgeon to do it. It will probably be necessary to use anesthetics while the operation is performed.

Ringbone.—P. E. W., Montague, Mich. The ringbone of your mare has no connection with the sudden swelling of her leg in March. I readily believe you that you did not succeed in removing the lameness with your treatment—blistering and using different kinds of medicines. It is now the wrong season for the treatment of ringbone; therefore, further instruction will not be necessary at this time.

Paralyzed Hogs.—A. R., Hartline, Wash. If your hogs cannot control their hind quarters, and when trying to run are liable to fall and to roll over, there is probably something wrong concerning their diet, and it may be that it is the alkali you speak of. Further I cannot answer your question, because I never had any opportunity to observe the effect of alkali in soil and water upon hogs; and, moreover, paralysis in hogs can be produced by numerous other causes.

Probably a Roarer.—J. T. S., Pikeland, Pa. According to your description, your mare must be a mild roarer. If her roaring does not seriously affect her ability to work, my advice is to leave it alone. The only remedy possible consists in a surgical operation, which, however, is not always crowned with success, and requires a good surgeon to perform it. If you desire to have it performed, a good place to have it done is the veterinary school of the University of Pennsylvania, in Philadelphia.

An Obstruction in a Cow's Teat.—J. L. P., Spring Valley, Wis. Without knowing the nature of the obstruction in your cow's teat, I can only advise you to endeavor to gradually widen the passage by vigorous milking. Any attempt to remove the obstacle by means of instruments, unless done with the strictest aseptic precautions, is apt to produce the opposite result, and may even cause garget. If you find that you can do nothing else, stop—not at once, but gradually—milking that quarter, and apply to its surface a salve composed of gum camphor, one part, and soft soap, six parts.

An Ugly Scar.—M. C., Linton, Ohio. Any wound on a horse's leg below the so-called horny wart, or chestnut, if allowed to suppurate before a healing is effected, will leave a more or less ugly, horny scar. This scar is permanent, and will be the larger and the uglier the larger the wound, the more it gaped and the longer it suppurated. In certain cases the size of the scar can be reduced by excision, provided a bealing of the new wound is taking place by "first intention," or without any suppuration. A fresh scar will in time somewhat decrease in size, in the same ratio in which the scar tissue contracts and becomes more solid.

Knuckling Over.—F. E. A., Gray Eagle, Minn. If you apply the term "ankle" to the pastern-joint of the horse, then what you describe must be what is usually known by the term "knuckling over," caused by a morbid relaxation of the ligaments, produced by over-exertion or too severe or too long continued a strain. The treatment consists in giving rest and in feeding nutritious food, so as to give the injured parts a chance to recuperate. Under circumstances, it may also be advisable to remind the animal that the weakened ligaments must be favored, by applying a good blister in front of the joint. Still, where the case is of long standing, any treatment is apt to be in vain.

A Cow Her Own Milkmaid.—G. C., Pleasantville, Pa. Your cow which attends to her own milking appears to be convinced of the good quality of her milk; but you can easily fool her and induce her to leave all her milk for you. Have a halter made with a broad, leather nose-band, provided with alternate rows of sharp nails sticking out in such a way that they will prick her whenever she attempts to suck herself. With such a halter on she will soon find a bair in the self-milking business.

Partial Paralysis of Penis—Diseased Cow.—H. E. K., Elliott, N. D. It is possible that the partial paralysis of the penis of your colt, three weeks old, will gradually disappear as the animal gets older and stronger. I do not believe that castration will have any effect upon it. If no improvement is visible, you may try the use of a suspensory. Whether the "bard cough" of your cow has anything to do with the disease of the udder, which latter appears to be garget, I cannot decide from your description. If it has, tuberculosis has to be suspected. If it has not, and it is not yet too late, the udder may be restored by frequent and thorough milking. Milk that looks greenish and is mixed with blood is, to say the least, not palatable, and is dangerous if the trouble is caused by tuberculosis.

Worms in Hogs.—F. S., Clayton, Okla. If the worms passing from your hogs are from eight to ten inches long and one fourth of an inch thick, pointed at both ends, they are probably ascarides (*Ascaris lumbricoides*). *Echinorhynchus gigas*, a worm also frequently occurring in hogs, is of about the same length, is yet a little thicker, especially in the fore part of the body, and more tapering behind than in front. If you have to deal with the former, give each hog, for a few days in succession, once a day, one grain of arsenious acid, with a piece of boiled potato for voluntary consumption, but see to it that the hogs take the medicine in your presence, so that no other animal may get it and be poisoned. Further than this, feed your hogs all the sour milk you can give them, and keep your yard clean, so that the embryos of the mature worms that pass off have as little chance as possible to hatch and to infest the pigs.

A Hard, Movable Swelling.—F. D. C., Durwood, Ind. Ter. If the hard and movable swelling, or "lump," as you call it, on the inside of the right lower jaw-bone of your mule is a hard and knotty enlargement of the right submaxillary lymphatic gland, its presence may be an indication of glanders; at any rate, makes it advisable to have your mule examined by a veterinarian, or by somebody familiar with the characteristic symptoms of that disease. In all cases, the presence of such an enlargement indicates that some kind of a deleterious process is going on within the province of the lymphatics tributary to that gland. If it is not in the lymphatic gland, but outside the same, it probably is some kind of morbid growth, not necessarily malignant, and removable by excision. If it is glanders, you will also find more or less discharge from the right nostril, and perhaps ulcers, more or less high, on the septum of the nose.

Probably a Morbid Growth.—R. T., Waukon, Wash. According to your description, your mare seems to have a polype or some other morbid growth—maybe a sarcoma—in the respiratory passages, probably in one of the nasal cavities. I would, therefore, advise you to make a close examination of her nasal cavities on a sunny day by throwing the rays of the sun, by means of a small mirror, as high up into the nose as you can. This will enable you to see what may be wrong. The principal symptoms of glanders are, first, chancreous ulcers on the septum of the nose; second, a discharge, seldom very copious except in the most advanced stage, from one or both nostrils; and third, a hard and knotty swelling of the submaxillary lymphatic glands. Almost absolute certainty whether a horse has glanders or not where the instance named symptoms are not all present, or only imperfectly developed, can be had if the horse is subjected to the mallein test.

Hooks?—J. S. W., Winterpock, Va. I am at a loss what you mean by "books." That term is sometimes applied to a swelled or diseased condition of the membrana nictitans, or so-called third eyelid or haw in the inner corner of the eye. But such a swelled or diseased condition never seriously affects the general health of the animal, and surely does not become fatal. There is one very fatal disease, known as tetanus—and if the jaws are set, also called lock-jaw—in which the spasmodic contraction of the muscles draws the nictitating membrane over one third or even one half of the eyeball, especially if the head of the horse is raised. Maybe your horse died of this disease, in which, however, the rigidity of the whole body, the inability to open the mouth, and consequently to eat, and the abnormal hardness of all the superficial muscles are far more conspicuous symptoms, not one of which you have mentioned. But whatever the disease may have been, the cutting of the "books" is a useless and cruel operation, and should never be performed except in such rare cases in which the nictitating membrane has become degenerated by some morbid growth, and then only by a veterinarian who knows what he is doing.

A Fistula—Shedding of the Coat of Hair.—U. V. S., Iconina, Iowa. What you describe in regard to your colt is a fistula, which requires a surgical treatment, and perhaps a surgical operation. It does not proceed from your communication where the fistulous canal leads, how deep it is and what parts and tissues are diseased; consequently, I can only give general directions. Like in all fistulas, a free discharge of the pus and of the exudates must first be procured, either by enlarging the old opening in a downward direction or by making a new one; secondly, the walls of the fistulous canal, being more or less callous, invaded by bacteria and without sufficient vitality, must be destroyed, which, in many cases, is best effected by means of caustics—sulphate of copper, for instance—and then, after the fistula has thus been deprived of its fistulous character and been changed to a fresh wound, it can be brought to healing by ordinary treatment, cleanliness and aseptic or antiseptic dressing and protection. It is always best to leave the treatment of a fistula to a veterinarian.—The best means to hasten the shedding of the coat of hair on a horse consists in good, nutritious food in sufficient quantities, and in diligent grooming. If horses do not shed their coat of hair at the proper time, notwithstanding that food and care are unobtainable, the failure is due to some chronic disease.



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Our Farm.

ORCHARD AND SMALL FRUITS.

CONDUCTED BY SAMUEL B. GREEN.

PLUM AND APPLE CURCULIO.

THE curculio live over winter in the beetle state in grass, leaves and protected places. In the spring they come out early and feed on the fruit of plums, apples, cherries, peaches and similar plants. They begin their work in the spring almost before the plants are out of flower.

There are several species of them; one attacks the plum, in which it lays its eggs just under the skin. The growth of the larvæ in the fruit of the common varieties, that is, European sorts, causes it to become rotten and to fall off when about half grown. Our native American varieties of plums are called "curculio-proof," because very few of these eggs develop in them; but this stinging of the fruit makes it rough and misshapen. Another species of the curculio attacks apples, causing the fruit to become rough, knotty and misshapen. These curculio are less than one third of an inch long, dark in color, with a stiff, hard snout, which is quite prominent. They are easily detected on plum-trees after the plums fall.

REMEDIES.—It has frequently been recommended to prevent the injuries of these pests by spraying the trees with weak solutions of Paris green. In my experience good results have sometimes followed this treatment, especially in the case of the apple, which has foliage not easily injured by arsenical poisons; but in case of plums the foliage is so tender that it is liable to be burned by arsenical mixtures. In order to be successful in the use of this remedy, the applications must be commenced soon after the flowers fall, and continued once or twice a week for from four to six weeks, or until the insects disappear.

But in either case, especially with plums, it is better to jar the trees and collect and destroy the beetles. This work should begin as soon as the flowers fall, and the trees jarred each morning so long as the insects are found. The beetles are dumpish in the morning, and in cool weather, and they fall quickly when jarred. By spreading sheets under the trees the beetles are easily collected and destroyed. There are many devices to facilitate this work. In one case a light frame of proper size covered with cloth is moved about on a wheelbarrow-like affair. It has an opening over the wheel large enough to admit the trunk of a plum-tree to the center of the frame. If the trees are large, they should be jarred by striking a branch at a time with a padded stick.

FALL APPLES.

Handsome, tender and good fall apples sell better in any market than the tough-fleshed winter apples that keep in common cellars merely for the reason that their flesh is firm and tough, such as Willow, Ben Davis, Stark and Missouri Pippin. Such tender sorts as Jonathan and Grimes Golden are not included in the winter list, as where they can be profitably grown in the West they are fall apples to even a greater extent than some of those named below when grown on the forty-third parallel.

The northern fall apples kept in cold storage preserve their flavor and do not decay quickly when brought out for sale in winter or spring. This has also been demonstrated during the extended use of the Wealthy and Oldenburg in Chicago, Milwaukee, and even in St. Louis, in winter and spring. They come out of cold storage and hold up with unimpaired flavor on the stands of the apple retailer as well as the winter apples from the cellars, and have far quicker sale.

Such fall apples should be picked as soon as the seeds are brown in the fall, and should be barreled and put into cold storage at home or in market before their coloring is nearly complete, as experience has shown that all these northern sorts will color up perfectly in the barrel. The neighborhood in north Iowa that has two hundred acres of orchard can richly afford to put in a modern cold-storage plant.—Prof. J. L. Budd.

INQUIRIES ANSWERED

BY SAMUEL B. GREEN.

Worms in Apples.—W. A. G., Solomon, Kan. Your apple-trees are probably affected with the canker-worm or similar insect. Your best remedy is to spray the leaves with Paris green and water at the rate of one pound to 150 gallons. Please send me a few specimens for identification. By worms getting into your apples I suppose you refer to the larvæ of the codling-moth, which enters the blossom-end and eats down to the core. This insect is easily checked by spraying with Paris green and water, as recommended for the canker-worm. This work should be done shortly after the flowers fall, while the small apples stand upright on the tree. Done at this time, the poison collects in the blossom-end, which is the place where the worm enters the fruit.

Walnuts and Pecans.—L. S., Jerseyville, Ill. It is too early yet to say whether the Japan walnuts are worth growing, but I am very doubtful about their being valuable in Illinois. English walnuts and pecans come nearly true from seed, but not exactly so. By planting the best thin-shelled sorts, we are pretty sure of getting trees that bear good nuts. Grafting the walnut or pecan is often unsatisfactory, but it can be done. Wild pecans come from the nuts, which sprout readily if wintered over mixed with leaves and dirt on top of the ground. If grape, currant and quince cuttings are made as early as the first of April, of the well-ripened wood, and are buried in sand in a cold cellar until they callous, before planting them out, they will probably grow, but should not be planted outdoors until the ground is warm. If only a few hundred cuttings are wanted, plant them in six or eight inches of moss or sand in a box outdoors placed in a cool situation, where they will be almost sure to callous, when they should be set out. Currant cuttings will generally grow if cut in the early spring and planted out at once, but it is far better to make cuttings of all kinds in autumn. The cuttings should be about ten inches long, put in slanting at an angle of forty-five degrees, so deep that only one bud shows above ground. In growing quinces from cuttings, it is a good plan to graft two or three inches of apple-root on the lower end, which sustains the quince until it has roots of its own. It costs but little to do this, and I prefer to practise it. If the pecan-nuts have been properly kept outdoors all winter, they will not need to be cracked by hand, as the frost will have done it. It is a little risky to depend on cracking the nut by hand. The frost does it much better than it can possibly be done by hand. Chestnuts do not come true from seed any more than walnuts or pecans.

Spraying Grapes.—G. J. K., Davenport, Iowa. On high land in Iowa where there is a fairly good circulation of air, it is seldom that any great advantage comes from spraying grape-vines, since the dry, bright summer weather common in that section prevents the growth of fungous diseases. But in closely shut-in locations, or in moist weather, the grape diseases are sometimes quite injurious there. The most common diseases are black-rot, which causes the berries to rot and shrivel up, but does not hurt the leaves, and brown-rot, or downy mildew, which most seriously attacks the foliage, often causing it to fall off before the fruit is ripe. Concord, Worden and such varieties are often seriously injured by black-rot, while Delaware is most commonly injured by the downy mildew, which often causes the leaves to drop about the time the fruit is full grown, but when still green. It also causes brown-rot in grapes. The most practical way of preventing the black-rot on a small scale is by haggling the clusters of grapes as soon as they are out of flower. This is entirely practical where one has less than one hundred vines. The fruit thus treated is far superior to that not put in bags. On a large scale it is necessary to spray for each of these diseases, and the treatment is the same. Just before the flowers open, spray the fruit and leaves with Bordeaux mixture. Repeat this three or four times, at intervals of about two weeks, when two applications should be made of ammonium carbonate solution. But if only a few sprayings are made, and the work done thoroughly, you will find the protection well worth the trouble. Bordeaux mixture is made as follows: Dissolve five pounds of sulphate of copper in forty gallons of water. Slake five pounds of good quicklime in ten gallons of water. Pour the lime and water into the sulphate of copper solution, and stir thoroughly. Together they should form a sky-blue mixture. This should be strained twice before using in a spray-pump. If more convenient, the lime and copper sulphate may be treated with a small amount of water first, and the full quantity added later on. The ammoniacal carbonate of copper solution is made as follows: In a vessel having a capacity of two quarts or more pour one quart ammonia (strength 22° B.), add three ounces carbonate of copper. Stir rapidly for a moment, and the carbonate of copper will dissolve in the ammonia, forming a clear liquid, which may be kept indefinitely. Dilute to twenty-five gallons. The sulphate of copper should cost not over seven cents, and the carbonate of copper not over fifty cents per pound.

GREATER FLORIDA.

EFFECTS OF THE ORANGE FREEZE IN FLORIDA.

When the announcement was made that the larger portion of the orange-trees in Florida had been destroyed by the unusually severe frosts, it was looked upon as one of the worst calamities which had ever befallen the people of that section of country.

This feeling was shared by a very large number of the people of the country living beyond the limits of Florida and largely South, because of the very general impression prevailing that Florida was incapable of producing large quantities of any other product which could be sold profitably.

The writer has always held the opinion that when any portion of country containing diversified soil, and which is capable of producing various products to advantage, confines itself to one single product, especially where that one product is more of a luxury than a necessity, that such a course is injurious rather than beneficial.

Even in the case of what may be presumed one of the necessities of life, such as cotton, it is a notorious fact that under the stimulating cry so prevalent years ago that "Cotton is king," the attention of the producers of the soil was unwisely given in large part to the production of that staple.

Many farmers of the South, by confining their attention and labor to the production of cotton, have practically bankrupted themselves, and it is only within a comparatively few years that some of the Southern farmers have learned to produce other necessities, and have thus entered upon careers of prosperity.

We take the ground unhesitatingly that the freeze-out, so far as oranges are concerned, in Florida, will in ten years from this time be looked upon as a beneficent interposition of Providence on behalf of the state of Florida.

Already the indications are clear and manifest that Florida, with her tropical soil and climate, is destined to and will become the great early vegetable and fruit producer of this country, and we predict that the average farmer in the state of Florida, during the next twenty years, will earn more net money per acre than will be earned in any other state in the Union.

Middle Florida is what is known as the Tallahassee country, comprising Leon, Wakulla, Jefferson and Gadsden Counties, and is destined to be one of the greatest and most profitable tobacco-producing regions in the world; and this has been amply evidenced by what has been published in our columns heretofore.

Again, there is no section of the whole South so admirably adapted for fruits and dairy farming as the Tallahassee country; and when this is supplemented with the great advantages of climate and soil which obtain, the future of that section of Florida is practically assured.

What the South is suffering for to-day is the introduction of a class of farmers who have been educated to work every weekday in the year, instead of taking life in the easy, slothful way of the average Southern farmer.

With this new element plentifully sprinkled through the South, it has a farming future second to no other section of this country.

NEW MINERAL DISCOVERIES IN FLORIDA

It is rumored that recent explorations among the hills of the Tallahassee region, in Western Florida, have disclosed the fact of the existence of several important minerals, which have a large sale throughout the world, and there is every reason to believe that in the near future steps will be taken to develop these discoveries into industries, which may have an important bearing upon the future prospects of that section of country.

It is said that these investigations have been quietly conducted under the immediate direction of the managing director of the Clark Syndicate Companies, and as he represents a coterie of very progressive, intelligent Scotchmen, if the results are in accordance with present indications, a new and unexpected industry will be opened in that region.

HAS PURCHASED A PLANTATION.

TALLAHASSEE, FLA., May 4, 1896.

CLARK SYNDICATE COMPANY,

Tallahassee, Florida.

Gentlemen:—Having spent some time in looking over the land of Leon County, I take great pleasure in expressing my private views of things as I have seen them.

The climate could not be better if it was made to order, and must prove very beneficial to all who come here to enjoy it.

In regard to the land and opportunities, I have found everything just as it is represented by the Syndicate, and the only criticism I could place on their statements is that they are too conservative.

I have purchased a plantation near Tallahassee, which, if it were in my native state (Ohio), could not have been bought for six times the sum I paid for it, and it is capable of producing three times what the acreage would in Ohio.

My advice to any young man is to do as I have done—come and see. I start for Montpelier, Ohio, to-night to arrange my business to move here this fall, and any information that my brother farmers may desire, can be had by inclosing a stamp with your questions, at that point.

Yours,

(Signed) H. H. BRUNDYDGE,
Montpelier, Ohio.

FORTUNES FROM LETTUCE.

One of the most interesting articles, upon what may be termed the outgrowth of the orange calamities in Florida, relates to the production of lettuce. The writer, in speaking of the possibilities of sale and profit in connection with this article, made the following terse and interesting statement:

"This will be the most successful year in the history of truck-farming in this vicinity, and some of the farmers who were compelled to borrow money with which to purchase fertilizer, will have independent fortunes when the season shall be at an end. The success of the farmer this year is due to two causes—the lesson taught by the freeze of 1895, which caused many of them to cover their lettuce crop, and the comparative small acreage of cabbage.

"The most successful crop so far has been lettuce, and some surprising results have been obtained by nearly every farmer who planted this crop to any considerable extent. The acreage this year has been four times as large as that of any previous year, but the enormous yield seems to have had no effect upon market prices. One peculiarity about the lettuce crop is that only two markets are open to it—New York and Philadelphia. It is a vegetable that demands a cultivated market, and good prices were obtained in New York and Philadelphia only after much work on the part of the commission merchants. Lettuce can be grown at various seasons of the year. The first crop was planted last September, and the first shipments were made about the latter part of December or the first of January.

"The shipments were light at first, but they gradually increased until they reached about 3,000 baskets per week from this city. The sales have averaged \$2.75 net, and the shippers here estimate that an average of 250 crates of lettuce have been shipped from one point in Florida every day since January first to the present time, and about \$66,000, at the lowest estimate, has been distributed among the growers in this vicinity. Most of that sum has been received by about seven growers, who have raised the bulk of the crop.

"The yield of lettuce has been heavy. About three hundred baskets is the average yield per acre. It costs about 30 cents per basket to grow lettuce and load it upon the cars for market. About two fifths of that amount is for fertilizer, and the remainder is for labor, the cost of the basket, drayage, etc. The cost of transportation to New York, 71 cents, makes the expense of placing a crop upon the market \$1.01 per basket. To net the grower \$2.75, the average sale of lettuce this year has been \$3.76 per acre. This crop is going forward at the rate of two and three car-loads per day, which is greater than has been known at any other time during the season.

CIDER MACHINERY
Hydraulic, Knuckle Joint and Screw Presses, Graters, Elevators, Pumps, etc. Send for Catalogue.
BOOMER & BOSCHERT
PRESS CO.,
99 W. Water St., SYRACUSE, N. Y.



Smiles.

A GUESS AGAIN.

"I guess it's time to go,"
Remarked at last the bore.
"An excellent guess," she answered.
" Why didn't you guess before?"

A GREAT LOAFER.

Now doth the so-called busy bee
Have matters pretty slick;
She lives on honey months and months
And never does a lick.

IF.

If love were always rosy
And knew no mortal ills,
And never went to pay the rent,
Or stormed at grocery hills,
Theu would the world go singing,
And heaven would kiss the hills,
If love were always rosy,
And paid no grocery bills!
-Atlanta Constitution.

CAUSE FOR DISSATISFACTION.

UNCLE GILCHRIST—"I am tired and
sick of these encyclopedias—tired
and sick of 'em. I paid seventy-five
dollars for the set of 'em, and I'd
sell 'em for ten. I'll send 'em back
to the publishers to-morrow."
Niece—"Why, uncle, what is the matter
with the encyclopedias?"
Uncle Gilchrist—"Matter? Why, I want to
know something about the Cæsars, and I can't
find a word on the subject. The encyclopedia
ignores the whole kit of 'em."
Niece—"Have you looked, uncle?"
Uncle Gilchrist—"Looked? Of course I have
looked. I've been through every page of the
S's."—Judge.

IMPORTANT INFORMATION BY TELEPHONE.

A messenger-boy called up the Central
telephone-office yesterday and asked the
operator if she knew what love was.
"No," she replied. "Say, if you find out, let
me know, will you?"
"All right," said the boy.
In a little while he called her up again, and
said:
"Say, I found that out. About love, you
know."
" What is it?" asked Central.
"An itching of the heart that one can't
scratch," said the boy, and he raug off.—Syr-
acuse Courier.

HISTORY.

Druggist (to doctor who has just entered)—
"Excuse me, doctor; Mrs. Scadd's little boy
has just brought in one of your prescriptions
for filling; but, really, I can't make it out to
save me. Will you kindly give me your
assistance?"
Doctor (after looking over prescription)—
"Hum—er—well—er—hem—er—well, youug
man (pompously), I'm not a prescription
clerk; I'm a doctor."—San Francisco Wave.

ON THE "L."

First passenger—"Old Closefist must be
tickled to death to see the cars crowded like
this. He has a big block of stock in the road."
Second passenger—"He isn't tickled at all.
He considers it an outrage that the company
should not be allowed to charge more than
five cents for seats when standing-room easily
commauds that price."—Truth.

ANYTHING SHE CALLED FOR.

Mr. Downtown (irritably)—"Bridget, I must
insist that you cease singing that song. My
wife has a nervous headache, and it annoys
her."
Bridget (the cook)—"Oi will stop, sorr. Oi
didn't know that the mistress disliked that
song. Pfwat soug do she want me to siug?"—
Judge.

INDIANAPOLIS INDORSEMENT.

Indianapolis, Ind.—(Special.) A. Phillips, of
No. 356 Pine street, this city, a short time ago
came near dying from excessive use of tobacco,
which he had used for 25 years, until his ner-
vous system was so completely shattered that
he had to get up from his bed and smoke. As
a last resort, after frequent unsuccessful at-
tempts to stop, he tried No-To-Bac. All desire
was immediately destroyed, his nerves made
well, and he gained over forty pounds. Since
this cure has been made known, one thousand
people are taking No-To-Bac with wonderful
results. Booklet and sample mailed free. Ad-
dress Sterling Remedy Co., Chicago, Montreal,
Can., or New York.

Mr. Lincoln was one of those singular men
whom the great unknown power brings upon
the scenes of men's actions when momentous
events are about to transpire.—W. B. Franklin

PRINCIPAL OCCUPATION.

Small boy—"I don't wonder tbat women's
heads so ofteu ache."
Little girl—"Why?"
Small boy—"Every time they see any of
their children they've got to think up some
reason for not letting them do what they
want to."—Good News.

THE POWER OF THE HUMAN EYE.

Blazley—"I was coming down town in a car
this morning, and the conductor came along
and looked at me as if I hadn't paid my fare."
Bizley—"What did you do?"
Blazley—"I looked at him as if I had."—
Roxbury Gazette.

A MATTER OF DOUBT.

"Do you expect to suffer from hay fever this
summer, Mrs. De Long?"
"No. Not unless my husband's business
improves."—Detroit Free Press.

HIS CAPACITY WAS LIMITED.

"Don't you think, Harry, you could induce
one or two boys to come to Sunday-school?"
"I could bring one," he replied. "De udder
fellers in our alley kiu lick me."—Life.

TITBITS.

"What are you thinking about, little man?"
asked a charming hostess of a small boy
visitor.

"Mama told me," answered the little mau,
"not to take two oranges, and I was thinking
I'd be mighty lucky if I got one."—Detroit Free
Press.

St. Vitus' Dauce. One hottle Dr. Fenner's
Specific cures. Circular, Fredonia, N. Y.

An old New York gentleman, meeting his
grandson, said to him, in an impressive toue
of voice:

"My dear boy, I hear some very discour-
aging reports about you. They say that you
go hebiud the scenes, and are very much gone
on Miss Topsis Liftoe. Is that so?"
"Yes, grandpa, to some extent."

"Drop them, my boy. I know them, my
son. They are a had lot."

"But, grandpa, the actresses of the present
day are different from what they were when
you were a young man, fifty years ago."

"Not much, my boy. They are mostly the
same identical actresses. Why, I was engaged
once to Miss Topsis Liftoe myself."—Texas
Sifter.

It was in one of the mountain towns of
eastern Kentucky. I had dropped into a
general store in the evening to make a
purchase, and was lingering to hear a con-
versation between three or four men, when
one of them arose, winked at me to follow
him, and started out just as an old man who
was saluted as "Cap'n Jim" entered.

"Yo' is a stranger in town, I reckon?"
queried the winker, as we got out.

"Yes."

"And nobody's dun told you about Uncle
Tom who keeps this stoh?"

"No."

"Then I'll explain. That yere Cap'n Jim
has cum to town for powder to shoot squirrels.
That yere Uncle Tom keeps it in a keg, and he
allus lights a candle to weigh it out in the
back room. I've hin a-talkin' to him fur the
last twenty years, but he doan' believe it."

"Don't believe what?"

"That that ar candle and them ar powder
am jess dead suah to cum together sumtime.
Got to do it. Uncle Tom's gittin' old and
trembly, and thar's got to be a calamitous
calamity in that back room."

"And you think it will come off to-night?"

"Mighty likely, sah. I hated to git up and
go out afore sumbody had treated, but we ar'
in dooty hound to save our lives, I reckon."

"You didn't say anything to the others?"

"Twa'n't no use. They was talkin' about
b'ars, and a b'ar story would keep 'em thar' if
the house was a-fire. Besides, they know all
about it."

We had walked away about thirty rods
while talking, and had just taken seats on
the hotel veranda, when there came a terrible
rumble—the night was lighted with a great
flame—and then the earth seemed to rise up
in waves.

"It's tbat yere powder and that yere candle
cum together!" shouted my friend, as he
picked himself up, "and now I hope that yere
Uncle Tom feels a heap better fur his peart-
ness!"

The store was demolished, and four men
killed, while almost every pane of glass in the
town was broken.

"Had to be," said my friend, as we stood
among the crowd gazing at the ruins. "Yere
was trembly Uncle Tom with whisky in him,
thar' was the taller candle with proper
ambishun, yere was the keg of powder jes'
fitchin' to be tackled. Had to be. Couldn't
git sбет of it!"—Detroit Free Press.

A HARD COUGH distresses the patient and
racks both Lungs and Throat. Dr. D. Jayne's
Expectorant is the remedy wanted to cure your
Cough, and relieve both the Pulmonary and
Bronchial organs. The best family Pill, Jayne's
Painless Sugar-Coated Sative.

Baco-Curo The only scien-
tific cure for the
Tobacco habit.

Baco-Curo Cures when all other
remedies fail. (Write
for proofs).

Baco-Curo Does not depend on the
will power of the user.
It is the Cure. Vege-
table and harmless.

Baco-Curo Directions are clear:
"Use all the Tobacco you
want until Baco-Curo
notifies you to stop."

Baco-Curo Is the Original Written
Guarantee Remedy
that refunds your
money if it fails to
cure.

Baco-Curo Does the Curing. Its
Competitors do the
Blowing.

Investigate Baco-Curo before you huy any
remedy for the Tobacco Habit.

The U. S. Courts have just decided that
BAGO-CURO
is what it Pretends to be
A CURE.

WHICH DO YOU WANT? A CURE
OR A SUBSTITUTE?
One box \$1.00, three boxes (and guaranteed cure) \$2.50, at
all druggists, or sent direct on receipt of price. Write for free
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can have it! We
offer you the Sole Agency for an article that is
Wanted in Every Home and Indispensable
in Every Office, something that SELLS AT
SIGHT. Other articles sell rapidly at Double
the Price, though not answering the purpose
half so well. You can make from \$500 to \$700
in three months, introducing it, after which it will
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tended to. Ladies do as well as men, in town or coun-
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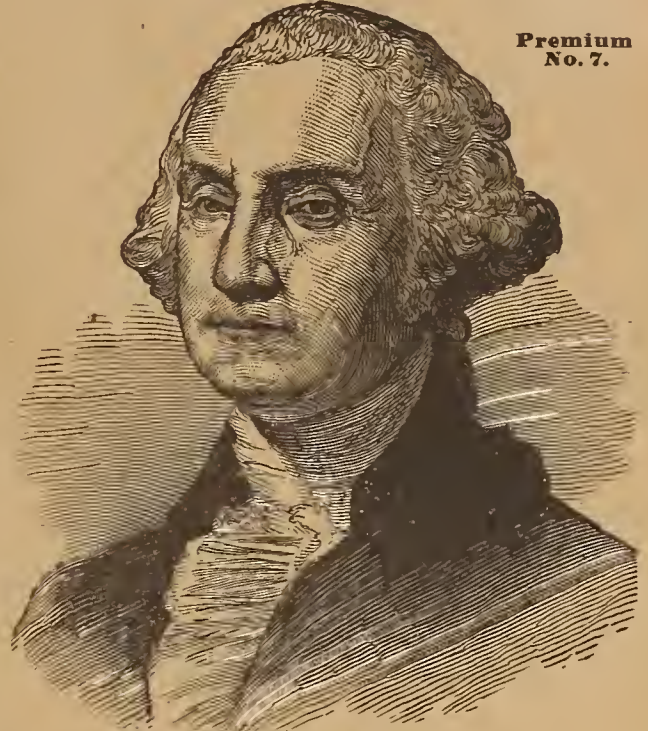
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A HINT FOR THE NEXT TIME.

Elderly coquette—"Jst imagine! My maid took three quarters of an hour to curl my hair this morning."

Her dearest friend—"Why didn't you take a walk in the meantime?"—Town Topics.

INTERESTING.

Fizz—"Great wedding that of the Newgold's. I hear Roundleigh was the best man."

Quizz—"The deuce you say. Who was the worst?"—To Date.

TITBITS.

A young doctor, wishing to make a good impression upon a German farmer, mentioned the fact that he had received a double education, as it were. He had studied homeopathy, and was also a graduate of a "regular" medical school.

"Oh, dot vas noding," said the farmer, "I had vonce a calf vot sucked two cows, and he made noding but a common schteer, after all."

Many years ago, Barney Barnato rented a little house in one of the frontier towns of South Africa. Barney spent considerable in improving the house, but he quarreled with his landlord, and decided to move. By inserting the following advertisement in the local paper, the prospective millionaire in some measure got even with his landlord: "Wanted, by a gentleman who agreed to leave dwelling occupied by him in condition in which he found it, 100,000 lively black beetles." Then followed Barney's name and address.—Argonaut.

An old woman was being questioned by a lawyer as to how the testator had looked when he made a remark to her about some relatives.

"Now, how can I remember? He's been dead two years," she replied, testily.

"Is your memory so poor that you can't remember two years back?" questioned the lawyer.

The old woman was silent, and the lawyer asked:

"Did he look anything like me?" "Seems to me he did have the same sort of vacant look," responded the witness.

And the lawyer had no further questions.—Youth's Companion.

A few years ago Jim Chessley was one of the best all-round athletes on the Coast, but he made a specialty of base-ball and sprinting. One night, after being out with the base-ball crowd, he suggested that they go up to his lodgings and look at a new suit he had bought to sprint in. Though it was two o'clock in the morning, they accepted his invitation.

Chessley put on his new running-shoes and trunks. While he was still prancing about the room before his admiring friends, a commotion was heard out in the hall, and cries of "Stop, thief!"

Chessley threw open his door in time to see a man darting down the stairway. He dashed after the fellow, and after a sprint of half a block, caught him. When Chessley took him by the collar, he whirled around as if he intended to fight, but when he had sized Jim up from the top of his head to his spiked soles, his jaw dropped, he shook his head hopelessly, and said:

"I give up, pardner. When they keep a man ready in runnin'-costume to chase a feller at three o'clock in the mornin', they're too many for me."—San Francisco Post.

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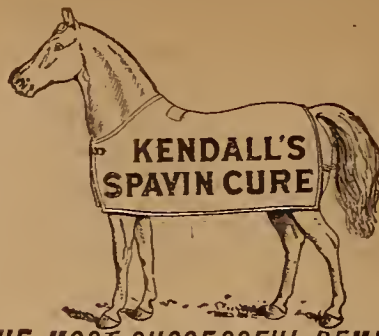
MODEST.

Miss DeFlyte—"Bridget, if Mr. Slims calls while I am out, hold him until I return."

Bridget—"Oh, miss, sure and Oi wodn't like to do that."

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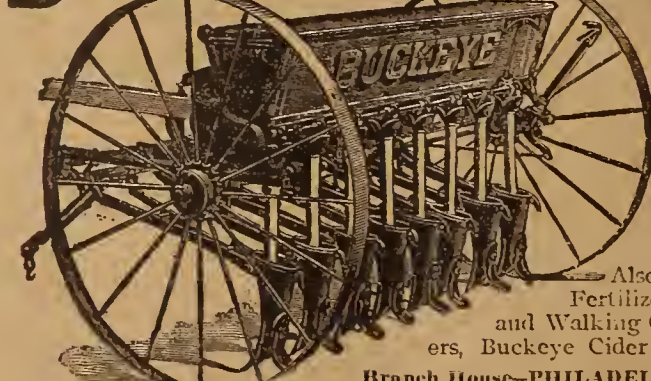


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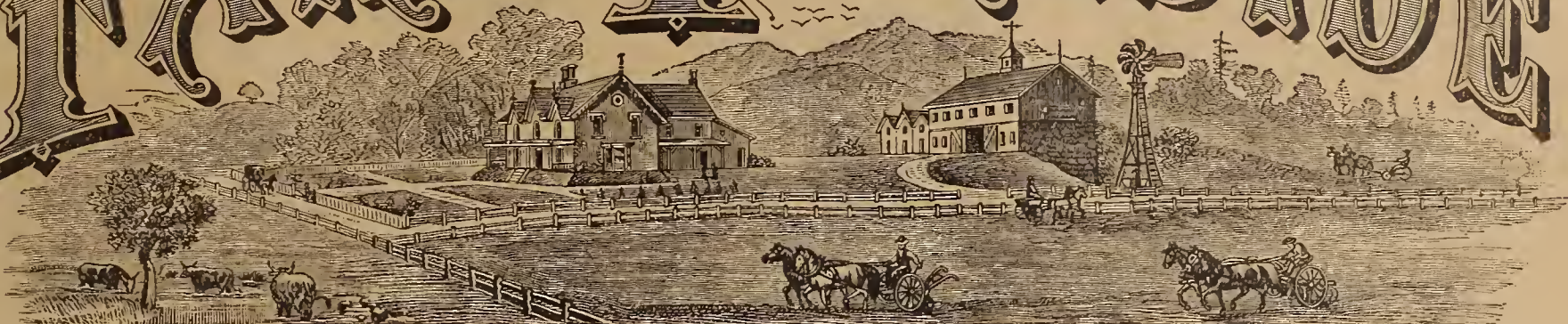
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FARM AND FIRESIDE



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predict. The only competent authority to consider the grave conditions newly created by reason of this phenomenal addition to the world's silver supply must be composed of representatives of the nations of the world. No one nation can determine the policy which shall be adopted by all, or for itself, without considering the policy of the others. The present seems to be the most appropriate time to press to a conclusion and an ultimate agreement between the great commercial and monetary nations the decision as to the wisest ratio between gold and silver, to be made universal the world over.

"When the fact is understood that we are likely to have a constant and increasing addition to the world's silver without any similarly increasing demand for it, either as money or as a commodity, it is apparent its value has become and must continue subject to the inflexible laws of trade like any other commodity. It must decline in market value under such supply. Its quotations must fluctuate with the fluctuations of supply and demand, like coal, like iron and other products. Upon no consistent basis can any fixed ratio be established by the United States alone between silver and gold under such circumstances.

"Let no man flatter himself that a determination of the great economic problem will ever be arrived at under the teachings of the empirics who vie with each other in the effort by legislation to put the dollar stamp on a half dollar's worth of silver in any single country. The supply of silver being what determines its value, it is only just that all commercial nations shall participate in establishing an international ratio. If we shall devote our surplus energy and overflowing patriotism to securing that result, we shall do far better than in exploiting intangible theories.

"I am in favor of using all the silver as coin we can, and we may be able to use even more than we are now using, but the question of the standard should be settled. We should not depart from the gold standard until we have the co-operation of other great nations, and an agreement as to the ratio for the free and unlimited coinage for all the nations."

CONSUMERS who from choice prefer the compound made from "skimmed milk and soap grease" to genuine cheese no longer need be uncertain about getting just what they want in the markets. Hereafter, it and the wooden packages in which it must be packed shall both be plainly marked, stamped and branded on top, bottom and sides "filled cheese." June 4th, the Senate, by a vote of 37 to 13, passed the filled-cheese bill just as it came from the House, and the president approving, it will be law. The manufacture and sale of filled cheese are placed under the surveillance and regulation of the United States internal revenue bureau. The product itself is taxed one cent a pound. Manufacturers are required to pay an annual tax of \$400; wholesale dealers, \$250, and retailers, \$12. For this act Congress deserves the gratitude of consumers and producers. It is another step forward in the pure-food movement.

COL. J. R. DODGE, formerly statistician of the Department of Agriculture, referring to misrepresentations in certain mugwump papers regarding the wool industry, says:

"They glory in the displacement of our Merino fleeces by 'the enormous and wholly unprecedented importation of the finest fleeces' from Australasia of Merinoes originally obtained from Germany and the United States, and incidentally in the reduction of national flocks by fully 15,000,000 (though the Department of Agriculture is admitting the loss by hesitating and halting instalments), and in losses in numbers and values and depreciation of

pastures far exceeding one hundred million dollars, and in the ruin of multitudes of growers driven to bankruptcy and poverty.

"Nor has the assumption that the interests of 70,000,000 people in the 'warm, pure and comfortable' clothing are conserved by the change from domestic to foreign wool a color of truth. It is a part of the program of anglo-manias of the American press to disparage American products. The average quality of our manufactures has been sadly deteriorated by this foreign invasion, which includes shoddy that displaces three times its weight of uncleaned wool, and during the last year displaced the wool of 10,000,000 of our sheep. Heretofore, practically only the small quantity of shoddy made here was used, and the average quality of our products was vastly superior in strength of fiber and durability to the goods manufactured for the masses in Europe. Now our manufacturers say they must make similar goods or be driven from the market by competition of European shoddy; and they are making them."

During the past two years unusual quantities of shoddy goods have been sold in this country. They were low-priced, but observant wearers soon found out that they were the dearest goods on the market. The old maxim applies—the best is the cheapest. In times of enforced economy, buyers search for low-priced goods, and manufacturers seek to supply the demand. The result is that the buyers of shoddy goods help to cheat themselves.

JUNE 1st the House of Representatives passed without a division the labor commission bill, and it is confidently expected that it will also pass the Senate, and become a law. The bill provides for the appointment by the president of a body to be called the "Industrial Commission," to be composed of three representatives each of agriculture, business, labor and manufacturing. A majority of the commission shall not belong to any one political party. It will be the duty of this commission to investigate questions pertaining to immigration, labor, agriculture, manufacturing and business, and recommend to Congress such legislation as may be deemed best upon these subjects.

In a speech favoring the bill, Congressman Belknap, of Illinois, said: "Some seem to think strikes and disorders of like character are always occasioned by the impetuosity or unwise acts of labor. Fair-minded citizens, upon reflection, must admit that often capital is oppressive and unjust, and therefore at fault. Labor does not ask for charity; all it wants is justice.

"Under our form of government all men are equal before the law, but when we recall the frequent occurrence of strikes, lock-outs and similar events, causing suffering and distress to many, we cannot but conclude that often misunderstandings exist between the employer and the employee, or that there is frequently oppression and injustice. Therefore, it is our highest duty, as representatives of the people, to adopt such measures as will do away with this unfortunate condition of affairs. This cannot be done without a careful consideration of the interests of all.

"The appointment of the 'Industrial Commission,' authorized by this bill, I believe, will accomplish this most desirable end. This bill brings together the chosen representatives of capital and labor in the same room, around the same table, where the needs of all may be carefully considered, where the interests of all may be discussed.

"It harmonizes conflicting elements. Instead of pulling against each other they will pull together. Instead of working as enemies they will act as friends. This bill has the hearty approval of every labor organization in the land. It is a fair and just measure, and we owe it to the bone and sinew of our country that it should be passed."

WITH THE VANGUARD

THERE is a strong probability that the clover-seed crop of 1896 will be short, and that high prices will prevail. In view of the present outlook, it would be wise to plan for saving a crop of seed from all the promising clover-fields. In some sections the stand of clover was so poor that many fields intended for hay were plowed for corn and millet.

IN the June 1st number it was stated that the records of the Cincinnati station of the weather bureau showed a deficiency of 8.44 inches in rainfall from January 1st to May 18th. June 3d the deficiency was 8.41 inches—practically the same. The rainfall between May 18th and June 3d was almost exactly normal. The generous and timely rains were of inestimable benefit to farm crops. But these rains were not heavy enough to put a reserve of moisture in the subsoil. The condition of the later-maturing crops is still critical, as indicated in these columns two weeks ago. They are dependent on the possibility of timely and frequent showers through the remainder of the season. The probabilities are against them.

SENATOR CULLOM, in a recent speech before the Senate, made the following statements on the subject of international bimetalism:

"The important interests of the world's trade are so affected by the operation of distant and distinct governmental policies, that the necessity already exists for harmonious international arrangement in monetary affairs. The world's production of precious metals, and the world's coinage of the same, have become important integers which cannot be overlooked. Even now we cannot say that the stoppage or increase of the metallic circulation in any one of the small nations may not affect for good or evil the mercantile interests of the United States. The phenomenal fact that the world's production of silver, which had remained about stationary at \$30,000,000 or \$40,000,000 annually for nearly a century, has vastly increased of late, and last year reached the wondrous sum of \$215,000,000, must necessarily produce some signal effects upon the varied interests of the newer commercial world, which it would be mere presumption now to

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FARM AND FIRESIDE,

Springfield, Ohio.

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Is the title of a bulletin published "How to Select Good Cheese" for free distribution by the Department of Agriculture, Washington, D. C. After explaining why there is so much poor cheese in the markets, and giving the composition of that rank fraud, "filled cheese," the bulletin says:

"There is plenty of good cheese still made in the United States, and it can be secured if buyers will but make a little effort to find it. The states of New York and Wisconsin together produce two thirds of all the cheese made in the country, and the reputation of the factories of these states for high-quality, full-cream cheese has been long established. The product of these factories of the standard, or Cheddar, form of large cheese stands second to none in the markets of Great Britain, as well as in America.

"The two states named, as well as others, absolutely prohibit the manufacture and sale of filled cheese within their borders, and the marking of skim-cheese to imitate full-cream goods. These laws are well enforced. Several states especially provide by law that distinctive brands may be placed upon the bandages of full-cream cheese made in their factories, and also upon the boxes in which the cheese goes to market. These official brands are numbered and registered, and, so far as known, have never been actually counterfeited, although some have been closely imitated. Strangely enough, many factory managers fail to avail themselves of these laws which permit them to identify and guard their products. Their cheese is sold unmarked, to dealers who prefer to place upon it their own brands or trade-marks. The factories thus lose the advantages conferred by law, and permit 'the near-by dime to hide the more distant dollar' in their business.

"When cheese and package are found branded in accordance with the stated provisions of the law, the article may safely be accepted as genuine and guaranteed. Others just as good may be on the market unbranded, or without the state brand, but such cannot be bought with equal confidence. Manufacturers who do use the official brands for the identification and guarantee of their products are entitled to all benefits resulting from such action.

"Advice to Buyers of Cheese.

With this explanation, the following advice may safely be offered to buyers of cheese. It must be understood that these remarks apply only to cheese of the customary factory form, weighing from twenty to sixty pounds each, and sold and shipped in round boxes, one or two cheeses in a box. This description covers the great bulk of the cheese of commerce in the United States, but necessarily excludes a large number of other kinds and fancy forms of cheese, more or less familiar to trade, but all in comparatively insignificant quantity, and less subject to imitation and adulteration.

"Merchants buying cheese should deal with agents and firms whom they consider thoroughly reliable, and from whom redress can be obtained in case of deception and loss, even if unintentional. They should become familiar with the authorized or official markings for full-cream cheese made in the principal producing states, and should specifically order only such cheese as is so marked. Upon arrival, every cheese should be examined, and none accepted which cannot be definitely identified by its markings as the article ordered and desired.

"Retail dealers should take the same precautions, and should either keep cheese in the boxes in which bought, or preserve the boxes until the cheese is all sold. Every piece should be so cut for retail as to keep the mark on the bandage, to insure identity, until the last piece is sold.

"Consumers should inform themselves as to proper markings in like manner, and when they buy should insist upon seeing the markings upon the cheese, and, if necessary, upon its box, in order to fully identify the article as one officially branded."

In conclusion, the bulletin gives the substance of laws authorizing special marks for cheese in the states of New York, Wisconsin, Ohio, Minnesota and Colorado, together with facsimiles of the official brands in use. The bulletin is a useful guide for consumers who desire to buy only good cheese, and for retailers who wish to handle the same.

NOTES AND COMMENTS.

Planting Trees. The idea of trimming trees closely at both ends, in fact, to a mere stub like a cutting, came from Mr. H. M. Stringfellow, of Texas. Recently he wrote to me as follows: "I hope you will test this plan fully, though its value is settled beyond all doubt. Thus far the big guns in horticulture have taken little interest in it. I have written to Prof. Wickson, of California, Berckmans, of Georgia, Prof. Bailey, of Cornell, and many others; but all say it won't do, and they will hardly try it. Prof. Bailey promised me last year to try it, but recently wrote, saying he had so many important things to attend to that he really hadn't had the time. I have sent to all the stations a copy of an article which I wrote on the subject, but it seems nobody wants to take any stock in it. It is the most important reform of the day in horticulture."

I do not think Mr. Stringfellow has a real grievance. The matter has been well presented to the public. An explanation of the Stringfellow method has been given in these columns recently. I have seen notices of it in many of our agricultural contemporaries, and as early as 1889 (if I remember correctly) Prof. Brunck, of the Maryland experiment station, addressed the American Pomological Society at its meeting in Washington, D. C., on the subject, showing trees pruned after this method, and others after they had made a year's growth. Prof. Brunck was very much in favor of this close pruning. I made some trials the next year, but the trees (peaches) which I used in the test were so nearly dead when received from the nursery that nothing ever came of it. One of the big guns in horticulture, namely, my friend J. H. Hale, of Connecticut, however, has not only made such tests, but planted large peach orchards in Georgia with trees thus closely trimmed, and he reports good results.

I do not see why nursery trees cut back to a mere stub, and with roots only one or two inches long, should fail to grow, and develop a good tree after awhile. We can

make good trees as well as good grapevines, etc., from mere cuttings without any root. In the case of apple-root grafts, we have only a short piece of root, and even then only an imperfect connection between this and the top of graft, and yet the tree lives and does well. The only question which remains for investigation is whether we can make a better tree by the Stringfellow method of close trimming than we can by the ordinary way of moderate cutting back. I am now planting a number of trees trimmed in different ways for the very purpose of finding out for myself. And this really is what others should do. It is the only way of settling disputed points. It would be unwise to let old notions or prejudices stand in the way of "trying all things." We must not say that "it won't do." Many important and useful innovations have at first been opposed as absurd and impracticable. Let us try, and then "hold fast to that which is good."

Nut Culture. Nut-growing is a coming important industry. While overproduction in many lines is the general complaint, we must look to new lines for extraordinary profits. It is only pioneer work that thus far has been done in the production of nuts in America. But the field is promising, and I think the people who do the first planting will reap big returns. I would like nothing better than to have a real big nut orchard; in fact, have a few acres with Paragon chestnuts, and hope to secure valuable crops some day. The Department of Agriculture (division of pomology) has just issued a bulletin on American nut-growing. Unfortunately, the law restricts the issue to one thousand copies, and I found myself left out. But corresponding with the United States pomologist, I discovered that the superintendent of public documents had still a few copies to spare, at thirty cents each, and, of course, I quickly secured one. Possibly Congress may provide for a larger edition for free distribution. The announcement is now made that a book on nut-growing, written by the eminent horticulturist A. S. Fuller, of New Jersey (in whose death, a few days ago, American horticulture suffered such a severe loss), will leave the press in a very short time. If our friends cannot get the government bulletin, they will at least be able to buy Mr. Fuller's book. I shall have both, and may have more to say on the subject later.

PRUNING THE TOMATO.

Now that the season is at hand for the proper training of the tomato to secure the best results in fruitage, the following suggestions will be of value to many thousands of new subscribers who may not



FIG. 1.

have seen the issue of the FARM AND FIRESIDE for November 15, 1895, in which an illustrated article appeared relating to the same subject.

As in successful orchard culture or in that of the grape, timely and judicious pruning is essential, if the best results are to be attained. Superfluous and useless growth must be prevented, so that the vital force of the tree or plant will be directed to the proper development of the fruit-bearing buds and branches.

While it is admitted that in some cases

where the tomato-vine is trained to a single four-foot stake, the ripening of the tomato may be slightly delayed, yet the increased size and excellence of the fruit more than compensates for the brief delay in ripening. Presuming, then, that a five-foot split stake has been firmly set at each plant, and the tomato-vine has already been tied to the stake with common twine, a daily lookout must be kept for the suckers which put out from the main stalk and retard the proper development of the tomato-plant.

The sprouts, or auxiliary suckers, which push out from the base of the upper side of each of the side branches must be resolutely pinched off, or broken off if the pinching has been delayed too long. If this is done,



FIG. 2.

and the vines have been tied to the stakes with not less than three strings, as the growth has been continuous, the vine when in bearing will appear as shown in Fig. 1.

If, as it sometimes occurs, a second branch or stem is allowed to grow from near the ground, the result will be as shown in Fig. 2. By keeping all superfluous growth pinched back, this will grow nearly or quite as large as the main stalk, simply forming a fork. Both stalks are to be tied to a single stake, unless it is deemed desirable to let the side branches spread out upon the ground, where they will continue to grow and ripen fruit after the staked vines have ceased bearing. These will continue to bear fruit until after the first killing frost. On the approach of frost, it has become customary by many truckers to pull up the vines and spread them in a well-sheltered place and cover them with litter, so as to allow the ripening process to go on. This late crop is often more profitable than that of the staked vines near the close of the tomato season.

The amount of cutting back that the tomato-stalk will withstand is phenomenal where the stake system is practised. It is well known that the activity of the growth is greatest in the tops, where the fruit in its greatest perfection is formed. It must be borne in mind that the shoots that spring from the base of the first side branches that are formed are veritable robbers, and must be promptly suppressed by pinching or breaking off.

In the early stages of the growth of the tomato, some growers have been very successful by working into the surface soil a mixture of nitrate of soda and gypsum (land-plaster). As a special formula for a tomato fertilizer, the following proportions to the ton will yield the proper percentages of the fertilizing elements most needed by the plants: Two pounds nitrate of soda, seven pounds cotton-seed meal, eight and one half pounds acid phosphate and two and one half pounds muriate of potash. These substances will yield about five per cent of ammonia, seven per cent of available phosphoric acid and eight per cent of potash. The above materials multiplied by one hundred make about two thousand pounds. The small amount named is for the benefit of those who grow but few tomatoes for home use.

W. M. K.
Near Washington, D. C.

Our Farm.

FARM THEORY AND PRACTICE.

CLOVER HAY.—Our experiment stations tell us that clover hay, rightly made, is a well-balanced ration for stock at rest, and some farmers have found that it gives satisfactory results without any grain when fed to horses at light work. The analysis shows that this should be found correct. But notwithstanding all this, there are probably comparatively few farmers who believe that these statements are literally true. I confess that I believed them exaggerated until a few years ago, when I was fortunate enough to make one lot of clover hay in what afterward appeared to be a perfect manner, and since that time I have believed that the original feeding value of clover is all that the enthusiasts claim for it, and that much of its strength and palatability are usually lost in the making. This is not always the fault of the farmer, very much depending upon the weather. The best clover hay can only be made in dry weather, and cool, windy days are far preferable to still ones with hot sunshine.

WHEN TO CUT.—One reason that clover hay is often of inferior quality is that the right time for making it comes when one is busiest with spring crops. A week works a great change in the character of a clover-plant when it is approaching maturity. The advice is often given that we cut clover when in full bloom. The fact is usually that some heads are coming into bloom throughout the season, and this unevenness is so marked in some seasons that one can hardly decide when the field is nearest full bloom. Generally, however, the most of the plants show bloom when the very first heads have turned brown, and the field is then ready for harvest. Cutting at this stage is satisfactory only when the ground is fairly dry, and there is promise of good weather. It is a far more difficult matter to cure such clover properly than when half the heads are brown, but if cutting is delayed for any reason until the latter stage is reached, the quality of the hay is not the best.

CURING.—A few leading farmers have told us that clover may be cut in the morning and put into the mow the evening of the same day, with the best results. I cannot dispute this, but feel safe in asserting that four farmers out of five following this plan will have badly damaged hay, if the clover is rank. It is safer to cure more thoroughly in the field. A common mistake is to leave the clover too long in the swath. The tender leaves turn to a crisp before the stems are half wilted, and are lost in the raking and other handling. Clover should be raked into the windrow just as soon as the rake will work freely. The leaves are yet tough, and none of the plant is wasted. If the clover is rank, and especially if the ground is not quite dry, it may be necessary to leave the clover in the windrow over night before cocking it. In this case dew may injure a small portion of it, but the damage is comparatively slight. After some airing in the windrow, it should be put into cocks and left to

One can hasten the curing process by leaving the clover in the swath a longer period of time; and this may be necessary, oftentimes, but the hay is not so good as it would have been had the weather permitted curing in the cock. In a threatening season it is often advisable to do much of the curing in the windrow, getting the clover out of the swath just as soon as any of the leaves show any crisping, and then shaking and turning the windrows repeatedly to push the curing. This calls for more labor than cocking, but gives one pretty good hay within the shortest possible time that good hay can be made. When the weather is fine, and the clover heavy, curing in the cock requires at least three days' time from time of cutting. The secret of getting choice hay lies in early cutting, and sweating the moisture out instead of evaporating it by the direct rays of the sun. Exposure to the sun until the stems are wilted results in a loss of the best part of the plant.

CLOVER FOR HORSES.—There is a prejudice against clover hay for horses, but its value depends on circumstances. Badly cured or weedy hay is not fit for any horse, and driving-horses do not do well upon any kind of clover; but the ordinary farm-horse may be safely and cheaply wintered on clover hay that has been made without exposure to the sun, if it is free from mold. One reason that its effects are

about as green as fresh cut clover that is nearly ripe. The next forenoon, when the dew is off, turn the windrows over with a fork. Then, in the heat of the day, while the clover has the warmth of the sun in it, put it in neat cocks, keeping the middles full, and dressing the cocks down with fork when done. If rain threatens, use the caps. Let the hay stand until nearly through the sweat. Then tip the cocks over and scatter the hay in the bottoms slightly, loosening all the hay sufficiently to let in the warmth of the sun, and draw to the mow before any dew falls. This hay will cost you a dollar a ton more than overripe clover, but is actually worth twice as many dollars per ton as ordinary hay, and you will not doubt this statement after one trial.

DAVID.

COW-MILKERS.

SOME INGENIOUS DEVICES FOR MILKING COWS, PATENTED WITHIN THE PAST FEW YEARS.

In the class entitled "Dairy," in the patent office, there is a sub-class called "Cow-milkers," which contains all the devices ever patented in this country for milking cows, and comprises about one hundred patents. That there are so many patents in a class of this character, when so few milkers are to be found in use, is quite surprising, to say the least of it. Some of these patents represent quite complicated mechanisms, while others are extremely simple in structure. It is a notable fact, too, that the largest number of inventors in this class of devices, from all foreign countries, are Danes or Swedes.

The older patents illustrate merely four thimble-shaped tubes, connected one to each teat, and a small rubber hose running from the lower end of the tubes to a larger pipe or hose. The small tubes are connected to the larger pipe by airtight connections, and

a vacuum-pump or bellows is attached to the end of the pipe for drawing the milk from the udder, or for starting the flow.

There is another type of cow-milker which consists of the tubes merely connected at a common center to a large hose, and one of this class is shown in Fig. 1, and which is reproduced from the patent drawing. This device consists of a series of metal teat-tubes, closed at one end, provided with perforations in the sides (Fig. 4 A). There is also a groove around each tube, which serves to hold them in place by the contraction of the rim or mouth of the opening in the teat about the groove. Rubber tubes are connected to the teat-tubes, and extended to a common discharge nozzle. The device is supposed to be self-acting. The weight of the contrivance is sustained by a strap or cord passing over the back of the animal.

In 1887 an Indiana man conceived the idea of using an appliance similar to the ordinary atomizer for drawing the milk. His device is shown in Fig. 2. Four nipples, made of flexible material, and having spring bands at their upper ends for holding them in place upon the teats, are connected at their lower ends to a rubber bulb having a discharge-valve at its lower end (Fig. 4 B). When the bulb is compressed by the hand of the operator, a vacuum is created which draws the milk into the bulb, and upon letting go, the milk is discharged through the valve. The only advantage of this contrivance is that the four teats are simultaneously milked by the action of one hand. It is, however, quite simple in construction when compared to the many complicated machines found in the patent office, and it is strange that some such appliance has not found

more favor with dairymen generally throughout the country.

An apparatus of a more complex character is shown in Fig. 3, and is intended to be used in a large stable where the animals are

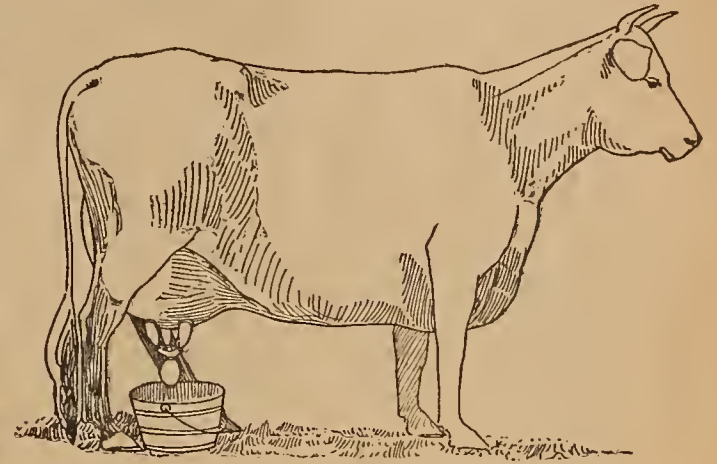


FIG. 2.

arranged in rows of stalls. A shaft, supported in hangers above the head of the cow, carries a sprocket-wheel, which is connected by a drive-chain to a small sprocket mounted in the milking-frame under the animal. A pair of rubber-faced jaws is used for each teat, and an action similar to that of the human hand is given these jaws by the revolving shaft, sprocket-wheels and chain. The milking-frame is supported by a chain having a spring section to give a yielding action. All the parts of the apparatus are adjustable to operate with cows of any size. The revolving shaft passes along over the stalls, and is intended to operate the entire series of milkers in the several stalls.

There are many devices of quite widely different construction in this class of machines in the patent office, and all sorts of mechanical movements have been resorted to by the inventors to give the milking-jaws the same movements as the human hand.

EMMET PAGE BUNYEA.

ONE METHOD OF CO-OPERATION.

Farmers should co-operate more in their work. Co-operation can be made advantageous in selling as well as in buying. This frequently applies to the disposal of small fruits, especially where growers are situated some distance from market. Formerly the strawberry-growers living twelve to fifteen miles from our cities marketed their berries individually, by team. The smaller grower, with a dozen crates of berries, along with the larger producer with his twenty or thirty crates, took an early ride and delivered their berries at the retailers or commission-houses by team. Of course, the berries were picked the day before, and although handled ever so carefully, the long ride over roads none too smooth, it was unavoidable that the berries were somewhat mused on arrival.

One or two individuals tried sending their berries to market by the morning train, but soon abandoned the plan, from the fact that rough handling by the railroad men necessitated a reduction of one to two cents a quart for the fruit thus shipped below that transported by the old way, so this was abandoned.

Soon afterward the strawberry-growers clubbed together, hauled the fruit to the station, hired a car daily through the season, and one or more of their number loaded the fruit into the car, while at the

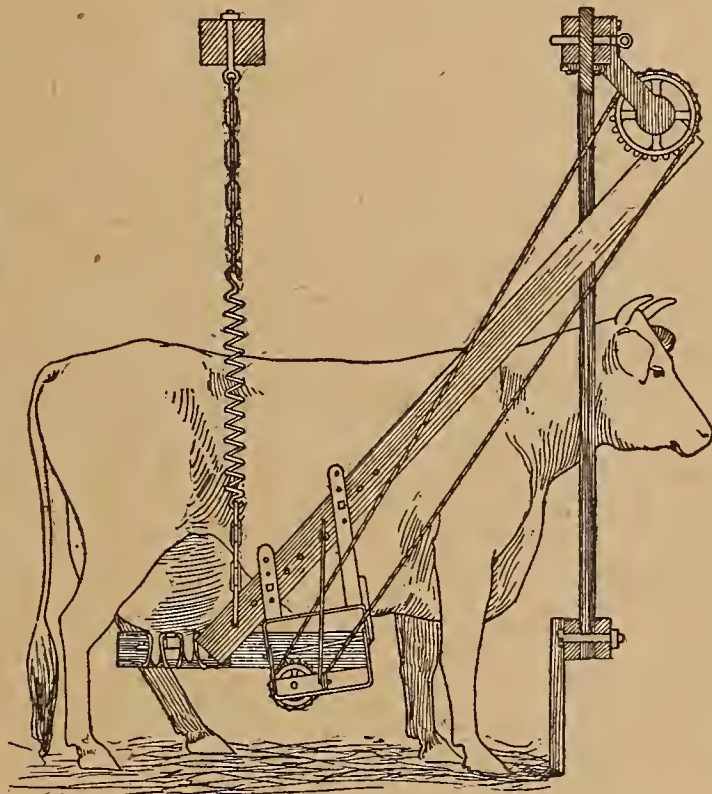


FIG. 3.

sometimes bad is that too much is eaten by the animal because palatable. Being a rich food and craved by a hungry animal, it should be fed in moderation. Those who have never cut their clover when in first full bloom, and then cured it without much sun upon it, sweating the moisture out and saving all the leaves and heads with much of the original color, may fail to understand how clover hay can be regarded a substitute for both grain and timothy when horses have an abundance of time, as is usual in winter, for eating and digesting it. Nothing but experience with a lot of prime hay will convince some that this is true.

TEST THIS MATTER.

—I am writing for the benefit of those who cut late, and then over-cure in the swath. I know the difficulties connected with the proper curing of clover—all about the rush of work, the time required to cure clover cut before heads are brown, and the chance of losing the hay by bad weather. Probably all the clover cannot be made just at the right time, but this much can be done: Determine to experiment with two or three acres. Get one hundred hay-caps. Just as soon as most of the clover shows full bloom, if weather is fair, cut the strip. Watch it, and rake after three hours, more or less, of sunshine. It will then appear

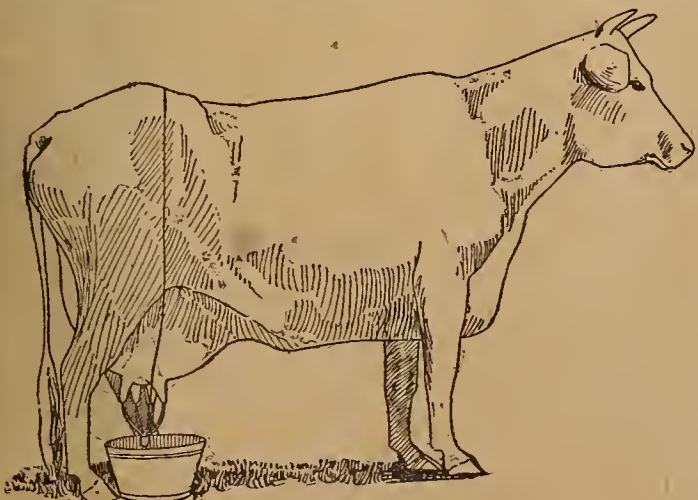


FIG. 1.

sweat. Being green, it warms up in a few hours, and when it has passed through this, one has ideal hay, with leaves and heads about the same color they were before cutting.

The serious objection to this plan of handling clover is the length of time it is exposed to the chances of bad weather.

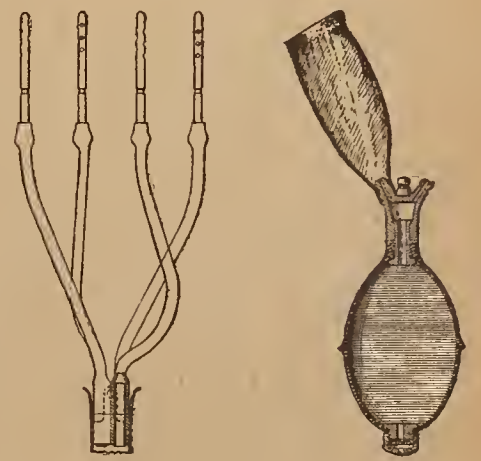


FIG. 4.

other end of the route a competent man unloads the fruit and delivers it to the commission-houses or the trade. By this arrangement much valuable time is saved, the berries are in better condition when sold, and more money is realized by each individual grower than when each marketed their berries by team, individually.

Maine.

L. F. ABBOTT.

Our Farm.

NOTES FROM GARDEN AND FIELD.

CULTIVATING ONIONS.—In accordance with an old, time-honored custom, most of the onion-growers, in weeding, scraped the soil away from the plants, as shown in Fig. 1, leaving the bulbs almost fully exposed on the surface of the ground. Some time ago, a Michigan gardener, who raises onions on a very large scale, told me that he practices a different method altogether, and this with generally satisfactory results. After the onion-plants get some size, he throws some soil against them from both sides (with a Planet Jr. or similar wheel-hoe straddling the row). He does this while the weeds in the rows are yet small



FIG. 1.

enough so that they can be choked out by the soil covering. A row of onions thus hilled is shown in Fig. 2. My Michigan friend claims that much labor in weeding is saved by this plan, and the onions do just as well as if left exposed above the ground. If we can hill with a wheel-hoe, and thus kill the weeds, it is surely a quicker way than to go over the rows, scraping the soil away from the plants with a hand-weeder. I don't believe that it will make much difference in the growth of the onion whether we scrape the soil away or pile it up against the plants. I will try both methods.

EFFECTS OF WATERING.—Sometimes I have been puzzled why some of my onion-plants (and some of my lettuce and other crops under glass) did not do as well as they might, when they had the advantage of the best and richest soil, and this exceedingly mellow, too. It now seems to me that the trouble was chiefly one of lack of water. Some of these plants need more water than is frequently given them, and in many cases the soil underneath the surface is allowed to become dust dry. We apply water from overhead, and the surface may appear quite wet; but we seldom have an inkling of how very dry the soil about the roots remains all this time. If you want to see the effects of moisture, just take a plot of plants, especially onion-plants, and set it so one side is slightly higher than the other. Then apply the usual quantity of water in the usual overhead method. After awhile the plants on the lower side begin to grow faster than those on the higher side, and look healthy and thrifty, while those on the higher side look yellowish, sickly and wilted, with tips dying down. Now reverse the order of things, by making the lower side the higher one. Then the water as applied will be running down the slanting surface to the starved plants, and these will at once



FIG. 2.

revive and try to catch up with the larger ones on the other side, while the latter soon begin to droop and stop growing. The new "fad" of subirrigation has the great advantage over the old plan of surface watering that the water which we apply does not show on the surface until the whole bed, from the bottom up, has received a thorough soaking. In other words, the new plan tempts us to use water more freely than we would by overhead watering. Most of our vegetable crops, especially lettuce, onions, celery, radishes, etc., require more water, to do their best, than is usually given them. T. G. R.

ORCHARD AND SMALL FRUITS.

CONDUCTED BY SAMUEL B. GREEN.

THE FUTURE OF OUR NATIVE PLUMS.

A few years ago, the older members will remember, not a single variety of plum was propagated in northeastern Iowa except the Miner. Now we have in the state such fine varieties of the Miner (Hortulana) type as Keith, Maquoketa, Forest Rose and Milton that find a quick sale in any market, and that will bear crops without intermingling with varieties of the Americana.

Of the latter type we also have a great number of choice varieties, such as Wyant, Wolf, Hawkeye, De Soto, Cheney, and other less known but equally valuable varieties.

As to their status in market, a careful inspection and study of South Water street, Chicago, will tell the story. Even in New York, Philadelphia and Boston, our best native plums find a quick sale in competition with the best European and Japan varieties. One of the oldest and most extensive commercial plum-growers of the East, Mr. J. W. Kerr, of Denton, Maryland, recently astonished many readers with this statement:

"Since 1882 I have devoted special attention to what are popularly termed native plums, starting with the Wild Goose, supplemented by Newman, Moreman, and one or two others. I have drifted along until my orchards comprise over one hundred and fifty native varieties. I have lately confined myself mostly to the native because those of European origin were unprofitable and unsatisfactory in nearly all respects, and I am in the fruit business for revenue, as well as for education and health."

Among the many natives he finds profitable he names Wild Goose, Milton, Whitaker, Col. Wilder, Charles Downing, Osage, Wolf, Rockford, Ocheeda and Hawkeye. As yet it appears he has not discovered the market value of such sorts as Keith, Maquoketa, Forest Rose, Wyant and others locally known in Iowa. Mr. Kerr adds: "I have not named a native that has not proven more profitable as a market plum one year with another than any European or Japan variety." When marketed in neatly put up baskets he reports that our native sorts sell repeatedly to the same customers at better prices than the best Japan or European sorts he has sent to Philadelphia, Baltimore, New York and Boston.

The reason for this early market recognition of our native sorts is not on account of size, but their freedom from the pasty, cloying flesh peculiar to most foreign varieties, and their sprightly, refreshing flavor.

The best varieties we now possess will mainly capture the markets of the West when we have growers in a commercial way who handle the fruit in a methodic manner. All this has been the outgrowth of mere selection and testing of our best native sorts from the thickets in a very brief period. It is a grand foundation. No country of the temperate zones has been blessed by Dame Nature with plums of such size and quality.

CULTIVATION AND SOIL SHADING.—A dust mulch, resulting from frequent stirring to a depth not exceeding four inches, lessens evaporation and favors the ascent of moisture from lower levels. During the past season we stirred the dust mulch about once a week, and continued it until the 20th of July, in all our nursery rows. The effect has been that moist earth was found at all times under the dust, and the growth has never been more perfect, and the foliage is bright and without show of injury from insects or fungi. The same effects have been observed in bearing orchards and small-fruit plantations where the culture has been as continued and perfect as is practised in the orchards of south California, where culture has been found cheaper than water at so much per inch.

In young orchards, even when bearing their first crops, the cost of culture can be lessened by sowing buckwheat about the middle of June. This shades the soil, lowers the temperature of the lower beds of air in the rows, and appears to favor the ascent of moisture from below about as well as the mellow surface or the dust mulch in very dry seasons.

METHODS OF PLANTING.—Experience in all dry interior regions is favoring the planting of orchard fruits and nut trees closely in rows running north and south

and giving wide spaces between the rows for north and south air circulation. In other words, we have matted rows with wide spaces for side development after the tops meet, as well as for air circulation. In the dry climate of east Europe the spaces between the north and south matted rows are often six rods in width, and these spaces are kept shaded during the growing season by crops of buckwheat, sugar-beets, flat-podded pea or Bokhara clover. The matted rows give forest conditions to the main stems and branches, and the wide, dense shade permits the nitrogen-feeding roots to come up near the surface where the supply is more abundant.

WILL IT PAY TO WATER?—In southwest Iowa the observation of the writer favors an affirmative answer. At the nick of time, when apples are about half grown, one heavy watering will make the difference between high-priced select fruit and rejected fruit in our best markets.

In watering, V-shaped troughs are used, adding a section at a time in running the length of the row. On the drift soils, like those of Iowa and Russia, too much water is required to flow across the orchard, and the side nearest the reservoirs gets too much water. In eastern Russia, the orchards on the bluffs of the Volga are nearly all watered in this way. Counting the interest on the amount invested in plant, cost of keeping up, and labor, a number of large orchardists assured the writer that they could water the trees heavily twice at less per tree than the price of half a bushel of apples, and that the gain some years was practically a whole crop, amounting to hundreds of dollars. But the Russians water their trees twice—once when the fruit is about half grown, and once in the fall after the fruit is picked, to insure the safe wintering of the trees. But with us, as a rule, the fall watering can be dispensed with, as usually we have quite abundant rains at that season. Our rainfall is so nearly sufficient that it only needs some aid in late midsummer.—Prof. J. L. Budd, in *Iowa Horticultural Report*.

INQUIRIES ANSWERED

BY SAMUEL B. GREEN.

Caterpillars on Orchard-trees.—J. M. E., Severy, Kan. Spraying the foliage with Loudou purple or Paris green and water is the proper remedy. I cannot tell you the habits of the pest without you send me a few specimens to identify it.

Transplanting Strawberry-plants.—E. H. E., Copoy's Bay, Ontario, Canada, writes: "Can I move two-year-old strawberry-plants this fall without destroying their fruitfulness?"

REPLY:—If transplanted with a large spadeful of earth it might be done, but you had better use thrifty runners of this year's growth.

Currant-worm.—L. G. H., Langdon, N. H. The worm you refer to is probably the currant span-worm. It is not generally as destructive as the larvæ of the saw-fly, but may do much injury. The reason why you have not been successful in treating it with Paris green and hellebore is probably because the worms were so scattered you did not reach them. They are both good remedies for the pest, and very effective if thoroughly applied.

Currant-borer.—A. L. W., Minn. The currant-borer has been so very injurious in your section that I am disposed to think it attacked and so weakened the stalks that they were killed in the winter. Last winter, while not very cold, was particularly severe on all vegetation in the Northwest on account of the light snowfall and dry subsoil. In localities where the currant-borer is numerous it is very important to cultivate currants and gooseberries in the bush form, with several stalks to each plant.

Borers—Whitewash and Insects.—I. H. C., Huttonsville, W. Va. After borers get into apple-trees, the simplest remedy is to dig them out or to kill them with a wire in their burrows. The trees should be looked over in the spring and fall and all borers removed.—Whitewash on the trunks of trees is not a certain preventive, but repels insects. If a small amount of soap and Paris green is added to the whitewash, it is made very much more effective. If a little plaster of Paris or cement is added to the whitewash, its adhesive qualities are greatly improved. A piece of soap in the main croches of trees is also a partial preventive of borers.

Injured Grape-vines.—J. B. Houghton, Iowa, writes: "The roots of our grape-vines seem to be injured, and many are rotten. The vines have grown six inches, but do not look strong. They are Concord."

REPLY:—The dry condition of the ground last winter, and the absence of a snow covering in the Mississippi states, is, I think, the cause of the trouble with your grapes, which are pretty generally injured to some extent in that section. It is not uncommon to have the surface roots of grapes killed in severe winters, and it seldom causes serious injury.

It is a good plan to plow vineyards and keep the surface roots cut off, but this work should be done in the spring, and should be commenced while the vines are small, and continue each year. Great harm would result from plowing off the roots of well-established vines that had large surface roots, and it should not be done. In your case, I think there is probably plenty of deep roots that will support the vine until feeding roots are formed. If your vines were of some of the more tender sorts, such as Duchess and Lady and Moore's Early, they would be more likely to be severely injured than the Concord.

Pinhole-borer.—C. H., Saginaw, Mich., writes: "I have a soft maple-tree, planted two years ago. Last year it grew very nicely, but this year the bark seems to have sprung away from the tree and is cracking all over. Under the bark is a kind of brown dust, and little holes here and there are drilled in the tree. Can you tell me what the matter is, and if there is a remedy for it? This is the third time I have planted a tree in this place in my garden. The last time I got a good-sized one, about five inches in diameter."

REPLY:—The tree is affected by what is known as the pinhole-borer. It is very destructive to any tree it may attack, but seldom affects other than weak trees. Your tree being large was weakened by transplanting, and hence attacked by this borer. There is no use bothering with a remedy for this pest in your case, and you had better dig it up and burn the tree. When you replace it, set out a small, healthy, vigorous tree, and give it lots of good soil, and you will have a big tree much quicker than if you start with one five inches in diameter.

Variation in Plants—Influence of Stock on Scion.—E. C. L., Parker, Wash., writes: "Is all variation in plants due to cross-fertilization?—What influence has stock over scion? For example, what would be the result if we raised seedlings from Elberta peach-pits, and then budded the Elberta on them? Would it increase the size of peach? It is a large, yellow peach, and the tree is a strong, vigorous grower."

REPLY:—No. There may be, and often is, variation among flowers, fruit-buds or branches on the same tree or plant where cross-fertilization has had no effect. For instance, I have a wild black cherry which has yellow leaves. The Bride rose (white) is a bud variation from the Mermet rose (pink). Many yellow foliage-plants, such as golden spirea, golden-leaved dogwood, Fair Oaks coleus, and others, are bud variations from plants with green or red leaves, and on such plants one will occasionally see a tendency to revert to the original type indicated by a branch with leaves like those of the parent plant. But the quality of many of our pomaceous and other fruits is influenced to some extent by the pollen supplied the flowers, though it is not commonly very pronounced. It is often stated that if cross-fertilization among our cultivated fruits was prevented they would then come true from seed; but this is a mistake. There are a few peaches, and possibly a few plums, that come true from seed, but they are very rare, and seedlings from our best cultivated fruits are often and generally very inferior. But I think that among plants there is plainly a prepotency of some varieties over others; yet we have not yet worked long enough in this line to reduce it to a science, as in the breeding of animals.—The stock influences the scion much more than is generally believed. For instance, I have a photograph of Duchess apples grown on a Transcendent crab stock, which are plainly influenced by the stock, and have taken on quite a crab-like form and stem. The most desirable qualities in a stock are congeniality with scion so as to secure a good union and adaptation to soil and location, so as to secure a good growth. I see no objection to using Elberta peach seedlings, provided the pits are from perfectly healthy stock and the seedlings do well in your vicinity. The reason that Tennessee seedling peach-pits have been and are so popular is that they have been vigorous and healthy and free from yellows and the curl.

Pure

Blood is the safeguard of health. Now is the time to see that your blood is pure, and to make it pure and give it richness nothing can equal Hood's Sarsaparilla, because Hood's Sarsaparilla is the One True Blood Purifier. It makes Rich Red

Blood

It will overcome that tired feeling, create an appetite, give sweet, refreshing sleep and make you strong. It will build you up and enable you to resist the dangers of sudden changes in temperature, and the enervating effects of warm weather.

Hood's Sarsaparilla

Is the One True Blood Purifier. All druggists. \$1.

Hood's Pills cure Liver Ills; easy to take, easy to operate. 25c.

Our Farm.

CURING THE COW-PEA VINE FOR HAY.

THE northerner who has recently settled in the pine-wood regions of southern Mississippi and Alabama, who is desirous of making hay enough to supply his stock during the comparatively brief winter season, must necessarily depend almost wholly on crab-grass, cow-peas and Mexican clover, or upon Bermuda-grass and alfalfa where the soil is sufficiently fertile to produce good crops from the latter.

The cow or field pea grown in the vicinity of the Gulf is entitled to the first place in the list of hay-producing plants. The farmer who grows the trailing varieties for hay for stock-feeding purposes, and then returns the manure accumulated during the winter season to the soil of his farm, will grow far better and more profitable crops than those who do not follow the same wise practice.

The cow-pea is the great southern substitute for clover, and when the hay is cut and taken from the field, there still remains in the roots and stubble a large amount of nitrogen taken from the air, about equally as valuable for fertilizing purposes as the top growth for hay.

The hay, if made of one of the running varieties, contains about two per cent of nitrogen, three per cent of phosphoric acid, and 1.5 per cent of potash. Of these substances, the value of the nitrogen, based on the market value, usually twelve to fifteen cents per pound, would be, on an ordinary yield of twenty tons of green matter to the acre, from \$15 to \$18. The hay made from cow-pea vines compares favorably with wheat-bran in its value as food for cows, and is an excellent substitute for it. Every southern farmer highly appreciates the cow-pea for forage, and along the coast line from the Chattahoochee to the Rio Grande it furnishes the bulk of hay used upon the plantations.

How to cure and stack the hay made from the vines, where the rainfall is as great as it is along the coast line, is a most important matter, and one which can well be repeated quite often, to the advantage of the readers of the FARM AND FIRESIDE who have recently settled in the locality indicated. In curing pea-vine hay, great care should be exercised to harvest as many leaves as possible, since the value of the hay largely depends upon it. As soon as the first pods turn yellow, begin to cut. Start the mower as soon as the dew is off in the morning. Stop cutting at noon. In a couple of hours start the horse-rake, and put the vines into small bunches or cocks. Run the mower again from three to four P. M., and rake up and put into small bunches or cocks, as before. These are allowed to stand until after dinner the following day, when each bunch should be turned over and exposed to the hot sun a short time, and then doubled by putting one upon the other. This is repeated the following day. If the weather continues fair, as soon as the heating or fermenting process is finished, the cocks should be again overturned, and dried for about an hour, and then be housed or stacked.

If housed, it is a good plan to put the hay on a pole scaffolding, and if there is any dry oat or wheat straw at hand, alternate layers would absorb any superfluous moisture in the vines. In staking, it is well to have a good rail bottom, making the center fully two feet higher than the outer edges of the stack bottom. In the center of the stack bottom a well-limbed young tree, fifteen or sixteen feet in height, from which the ends of the branches have been cut, will, when the hay is stacked around it, afford some ventilation, and by remaining much the highest in the middle, will cause any water that may fall to find its way to the outer edge of the stack.

A more thoroughly satisfactory way is to procure a few sixteen-foot poles that are eight to ten inches in thickness at the butts, and saw in and cut out a series of notches or shoulders eighteen inches apart, making the lower one three and one half feet in height from the bottom, and the upper one eighteen inches below the top of the pole. These poles are to be firmly set to a depth of two feet, and placed eight feet apart in a row. The lower cross-arms, which are to support the floor of the stack, are made of five-inch poles split in half, and firmly spiked at the center of each to the lowest notches in the upright poles. The lower arms will

extend outward a distance of five feet, and the cross-bars at the uppermost notches but fifteen inches beyond each pole. When the poles are raised and set, the arms will extend outward from the center of the rick, or long stack. The outer ends of the lower cross-bars must rest on supports. On these arms, and lengthwise of the stack, place small poles one foot apart. On this floor place the first tier of the pea-vine hay eighteen inches in depth; then another flooring of poles, and eighteen inches more of hay, and so on until the top of the pole is reached. Nail a strip of lath upon the tops of the poles. Thatch with coarse grass, straw or other good material to shed water. The proper curing of the vines of the cow-pea so as not to loosen the leaves is the object to be aimed at. Curing in the shade, in cocks or bunches, with free ventilation in the rick or when housed, so as to prevent moldiness and rot, are the conditions required in securing the best results.

J. W., JR.

THE SUGAR-BEET.

The people of the United States consume about sixty-five pounds of sugar per capita each year. A large proportion of this necessary article comes from European countries. This fact, together with the desire for investment and creating enterprise, has induced men of money to construct beet-sugar factories in this country. Two experimental farms and factories have been established in Nebraska, one in Utah and one in California. These are owned and operated by private corporations, and not supported by the general government, excepting so far as the bounty laws have been operative. The most extensive plant is that at Chino, California, and the next is located at Lehi, Utah. In both states the beets are grown by irrigation.

Sugar-beets are small and long tubers, resembling parsnips. The best specimens average about three quarters of a pound. A tap-root extends several inches into the soil, and small fibers shoot out in search of nourishment. The tops secrete a sugar substance, gathered from the heat and moisture of the atmosphere. Where the soil is suitable for growing, and the climate favorable for collecting hydrocarbon, the beets yield from twelve to fifteen per cent of sugar. The tonnage harvested from an acre depends largely on cultivation, but in Utah and California reaches fifteen or more tons. Prices obtained by the farmers are from \$3.50 to \$4.50 per ton.

The beet-seed comes from Germany. In the spring, as early as possible, the seeds are drilled in furrows about twenty to thirty inches apart. No irrigation is made until the plants are seven weeks old. Usually, three applications of water are made by the furrow-irrigation process. As soon as the plants get above ground, cultivation and thinning begin. This furnishes employment to hundreds of boys and girls. A crooked iron weeder is fastened to the hand like a corn-husker, and the person gets down upon the knees and pulls out extra plants and weeds.

Over one thousand men, women and children are employed in Utah in growing and harvesting beets and manufacturing sugar. The product for 1895 of the Lehi sugar-factory exceeded 5,000,000 pounds of granulated sugar. More than 40,000 tons of beets were consumed. The sum of \$215,750 was paid by the company for beets and labor.

The coal and coke used at the factory cost over \$27,000, and about \$25,000 was expended for other materials. All this cash was used in Utah—chiefly in one county. The products of four such factories would not supply enough sugar for the inhabitants of the state.

After the saccharine matter has been extracted, the sugar-beet pulp is a valuable stock food. The Utah sugar-factory has one of the largest stock-feeding yards in the West, where cattle are fattened for market on beet-pulp. An extensive silo system is carried on in connection with the factory. Railroad-cars are loaded with the pulp from the mills and hauled to the silo, which consists of a long series of vats on either side of the railroad-tracks. The farmers purchase many tons of pulp, and use it in feeding horses, hogs and cattle.

Any soil that will produce fair crops of corn is suitable for the sugar-beet. It is a drought-resisting plant, and will send its

roots deep into the earth for moisture and food. The land should be plowed deep and well pulverized. Sugar-beets are good for feeding purposes, and add much to the products of the dairy. There are six varieties, any of which are good and superior to ordinary root crops. This country should consume the product of three hundred such factories as those in Utah and California. There is an inviting field for the farmer and capitalist in every state where beets can be grown.

Utah. JOEL SHOEMAKER.

POTTED PLANTS.

Potted plants very often suffer from lack of moisture at the roots, when we think we have watered them right along very freely. When the ball of earth in the pot becomes dry, it shrinks, perhaps leaving a slight open space between pot and earth, and when water is applied, it will run off on the inner surface of the pot, and escape through the drainage-hole, while the soil in the pot remains dry. The best way to water potted plants is by absorption from the bottom up. Stand the pot in a pan, tank or other receptacle that contains a few inches of water, and leave it there until the soil in the pot has become soaked up to the top. This secures thoroughness, and will have the best results.

T. GR.

PRUNING OF FLOWERING SHRUBS.

On grounds of limited area, and in the gardens of the village and suburban lot, a judicious use of the pruning-shears annually is an indispensable necessity to harmony and the formal character of the surroundings. An important point is to prune at the proper time. Flowering shrubs should be dealt with differently from evergreens or the ornamental foliage class.

The majority of shrubs make their flower growth the previous year; consequently, to cut back in autumn, or before flowering takes place in the spring, destroys the whole season's flowers. As soon as the flowering season is over is the best time to prune all shrubs of this class. Thin the branches where crowded, and remove the old wood that has borne the flowers, to make room for the growth of new shoots for the succeeding year. This includes the forsythias, dentzias, weigelias, shrubby spireas, lilacs, viburnums, etc. Rhododendrons need more care, as the growth cannot be cut away without reducing the number of flowers for the next year; and on the other hand, if allowed to grow thickly in clumps, without cutting, the inner and under shoots soon succumb to the stronger growths. Moderate pruning will be found the most satisfactory course.

The hardy azalias are not so difficult to keep within bounds, and but little pruning is required, as they grow in fairly good shape if given sufficient room. The same applies to the kalnias and andromeda.

The arrangement of our plants and shrubs is important. In mixed shrubbery borders, each plant should have sufficient room, and those in the front line should be of a dwarf-growing character, or such as can be kept dwarfed without becoming unsightly.

L. F. ABBOTT.

Maine.

EXTRACTS FROM CORRESPONDENCE.

FROM KANSAS.—Having traveled many thousands of miles in the last thirty years in the pursuit of health and climate, I am happy to say that I have found it. We here have just the place for old soldiers who are broken down, as the nights during the summer months are cool and pleasant. A nice home can be rented, with fruit now in full bearing, with a garden of from one to two acres, for \$3 a month, or purchased for \$300 to \$500 in payments. We have abundance of cold, soft water. Our peach-trees are breaking down with fruit, also cherries, pears, apples and plums. Small fruit and garden lands of rich, black, river-bottom land, well improved, can be had for from \$600 to \$700 for six to eight acre tracts; rich bottom lands, \$20 to \$30 per acre, improved. Now, I should like to call the attention of old veterans to this section of Kansas. Why go to poor lands, where you must fertilize the crops before anything can be raised, while here in the Neosho river bottoms the land will produce everything that any state will produce, without any manure? We here have an eastern population of mostly American-born residents, good schools, churches of all denominations, no saloons, and but little cold winters, ice or snow. This

is a beautiful and healthful country. I had muscular rheumatism for a long time in Illinois, but since I came here it has left me. This is a soldier city of 2,700 souls, and being on the line between the Osage nation and Kansas, we get all the trade from there. Our berry crops are enormous; also the crops of wheat, oats, barley and grass. F. A. Chetopa, Kansas.

FROM OKLAHOMA.—Let me thank an unknown subscriber for the FARM AND FIRESIDE. I suppose he knew a strip pioneer needed its help and cheer on the new home. When I was an Ohioan, it came for years, but I was not a bread-winner then, nor learning to farm, either. It is thankfully received. Last winter, when the children held down the claim and the mother was teaching among the Osage Indians, what company it was to them! We have lately had two severe hail-storms and cyclones, which did much damage. I suppose none of the readers can sympathize with me in my pioneer life, twenty-seven miles from a railroad and shut out from much society, except some of the grandmothers who helped to settle up Ohio. Times are very hard. Butter is worth four cents a pound and eggs four cents a dozen. We raised only Kafir-corn on the new sod last year, and some garden truck. Beans, potatoes, etc., came up voluntarily here. We had new beans the first of May. I think in time this will be a fine country. It is well watered, healthful and has fine soil, but we have plenty of insects to fight. One thing I have noticed that may benefit many: Plant winter onions around young apple-trees, and no rabbits or insects will bother them. Floyd, Oklahoma. M. A. L.

FROM IOWA.—This is one of the great stock-raising and corn-growing sections of western Iowa. Land is worth from \$15 to \$50 an acre. The surface of the country is very rolling, except in the valleys. Corn is the principal crop, though in the season of 1895 small grain was exceptionally good, and more was sown this year than ever before. Dunlap is a town of about 1,400 population, forty-seven miles from Council Bluffs and Omaha, on the main line of the Chicago and Northwestern railway. W. R. W. Dunlap, Iowa.

SPLENDID OPPORTUNITIES

For home-seekers and others desirous of changing their locations are offered in the great states of Wisconsin, Iowa, Minnesota, South Dakota and Nebraska. Fertile and productive land is for sale on the most reasonable terms, and there are many openings for all classes of business men, particularly farmers and dairymen. Those interested will be furnished full information, free of charge, upon application to W. B. KNISKERN, 22 Fifth Avenue, Chicago, Ill.

Lincoln was tested in every way through the great struggle, and his rare virtues will endear him to the American people the more they study his life.—S. Wells Williams. To integrity of purpose, firmness of will, patience in investigation, unswerving fidelity to trust, and a deep impression of his accountability to the nation and to God, Lincoln added a thorough knowledge of the theory and principles of our government, and of men.—D. Dyer.

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Our Farm.

THE POULTRY YARD.

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NEVER WAIT FOR RESULTS.

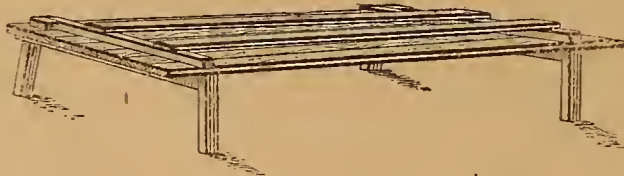
It takes some farmers a long time to find out that they expend a large sum on experiments that should not be made, while they refuse to experiment when it should be done. One of the favorite experiments practised on nearly all the farms is that of keeping hens and pullets for several months with the expectation that they will soon begin to lay, and such fowls are thus carried over for two or three months, only to be sold in disgust at a time when they bring but little in market. When a dozen hens compose a flock, and but few eggs are secured, it is easily known which hens are the layers, as the red combs will indicate the profitable ones. If the combs are shriveled, and have no color, it is safe to look for no eggs for quite a time. To keep such hens with the belief that they will soon help to increase the number of eggs is to incur unnecessary expense, leaving out the fact that the unprofitable hens will become so deeply indebted to their owner that they cannot in the future remunerate him for their support.

The best time to sell the hens is when they stop laying in the winter, as the stock left will then be more profitable, while less labor will be necessary and more room will be afforded the layers. A few hens that are laying will give a profit which the larger flock will not do if the layers must support the whole number. In winter the rule should be to keep no unprofitable hens, as room at that season is too valuable to be occupied by idle fowls.

ROOST AND DROPPINGS-BOARD.

The illustration is of an improved roost and droppings-board, designed by Mr. E. L. Mills, Michigan. The roost is raised, in order to permit of cleaning the board. It will be noticed that the roost is but a few inches from the board, which is correct for heavy fowls, but it can be elevated more, if desired by a person constructing one.

As the illustration explains itself, no detailed description is necessary. The design is intended to show how easily the droppings-board may be cleaned, which should be done every morning. The roost and boards are on legs, hence are not fastened to the poultry-house, thus enabling the attendant to take them outside and clean them whenever it is preferred to do so.



MATERIAL FOR NEST-BOXES.

Cut hay, straw, grass, etc., are unnecessary in summer. The best material for nest-boxes in summer is earth. Take a soap-box, cover the bottom with four inches of dry earth, sprinkle some fresh insect-powder over the earth, and the nest will be complete. The nest should be made new with fresh earth at least once a week, as it may happen that an egg will be broken in it, the earth then being an excellent absorbent. Keep the nest-box in a cool place where the laying hen will be comfortable when she is on the nest.

THE BEST ROOSTS.

The best roosts are made of a piece of 2x3-inch scantling, flat side up, the center being supported by an upright post, if the roost is very long. There is no necessity for having the roost more than six inches from the floor, as high roosts only serve to injure the birds when getting on or off. All roosts should be movable, so as to take them outside to be cleaned.

HOME SEEKERS' EXCURSIONS TO THE WEST AND NORTHWEST.

On June 9 and 23, 1896, the North-Western Line (Chicago & North-Western R'y) will sell Home Seekers' excursion tickets at very low rates to a large number of points in Northern Wisconsin, Michigan, Northwestern Iowa, Western Minnesota, Nebraska, North Dakota and South Dakota, including the famous Black Hills district. For full information apply to ticket agents of connecting lines or address D. W. Aldridge, T. P. A., 127 The Arcade, Cleveland, Ohio.

INCREASING THE PRODUCTION OF EGGS.

As the weather becomes warmer the wants of the fowls will decrease. During the long winter they cannot assist themselves, being blocked by snow and cold winds. Fowls, however, are always discontented under confinement, and will not lay as many eggs when kept up as when they have an opportunity to forage. Grass and insects should now be abundant, and if the temperature of the atmosphere is not too high the hens will have a strong desire to be in the fields. What the farmer or poultryman must guard against, however, during the warm weather is the use of too much corn or wheat. The necessity for the use of any kind of grain does not exist, except in cold weather, if the hens have a variety. A change of food, along with a favorable change in the weather, should induce the hens to begin laying at once, and as soon as their combs begin to get red it will be an advantage to cease the use of grain and give lean meat. A pound of lean meat once a day for a dozen hens should start them to laying, if they have not already been overfed and made very fat. Do not forget the green or bulky food, also. A head of cabbage will be appreciated, and a mess of cut clover, scalded, will not only promote laying, but is also a beneficial food from a dietary standpoint. Do not rely upon grain exclusively. Grain is not cheap unless it makes the hens lay.

TREATMENT OF LARGE BREEDS.

During the summer and late in the fall, when Brahmas and Cochins have been liberally fed, they will be more or less subject to scours, and unless they are dieted well, will prove unprofitable during the winter. The best plan to pursue is to reduce them by partial starvation, which will require about three weeks. It is a method that many will not pursue, yet in no other manner can the hens be brought into condition. Give them plenty of water, but feed only once in two days, allowing an ounce of lean, cooked meat at one feed, and about an ounce of bread at the next, making two meals in four days. As fat hens cannot starve until they first utilize the fat on their bodies, such a diet will do

them no harm, but will be a benefit. Leghorns and other small breeds are seldom found in that condition so noticeable with Brahmas, Cochins, Langshans and Plymouth Rocks.

SPRAYING TO DESTROY LICE.

Every reader knows the composition of kerosene emulsion, as it has been given repeatedly, and many of them have had experience in the work of spraying. Now, kerosene emulsion is sure death to lice, and is much cheaper than unadulterated kerosene. While it is understood that by spraying the poultry-house twice a week with the emulsion, thoroughly saturating the floor, walls, roosts, nests, yards, fences, etc., lice will be destroyed, yet it is not an easy matter to get the lice completely off the bodies of the hens. Dipping them in the emulsion is not satisfactory, for unless extra care is taken that the emulsion is perfect (no free kerosene) the hens will come in contact with the kerosene that floats on the top, if unmixed, which is very irritating to their bodies. To avoid this, have an assistant hold the fowl by the legs, head down, and spray the emulsion well into the feathers, completely saturating the bird, wiping off the head and face and turning it loose. Every louse will be destroyed. Do this once a week until you are satisfied that your object is accomplished. Always anoint heads with a little melted lard or vaseline each time.

When you actually deluge the poultry-house with solutions for destroying lice, and finish a hard day's work in so doing, you must not conclude that you have settled the lice problem. Those who combat lice make only a partial attempt. There is no such thing as getting rid of lice by one effort. Lice must be kept out; and as they multiply rapidly, the work necessary for cleaning the premises of their presence must be done as regularly as cleaning a stable, though not so frequently. The

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easiest way to get rid of lice is to first deluge the house with the kerosene emulsion. In two or three days deluge it again. Then once a week the house may be lightly sprayed with the emulsion. Always dust with air-slaked lime after the house has dried off. If this is done regularly, the work of keeping down lice will be a simple matter and require only ten minutes' time.

THE BEST CURE FOR DISEASES.

There is one simple remedy that seldom fails when a number of hens become droopy, refuse to lay, and show signs of bowel disease. In ninety-nine cases among one hundred the difficulties encountered are due to indigestion, which arises from overfeeding. By withholding all food for three or four days a cure will nearly always result without the aid of medicines. When hens are fat it is difficult to injure them by three or four days' fasting, as they are then well provided with the stored fat on their bodies. Before they can starve they must first become poor in flesh. The fasting, however, enables the hens to become clear of the cause of the ailment, rests the digestive organs, and enables them to better digest any food that may then be allowed. When three or four days expire in fasting them, then give only one meal per day for a week, allowing lean meat, one pound to twenty hens, and the change of diet will also prove of advantage. Hundreds of remedies have been suggested for ailments of poultry, which require time and labor; but the best and most harmless remedy is to follow the method suggested above, and the result will seldom be disappointing.

RAISE CABBAGES FOR POULTRY.

Set out a few hundred cabbage-plants for the use of the hens. It matters not whether the cabbages make hard heads or not, or whether they become large or small. The hens will enjoy them during the winter, when green food is not easily obtainable. There is but very little nutriment in cabbages, yet they serve a dietary purpose, providing a change of material, thus preventing injurious effect from a continual dry food. They can be grown at a small cost, and pay well for the purpose.

FEATHERS FROM DUCKS.

Ducks may be plucked as well as geese, and for that reason the Pekin or Aylesbury breeds, which are pure white in color, are most desirable. There is quite a value in feathers where large numbers of ducks are kept, and Mr. Rankin, who is known as raising thousands every year, states that feathers pay all expenses of picking, preparing and shipping the ducks to market. The feathers from live ducks of the large breeds command nearly as high a price as those from geese.

SHADE IN SMALL YARDS.

In those yards where poultry must be confined, and where hens are exposed to the direct rays of the sun during the warm days of summer, a cheap and convenient mode of providing shade is to secure five or six yards of unbleached muslin, fastening a strong string at each corner (or end) of the muslin. If the strings are then fastened to each side fence, so as to stretch

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the muslin across the yard, it will provide shade. The cost should not exceed twenty-five cents, and the time about ten minutes. If preferred, two strips of muslin may be sewed together to widen the cover. Of course, much will depend on the shape of the yard.

CLEANING EARTH FLOORS

There is but one sure method of cleaning earth floors, and that is to remove the top soil to the depth of four inches and add clean earth in its place. This is usually done every summer, fall and spring, and the floor kept well covered with litter, leaves being best for that purpose. During the summer air-slaked lime is applied once a week, thus destroying the germs of any disease that may probably have existed, and thereby lessening the liability of loss.

INQUIRIES ANSWERED

Soft-shell Eggs.—J. H., Brownsville, Texas, writes: "What is the cause of hens laying eggs with soft shells?"

REPLY:—It is the result of overfeeding and getting the hens in a very fat condition.

Sore Feet.—C. R. A., Harrisville, Mich., writes: "What is the remedy for sore feet? Is it contagious?"

REPLY:—It is not contagious, and may be caused by jumping from a high roost, or from contact with wood ashes, which are caustic.

Chickens Dying.—Mrs. W. E. M., Laurens, Iowa, writes: "My chickens are dying. First become in a stupor, lower portion of body seeming bloated."

REPLY:—It is probably due to some substance picked up, unless they have been attacked by lice, which sometimes cause such symptoms.

Chicks Not Hatching.—R. W., Estrella, Cal., writes: "Why is it that my chicks do not get out of the shells? I use an incubator. They die in the shells when fully developed."

REPLY:—Full details of the management are necessary in order to assign a cause. Such cases are frequently the result of too much moisture.

Wyandotte Chicks.—Mrs. L. C. A., Harrodsburg, Ky., writes: "I purchased eggs of a breeder (Wyandotte). Some of the chicks have white stripes, some brown stripes, some are light brown, etc. Are they pure-bred?"

REPLY:—Wyandotte chicks differ very much, seldom being uniform. They are probably pure, and the colors will be more satisfactory as they approach maturity.

Guinea-fowls.—A. S. W., Bersie, Minn., writes: "Will guinea-fowls keep hawks away, and will they fight with the other fowls?"

REPLY:—They do not keep hawks away, and are pugnacious, but usually do not remain with other fowls, preferring the fields. They have no value in market, but are profitable for family use, and are excellent as insect destroyers.

Goslings.—Mrs. M. L., Bluff Plain, Ohio, writes: "My goslings grew nicely until five weeks old, then became droopy and helpless for several days, finally dying. The food was corn-meal, moistened, with plenty of cold water to drink."

REPLY:—The corn-meal alone was insufficient food. They should have had more of a variety, such as lean meat, cooked potatoes, etc. Damp quarters at night will also cause them to droop and die.

If You Have Rheumatism
write to me, and I will send you free a package of a simple remedy which cured me and thousands of others, even cases of 23 years standing. Address, John A. Smith, Milwaukee, Wis.

Our Fireside.

IT'S MIGHTY COMFORTIN'.

Oh, it's mighty comfortin' when your hair is gittin' thin,

And the wrinkles in your face have come to stay,
Just to feel her little hand smoothin' out each silver strand,

While you meet her lovin' look and hear her say:

"John, my dear, it seems as though every day you live you grow

Handsome than in the olden days;"

And you smile back at your wife, while you think in all your life

You never heard a sweeter word of praise.

Then, somehow, the tear-drops rise to your dim old fadin' eyes,

While you kiss the tender hand still white and small,
And you try to tell her how you loved her then—you love her now,

But, bless me, if the words will come at all!

For just then it comes to you to think of trials she's gone thro'

And borne without a murmur for your sake,
You can only bow your head at the lovin' things she's said,
And your poor old heart can only ache and ache.

But she knows what ails you then, and she kisses you again,

While you hear her gently whisper, sweet and low,
"Life has bro't more hopes than fears; we have known more smiles than tears,

You're the dearest dear of dears, John Anderson, my Joe!"

So it's comfortin', I say, when your hair is gittin' gray,

And you're slippin' down life's hill a-mighty fast,
Just to feel her little hand strokin' back each silver strand,

While she whispers that she loves you—to the last.

—Mary Wright Davis, in *Pittsburg Dispatch*.

Among the Unbidden.



IMMEDIATELY after the Marlborough-Vanderbilt wedding, I, with the many unbidden, went into the church, and amid its loveliness was lost for awhile to earthly things.

Pausing after a time beneath the garlands of roses and lilies for a moment's rest, I found myself in close proximity to a woman who instantly riveted my attention.

Leaning carelessly and gracefully against one of the chrysanthemum-wreathed pillars, with her hands clasped loosely before her, and her head slightly inclined, she made a picture that time will never efface from my memory.

She was as exquisitely beautiful as Raphael's conception of the Madonna, and as sorrowful as that holy woman of old when her son was slain for a sin-cursed world.

As I looked, entranced, upon her, a slight sound made me conscious of another presence near me, and nearer still to her, and this sound, though it was as soft and sweet as the fragrant zephyrs that lift the dewdrops from the bosom of the earliest June roses, was also perfectly clear and distinct, and aroused her, too, from her reverie. 'Twas only one word he uttered, but, oh, how much of music drawn from minor keys, of love, of sweetness, of heart-longing, was expressed in that one sacred word, "Mary!"

She looked up, and, beholding him, seemed not in the slightest degree surprised; evidently, he had played the chief part in her day-dream—only a gladness came into her face, the like of which I never saw. It was the expression of such pure and undefiled happiness as in my imagination I have seen on the face of the doomed suddenly recalled from the outer darkness into one of his Father's mansions.

Stepping a pace toward him, with outstretched hands and all her pure soul reflected in her glorious eyes, she, too, murmured but one word, and the key-note was so precisely the same that her "Philip" seemed but an echo of the name he had breathed—an echo, too, in its softer strain of love and sadness.

A quiver of pain stirred me as I listened. How they had suffered, these two, and were destined still to suffer; for, as I watched them, breathless, I saw her awaken from her dream.

With a startled movement, she drew back from the man who had stepped forward to meet her, and all the old pain came back to her face—so bitter, so keen, so piercing, that involuntarily I covered my eyes to shut out the vision of her agony.

When I looked again, the first sharp edge of the awakening was subdued, and in its stead shone out that victorious look that is won, and won only, by those brave and heroic spirits that, forgetting self, battle only for the right, and I heard amid the murmuring voices around me, that took no note of the little tableau acted in their midst, the words she addressed to the man whose eager movements she had checked:

"Philip, forgive me, I had forgotten. Wooed by the fragrance of the chrysanthemums, my spirit had wandered back to the dear old home, and those happy days when you had come. What more natural than my forgetfulness, amid this atmosphere, of that dark hour

when our trouble came—that hour when the chrysanthemums were withered and faded and dead?"

I prayed in that moment when her voice ceased that he would go to her, and folding his arms close about her, would teach her still to forget. But even as I prayed, the man widened the space between them, and clenching his hands until the nails bruised the tender flesh, he cried, bitterly:

"God help me! I, too, had forgotten."

After a moment's silence he turned to her again. All the sweetness had gone now from his face, all the music from his voice. It was only hard and cold and cynical as he said:

"Quite a striking little farce this, Mary—you and I meeting, after all these years, around a marriage altar."

He laughed bitterly, but the woman heeded it not. Apparently, she heard only a part of his speech, for she said, calmly and sadly:

"After all these years, Philip, to meet just at this time. Oh, Philip," stretching out her hands to him entreatingly, while her eyes filled with tears and her voice quivered with pain, "he is dead! He died to-day."

Her words produced an instant and terrible effect upon him. I gazed in horror at the man thus suddenly changed into the similitude of a demon, and wondered even then why God makes us so near akin to the brutés.

He strode toward her, and pushing away her outstretched hands, hissed close to her face:

"Woman, how dare you—how dare you," he repeated, while every muscle in his face twitched with passion, "breathe his name to me?"

She flinched not one iota, but going still closer to him, she raised her eyes fearlessly and looked at him.

"And so, Philip, you doubt me still?" she said, sadly. "Fool that I was to think for one moment that you had repented of your harsh judgment, and was coming home to me; fool to imagine that, knowing me as you did, you would see your mistake when you had time to reflect; fool to look for your coming through all the hours of all the days of three long years."

"You were indeed silly not to understand that I could not come. Think for a moment why I left, and you will understand this. Picture to yourself again that memorable evening when I came home and found all the evidence of a man's presence in your room—an odd glove, a half-smoked cigar among the hie-a-brac, your inability to explain, your confusion. Great heavens, woman, the torture, the agony you have made me suffer! And there you stand, looking at me with your wide-open, innocent eyes, as if you had never done a wrong in your life.

"God knows how I wrestled with my suspicions and jealousy that night; how, looking upon you as you slept, one dimpled hand supporting your soft cheek, the other resting lovingly on our baby, our darling boy." His voice grew husky here, but almost instantly he controlled himself and continued, "I wondered if any one could look so innocent, so pure, and yet be so vile. Ah! Mary, your beauty, your angelic beauty, tempted me for one brief day to forget even the honor of my name."

He paused here to drink in that beauty, and on his face was depicted such longing, such passion, such love as surely man seldom feels. When his eyes were satisfied, he said:

"And, Mary, I think you would have won if this had been all. But do you remember that next evening when I returned, and finding you out, went naturally into your room to await your coming. Ah! how vividly I see it now. Your pretty basket, with its dainty work; the beautiful pictures that your dear hand painted; the soft cushions, and your Bible lying near, showing marks of constant reading. I remember how I sat down, and taking this sacred hook—sacred to me, I fear, because it was yours—resolved to trust and believe in you through all things for all time. As I touched the book softly, caressingly—it was yours, you know—from between the leaves a note slipped out and fell at my feet. Have you forgotten the wording of it?" he suddenly asked, with a bitter laugh. "It is branded as with fire upon my memory forever; still, I have ever kept it with me as a tangible proof of your guilt and justification of my action, and, too, to revive your memory if it should ever prove remiss."

Here he took from an inner vest-pocket a small, crumpled piece of paper, and opening it carefully, bowed profoundly to the woman, and said with bitterest sarcasm:

"Madam, allow me."

I glanced anxiously, nervously at her, but she still leaned carelessly and gracefully against the pillars, the background of white and pink chrysanthemums lighting up her beauty into something that was not of this earth, and looked at him with calm, unflinching eyes as he read aloud to her the note:

"September 20, 1891.

"Meet me to-night, my dearest, in the summer-house, between the hours of eight and ten o'clock. It may be the last time I shall ever look upon your dear face. Don't fail me. God only knows into what darkness and misery my future shall be cast, but the memory of your love and faithfulness will lighten it all, he it ever so dark. After this I shall leave you alone with your poor, unhappy, deluded Philip.

"There, madam, there it is! And you granted his prayer; you proved your faithfulness to him by going to meet him. Yet you wisely timed your return to 'your deluded Philip,' for barely had I grasped the meaning

of the note, and started to join you, when I heard the soft rustle of your skirts, and we were alone together. The wonder to me is, and always has been, that I didn't kill you; that my fierce indignation, my dishonored manhood, my wild passions, could be stayed by that sweet, childlike voice that pleaded so earnestly, 'Trust me, Philip, only trust me!' The wonder to me now is that I don't kill you where you stand."

He moved hastily toward her, but he stopped suddenly—checked once again by the look in her eyes, and she said softly:

"God forgive you, Philip, and God help you to bear the remorse that will torture you through all the coming years." Then remembering, she broke down again, and holding out her hands to him she cried piteously, "Oh, Philip, he died to-day!"

Her last hour had come—I saw it in his face. The man had borne all he could bear; he could be tortured by her no more. She saw it, too, and recoiling, threw up her hands, and cried:

"Wait, Philip, one moment longer. I forgot you did not know. Be patient, and I will tell you all. It is well you did not come sooner. I trusted you would—that you would believe in me without an explanation. But I see you could not; so it is well you stayed away until to-day—to-day, when he is dead, and I, with all my fear for him removed, can explain.

"Oh, Philip, how my heart bleeds for you! The sorrow would have been spared you if your mother had lived. Her influence would have softened your nature, and left your otherwise perfect character free from a debasing suspicion that spoils even your high sense of honor, and makes you a reproach to your friends. Being so constituted yourself that few things tempt you to swerve from the path of duty, you have no patience with the weaknesses of others, and often suspect and believe that there is wrong when there is none. But the gravest and saddest error you ever made, Philip, was when you thought your father guilty of that foul murder four years ago. Circumstances were bitterly against him, I grant, but he was innocent. How could you, knowing him as well as you did—you, his only son, his only child, his pride, his idol—doubt him? He was ever tender, ever a gentle man, and this broke his heart. Not only this, but it shattered his hopes, too. If you, his boy, believed him guilty, what could he expect from his friends?"

"After four long years of wandering and exile, the message he sends you to-day by me is that he is innocent. But, Philip, you can never, never ask for his forgiveness, for he died to-day. Died here in one of the city hospitals—died in my arms; died blessing me as his dear daughter, his loving, faithful child, whose trust in him saved him from despair and his belief in a God from shipwreck.

"You have read his note to me, Philip, written in that dark hour when he so needed the strong arm of a son to lean upon, and found it not. You have alluded to that time when he came, 'like a thief in the night,' into my room. Ah! if you could have seen him then; see his agony when he took our boy, his son's son, into his arms for the last time, and blessing him, prayed that you, his dear boy, would never suffer the anguish through him as he, your father, was then suffering through you. He heard you coming, Philip, even as he prayed for you, and fearing to meet you, dreading to see the thought he would read in your eyes—think of this when you are tempted to be hard and cruel in your judgment—he went out, through a side door, into the night alone, and, as I thought, forever; but the homesickness, the loneliness, the longing for sympathy, made him linger near us yet another day and write that fatal note. He dared not again come into the precincts of his noble, upright and honest son's home."

A note of sarcasm here made a slight discord in the sweet southern brogue, but the man heeded it not. He still listened in silence with an interest so strained, so intense, that it was painful to behold.

"You have read to me, Philip, those last loving words he wrote." The voice is only sweet now, and sad—so sad. "Now I will read to you the next message I received from him."

She took from her purse a folded, yellow paper, and as she opened it he involuntarily dropped his face into his hands. Thus it is that the sight of one of those ofttime hearers of evil, a telegram, affects us.

"NEW YORK, October 30, 1895.

"TO PHILIP BROWNLEE, JR., AND WIFE:—Philip Brownlee is dying. Come at once.

"MATRON—HOSPITAL.

"Leaving our boy, I took the next train for New York, and, thank God, made the last week of his life on earth the happiest he had known for four weary years. He never knew that you had left me, Philip, his 'little daughter,' as he lovingly called me. I told him that you were away, and too far, I feared, to reach him in time. It was wonderful how he lived to see you, hoping each morning that you would be with him at night, and watching through the long hours of the night for your coming with the day. But even his marvelous endurance gave out at last, and this morning at six he died, blessing you, his dear, motherless boy, and begging me again and again to tell you of his innocence."

The man's head was still howed in his hands, and his whole frame shook as his great agony mastered him.

She went to him, and putting her arm

through his, leaned her golden-crowned head against his shoulder.

"Oh, Philip, my poor boy, how sorry I am for you! In all the world you have now only your boy and me to comfort you. But we will love you, and be faithful to you until death."

Not one word as to her suffering; not one reproach. God in heaven, how far above man in her purity and goodness hast thou placed woman! Realizing this fully, no wonder that we shudder when she falls.

He understood; he appreciated her worth at last. Looking upon, but not daring in his unworthiness so much as to touch her, he thus addressed her:

"Mary, you cannot mean it. You cannot love me still, after all. It is too late—too late to ask you for forgiveness, too."

She raised her eyes—those beautiful eyes, purified now by suffering—and looked at him wonderingly. Too late for a woman to forgive while life lasts? Too great a strain for her love to hear when once she has loved?

I went softly out and left them together. When I reached the door I looked back upon them for the last time. They were kneeling side by side, and close together, with their heads bowed on the chancel railing. The mellow light from above came softly down, and like a benediction from heaven rested tenderly upon them, and the lilies-of-the-valley, covering with their God-given loveliness the chancel railing, listening for the second time that day to the sacred vows breathed above them.

The first fell from the lips of a youthful pair entering with timid feet a new and untried path, with all its turnings hidden by fresh, unplucked flowers; the second and last vow came from two who, once entering this path, had faltered and drawn back when the way grew dark, and the roses, scattering their leaves, discovered the thorns beneath, but who now, looking with wiser heads adown this path, and seeing the shadows that must sometime cross it, start out afresh, prayerfully, bravely, trustfully, helpfully, forhearingly, lovingly and gladly together.—*New Orleans Picayune*.

FRUIT.

The value of fruit is being appreciated more and more by the American people. It is a common custom, even in families of limited incomes, to use fruit in the morning. The London *Family Doctor* says:

"Fruits are the natural correctives for disordered digestion, but the way in which many persons eat them converts them into a curse rather than a blessing. Instead of being taken on an empty stomach, or in combination with simple grain preparations such as bread, they are frequently eaten with oily foods, or they are taken at the end of the meal, after the stomach is already full, and perhaps the whole mass of food washed down with tea, coffee or other liquid. Fruits, to do their best work, should be eaten either on an empty stomach or simply with bread—never with vegetables. In the morning, before the fast of the night has been broken, they are not only exceedingly refreshing, but they serve as a natural stimulus to the digestive organs. And to produce their fullest, finest effect, they should be ripe, sound and of good quality. In our climate fresh fruit should constitute, not the finishing, but the beginning of the meal, particularly the breakfast, for at least six months in the year. The good effects that would follow the abundant use of fruits are often more than counterbalanced by the pernicious habit of saturating them with sugar. Very few fruits, if thoroughly ripe and at their best, require any sugar, particularly if eaten in a raw state; but it unfortunately is a fact that what is intended and prepared for us as a great good in the matter of diet should be transformed into exactly the reverse."

A SIBERIAN BABY.

As described by a recent traveler, Russian babies, as seen in the homes of the Russian peasants in Siberia, are very unattractive specimens of humanity. "I looked curiously at one little bundle," says the traveler, "which was laid upon a shelf. Another hung from the wall on a peg, while a third was slung over one of the supporting rafters, and was being swung to and fro by the mother, who had a cord loop over her foot. 'Why,' cried I, in surprise, 'that's a child!' 'Of course it is,' replied the woman; 'what else should it be?' Having learned so much in so short a time, I had an irresistible desire to inspect the contents of the swinging bundle. I looked, but turned away in disgust, for the child was as dirty as a pig in a pen. I could not refrain from asking one question. It may have been impertinent. 'Washed!' shrieked the mother, apparently horrified. 'Washed! What? Wash a baby? Why, you'd kill it!'"

OIL PROSPECTORS ON THE JORDAN.

According to consular reports, it is the intention of the Turkish authorities at Jerusalem to establish a steamship line on the Dead sea. The existence of asphalt in that region has been ascertained, and it is supposed that petroleum will also be found. A rational development of the Jordan valley from Lake Tiberias down, and especially the opening up of the rich mineral resources of the Dead sea basin, is considered a very profitable undertaking, for which, however, foreign capital will hardly be found, as the legal status of property-holders in those regions is very unsafe.

FANNING'S HEART.



MISS IRWIN was very busy. She was handling a difficult assignment which by right should have been given to one of the men reporters, and so it happened that she remained after everyone else had gone to dinner, and for some time the walls of the city editor's room had listened to the

unusual sound at such an hour of a bad stub pen scratching over thin brown paper.

Finally the monotonous scratching was interrupted by the opening of a door, and Fanning, the police reporter, hastily entered. Miss Irwin paused in her story long enough to look up.

"Oh," she said, "it's you, Fanning. Been to dinner already?"

"No, ma'am, not yet. I'm looking for Scranton. Hasn't come back yet, has he?"

"Not yet. Anything I can do for you?"

"No, thanks. I just wanted to see him about a story—that little chap that was hurt. Read about it, didn't you? Scranton's interested. The little chap's dying. I've just come from the house. The doctors all say he'll die to-night, and I wanted to tell Scranton. I am so worried. Pshaw, I'm worried sick. I—"

He paused, ran his fingers through his hair, and looked embarrassed.

"Come, now, Fanning, tell me all about it," said the thoroughly interested Miss Irwin.

"There ain't much to tell. Ob, you mean what I'm worrying about? Well, to put the whole thing in a few lines, I'm afraid he might not die in time for me to get my story for the morning's paper. Just think of what I'd lose—such a beautiful story."

Miss Irwin looked shocked, and Fanning saw it. His blue eyes took on a resolute expression, but the muscles of his face did not move, nor did his red cheeks grow the least bit redder. He lit a cigarette, and said, doggedly:

"Yes, ma'am; so long as he's going to die—they say he won't live through to-night—he might have enough consideration for me to arrange it in time. Just my luck to get scooped." And he knocked off some cigarette ashes.

Miss Irwin gazed at the boy in astonishment. "Why, you cruel, cruel fellow!" she exclaimed, in a disappointed tone. "I didn't think you were that sort."

It was Fanning's turn to look disappointed. "You seem to think, because I talk as I do, that a police reporter hasn't any feelings at all," he said, in an injured way. "Maybe we've got more than you think. Now, there ain't anybody sorer than I am for that little boy. Why, his mother and sister think I'm the best friend they've got, because if I hadn't said my say, the bully who hurt the little chap wouldn't have been held at all. I fixed him all right enough, though; made things pretty lively at the police court, didn't I? Well, I guess.

"Say, if he'd hurry up and die in time, I could write the most elegant and touching story. You just ought to see him. Everybody takes so much interest in him, and folks send him books and toys and jelly and all sorts of good things to eat. When I saw him this evening, the hed was covered with playthings, but if you'll believe me, he didn't seem to care for 'em at all. The only thing he noticed was a bunch of roses somebody had sent him. He wouldn't part with 'em, and when I saw him lying back there with the flowers against his cheek, I thought how pretty it would be for me to have him die with them in his hand. Say, wouldn't that be picturesque? I won't bother you, though, any longer. If you see Scranton, tell him about it; he'll be interested."

The door closed, and Miss Irwin was again alone. She couldn't take up the train of thought she had been pursuing when interrupted, and she still had the shocked look she assumed at the beginning of Fanning's conversation.

"Such a hardened fellow," she muttered, "and yet at heart I really believe him to be what he says he is."

The next morning Miss Irwin scanned the papers, but saw nothing about the boy. The evening papers contained long accounts of his life and death. Miss Irwin felt rather sorry that Fanning, with all his cruel, kind heart, had been scooped. She was sure his account would have surpassed those she had read, and she sighed as she thought of the roses. They had not been mentioned at all.

Several days passed. She was anxious to meet the police reporter. Curiosity caused her to wonder what he would say. Finally the chance came. She happened to be waiting for a car when Fanning passed. She stopped him.

"By the way, Fanning, I saw you were cheated out of your story about the little boy."

"Yes, I was. Luck's dead against me."

"What time did he die?"

"Three A. M. exactly. Just too late for me to get in even a line. I was there when he died."

"Poor, dear little fellow! How did he die?"

"He died on space rates, ma'am."

Miss Irwin thought that she had become used to the reporter's peculiar style, but his

reply was too much for her. When she regained her composure, she said:

"I mean, did he know anybody? Was he conscious to the last?"

"Oh, yes. He just opened his eyes; then he shut 'em again, and he opened 'em again, and smiled real sweet at his mother and sister and me, and then, and then he—he just died nice, real nice."

"Say," he touched Miss Irwin on the arm, and laughed, "what do you suppose? His mother thinks so much of me she asked me to pick out the coffin; said she didn't know what would be appropriate. I selected a little beauty. Say, you ought to have seen him in it."

Miss Irwin was becoming vastly interested in Fanning. He was so different from any one she had ever met before. Then, too, he puzzled her. His conversation was certainly of a "don't-care" style, but somehow she couldn't believe him to be as heartless as he seemed. His story about the death of the little boy had affected her greatly; so much so, in fact, that she went to see the sorrow-stricken mother.

"Ob," said the mother, between her tears, "you are from the morning *Herald*, you say? It is so kind of you to come. My poor little boy thought the *Herald* was the best paper in town; he often sold it. If all the people on the *Herald* are so good and kind as you and Mr. Fanning—"

"Fanning!"

"Yes. Do you know him? I don't know what on earth I would have done in all my troubles if it hadn't been for him. He's got the kindest, most generous heart. 'The Lord loveth a cheerful giver,' but then, Mr. Fanning can afford to give, and—"

"Fanning afford to give!" ejaculated Miss Irwin. "Why—"

"It's a blessed thing to be rich, and to have so much power on a great big paper like the *Herald*," continued the elder woman. "Of course, if he had been poorer off than he really is, I wouldn't have let him do what he did."

"May I ask what he did?" inquired Miss Irwin.

"Yes, indeed, and I'm only too glad to tell you about it. I believe in mentioning good deeds. Mr. Fanning's paper took such an interest in my little boy that it printed long columns about him, and then Mr. Fanning had the man who injured my boy put in jail, and then he sent him flowers—beautiful roses, the ones he was buried with—and Mr. Fanning even bought the coffin with his own money. When I told him not to do that, he laughed, and said that was nothing—he could afford it."

"So," mused the lady reporter, as she walked away, "Fanning has spent all his hard-earned savings on the flowers and coffin. He's a dear, good boy."—*Omaha Herald*.

FAILED FROM LOVE.

"Auntie, if you don't want me this afternoon, I shall try to get in at the concert."

"Absurd! The crush will be bad enough. Besides, it will be quite dark when you come out, and you know I don't like your being alone."

"I can take care of myself, at my age (she was just seventeen), and go I must. He is to play 'La Fee d'Amour,' and it is important for me to hear it."

Joyce was at the door an hour before the concert began, and she managed to get a capital seat.

It was a long while before the people began to fill the stalls. Presently, however, they began to arrive.

In the second row sat an old lady with snow-white hair and a sweet, gentle expression. Joyce loved her, and sighed at the memory of the mother who had been just such another. She was with a young man, a handsome lad of about twenty, with long, musical hands and a slight stoop.

After that she saw nothing. She closed her eyes and held her breath, and was only conscious of the glorious music that filled her soul. It was over, and she rose to her feet and stung her little hands with violent claps when everyone had stopped. And the dark lad in the stalls below saw her and touched his mother's arm.

"Look at that child! How enthusiastic!" And for the rest of the concert his eyes never left her face.

She was crushed in the crowd coming out, and when she reached the door she found it was raining, and felt for her purse. It was gone.

Her quick exclamation attracted attention. "What is the matter?" a voice at her elbow said.

"I have lost my purse!" she cried; "and I have no umbrella, and there will be such a scene if I get wet. I wanted to take an omnibus, but I can't."

She looked up and saw she was speaking to the lad whom she had noticed in the stalls with the old lady.

"What a pity I did not see you before!" he said. "My mother has just driven away, and she would have given you a seat in her carriage with pleasure. But will you—will you let me drive you home in a hansom?"

She did not hesitate. "Thank you! And you will come in and explain to Aunt Charlotte?"

They talked of the concert as they drove away. At least, Joyce listened, for she found

the lad was a musician himself, and could explain what she had not understood in the wonderful playing.

It was not so easy to explain matters to the crabbed Aunt Charlotte, but when the lad told her he was the son of the late Lord Treberne, and that he knew his mother would call on them the next day if they would allow her to do so, she became more amiable, and asked him to stop to tea.

And Joyce brought her violin to show him, and he induced her to play. What a lovely little picture she made!

When his mother came the next day, she brought the request that Joyce would accept some lessons of her son.

"He is considered very good," she said, "and was well known abroad in the musical centers, but he doesn't play now." And from the tone in which it was said, Joyce knew that she was not meant to ask the reason.

She made wonderful progress under his direction. Her whole heart was given to her music. But he, while he taught her with infinite pains, grew absorbed in the daily study of her charms. And at last he spoke.

"I have loved you," he cried, "from the moment I saw you, a beautiful soul of music leading the enthusiasm of that great assembly, and I am mad for love of you."

"Love!" she whispered, softly. "Love! Oh, no; it is not for me! I am grateful, but I cannot think of love. I must work. I—I want to be famous." And she threw herself on a couch and sobbed, she did not know why.

"I will help you to be famous."

After that the lessons were carried on with stricter study, and the pauses were not filled with sympathetic words, as of old.

At last he told her she should make her debut. Through his influence she was to play at a grand concert at St. James hall, and for the moment the old eager desire for fame came back.

She saw the old lady in the very place where she had first seen her, and the dark lad was beside her. But the boyish look had gone from his face.

She played "La Fee d'Amour," and she knew when the pause at the end was broken by a passion of applause that she had done well. Was he satisfied? But he had left his seat, and he did not return to it again.

Had her inspiration gone? She played after that worse and worse each time, and her last piece was scarcely applauded.

Once off the platform, Lady Treberne was awaiting in her carriage to stop her.

"Child, come to my son. You must return with me now."

They found him in his room, his arms crossed on the table, and his face buried in them. Joyce softly touched him. He looked up and sprang to his feet.

"Have you come to mock me?" he cried. "Don't you know all that has been given you to-night would have been mine if my hand had not failed me? These fingers can never hold the bow again; they are paralyzed."

"I did not know," she sobbed. "Oh, how you must have suffered! I—I came to tell you I do not want fame. I have failed—failed because I love you."—*London News*.

APPRECIATION OF BRAINS.

In a prosperous farming community in one of these blessed United States lives a man who has a good-sized family of children, some of them quite young. The profits on farm produce have not been amazingly large for the past few years, and while he has managed to keep his head above the water, he has not been able to hire as much help as he would have liked. He has two daughters and a son, the younger of the three being about sixteen years old. They were bright youngsters, this trio, and a couple of years ago, when the district schools closed in the spring, the oldest girl sought an interview with her father, in the course of which she put some pretty plain business propositions before him. He had regretted that he was not able to hire necessary help, both in the house and out of doors, and the daughter proposed that the father pay to her, her brother and sister, about one quarter of the sum that a couple of good men would cost, and they would do the work in the house, the dairy and the garden, and the boy to take his share of the regular farm work and the care of the stock. Half of the money was to be paid in cash at the end of each month. For the other half the father's note was to be given; or instead of this, some farm animals that they might rear and sell on their own account, due allowance being made for keeping, etc.

They were all ambitious for more education, but found it impossible to obtain it at the adjacent school. They therefore devised a way for self-education that was worthy of a genius. Every month they sent to the city for books, papers and other literary matter, joined some summer schools and literary organizations that could be kept up with by letter, and among other things took a full Chautauqua course. There was always time for a couple of hours' study in the evening; the noon hour was utilized, and every odd moment was made the most of. At the end of two years there were not three better informed young persons in their section of the country. Not only in general literary work were they thoroughly posted, but having taken to scientific study in one direction, they spread out into others. They investigated everything

that was worth knowing in farming, gardening, fruit culture and the florist's art. The result was a great increase in the amount and value of the crops, and much better methods in the marketing and management of the farm and produce.

At the beginning of the third year, the eldest daughter and the son had the refusal of excellent positions away from home; but the father, realizing the advantage they had been to him and the business, paid each one as a salary the amount over and above the estimated ordinary value of the products of such a place. This agreement was accompanied with the contract that whatever in excess of this they could make they were welcome to. Although the last bargain has been running less than a year, the results of their research and industry are so apparent that both are likely to realize a handsome sum for their work.

Instead of scrimping and depriving these young people of their pleasures and privileges, as many people in moderate circumstances in their vicinity have done, this man has appreciated something of the value of brains, and realizing it, is willing to pay for it. Each of these three industrious young people has his own horse, and goes about, when his work is done, at his pleasure; they have an admirable library, between them take all the popular publications, and their society is sought for by all the neighbors who understand the value of the knowledge of an expert.

Many fathers would find their domestic and financial condition in much better shape if they would adopt this idea.—*N. Y. Ledger*.

DOWN TO CHINA.

Another suburban story is about a little girl, evidently a bright one, and one who even when small kept her ears open and her wits about her. She was at the time too young to have been reading geography, but she certainly had been listening while older people had been talking about the country on the opposite side of the globe. The mother of the little girl was out in the garden one day looking over her flower-beds, and her daughter was playing near by, digging into the soil with her little toy shovel. Presently she uttered an exclamation which attracted her mother's attention.

"What is the matter, Lina?" she asked; "what have you found?" And the mother, on going over to look, saw that the child had unearthed an old fragment of crockery ware.

"Oh, see, see, mama!" cried the little girl, as she more clearly exposed her discovery, "I have dug way down to China."—*Chicago Mail*.

GOOD-MORNING.

As soon as her little one can speak, the mother should teach it to bid "good-morning" to every member of the family as it meets them for the first time in the day. It is the habit of home courtesies of this kind, insisted upon until they are natural as breathing, that makes the well-bred women, always polite and courteous as a matter of course, with that true politeness that comes from the heart. "Company manners" are usually no manners at all; and the mother that brings her children up to regard the social amenities in the home will need have no fear of their behavior when they are away from home. So begin with the "good-morning," which should be the introduction to all good things to follow.

FOOD AND DRINK.

At the rate we are progressing in other arts, it is to be hoped that the culinary art—the most important of them all—will have made such progress during the coming century that the service of soggy, heavy desserts and dyspepsia-breeding sweets at the end of dinners will be a thing of unpleasant memory only. Americans, especially young Americans, have been handicapped with such fare long enough. They should finish dining with fruits and trifles. Our air is too rarefied, our nervous organism too delicately attuned for the pastry of English farm-haud ancestry. Our meats do not depend on the cruet for their flavor; our sweets, therefore, should not be made under the modernized formulas of the saffron age of cookery.—*Twentieth Century Cookery*.

HAVE YOU ASTHMA OR HAY-FEVER?

Medical science at last reports a positive cure for Asthma and Hay-fever in the wonderful Kola Plant, a new botanical discovery found on the Congo river, West Africa. Its cures are really marvelous. Rev. J. L. Coumbs, of Martinsburg, W. Va., writes that it cured him of Asthma of fifty years' standing, and Hon. L. G. Clute, of Greeley, Iowa, testifies that for three years he had to sleep propped up in a chair in Hay-fever season, being unable to lie down night or day. The Kola Plant cured him at once. To make the matter sure, these and hundreds of other cures are sworn to before a notary public. So great is their faith in its wonderful curative powers, the Kola Importing Co., of 1164 Broadway, New York, to make it known, is sending out large cases of the Kola compound free to sufferers from Asthma and Hay-fever. All they ask in return is that when cured yourself you will tell your neighbors about it. Send your name and address on a postal-card, and they will send you a large case by mail free. It costs you nothing, and you should surely try it.

LIFE IN THE PINY WOODS.

At Antioch, Miss., the different stages of the piny woods inhabitant are illustrated. The first stage is the charcoal-burning, if the trees are small; and if they are large, of getting them down and to the sawmill. Either brings ready money. When the trees are removed, the work of farming begins without removing the stumps, which, after the shiftless method prevailing here, are plowed around year after year. The soil must be fertilized, but when this is done it yields abundantly with very little effort, and the quality of the produce is excellent. What can be done in this kindly climate, with the warm, light soil, has not yet been tested by any of the piny woods people.

It is a saying in regard to them that they have nothing to ask of the world so long as there is a sweet potato in the bank and a razor-back hog running. That sweet potatoes are kept here in big piles, covered over with sand, and called sweet-potato banks, makes this saying plain. This perfect content with the bare necessities, together with utter ignorance of how things should be done to insure the best results, is the reason why the piny woods people have handed down poverty from father to son for many generations, while a competency that would easily develop into wealth could just as readily be theirs. With a herd of fifty cows, there is not a drop of milk or an ounce of butter used in the family that owes them. Dr. Charles L. Le Roux, who has been much among this people, declares that to teach the women to cook, and so eliminate grease and the frying-pan, would be a missionary work that would be the redemption and elevation of this peculiar and thriftless, although industrious, and, in their way, upright people. He claims that the inertia which makes them content with simple existence is the result of a diet composed largely of concentrated grease, such as no human pancreas can successfully dispose of.

The life of these people is that of the frontiersman and pioneer, continued over a period of many years, with no indication that it will ever be other than it is. The house of Elder Woodcock was in every way superior to any other we saw in a day's journey. The houses are, most of them, of logs of the rudest construction, through the crevices of which one can at any time catch bird's-eye views of the outside world. At one place we visited there was a family of seven living in perfect content in a single room. This must have been simply a matter of choice, as the logs for constructing more commodious quarters were at hand, and it was only a matter of a little labor. That there was anything exceptional in this way of living did not occur to these people, as when the country editor inquired if all the cooking was done in a single pot that stood on the fire, the woman replied:

"I don't see what folks want of any moor. I'm shoor that's all I keer fo' to wash. Some folks jest like to make work fo' 'emselves, but I don't. A woman as knows much can get up a diuner good enough fo' anybody to eat in that pot. My man went up once to Nu Orleans with charcoal, and when he come back he were all used up. He jest couldn't eat any of the stuff he got up there. Seem like he was holler down to his toes. You-all come out here and stop awhile and eat what's cooked in that pot, and you'll toughen up and get over lookin' so white and fine and peaked."—*Chicago Tribune.*

A LITTLE THOUGHT.

It is told of some mother, who was a rigid disciplinarian, that whenever her little girl particularly desired to wear one frock, she considered it a matter of duty that the child should wear another.

"It is entirely wrong to indulge children's notions," she said. "They should be trained not to think of their clothes, but simply to wear what is put on them."

"But don't you believe," some pitying on-looker suggested, "that the child really thinks more about the matter when the frock you make her wear is so distasteful?"

"She must learn not to dislike it," said the mother, carelessly. "I have told her to wear it. That is enough."

The friend remembered the little girl's screams and protests, and the flushed, passionate face with which she ran out of the room and slammed the door—which "wooden oath" apparently passed unnoticed by the severe parent. Remembering, she wondered if forcing the child into one special garment compensated for the price it cost.

"But what difference—" she timidly began.

"All the difference in the world," retorted the mother. "She hates red because she knows it is not becoming to her. Well, it isn't, but I shall not encourage vanity in so young a child."

"But you don't wear red yourself for the same reason," insisted the friend.

"No; but then I have sense enough to decide wisely and then forget the matter. Grace may do as she pleases by and by."

Argument seemed thrown away. The friend was silenced, but took an inward vow to make a few of the prettiest frocks she could design for her own little daughters, and to choose styles and colors with special reference to their becomingness. And when, afterward, some one remarked the extreme care she took in the matter, she repeated the little anecdote and her own lesson drawn from it.

"It seems to me," she concluded, gravely, "that the child's spirit and temper are of more consequence than the frock she wears. Red, blue or green is of no particular consequence. Nor is the style; it is as easy to make a thing becoming as the reverse. I like, too, to see the children look pretty rather than ugly. All that is my side of the matter. On their side, it hurts their spirit to have remarks made about them by other people. It hurts their feelings to think I could so injure them, unless I was obliged to do so. And if they do have little notions about some matter of dress, it is better not to notice too much the notion, but to quietly see that there is no cause why it should torment them. I think, too, it is really easier to be good in a pretty dress than in an ugly one. I know it is easier to forget the dress and think only of the goodness, because it is easier to forget a satisfactory thing than one whose hatefulness continually torments us. I think," she concluded, with a laugh, "I'll make my children good in pretty dresses first. And when they've grown strong enough to bear it, I'll begin to insist that they shall be equally good in ugly ones. That's a natural development, and the other isn't."—*Harper's Bazar.*

WHERE THEY ORIGINATED.

Among the more important plants that were under cultivation at the dawn of history, or more than four thousand years ago, says an exchange, are:

Apples—Still found wild over extensive regions of the north temperate zone. First cultivated in southeasteru Europe or western Asia.

Barley—Among the most ancient of cultivated plants. The common or four-rowed barley, as also the six-row kind, probably originated from the two-rowed, which appears to have been the kind earliest cultivated. It is a native of western Asia.

Cabbage—Still found wild in many parts of Europe, where it has been cultivated from the earliest times.

Cucumber—The original wild species from which the cultivated vine came is supposed to be one found still at the foot of the Himalayas and in other parts of northern India.

Onion—First cultivated in southwestern Asia, where the originals of the cultivated species are still to be found. Held sacred and worshiped in Egypt in very early times.

Peach—De Caudolle has no hesitancy in assigning the origin of the fruit to China, though other eminent botanists believe it to have been cultivated in Persia and elsewhere at an equally early date.

Pear—First cultivated in the temperate portions of Europe and Asia, where it still flourishes in the wild state.

Rice—First cultivated in southern China or India. Not native in Egypt, though it has through the greater part of historic time been extensively cultivated there.

Tea—Chinese records are quoted to prove that tea was cultivated in that country at least 2,700 years before Christ, and it is generally conceded that its use originated in that region.

Turnips—The several species all appear to have originated in Europe, but to have early spread under cultivation into Siberia and other parts of Asia. They are still found in their original wild state in many parts of northern Europe.

Watermelons—Formerly supposed to have been natives of southeru Italy, but later investigations have traced their origin to Africa. They are certainly indigenous to the "dark continent," and are still found wild in the tropical regions on both sides of the equator.

Wheat—The extreme antiquity and wide area of the cultivation of wheat have rendered it difficult to ascertain just where it actually originated. It was well known in the earliest times of which any records are to be found all through the temperate regions of Asia, Europe and Africa, from China to the Canary islands. It has been discovered in the bricks of the pyramids of Dashur, Egypt, to which is given a date more than 3,350 B. C. The latest researches assign its origin to the region of the Euphrates, where it still exists wild—if anywhere.

HOW THEY NAME THE BABY.

The English and Americans invited to a christening ceremony dress in their best, the child is robed in shimmering white, and the function is as simple or elaborate as the wealth of the parents permits.

The Lapps, who received the doctrine of Christianity only a short time ago, are still pagans at heart, and still give pagan names to their children. The Lapp baby, in its half-moonlike case, is simply crossed with water and named.

Another Mexican method is for the nurse to take the child out into the yard where some rushes and a vessel of water stand. She plunges the baby three times into the water while three little boys of three years repeat three times the chosen name.

The Caribs, like Christians, have a godfather and godmother to assist at the ceremony of the christening, but the duty of these two, instead of being to provide a handsome present, is to bore holes in the child's ears, lower lip and in the nose, from which jewels and ornaments are hung.

Among the Indians of Florida it is the practice to name the male children, not after the

best friend and best-loved member of a family, but after the enemies his father or his friends have killed, the villages they have destroyed, or some successful event in which they have figured during war.

Among Christian churches, the Roman Catholic ceremony is the only one possessing special attributes. The child is supposed to be born deaf, and to be possessed of the evil spirit, and the first thing the priest has to do is to exercise the evil spirit and give the babe hearing. He performs the latter operation by wetting his thumb and touching the child's right ear, saying, as he does so, "Do thou open."

In Mexico the priest delivers exhortations over the infant on the miseries to which it is born. If the child is of high birth, a sword is put into its right hand, and on the left is fixed a shield. If the baby is a mechanic's son, the sword and shield give place to the instruments of his trade in life. Then the priest takes the child to the altar, draws a drop of blood from his body and immerses it in water.

An African ceremony of some interest is that adopted by the negroes of Ardra, and described by Picart. The child is about ten days old, and the ceremony is performed to the accompaniment of singing and instrumental music. A sort of shield is placed in the center of the company, the babe is laid upon it, and the celebrant then delivers a lengthy address on the principles upheld by the negroes, and the duties which the newly named babe will have to discharge in order to be hereafter a happy and honorable man. The naming of a daughter, Picart tells us, is performed with nearly the same ceremony, though not with so much solemnity as in the case of a son.

EXILED BY A THREAT.

"There are some men of such unrelenting purpose that when they once register a vow to do a certain thing no human agency can cause them to alter their resolution," said Mr. George Rice, of Arkansas.

"Here is a little story taken from life, every incident of which came under my own observation. The facts are truly stated, and can be easily verified: About ten years ago, in a little southern town, two friends of mine, a young man and a man of middle age, had a difficulty, and the former fell dead, pierced through the heart with a bullet from a revolver. The blame all rested with the deceased. He came of a highly respectable family, but had fallen into convivial habits, and when drinking was very ugly. Time and again he had made threats against the man who killed him. Friends of the latter told him of the threats, and begged him to avoid a meeting, which he did whenever possible. At last it came to a question of killing or getting killed, and he obeyed nature's first law.

"A jury would have cleared him beyond all doubt, if the case had ever come to trial, but it never did. Instead, he forfeited his bond of \$8,000, and the cash was paid over by my hands. The man who did the killing left for parts unknown, and has never returned. Why did he not stand trial? Simply because the father of the deceased solemnly declared, in the presence of all his townsmen, that if John — was acquitted of slaying his son, he would become the boy's avenger; he would kill his son's slayer. The old man was never known to break his word. His courage was of that desperate kind that feared nothing. Nobody doubted that he would do just what he said, so I advised John — to clear out, and as there had been enough killing, he went.

"Ten years have gone by, and the old father has never relented. He stands ready to-day to make good his oath. Argument and persuasion are useless, and a good man is forced into banishment as long as the other lives. He is getting very old now, and his health is feeble. His stay on earth is short, but until he goes, the sentence of exile stands."—*Washington Post.*

A \$17,000 WATCH.

"While in Geneva some months ago," said Col. J. R. Reynolds, "I visited the principal watchworks there, and as a matter of curiosity asked the manager what was the highest-price watch that was made in Geneva. He said that the most expensive watch turned out in Switzerland was worth \$700. This watch had a split second-hand, and struck the hours if needed. It also had in it a tiny musical-box, which played three distinct tunes. This watch, he said, was the finest that could be made, but that ornaments, diamonds, etc., could be worked into the cases, which would run the price up into as many thousands as the purchaser desired. He said there had been one watch made in his establishment the cases of which had been studded with diamonds, and which had cost \$17,000; but as far as the watch itself was concerned, it was a \$700 watch.

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Our Household.

THE LITTLE ROOM UNDER THE RAFTERS.

The little room under the rafters—
Oh, me! how the swift years have fled
Since my brother and I, in the days long
gone by,
Slept there in the low trundle-bed.
I remember its furniture homely,
Its rocker, tall-backed, and the stand
Painted blue as the sky, and the bureau so
high,
And the looking-glass small as your hand.
I remember the old-fashioned rose-bush,
That bloomed in its pot on the sill,
Of the window so low where the vines used to
grow,
The hop-vines, with leaves like a frill.
I remember the chest in the corner,
And the odorous herbs asway
In the breezes that blew the low window
through,
Bearing scents of the flowers and hay.
I remember how often ere sunrise
The robins my slumbers would break,
As they sung just outside the old roof brown
and wide,
In the elms which the winds loved to shake;
And how often at morn have I listened,
And while sunset was staining the west,
To the twitterings sweet of the swallow so
fleet,
As she built in the eaves her clay nest.
Oh, the years have been many and varied
Since I knew the sweet peace of that home—
Since I knew the rare bliss of a mother's fond
kiss!
And at times when alone there will come
A yearning, an infinite longing
For that dear childhood home far away—
For the old friends and best, and a night's
peaceful rest
In that room 'neath the rafters so gray.
—Edwin Booth Lowe, in *Good Housekeeping*.

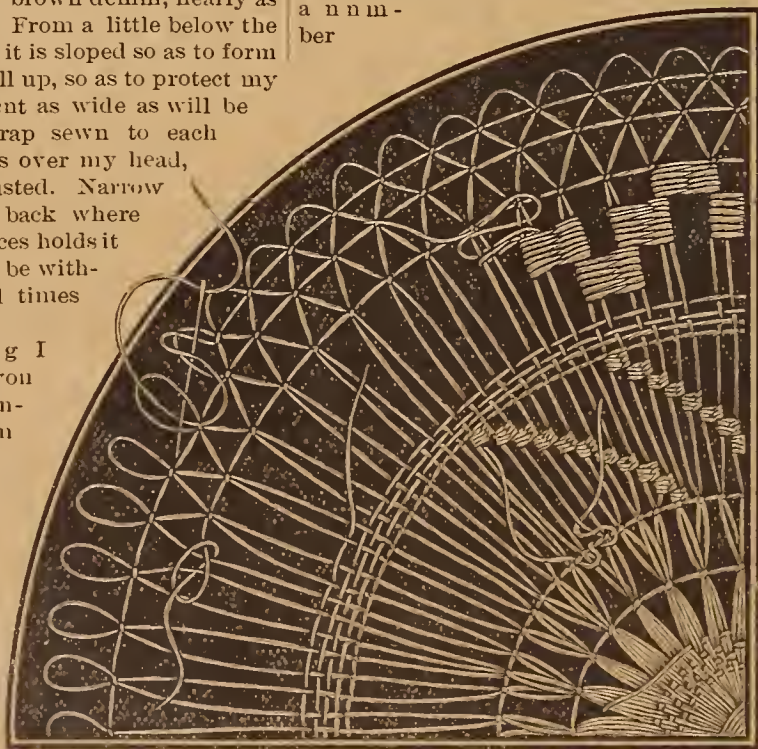
A HOUSEKEEPER'S NOTES.

Said a housekeeper the other day:
"When I cleaned house this spring,
I put oil-cloth on one kitchen table,
on the set of shelves over it, on my
cupboard shelves and on the shelves in the
pantry, and you have no idea how much
time and work it saves, and how much
easier to keep things clean, than when the
table was to be scoured and papers were
kept on the shelves. On the other kitchen
table, which stands near the stove, I put a
sheet of zinc, two inches larger than the
top of the table, turned it over the edge
and tacked it in place, and it is one of the
most convenient things I ever used. Hot
kettles or pans may be set on it without
fear of damaging it, and it is so easily kept
clean."

"I never thought of using zinc," said the
lady to whom she was talking, "but I have
a nail in the wall just beside my work-
table, and on it I keep a supply of papers.
When I want to set a hot vessel on it, I
slip a whole paper under it. If it is a pan
that might soil the table, I use only a sheet
of paper, then put it in the fire."

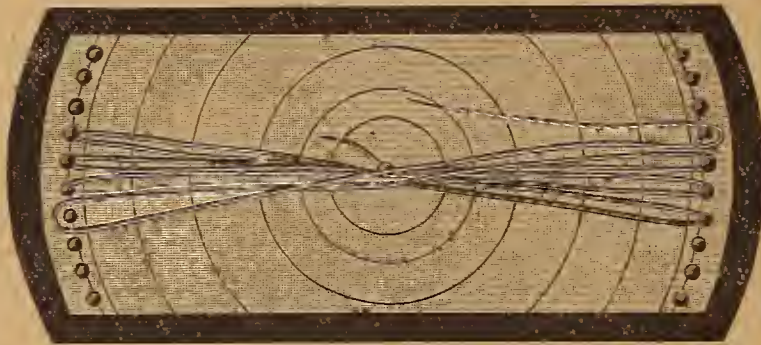
"Did you ever use denims for aprons
when washing or doing other heavy work?"
asked the first speaker. "I have one made
from one width of brown denim, nearly as
long as my dress. From a little below the
waist line upward it is sloped so as to form
a bib, reaching well up, so as to protect my
dress-waist, and cut as wide as will be
convenient. A strap sewn to each
upper corner slips over my head,
so it is easily adjusted. Narrow
ties sewn in the back where
the slope commences holds it
back. I wouldn't be with-
out it for several times
the cost."

"Another thing I
want to tell you
about," she con-
tinued, "is, when
you have to clean
new potatoes, put
them all into a
deep vessel with
plenty of water,
and add a
half dozen or
so of small or
medium-sized
stones, and with a
stick or large
spoon stir
them briskly
for a few minutes,
and the paring will
be all removed
without the neces-
sity of handling
them, and thus
staining one's
hands so badly.
Should a little
of the skin re-
main about the
eyes or uneven
places in the
potatoes, rub
them with a
damp cloth,
and save your
hands."



of months, and can be prepared for the
table in a few minutes; and no difference
how much we may have, the work of cook-
ing it in the oven is nothing compared with
the dread of having it grow stale on our
hands, or frying a little at a time in skillets,
with the smell of grease and smoke.

"Have you heard of Aunt Louisa's new
scheme?" asked the other lady. "You
know these hard times have hurt them
sadly, and she has had to manage in every
way to get along. She makes lovely yeast,
and knowing that so many housekeepers
prefer to buy rather than make, she rea-
soned that if they knew she had it to sell,
they would surely buy from her rather
than at the stores in town. So she had a
neat little sign made and put up at the
gate, and now every person who passes their
farm buys yeast from her instead of getting
it at the grocers'. She has just added sun-
bonnets to her line, for, as you know, most
women dislike to make them. She has
only had them advertised on her 'bulletin-
board' a few days, but has already sold
three. She is raising a nice lot of cucum-
bers and melons, and expects to be able to
sell every one of them at home in that
way. If her cabbage does well, she will
make it into kraut and sell it at home.
She is drying a great deal of corn to sell,
too, but she will probably sell that at the



grocery, although she may sell much of it
at home by advertising it on her sign at
the gate. CLARA SENSIBAUGH EVERTS.

A FEW NOTIONS.

Everyone knows how hard it is to
keep sausage fresh. It will, no difference
what we may do to prevent it, so soon
get to tasting strong, that we never think
of trying to keep it by packing it in jars
and pouring melted lard over the tops of
the jars, or packing it into new muslin
sacks and keeping it in a cool place, or
scarcely trust it when frozen solid, but be-
fore the "head of the house" has a chance
to say, "Isn't this sausage getting a little
bit off?" we just go to work and cook it,
and then we are sure we have it all secure.
Years ago we used to go through the tedious
process of frying it in skillets on the stove,
and it was a dreadful undertaking. But I
have grown older (also wiser), and now
take a large dripping-pan, and fill it with
sausage-cakes, sometimes to the depth of
two or three layers, and placing it in a mod-
erate oven, go about my work, knowing
that my sausage will be done through with-
out constant attention, and cooked in a
much more superior manner. When done,
I place the cakes in jars, and pour the fry-
ings over them. I cook them thoroughly
done, as I would be afraid to run any risks
with the stuff. It will
keep well for
a num-
ber

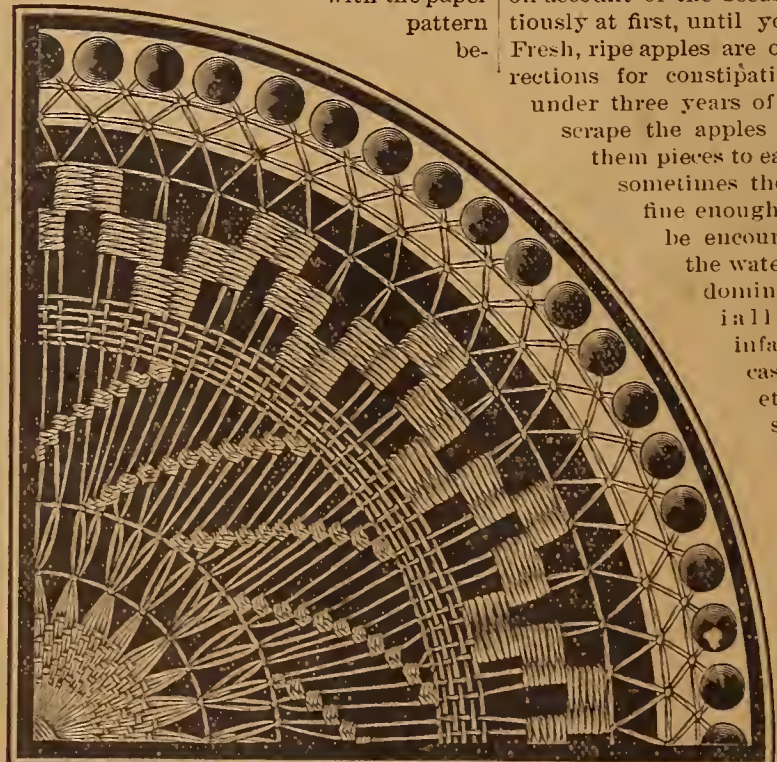
One thing which we have enjoyed the
past winter and spring are canned Siberian
crab-apples. We had such an abundance
of them, it seemed like a pity to let them
waste; and for all we did not care for them
in their season, we thought our tastes
might change before
spring, and so we filled
a number of cans with
the crab-apples, quar-
tered, liberally sweet-
ened, and stewed gently
in this syrup until ten-
der. And they were very
nice, as their sharp, live-
ly taste seemed to be
just what we wanted. I
shall put up a quantity
of them another year, for they help to fill
a long-felt want before "green-truck"
comes again.

Last year wild plums were very abundant,
and there is really nothing else that can
take the place of wild plums for jelly.
I cover them with water, and scald
them until the
plums crack
open and the
juice cooks out,
then drain the
juice into a
crock, allowing
it to settle, then
strain it through
a thin cloth, and
proceed as with
any other fruit-
juice, allowing
a pint of granu-
lated sugar to a
pint of juice, and boil in a large, shallow
tin pan—a new one. Pans are cheap, and
it does not pay to spoil jelly by cooking it
in an old pan or kettle. It cannot be sur-
passed for its brilliant color and good taste;
I usually add a good pinch of soda to the
water in which the plums are scalded, as it
takes away a slightly bitter taste that some
do not like in plums. They also make a
very nice preserve, if, after stewing for
jelly, the seeds are carefully removed, and a
fresh syrup made as for any other preserve;
they are cooked until clear, and the syrup
will be jelly. If they are not scalded
before adding to the syrup, the plums will
be hard and tough.

When putting turnips away for winter,
leave the tops on, and lay them on the
cellar floor, where they will keep moist.
They will be as plump and free from
wrinkles in the spring as when first taken
from the ground. It makes a little litter
on the cellar floor, but is easily removed,
and the turnips are very much nicer than
if the tops are cut off before carrying to the
cellar. THORNY POPPY.

HINDOUE-WORK.

This is worked something like pillow-
lace. A box with a cushioned top is
arranged first, into which pins can be stuck
with regularity, and over these the foun-
dation threads are used
with the paper
pattern be-



neath. Coarse linen thread is used as a
foundation, into which various patterns are
darned, as in the old Spanish-work. The
wheels can be used in various ways, and
for different kinds of fancy-work.
This work is entirely new, and these pat-
terns very choice. CHRISTIE IRVING.

HOME TOPICS.

PINEAPPLES.—I used to slice pineapples
for use on the table or for canning, but Ida,
a colored girl who lived with me a few
years ago, taught me a better way. In the
morning of the day pineapples were to be



served for dessert at dinner, she would
pare them, cutting out the eyes carefully,
but leaving on the tuft of leaves; then
holding the pineapple by this tuft, she
would shred the pulp into small pieces
with a silver fork, and leave all the core
and hard fiber fast to the tuft of leaves.
Over each layer of shredded pineapple she
sprinkled a little sugar, and when enough
was prepared, the dish was set in the
refrigerator until time to serve. This way
of preparing pineapple for canning or pre-
serving is far superior to any other.

CONSTIPATION IN CHILDREN.—When con-
stipation is persistent, it is almost certain
to be owing to the diet, and some change
should be made. Infants brought up on
cow's milk frequently suffer in this way.
Sometimes the difficulty may be removed
by giving diluted cream instead of milk,
or by adding a little lime-water to the
milk. If the trouble continues, I would
try malted milk or some of the other
preparations of infant food. For children



three years or older, Graham bread with
plenty of fresh fruit and vegetables should
constitute the bill of fare. Raspberries or
blackberries are sometimes objectionable
on account of the seeds. Give them cau-
tiously at first, until you see their effect.
Fresh, ripe apples are one of the best cor-
rections for constipation. For children
under three years of age, it is well to
scrape the apples instead of giving
them pieces to eat by themselves, as
sometimes they will not chew it
fine enough. Children should
be encouraged to drink all
the water they will, and ab-
dominal massage is espe-
cially beneficial with
infants. Do not use
castor-oil, rhubarb,
etc., without a phy-
sician's orders, as
they sometimes do
much harm. Un-
til you can regu-
late the diet to
correct the con-
stipation, use
enemas as
may be neces-
sary.

The little
daughter of
one of my ac-
quaintances
was cured of
persistent
constipation by being given a glassful of
cold water every morning a half hour before
her breakfast, which consisted of oatmeal
and milk, with Graham biscuit and fruit.
She ate meat but once a day—at dinner—
but fruit and Graham bread at every meal
and all kinds of vegetables in their season

She was an active child, and exercised much in the open air. She was eight years old at this time, and was not allowed to eat anything between meals, except a dry Graham biscuit about ten o'clock in the morning if she asked for it. I believe one great cause of this trouble in children is irregularity in their time of eating, and

fashion determines this year we shall wear the same linen collars and cuffs that our brothers do. It is convenient—in a way. We can borrow theirs when we run short. Fancy collars and cuffs are brought on in very pretty styles.

The trimmed sailor and walking hat are favorite styles, and one of last year can be made to do duty again, and is easily trimmed at home. Bunches of flowers of various colors, mixed, are very popular.

L. L. C.

LIGHT IN FARM-HOUSES.

In many country regions it is customary, either from motives of economy or from force of habit, for the family to spend the evenings in a room dimly lighted. A lamp of modest proportions, with a narrow burner, bearing a glass tube, or "chimney," is frequently the source of light for a whole family circle, gathered in a good-sized room.

There is a dim half-light in the brightest portion of the room, while great shadows veil the corners and throw a gloom about the assembled family. To people accustomed to cheery, well-lighted rooms the effect is depressing, almost sepulchral.

But it is a matter for something more than sentiment alone to consider. Those who understand the physiological action of light upon the human being know that it is essential to perfectly healthy conditions; and while an imperfectly lighted room may not bring results of actual sickness, its tendency is to lower the tone of the human system, and may display its effects only in lowered spirits or less wholesome temper. It cannot fail to work harm in some direction, however unrecognized that harm may be.

In this age, when a better understanding of things is possible, it is well to break away from mistaken ideas of the past.

To make a trial of the truth of this matter, bring in a modern lamp with broad, full burner, and if it bear a porcelain shade instead of the unlovely glass tube, so much the better. Set it in the midst of the family circle, and note the larger sense of cheer and gladness. It is impossible for human beings to resist such influences; their action is as natural and certain as that of water to the sense of thirst.

A certain home had always a happy, inviting aspect in the evening. To enter it was like going into a brighter world. To return from it to one's own home was to experience a feeling of forlornness and dissatisfaction with one's own abode. In the home referred to gleaming lamps with wide burners and bright shades shed a glow through the room that was like that of a house illumined for guests.

MRS. H. B. BOULDEN.

CROCHETED MAT.

First row—Make a chain of 6, join. Second row—Put 24 double crochets in this circle.

Third row—Make a chain of 5, skip 1 stitch, and put a double crochet in next stitch; make a chain of 2, skip 1 stitch, and put a double crochet in next stitch; continue until 12 spaces are made.

Fourth row—Make a chain of 15, and put 13 double crochets on this chain, allowing 2 stitches at top to make the turn. Repeat this until 12 fingers are made; then take a stitch behind one finger, make a chain of 15, and continue, as before until 12 more fingers are made, confining each of the last fingers behind the first row of fingers.

Fifth row—Tie thread to the point of one finger; join each finger to the other with a chain of 6, until the 24 fingers make a circle.

Sixth row—Put 5 double crochets in each chain of 6, with a chain of 1 between each cluster.

Seventh row—Chain of 7, and put in each chain of 1; continue around mat.

Eighth row—Chain of 7, and put in top of the preceding chain of 7.

Ninth row—Chain of 8, join in top of last row of 7 chains.

Tenth row—Make 8 double crochets, putting each in each stitch of the chain of 8 of the preceding row; make chain of 1, then 8 double crochets, and 20 on around the mat.

Eleventh row—Put 9 double crochets in the 8 double crochets; make chain of 9, skip 8 crochets, and put 9 single stitches in next cluster of 8 crochets; continue to repeat around mat.

Twelfth row—Make a double crochet, a chain of 1, then a double crochet until 9 are made in the preceding 9 crochets. Chain of 9, and 7 single stitches in the center of 9 single stitches of the row before; chain of 9, and repeat around mat.

Thirteenth row—Make double crochet, chain of 2, and so on until 9 double crochets are made; chain of 9, and 5 single crochets put in the cluster of 7 crochets, chain of 9, and repeat.

Fourteenth row—Make double crochet, chain of 3 until 9 double crochets are made, with a chain of 3 between each; a chain of 9, and then 3 single stitches in the center

preceding row; chain of 10; continue to repeat until around mat.

Sixteenth row—Make chain of 6, join in chain of 3; repeat until you get to chain of 10, then skip 3 stitches of this chain, join, make chain of 6, skip 3 stitches, join, and continue until you can join in the chain of 3 as at first.



Seventeenth row—Make chain of 9, join in third stitch of this chain, make chain of 3, and join in the chain of 6 of the preceding row, and repeat around mat.

PATTIE HANGER.

BUTTERMILK PANCAKES.

- 1 quart of flour,
 - 1 heaping tablespoonful of corn-starch,
 - 1 level teaspoonful of soda,
 - ¼ teaspoonful of salt,
 - 3½ pints of buttermilk.
- Sift the corn-starch and soda in with the



tempting them with dainties between meals. If a child is hungry enough to need something, he will not refuse a piece of bread or a biscuit without butter, sugar or jam to tickle his palate. A sufficiency of fresh air, pure water, exercise and a proper diet, with variety enough to keep the appetite good, will nearly always overcome the most obstinate constipation.

MAIDA McL.

SLIP BOOK-COVER IN FLORAL EMBROIDERY.

Flower-sprig shown in proper size in the illustration ornaments outside of a blue linen cover coming from "School of Art Needlework in South Kensington." Stalks and middle rib of each leaf made of lake-blue eight-ply filo silk, couched on with fine silk. Flowers and leaves worked of flat stitches of different lengths in white four-ply silk, and in straight and sloping directions, run under with white wool to give a raised effect. Flat-stitch edged round with stem-stitch of two-ply silk, needle being put through thread so that the contours may stand out more effectively.

Piece of linen seven and one half inches long and eleven and three fourths inches wide, mounted on pasteboard, required



for cover, which had better be given to a bookbinder to make up. Piece of elastic stretched tight, sewn along middle of back inside to hold book firm.

TOILET ACCESSORIES.

There are always so many little things to get before one is completely equipped, which runs into dollars of expense.

The different kinds of shirt-waists this year seem made for all purses, from forty-nine cents to five dollars; but they were wise who made their own waists at home, and bought the linen collars and cuffs at the store. Soft finishings at the neck and wrists are always more feminine, though



of the cluster of 5 stitches of the preceding row; chain of 9, repeat.

Fifteenth row—Make double crochet, chain of 3, then repeat until you have made 9 double crochets; chain of 10, 1 single crochet put in cluster of 3 of the

flour, and then put in the salt and buttermilk, and stir until a smooth batter.

Shannon City, Iowa. Mrs. A. C. K.

See page 13 for cut paper patterns.

Our Household.

THE AMATEUR AND THE SEEDLING.

It was the time when lilies blow,
And clouds are highest up in air.

—Tennyson.

THE time when the earth is full of beauty and bloom, of languorous scents and odors; when the latest seedling has sprouted, when the earliest is in bloom. The time when the

heliotrope is from the seed. Most people invariably fail with cuttings, and those far from the city and greenhouses have learned to their cost how seldom it outlives transportation. Even transplanting is severe upon it. I have found the best way is to sow a few seeds, ten or a dozen, in a pot where they are to remain. As but a small percentage of the seeds germinate, you will thus secure about one good plant to a pot; but even so, you will find it pays better than buying plants.

The verbena is a most difficult plant to winter over, but June seedlings frequently bloom freely in early fall, when first removed to the house, and before becoming infested with mites, or unsightly from other causes.

The lantana is a much more obliging plant after it is once sprouted, but so far I have found it almost impossible to get it to germinate. The next seeds I sow, I shall throw hot water on, and leave them stand some days before planting, as I find Mother Nature does not seem able to burst their hard shell unaided.

The seedling petunia is, I believe, the rankest grower and most free bloomer to be found on any floral list; and though a coarse, ungainly flower, is not to be despised, nor are they usually so ugly, leafless and inanimate-looking as the old plant or cutting. No plant will go so far toward making a window look nice from the outside, or in the distance, and one will lend so constant and varicolored bloom.

The vinca, or periwinkle, is a dainty plant, whose sweet, starlike blossoms, clean foliage and habit of constant bloom should win for it a wider cultivation than it now enjoys.

The Nicotiana affinis, although coarse of foliage, has responded so kindly to all amateur efforts, germinated so freely, and given such an abundance of large, very fragrant, white, starlike blossoms, both in



trowel and hoe have been laid aside for the summer, and you are preparing to enjoy the result of your spring labor.

But the flower lover must bear in mind that the price of blossoms is eternal labor.

Do you intend to have a winter window garden or conservatory? Then be up and a-doing. Get your cuttings potted and your seedlings planted, for the proper season is upon you.

When fall comes there will be many rare plants that you will desire greatly, but feel that it would be extravagant to purchase. These I would advise you to raise from the seed.

Such seeds as primula, calceolaria, cyclamen, cineraria and gloxinia are said to be difficult to germinate, but with a little extra care you will get a sufficient number of plants to cover the expenditure.

Heliotrope, fuchsia, verbena, geranium, lantana, petunia, vinca and Nicotiana affinis should all be sown in pots where they are to remain. Sow several seeds in a pot, and when well sprouted, thin out all but the central or strongest plant. The plants so removed may be given away, potted by themselves, or planted in a box fixed for the purpose, and later set in the cellar, to do service the next summer.

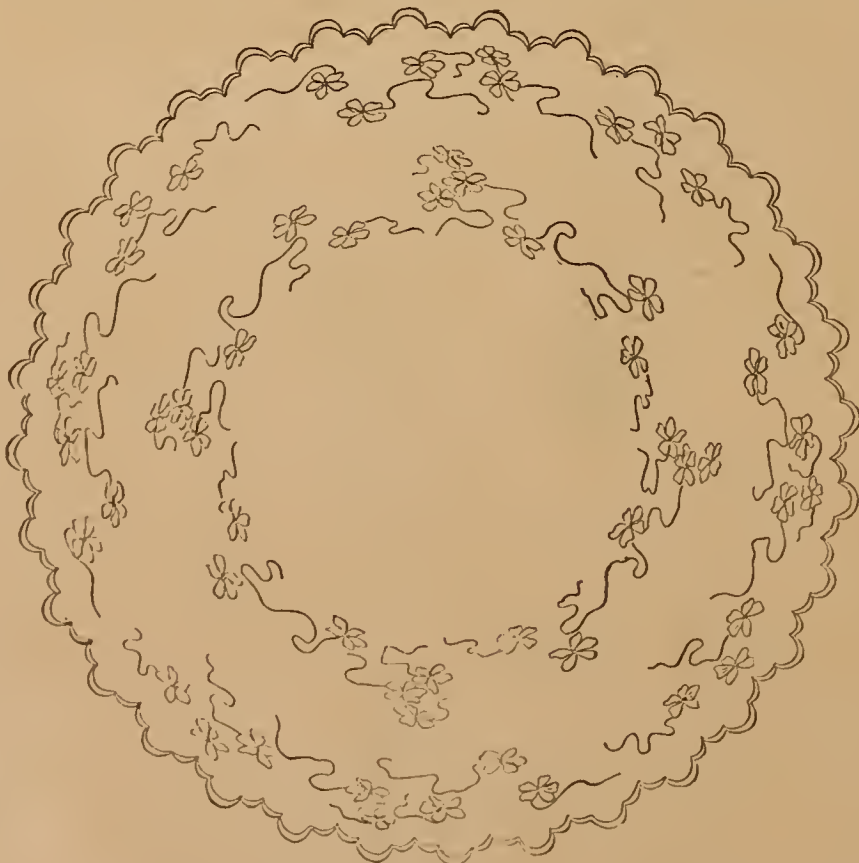
The plants from many varieties of seeds sown in June will bloom before frost sets in, and you can make your choice of those most desirable for the window.

By far the most desirable way to secure

summer and winter, that I shall never fail to give it a good word when opportunity arises.

CYNTHIA DOERING.

I regard Lincoln as one of the greatest men of our time.—Thomas Burk.



IVORY SOAP

IT FLOATS

At all grocery stores two sizes of Ivory Soap are sold; one that costs five cents a cake, and a larger size. The larger cake is the more convenient and economical for laundry and general household use. If your Grocer is out of it, insist on his getting it for you.

THE PROCTER & GAMBLE CO., CINCINNATI.

NEW USES OF WOOD.

The librarians are groaning over the inadequacy of wood-pulp paper. They say that books become friable, and actually crumble to pieces, when printed on this paper; and the men who are writing in the hope of the immortality conferred by printer's ink, are insisting on linen paper.

Since it is this that has cheapened the newspaper, till a smattering of universal knowledge is spreading—we may say in a thin layer—all over the land, perhaps we should rejoice at the change.

In France, that land of beautiful silk fabrics, we are told that a chemical process has been discovered by which the substance that the silkworm elaborates from the mulberry-leaf is so closely imitated by a treatment of wood, that a glistening, tenacious fiber is produced, which, being woven, deceives the experts themselves; and now we read that in Germany food products consisting partly of wood are being made. The information comes from a periodical devoted to wood industries. At Berlin a factory has been built which turns out about two hundred quintals of *wooden bread* per day. Sawdust is subjected to chemical treatment, after which it is mixed with one third farina, and prepared like ordinary bread. At present it only serves as food for horses, but the Berlin Tramway Company, the chief customer of the factory, is well satisfied with results. The men who make it say it is good food for man. Here is a field for the vast quantities of sawdust made in lumber regions.

H. M. PLUNKETT.

A HOUSE DRESS.

This neat and stylish dress is suitable for many materials, and is plainly made, with the exception of the front, which is of soft, all-over lace, or grass-linen over silk, and lace or knife-plaited tulle cascaded down the front, and also at the hand. The front can be made all in one, so as to remove when one needs it plainer still.

DAPHNE.

VIOLET CENTERPIECE.

This beautiful centerpiece in violets is one that we offer for 25 cents, or with the FARM AND FIRESIDE, postage paid (Premium No. 582), for 50 cents. The flowers are worked in the usual colors of violets, and the edge and joining lines in white.

CIGAR-RIBBONS FOR FANCY WORK.

The bright foreign-looking yellow ribbons that are attached to cigar-boxes and bundles of cigars are not infrequently thrown away as useless, but having seen how charmingly they may be applied to various fancy-work, I thought perhaps some of our readers might like to know in what ways they may be utilized.

In a house where there are one or two smokers, no difficulty will be found in soon obtaining a sufficient quantity of cigar-ribbons. The ribbons must be first smoothed out with a warm iron, and are then ready to work with. A small cushion or head-rest can be effectively decorated in the following manner: Mount the ribbons on a piece of white linen, fine brown holland or silk; the size must be determined by the kind of cushion you desire to make and the length of the ribbons.

Tack or lightly baste the ribbons onto the background, either in parallel rows one and one half inches apart, or diagonally from corner to corner. Each strip of ribbon should be feather-stitched or herring-boned down to the material on both edges with coarse black, brown or deep red silk, and in some cases small black or colored beads or sequins may be sewn to the edges, but this would not do on a cushion intended to come in contact with the face.

The work is also effective on tea-cozies, curtain-bands, pincushions, etc., and for these the shorter ribbons can be utilized. The cushions look pretty if finished with a frill of soft silk the color of the cigar-ribbons, or edged with a ruche of butter-colored lace. Cushions and other articles thus decorated and trimmed would prove a novelty at bazaars, and would be sure to sell well.

GWYNEDD.

“Here is something as good,”

Said the clerk in the store.
Said the lady: “I think I have heard that before; Still, I need no advice, As your statement implies, But I do want a card Of DeLong Hooks and Eyes.”

See that

hump?



RICHARDSON & DeLONG BROS., Philadelphia.

Also makers of the CUPID HAIR PIN.

There is lots of pleasure, satisfaction and health corked up in a bottle of HIRES Rootbeer. Make it at home.

Made only by The Charles E. Hires Co., Philadelphia. A 25c. package makes 5 gallons. Sold everywhere.



2 Minutes for Refreshments

THE Handy Tablet

requires neither sugar nor spoon to make healthful and refreshing drinks the moment it touches water. Sample by mail, 10 cents.

The HANDY TABLET CO., 1041 N. Front St., Philadelphia, Pa.

DILLEY'S KING WASHER. THE BEST WASHER ON EARTH.

REMOVABLE BOTTOM. NO RUST, NO INJURY TO CLOTHES. EVERY MACHINE GUARANTEED. We want agents and guarantee good wages to any good, lively hustling person. Write for full description. Address: MUIR WASHING MACHINE CO., Muir, Mich.

High Arm MY HUSBAND Cent see how you do it. \$50 Kenwood Machine for - \$23.00 \$50 Arlington Machine for - \$19.50 Standard Singers - \$5.00, \$11.00 \$15.00, and 27 other styles. All at a price FREE. We pay freightship anywhere on 30 days free trial, in any home without asking one cent in advance. Buy from factory. Save agents large profits. Over 100,000 in use. Catalogue and testimonials free. Write at once. Address, (in full), CASHBUYERS UNION, 158-164 West Van Buren St., B 7, Chicago, Ills.

FREE! A DRESS. Every woman who reads this can get a dress FREE by writing at once to L. N. Cushman & Co., Boston, Mass.

RIBBONS Finest qualities; pure silk; various colors and widths. Our prices will save you DOLLARS. Write for samples. Empire Ribbon Co., 52 Broadway, N. Y.

12 Yards Torchon LACE Given Away. All one piece FREE to all sending 1c. for paper 3 mos. Fireside Gem, Waterville, Maine.

If afflicted with SORE EYES Use Dr. ISAAC THOMPSON'S EYE WATER

40 Cent Patterns for 10 Cents

Any FOUR Patterns, and this paper one year, 60 cents, post-paid

These patterns retail in fashion bazaars and stores for twenty-five to forty cents each, but in order to increase the demand for our paper among strangers, and to make it more valuable than ever to our old friends, we offer them to the lady readers of our paper for the remarkably low price of only 10 Cents Each. The patterns are all of the very latest New York styles, and are unequalled for style, accuracy of fit, simplicity and economy. For twenty-six years these patterns have been used the country over. Full descriptions and directions—as the number of yards of material required, the number and names of the different pieces in the pattern, how to cut and fit and put the garment together—are sent with each pattern, with a picture of the garment

to go by. These patterns are complete in every particular, there being a separate pattern for every single piece of the dress. Your order will be filled the same day it is received. You can order any of the patterns offered in the back numbers of this paper. For ladies, give BUST measure in inches. For SKIRT pattern, give WAIST measure in inches. For misses, boys, girls or children, give both BREAST measure in inches and age in years. Order patterns by their numbers. Satisfaction guaranteed or money refunded. To get BUST and BREAST measure, put the tape measure ALL of the way around the body, over the dress close under the arms. Price of each pattern, 10 cents. Postage one cent EXTRA on skirt, tea-gown and other heavy patterns.



No. 6738.—BOYS' SHIRT-WAIST, WITH BYRON OR SAILOR COLLAR. 10c. Sizes, 4, 6, 8, 10 and 12 years.



No. 6741.—CHILD'S GUIMPE DRESS. 10 cents. Sizes, 2, 4, 6, 8 and 10 years.



No. 6788.—LADIES' PLAIN WRAPPER. 11 cents. Sizes, 32, 34, 36, 38, 40, 42 and 44 inches bust.



No. 6755.—LADIES' YOKE BLOUSE WAIST. 10 cents. Sizes, 32, 34, 36, 38, 40 and 42 inches bust.



E.C.

NOTICE

We receive many orders for patterns without any name or post-office address signed, hence we cannot fill the orders. If any of our readers have not yet received their patterns, and will write us a letter giving the full particulars so we can verify their order, we will be glad to look them up and fill them immediately.

Do not fail to give size wanted.



No. 6750.—MISSES' SHIRT-WAIST. 10 cents. Sizes, 10, 12, 14 and 16 years.



No. 6780.—LADIES' JACKET BASQUE. 10 cents. Sizes, 32, 34, 36, 38, 40, 42 inches bust.



No. 6773.—MISSES' OUTING JACKET. 10 cents. Sizes, 12, 14 and 16 years.



No. 6762.—MISSES' SHIRT-WAIST, WITH BLOUSE FRONT. 10 cents. Sizes, 10, 12, 14 and 16 years.



No. 6795.—LADIES' AND MISSES' SKIRT. 11 cents. Sizes, 22, 24, 26, 28, 30 inches waist.



No. 6765.—LADIES' SHIRT-WAIST. 10c. Sizes, 32, 34, 36, 38, 40, 42 inches bust.



No. 6761.—LADIES' SHIRT-WAIST, WITH BLOUSE FRONT. 10 cents. Sizes, 32, 34, 36, 38, 40 and 42 inches bust.



No. 6790.—LADIES' BASQUE. 10 cents. Sizes, 32, 34, 36, 38 and 40 inches bust.



No. 6722.—CHILD'S BLOUSE, SAILOR COSTUME. 10 cents. Sizes, 4, 6, 8 and 10 years.



No. 6772.—LADIES' BASQUE. 10 cents. Sizes, 32, 34, 36, 38, 40, 42 inches bust.



No. 6769.—LADIES' WAIST. 10 cents. Sizes, 32, 34, 36, 38, 40, 42 inches bust.



No. 6711.—BOYS' FAUNTLEROY BLOUSE. 10 cents. Sizes, 2, 4, 6 and 8 years.

WE HAVE OFFICES IN NEW YORK CITY, SPRINGFIELD, OHIO, AND CHICAGO, ILLINOIS.

NOTICE.—Send all orders for patterns direct to our central office, to FARM AND FIRESIDE, SPRINGFIELD, OHIO, where our stock of patterns is kept.

Our Sunday Afternoon.

DOWN BY THE SEA.

Down by the sea, the wide, deep sea,
Our Savior walked;
Down by the sea of Galilee
He preached and talked.

Sad were the hearts, the weary hearts,
That came to him;
Sweet was the word the people heard
Through shadows dim.

Glad was the song, the happy song,
That love gave birth:
"Glory to God, glory to God,
Good will on earth!"

Down by the sea where all must go,
The boatman pale
Stands on the shore, and evermore
Cries out, "All hail!"

Down by the sea, the wide, deep sea,
Jesus the same,
Ready to save from the dark, cold grave,
Praise to his name.

EARNEST LONGING AND LIVING.

WAITING posture is the posture of good servants; a watchful expectation is the emotions of a heart separated from the object of its love; a lively hope of her lord's return is the cherished hope of a lone wife. The wife whose husband has been long at sea does not wait to hear that his ship is telegraphed or approaching the coast, or that his signal is flying at masthead in the bay, or that he will anchor in the port at such an hour, and will make his appearance to her some due time afterward; no wife calculates thus; but the desire of her heart overleaps all premonitory signs of his approach, and leads her to expect, every time the door opens, to see him enter the parlor. She looks for his appearing every moment. Not a step is heard in the hall but she marks the sound, whether it be the well-known step of her beloved; not a latch is lifted but she looks up to see whether her lord is come; and though her friends laugh at her pains, she gives constant heed to his appearing who has been a long time on the sea.

This is the true position of the church, I humbly think; not saying, "My Lord delayeth his coming;" or, "My Lord cometh next week, or to-morrow, or next hour; but, Comes he not now, whom my soul loves? Is not that last trumpet the sound of his voice? Mark, do not the mountains sink? do not the seas retire? the stars fall? the heavens light up with fire?

This is no time for disputing, hickering, challenging of motives, imputing of evil or slacking in our work. "The time is come that judgment must begin at us, what shall the end be of them that obey not the gospel of God? * * * Let all who love our Lord's appearing walk together in love, as brethren; and by charity and patience—not only with one another, but opposers—prove the excellence of our faith, and the elevation of our hope, by the purity of our life.—Henry Dana Ward.

IT MAKES A DIFFERENCE.

The popular adage is, "Oh, it makes no difference what a man believes, if he is sincere."

Let us see. A family was poisoned in Montgomery county recently by eating toadstools, which they sincerely believed to be mushrooms. Three of them died. Did it make no difference?

A man indorsed a note for a friend whom he sincerely believed to be an honest man. He was a scoundrel, and left him to pay the debt. Did it make no difference?

A traveler takes the wrong train, going north, sincerely believing it is the southern train. Will it make no difference? Will he bring up at the south all the same?

If a man sincerely believes a certain thing, while the truth about it is entirely different, will this sincere belief make it all right?

The truth is, the popular adage is a lie, and a very transparent one at that! If a man is sincere, he will take pains to know the truth. For where facts are concerned, all the thinking in the world will not change them. A toadstool remains a toadstool, whatever we may think about it.—The Covenant.

GIVE ATTENTION to the first symptoms of a Lung Complaint, and check the dreaded disease in its incipency by using Dr. D. Jayne's Expectorant, a safe, old-fashioned remedy for all affections of the Lungs and Bronchia. The best family Pill, Jayne's Painless Sugar-Coated Sanative.

AMERICAN HUSBANDS.

It often strikes an observer that while Americans are by all odds the best husbands in the world—universally conceded to be more generous, more considerate, more attentive to their wives than the men of any other nation—they do not provide for the "relict" with the care and forethought that characterize Europeans. It does not do to take any chances in Europe, and carelessness or neglect to look to the future of a wife in the event of death does not result, as in this country it may possibly do, in her being comfortably supported somehow, somewhere; it means the poorhouse, or the serpentine, or worse—certain degradation and starvation in some form—at best the miseries of genteel pauperism. The result is that when a European marries he makes settlements; he buys a home; he lays by, if he is in business, a rainy-day fund; he keeps his weather eye open; he remembers that he is mortal.

Not so the American, as a rule. He is a man of big projects, of optimistic temperament, of generous ideas, and of improvident views. He feels that Smith may die, anyway, but that he is "good for fifty years." He is not surprised in the least to hear that Brown has failed, but he is confident that he will make (and leave) a million or more. He hears that Jones has made unfortunate investments and been "bitten" in Consolidated Midland, but it does not occur to him that his own \$100,000 in some other stock is by no means secure. The general hopefulness of a big, young, successful nation affects him powerfully without his being aware of it, and he feels that prosperity will always be his portion. If he is rich, he denies his wife nothing. He will give her anything she wants or fancies, spend a fortune on her and never feel the shoe pinch; send her to Europe every year, give her all the diamonds she covets, allow her to entertain extravagantly, do anything for her except provide clearly and definitely for her future in the event of his own death. If he thinks of such a possibility, it is generally in a large, loose, ineredulous fashion. "Oh, I'll pull through. I'll keep a stiff upper lip. Doctors don't know everything. Or if I don't, Lucy will be all right. She can go and live with Tom or Jenny, or get a little home somewhere."

Many a man dismisses uncomfortable doubts and warnings with just such superficial treatment, and then goes to a supper at Delmonico's, or the theater, or Wall street, and forgets all about them. And then what happens is this: One picks up the morning paper and reads, "Suddenly, at his residence, 559 Hightower street, of heart disease, Walter Thompson, aged 69. The friends of the family are invited to be present at the funeral, which will take place at 3 p. m." Then in a great many cases chaos comes for poor Lucy. Very often she finds that her Walter has left her no will. Or she finds his affairs all in confusion. Or she discovers that after having lived for twenty years in Hightower street like a rich woman, she has nothing whatever, no home and no money.—Lippincott's.

THE COMPANY YOU KEEP.

A person is known by the company he keeps, and frequently—as the humorist puts it—by the company he keeps out of.

Be careful in choosing your associates. Never make friends—acquaintances would perhaps be the better word—with those whose language, habits or general conduct you would be ashamed to see and hear in your own home. If you do you are sure to be the sufferer. The person of low tastes and conduct is much less likely to be benefited by your superior ways than you are to be degraded to his level. Such, unfortunately, is the law of nature. Let a drop of milk fall into a pail of water. It is lost in a moment. But let fall a drop of black ink into the same water, and its presence will soon be noticeable. A rotten apple will finally taint a whole barrelful of sound fruit, but who would think of putting a good apple into a barrel of decayed fruit for the purpose of making them sound again? This does not mean that virtue has no leavening influence, but simply that it is easier to go down hill than up.

So do not keep questionable company. If you cannot find the right kind of associates, the kind who will make you better and nobler, be sufficient unto yourself. Live with your books, and the worthies of all time, who are so willing to give you through their pages a friendship greater and benigner than that of kings.

The world will surely judge you by the company you keep. "Tell me with whom you associate," said Goethe, "and I will tell you who you are. If I know what your business is, I know what can be made of you."—Voice.

THE DAY OF THE LORD.

When God had purposed to overthrow the Sodomites, he said, "Shall I hide from Abraham that thing which I do?" Nay, verily, he would not do it; but dispatched his messengers to inform him, and also Lot, of his intentions to destroy Sodom, and hasten Lot and his family out of the city.

When Jesus spake to his disciples of Jerusalem's final overthrow, and of the solemn events which should succeed, they immediately asked him what "sign" there would be when all these things should occur. This would certainly indicate that it was in God's order to give "signs" before the occurrence of such great events; or else what put it into their hearts to ask such a question? I think it must be evident to all candid readers that this has been God's order in all the past. Will he change now with relation to the end of the age and the coming of the Messiah? Will there not be signs of an unmistakable character to notify the watching ones of the approaching event? We think there will; and when they begin to come to pass, the watchers will "look up," and "lift up" their heads, knowing their "redemption draweth nigh." Did not Paul expressly say, "Ye brethren are not in darkness, that that day should overtake you as a thief?" And how is it the church is not in darkness in relation to that eventful day? Is it not first, because they have been informed in the Bible that that event is coming, and believe the testimony; and second, when that event is near, there will be outward signals thereof to notify them it is at hand?—Journal of Prophecy.

AN EXPERIENCE OF BLINDNESS UTILIZED.

Over forty years ago, William Moon, a young Englishman, at the age of twenty-five, suddenly, through illness, lost his sight. Using the then popular "Frere's type," some ladies taught him to read. After this and previous systems had been mastered, the young man became a successful teacher to others similarly afflicted. Realizing the great necessity, he invented a simpler method, called the Moon type, noticeable for having but nine simplified characters. Mr. Moon's printing, it is said, is larger than preceding systems, is more easily felt, and therefore at once became popular.

Besides the Bible, Dr. Moon has printed (embossed) an extensive literature, both in English and many foreign languages. His earlier publications were a monthly magazine and a collection of devotional extracts. Dr. Moon died in 1894.

HUMILITY.

I believe the first test of a truly great man is his humility. I do not mean by "humility" doubt of his own power, or hesitation in speaking his own opinions, but a right understanding of the relations between what he can do and say and the rest of the worlds doings and sayings. All great men not only know their own business, but usually know that they know it; and are not only right in their main opinions, but usually know that they are, only they do not think much of themselves on that account. They do not expect their fellow-men to fall down and worship them; they have a curious under-sense of powerlessness, feeling that greatness is not in them, but through them. They do their work, feeling that they cannot well help doing it.—Ruskin.

BLIND EYES OPENED.

A little boy was born blind. At last an operation was performed; the light was let in slowly. When, one day, his mother led him out of doors, and uncovered his eyes, and for the first time he saw the sky and earth. "Oh mother!" he cried, "why didn't you tell me it was so beautiful?" She burst into tears, and said, "I tried to tell you, dear, but you could not understand me." So it is when you try to tell what is in the Bible. Unless the spiritual sight is opened, we cannot understand. The Psalmist prays, "Open thou mine eyes, that I may behold wondrous things out of thy law."



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Our Miscellany.

THE watermelon grows wild all over Africa. It was cultivated in Egypt B. C. 2500.

A DEALER says there is more steel used in the manufacture of pens than in all the sword and gun factories in the world.

WERE it not for the multitude of storks that throng to Egypt every winter, there would be no living in the country, for after every inundation frogs appear in most incredible numbers.

IN the manufactures of Great Britain alone, according to statistics, the power which steam exerts is estimated to be equal to the manual labor of four billions of men, or more than double the number of males supposed to inhabit the globe.

CAPTAIN E. Moss, a miner in the Transvaal, has a couple of dozen monkeys which work regularly in the mines. Their work is to gather the small bits of ore which would otherwise be lost, and he says that they work very regularly, and seem to enjoy it.

ONE of the amazing literary successes of the century is Spurgeon's sermons. The Westminster Gazette says 2,396 of these sermons have been printed and sold, and that the sum total of the sales reaches nearly 100,000,000, an average of about 35,000 copies per sermon.

FAR better than soap for the bath, more cleansing and refreshing to the skin, is the use of a muslin bag filled with the following ingredients: Two quarts of bran, one ounce of orris-root, one ounce of almond-meal, and one small cake of castile soap shaved in strips.

Bunyea & Bunyea, patent experts and solicitors, Washington, D. C., offer to send valuable information to inventors desiring to secure patents, without cost, upon application.

A SUM of 5,000 rubles has been granted to the St. Petersburg Medical Academy for the purposes of experimenting with the X rays. A committee consisting of Professors Jegoroff, Tavnezki, Bechtereff and Ratimorn has been appointed to consider the application of Roentgen's discovery to practical medicine.

NEGROES are black "owing to the stimulating action of solar heat, combined with moisture and an excess of vegetable food, yielding more carbon than can be assimilated, the character being then fixed by heredity." This extraordinary theory appears in a recent geographical school-book, bearing the name of Cambridge University.

THE enormous amount of wood now used for making paper every year may be judged from the fact that a Paris newspaper, the Petit Journal, which has a circulation of over a million copies a day, and is printed on wood-pulp paper, consumes in a twelve-month 120,000 fir-trees of an average height of 66 feet. This is said to be equivalent to the annual thinning of 25,000 acres of forest.

IT is clear that tobacco and tobacco smoke are antiseptics and germicides of considerable power, and that their action on the pulmonary circulation is useful in relieving or preventing any tendency to chronic congestion of the lungs. Many doctors in various countries have remarked the comparative immunity from pulmonary disease enjoyed by workers in tobacco factories.

ROLLING an umbrella is an art that few understand. The right way is to take hold of the ends of the ribs and the stick with the same hand, and hold them tightly together to prevent their twisting while the covering is being rolled around with the other hand. In this way an umbrella may be as tightly rolled as when it came from the factory. It is the twisting of the ribs out of shape around the stick that spoils the looks of an umbrella.

THERE are to be about 200 railway stations distributed over the new Siberian railway. The rolling stock will comprise 2,000 locomotives, 3,000 passenger-cars and 36,000 goods wagons. The passenger traffic will be almost exclusively confined to third or fourth classes, and the tariff will be very low. The works in connection with this great undertaking are being pushed on with much energy, and the work is expected to be completed in about six years.

By a special ministerial rescript, the exclusive right of importing foreign merchandise, duty free, into Siberia, by way of the Kara sea and the Yennissei, has been accorded to Captain Wiggins, an Englishman. There is probably no one who knows the navigation of the east Siberian coast and the Kara sea better than Captain Wiggins, and there are enormously profitable possibilities in the establishment of an adequate trading-fleet between western Europe and that remote and commercially necessitous region.

J. E. DAIN has in view the unearthing of a mammoth meteor on his gold claims at South Pass, Wyoming, within a few weeks. Last year, when Mr. Dain was working his mining property, he went out with his gun one morning, and found where a mighty meteor had torn up the earth for 200 or 300 feet, mowing the brush in its way as a mower would cut grass. The heat was too great for him to approach the spot at the time, but he was determined then to remove from its earthly repose the luminous phenomenon of the celestial space.

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BIRMINGHAM, England, has been making a successful experiment with the Gothenburg system. In September, 1894, the corporation opened a public-house in Elan village within its limits, in which temperance drinks as well as pure liquors were sold, the profits going to support a reading-room and recreation-hall in another building. It had to compete with an old-fashioned public-house, but gained rapidly on it. The official in charge, a teetotaler, is convinced, after a year's experience, "that the interests of temperance are far better served by providing wholesome liquor under proper regulations than by leaving the traffic to be conducted in the ordinary way, or in attempting to prohibit it altogether."

THERE is a region in the Caucasus mountains where, should a young man or woman die single, the mourning parents seek out some neighbor who has sustained a similar bereavement, and negotiations are entered into for a matrimonial alliance between the deceased. The amount of the dowry varies according to the good or bad habits of the girl when alive, and a father has been known to give as many as thirty cows in order to obtain an eligible husband for his dead daughter. If one party to a marriage contract dies before the union has taken place, the ceremony is nevertheless proceeded with. In China the spirits of all boys who die in infancy are, in due course of time, married to spirits of girls who have been cut off at the same early age. A similar farce is transacted with children who have lived to be twelve or fourteen years of age.

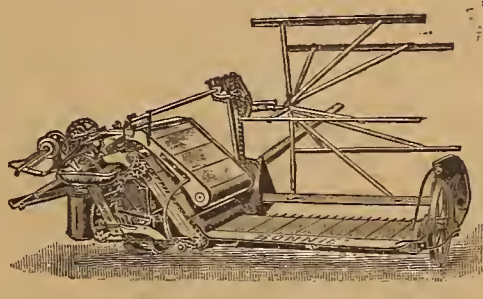
PROVERBS OF THE ORIENT.

There are few people in the world given more to the use of these proverbial expressions than are the Chinese, and for the "excellent sayings" of their poets and sages they entertain the greatest esteem and veneration. Like our own proverbial expressions, those of the Chinese are fitted for all occasions, "to point a moral or adorn a tale," but, of course, in the process of translation, unused as we are to their metaphors, much of the force of the original is lost. So far as research has gone, there has not been found any complete classified collection of proverbs in the Chinese language, but there are several works containing aphorisms and proverbial wisdom.

The following proverbs are familiar specimens of the Chinese coinage, and in several instances where they harmonize with similar ones in our language the English version is also given:

- "Virtue is the surest road to longevity; but vice meets with an early doom." (Virtue is its own reward.)
- "Time flies like an arrow; days and months like a weaver's shuttle." (Time and tide wait for no man.)
- "Let every man sweep the snow from before his own door, and not trouble himself about the frost on his neighbor's tiles." (Mind your own business.)
- "Attend to your farms and mulberry-trees, that you may have sufficient food and clothing." (Take care of your business and your business will take care of you.)
- "To paint a snake and add legs." (Drawing the long bow.)
- "Let us get drunk to-day while we have wine; the sorrows of to-morrow may be borne to-morrow." (Sufficient unto the day is the evil thereof.)
- "Abstain from falsely accusing, that the good and honest may be in safety." (Bear not false witness against thy neighbor.)
- "The court is like a ship at sea—everything depends on the wind." (Put not your trust in princes.)
- "For him who does everything in its proper time one day is worth three." (A stitch in time saves nine.)
- "To cut off a hen's head with a battle-ax." (Much ado about nothing.)
- "The truths which we least wish to hear are those which it is our advantage to know." (The truth is disagreeable.)
- "If you don't enter the tiger's den you cannot obtain her young." (Nothing venture, nothing win.)
- "One strand of silk doesn't make a thread." (One swallow doesn't make a summer.)

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"A thousand chiefs, a thousand plans." (Too many cooks will spoil the broth.)

"There's a time to fish and a time to dry nets." (There's a time for all things.)

"The teacher should not leave his books or the poor mau bis pigs." (Let the cobbler stick to his last.)

"It thunders loudly, but little rain falls." (Much cry and little wool.)

CAMEL-CRADLES.

Camel-cradles are not designed for rocking young camels to sleep, but they are a contrivance by which travelers in the desert may journey by night and yet not lose all sleep. Mr. Lansdell, in his recent hook of travels, describes them in an entertaining way, in telling how he journeyed by camel-train from Khiva to the Caspian:

"About seven o'clock all was in readiness, and we were to get into our queer sleeping-cages. Let the sleeper imagine two narrow wooden crates, such as earthenware is packed in, each sufficiently large for a man to lie when twisted to the shape of the letter S, and let him further imagine them suspended on either side of the huge hump of a kneeling camel.

"This, I am given to understand, is to be my sleeping-place for the night, and I accordingly choose my berth on the port side of the 'ship of the desert,' first putting into the cradle for a lining a piece of felt and then two pillows. Then I put on, over my ordinary suit, my jackal-lined coat, enveloping me from head to foot, over that my ulster, and on my head a sheepskin hat, to say nothing of my fur-lined hoots, and then, getting into the cradle, I cover my feet with my sheepskin rug.

"And now comes the tug of war. Nazar asks are we ready, bids us hold on, and says to the camel, 'Chu!' whereupon the animal gets up leisurely, first on its hind legs, and in so doing raises our feet to the angle of sixty degrees, thereby threatening to pitch us out bodily. We hold on, however, for dear life, and then comes a lurch from the fore, lifting our heads once more to the horizontal. The fear of danger is now past, but it is not easy to get accustomed at first to the strange motion caused by the long strides of the camel. When the creature was urged to go quickly, the nearest simile for the cradle I can think of is that of a bottle of medicine in the process of being 'well shaken before taken.' But when the camel walked leisurely, then one lies as in a boat idly tossed by the billows, and sleep becomes possible, just as it is in a Russian tarantas, when one is dead tired, cramped and 'used to it.'"

TEN WONDERS OF THE WORLD.

The following are considered to have been the ten most remarkable works of human labor:

1. The pyramids of Egypt and Mexico, the largest of which, near Cairo, known as the Great Pyramid, built by Cheops, king of Egypt, took 360,000 men twenty years to build.
2. The artificial reservoir—Lake Moeris—built by Ameneinba, of the twelfth dynasty, which served to store up the waters of the Nile during the dry season. Its circumference was 3,600 furlongs, and on its being allowed to

WALL-PAPER

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fall into ruin, the fertility of the region became, to a serious extent, a thing of the past.

3. The Taj Mahal, a tomb erected at Agra, in Hindustan, by Shah Jehan, over the queen, Noor Jehan. It is built of the purest white marble, and yet seems so airy that when seen from a distance it is so like a fabric of mist and sunbeams, with its great dome soaring up, a silvery hubble about to burst in the sun, that even after you have touched it and climbed to its summit, you almost doubt its reality. It cost over £3,000,000.
4. The temple of Baalbec, in the erection of which stones sixty-two feet long, twenty feet broad and fifteen feet thick were used—more prodigious masses than have ever anywhere been moved by human power, and much exceeding in size any stones used in the pyramids.
5. Temple of Karnak, described by Fergusson as the noblest effort of architectural magnificence ever produced by the hand of man. It covers twice the area of St. Peter's at Rome, and undoubtedly is one of the finest buildings in the world.
6. The great wall of China, 1,280 miles in length. It is twenty feet in height, and in thickness twenty-five feet at the base, and fifteen feet at the top.
7. The Eiffel tower, erected in the grounds of the 1889 Paris exhibition, and 984 feet high.
8. The Suez canal, with eighty-eight miles of waterway, connecting the Mediterranean and Red seas, and forming the principal route to India. It cost more than £17,000,000 sterling, and 172,602 out of the 399,677 shares were purchased by, and belong to, the British government.
9. The railway bridge—the largest cantilever in the world—over the Forth, with two spans, each of 1,700 feet, erected at a cost of nearly £4,000,000.
10. The leaning tower of Pisa, which deviates thirteen feet from the perpendicular.

The following works were by the ancients esteemed the seven wonders of the world: The pyramids, the tomb of Mausoleus, the temple of Diana, the hanging gardens of Babylon, the colossus of Rhodes, the ivory and gold statue of Jupiter Olympus, the pharos, or watch-tower, of Egypt.—Glasgow Citizen.

HER LITERARY TASTE.

A writer lets out a secret regarding the way in which young women read novels. It was in the car, and two girls were talking of what they read.

"Oh, I choose a novel easily enough," one said. "I go to the circulating library and look at the last chapters. If I find the rain softly and sadly dropping over one or two lonely graves, I don't have it; but if the morning sun is glimmering over bridal-ropes of white satin, I know it's all right, and take it, and start to buy sweets to eat while I read it."—Clips.

Queries.

READ THIS NOTICE.

Questions from regular subscribers of FARM AND FIRESIDE, and relating to matters of general interest, will be answered in these columns free of charge.

Cabbage-lice.—T. C., Benton, Cal., writes: "What will destroy cabbage-lice?"

Flea-beetles.—J. C., Foudis, Col. Your plants are being destroyed by flea-beetles.

Cabbage-worms—Squashes and Pumpkins Mixing in the Bloom.—R. J. S., Springville, Ont., Canada. A reliable destroyer of cabbage-worms is pure, fresh pyrethrum-powder.

Rank Growth of Pumpkin-vines—Grasses for California.—M. L. P., North San Juan, Cal., writes: "Please tell me what to do with pumpkin-vines. They grow well—run all over the field—but do not bear any pumpkins—Please tell me what kind of grass to plant in fields where I pasture my stock, so I will not have to plow and sow every year."

Celery Queries.—H. J. R., Chetopa, Kan., writes: "I have a tract of land which borders on a pond, and is thus kept rather sticky wet. Would it do to plant celery on this ground, say six or seven inches apart each way? Would White Plume blanch itself if planted this way? Would Giant Pascal do for late, and would it blanch itself?"

Probably a Thorough-pin.—L. S., Lund, Wisconsin. If you apply (erroneously) the term "hind knee" to the hock-joint, the soft swelling of the size of a small egg, situated between the "big cord" and the bone, and which "goes through on both sides," is nothing more or less than a so-called thorough-pin.

Weeds.—J. S. M., Appleton, Wis., writes: "Please tell me how to get rid of wild mustard; I want to seed the land to grass. I bought this land last fall, and it is overrun with mustard."

Three for a Dollar! Three what? Three charmingly executed posters in colors, drawn by W. W. Denslow, Ethel Reed and Ray Brown, will be sent free of postage to any address on receipt of One Dollar.

Lincoln combined the integrity of Washington with the humanity of Wilberforce.—George W. Julian.

VETERINARY.

Conducted by Dr. H. J. Detmers.

To regular subscribers of FARM AND FIRESIDE, answers will be given through these columns free of charge. Where an immediate reply by mail is desired, the applicant should include a fee of one dollar, otherwise no attention will be paid to such a request.

Large Swelling on the Hind Knee.—E. G. N., Billings, Mo. If the swelling on the hind knee of your mule is as large as a child's head and as hard as a bone, it will be best to have it first examined by a veterinarian before you begin any treatment, and make a bad case worse.

A Hole in the Side of a Cow's Teat.—R. M. C., Sheffield, Mass. If your heifer is a milk-cow, as I suppose she is, you cannot do anything until she is dry, when the superfluous hole may be brought to a close by a surgical operation, or by a judicious treatment with lunar caustic.

A Lame Horse.—W. G. P., Eaton Rapids, Mich. It cannot be determined from your description, which dwells on essentials, and does not give the characteristic symptoms, whether your horse, as you seem to think, suffers from a chronic or habitual dislocation of the patella, partial paralysis in the hind quarters, or spavin, which appears to me to be the most probable.

A Sunken Crest.—T. L. H., Coal Grove, Ohio, writes: "Can anything be done to restore the natural shape to a horse whose neck is slightly 'crest-fallen.' I have a six-year-old mare that has a small depression at the neck. Otherwise she is of good form."

Nasal Discharge.—B. F. D., Middleport, Ohio, writes: "I have a mare troubled with a nasal discharge. Her appetite is good. She is in good condition, but when turned in pasture she commences to snort as soon as she begins to eat, throws up her head as though a bot-fly were troubling her."

Probably Laminitis.—T. E. T., St. Martin, Minn. Although your description is lengthy enough, it dwells only on minor and inessential symptoms, and therefore does not give a basis for a definite diagnosis.

A Water-lapping Cow.—J. F. C., Golden City, Mo., writes: "I have a fine Jersey cow that licks water, in place of drinking as other cows do. She commenced it in early spring. Can you tell me the cause and remedy? I fed her boiled corn and shorts and corn fodder through the winter. She has been on pasture about one month, and I know of no cause unless it was the hoiled corn."

Warts—Eye Disease.—J. G. S., Stockham, Neb. There are warts and warts, occurring on many different parts of the body. Most of them will in time disappear without any treatment.

In a Bad Condition.—L. W., Kimball, S. D. Your horse surely is in a bad condition. There must be extensive morbid changes, either in the cavity of the mouth, in the nasal cavities or in the throat, and probably in all the parts named.

A Cribber.—J. J. C., Heron, Minn. Cribbing is a bad habit, and is incurable. There are several means by which it can be temporarily prevented, but they are all more or less cruel.

Swelling.—A. L. N., Gainesville, Ala. If your mare is with foal, the (probably edematous) swelling, extending from the sternum to the pubic region, is food of a serious character. Less voluminous food, or more concentrated and less bulky, and more voluntary exercise, constitute the remedy.

Horny Warts on Cow's Teats.—W. H. G., Brooklyn, Ohio. If the teats of your cow are covered with horny warts clear up to the udder, you cannot do much until the cow is dry, when the warts may be removed by various means, according to circumstances; namely, by ligatures, if they have a plainly developed neck, and by means of the surgical knife, and by caustics, if they are more or less sessile, or flat.

Too Impetuous.—F. X. I. T., Montmorency Falls, Can. The great impetuosity of your horse, in starting as soon as hitched up, is a bad and unpleasant habit, which undoubtedly was developed by injudicious training; namely, a lash with the whip as soon as the horse was hitched up.

WENT TO THE RIGHT PLACE AND INCIDENTALLY ILLUSTRATED BOTH THE POPULARITY OF ROLLER BEARINGS AND THE ALERTNESS OF THE POSTAL AUTHORITIES.

Some time ago a Georgia farmer addressed a letter to "The Ball Bearing Pony Binder Co., Chicago," and without an hour's delay it was delivered to the Deering Harvester Co.

This roller bearing feature, by the way, has given a tremendous boom to the Deering business; their shops in Chicago have had to be enlarged and their working force increased.

The growth of this firm has been phenomenal. In the early days before they gave to the world the twine binder, they were the leaders in the manufacture and sale of the Marsh harvester, which was a long step in advance of the reapers then in use.

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HOW \$20 MADE \$500 IN 20 DAYS Our book "How Fortunes Are Made" explains. Sent free. Write at once as the edition is limited. THE BENNINGTON INVESTMENT CO., 38 Wall St., N. Y.

SALESMEN. Mineralized Rubber Hose, Belting, Tires, Mackintoshes, etc., are better and cheaper than Vulcanized. Agencies granted. Mineralized Rubber Co., N. Y.

SALESMEN wanted to sell to dealers; \$100 monthly and expenses; experience unnecessary; enclose stamp. ACME CIGAR COMPANY, 96 Fifth Ave., Chicago

SPEX BIG MONEY IN SPECTACLES. Send for our Optical Catalogue—just out. New goods. Cut prices. F. E. BAILEY, Chicago, Ill.

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Alabama Homes For particulars write THE THOMAS T. MUMFORD LANO CO., Demopolis, Ala.

Our Farm.

HOTHOUSE AND OTHER LAMBS.

It is fast becoming the custom to push all food animals from birth to the earliest possible fitness for human consumption. It is learned that the younger the age the less the gain cost per pound; besides, as a rule, young meat is more sought after and more palatable than old, and it brings more in the market. Particularly is this so with lambs, when they can be had in the winter and early spring, out of the usual season.

To have lambs for sale out of season, of course, the sires and dams must be mated out of their usual season. The first of July is the time to do this. Select dry, grade Merino ewes that are in good condition, and which have proved themselves good milkers and mothers. The males should be pure-bred Shropshires, Rambouillets or Dorsets. Turn them together in good feed, where there is an abundance of shade and pure water. Keep salt where they can get it at will. Remove the males in October. If feed gets dry and short, give them a mess of wheat-bran daily.

In winter, clover hay and either beets or turnips will be needed, at least a quart a day each, and now is the time to provide for these. If for genuine hothouse lambs, the winter quarters must be made tight and light, with ample means of ventilation up through the roof above; and this must be done before hay is stored in the loft, if there is a loft for that purpose. It is found best to divide the sheep-room into pens, about sixteen feet square, and place sixteen to eighteen ewes in a pen. There must be an alley for convenience in feeding. On the approach of cold weather, the ewes are placed in the fold and shorn immediately. When first shorn, the temperature is kept at sixty degrees. As the wool grows out again, the thermometer may run down gradually to fifty, to remain there. This is accomplished by regulating the ventilators.

Another way to grow lambs in winter is to have a shed open on the south side, but which can be closed up. This should also be amply lighted. A yard is attached, inclosed by a tight board fence to protect from cold winds. These ewes are not shorn. In severe weather the animals are fastened in the shed; but not so closely that the temperature will go much above forty degrees. I have seen sheep drop so much wool in consequence of having been kept too warm that they were as ragged as beggars. The ewes are fed alike in the two systems. Roughage is clover hay, rowen, if one has it, corn fodder and straw to give variety, and a daily feeding of roots. Before lambs drop, reasonable rations of bran, oats and barley, if one has it, are given. After lambs drop, the grain feed may be equal parts by weight of bran, whole corn and linseed-meal, twice a day, all they will eat; but some other grain might be substituted. Lamb-creeps are constructed so the young things can retire to a pen by themselves when they choose and find the same grain feed.

Each system has its advantages and disadvantages. Hothouse lambs will fatten quicker than the others, and can be sold at an earlier age and for a greater price. The first lambs, when weighing twenty-five to thirty pounds, bring more than later ones weighing fifty pounds. Usually, all are disposed of under eight weeks of age. They are killed and dressed in a peculiar manner, and shipped by express to dealers in the large eastern cities. They are sold by the carcass, and not by the pound, and they must be fat or they are not wanted. Until the recent financial depression they brought from \$10 to \$15, usually about \$12 for the best seasonable lambs. Last February the best brought in New York about \$8, and then the price went down gradually to \$6 and some at \$5. Boston seems to be a better market than New York, and I cannot learn the reason. A year ago, last winter they sold there at \$10 to \$12, while in the latter place they were little more than half that. I clip the following from correspondence of the *New England Farmer* of recent date: "March 19th of this year we shipped five lambs to Boston that returned us, dressed, \$52.50;

and when such prices can be realized, it pays to keep sheep, although we may have two or three clips of wool waiting to be sold in the good time coming." Why there should be such a disparity in prices between the two cities I cannot learn; but were I growing lambs, I would make it my business to ascertain. From former experience in growing hothouse lambs and lambs in the old way, and keeping them five to six months, I think the cost is about equal, and the former always bring much more; besides, the lamb business is all out of the way when spring work commences. It is easy to make lambs weigh fifty pounds at fifty days of age. Let this point be reached in March or April, and the lambs will bring more than they ever would again. DR. GALEN WILSON.

Tompkins county, N. Y.

CULTURE OF CACTUS.

The cactus family of plants succeeds finely under ordinary house culture, and there is no class of house-plants more worthy of attention, or that afford more satisfaction. The varieties are so extensive and diverse that the field open to the enthusiastic cultivator is almost boundless. Plants are propagated by slips, from seed and by grafting. No branch of the art of cactus culture is more interesting than that of propagation by grafting the various species. By this means the delicate species may be worked upon stocks of stronger growth; also, curious and interesting specimen plants are obtained by grafting such sorts as Epiphyllum, or the whip-cord, or rattail, on Cereus.

The operation may be performed in early summer when growth is proceeding, and the methods are very simple. When the scion and stock are of nearly equal size, trim the stock wedge-shaped, split the scion, and perform what is known by gardeners as "straddle-grafting," winding the parts carefully around with a soft string.

When the small globular Mamillarias, Echinocactus, Echinocereus or Echinopsis is to be the scion, cut the base smoothly across the diameter, and the stock of C. Calambrius or C. Grandiflora, cut in the same way, and set the scion squarely upon it, and secure in place by a string passed over the plant and under the pot, and brought taut enough to keep the cut surfaces in close contact. No binding is required around junction of the stock and scion. Place the plants in a shady position for a few days, and kept dry, a union soon occurs.

What makes the work more interesting is, nearly all species in the different genera of the cactus order unite readily with each other. One thing to be guarded against is not to select a plant for a stock which differs greatly in quickness of growth from the scion, or the reverse. As a rule, grafted plants grow twice as fast as those on their own roots.

Slips from most species are easily rooted in moist sand in warm weather. Propagation from seed is easily accomplished, and a great deal of pleasure is derived therefrom. The seed may be sowed in flat pans or flower-pot saucers, filled with coarse sand, which should be kept at all times moderately moist and covered with a piece of glass. When attaining proper size, change the young plants to small pots.

Maine.

L. F. ABBOTT.

BERRY NOTES.

It is a question whether strawberry-beds should be allowed to bear more than one crop.

In the effort to bear fruit and mature perfect seed, plants become completely exhausted.

When berry-plants produce one crop, they never bear again. A new plant must be grown every year for next season's crop.

If season has been favorable, and a large crop produced, or if grass and weeds have been allowed to take possession, then do not hesitate to plow under and start new beds.

If, however, a small crop was produced from vigorous vines, and the beds kept free from grass and weeds, as they should be, then the second year, or even a third, may be profitable, depending much on season, fertility of soil, cultivation, etc.

When old beds are to be continued, they should be mowed immediately after fruiting, and burned over. Then reduce rows to six inches in width, hoe out all weeds and grass, apply fine manure, and cultivate often, same as new beds.—*From Thayer's Bulletin.*

FLORIDA FACTS.

FRUITS AND VEGETABLES ON THE FARM

It is surprising that so many farmers in the Southern states give so little attention to fruits and vegetables. Many large plantations, working a large force of employees, fail completely to arrange for any supply of those important articles of food. The first item of successful farming is to produce on the farm everything that is necessary for its support. To raise corn, wheat or other staples in large quantities for market, expecting to buy from the proceeds such necessities as can be produced, is not practical farming.

The greatest money-saver on the farm is a well-cultivated garden, with vegetables for every season. This important work is neglected, as a rule, in the rush to plant a large acreage of field crops, and throughout the summer the family and the employees are fed on corn-bread and bacon, with vegetables only when they can be begged or borrowed from their neighbors.

Buy a stock of Northern-grown garden-seeds from reliable seedsmen, and plant in such a way as to have a variety throughout the year. Don't go at this work half-hearted, with the clumsiest and most unreliable hand on the farm as gardener, setting aside the poorest tools and meagrest mule, but make the garden the most important work on the farm, and it will prove its value as a health-preserver and money-saver.—*Industrial American.*

ONLY ONE FLORIDA.

"Florida is a wonderful state. It was hurt for the time by the freeze, but its various resources are bringing a wide range of development that in time will prove its seeming loss to have been a blessing in disguise. In no other state in the Union can a man get such profitable returns by using brains and muscles. The wheat yield on \$100 land three miles from Lexington, Ky., in the very heart of the blue-grass region, is too small to leave any profit. One farmer shows his returns to be ten bushels per acre. At 65 cents per bushel he makes \$6.50 per acre, gross. Two peach-trees in Florida will not more than the gross return from an acre of this farmer's wheat. This same Florida land will produce 200 bushels of sweet potatoes, worth say 25 cents per bushel, or \$50 per acre, or 25 barrels of white potatoes, worth \$4 per barrel. Why poor men will try to dig a living out of \$100 land is most surprising. They could own a home in Florida, and in a few years bring it up in value to that of the highest-priced land in any other locality. Go South, young man. Don't wait. Remember that land is advancing in value, and that other people are finding out the truth. Linger means a lost opportunity. Go South, old man. Get out of the cold, death-dealing winter climate of the Northern states, that kills old people because it keeps them housed up. Buy a small piece of pine-woods land, build a simple little house, with open fire-places to dry it out in damp weather. Plant a big garden and all of the fruit-trees you can. Raise pigs, cows and all kinds of fowls."

There are farms in Leon and Wakulla Counties you can buy on your own terms, and the land is as productive as any in the Northwest. The climate is all you can desire.—*Floridian.*

THE CHOICEST FLORIDA LANDS.

It is well for our readers to bear in mind that the Clark Syndicate Companies offer land of various kinds and qualities. They have the choicest hard-wood hammock land to be found, not only in the state, but anywhere in the South. This land, as heretofore mentioned, is cleared, and thoroughly so, and is ready for the settler and farmer to begin his work at once.

The Company also has land of the No. 1 pine variety, which in the eyes and judgment of the Northern farmer is oftentimes considered poor land. But this is not so. It is a fact which cannot be gainsaid that the most successful results reported in the state have been attained by the cultivation of this No. 1 pine land, when fertilizer is used, and this land is the choicest fruit and vegetable growing portions of the state.

The Clark Syndicate Company, owning and controlling as it does large tracts of land of all kinds and varieties, is able to offer to the farmer and the prospective settler in Florida anything that he may wish. If No. 1 pine land is wanted, it can be had at low prices and terms to suit. If the choicer land is wanted—land that is cleared, nearer town, and than which there is no better to be found anywhere in the United States—this also can be had at a little higher price, running from \$12 an acre up.

We ask our readers to go down and personally investigate for themselves this beautiful and favored region. They will find everything exactly as represented, and they will then see for themselves a beautiful region, most fertile and productive, where cyclones, blizzards and all like dis-

turbances need never annoy or worry one, and where the snow-storms of the North never reach.

QUESTIONS ANSWERED.

We have received many inquiries as to the condition of crops in the western part of Florida, more particularly the Tallahassee hill region. In response to these very many inquiries, let us say through the columns of this paper that after a personal and very careful observation of the crops in this particular portion of the state, we can say frankly that they are all looking well, with the exception of the late sowing of oats and some few gardens. Corn and cotton are doing well. One particular field of corn, on the 25th of May, when observed by the writer, was nearly six feet high; and a corn-raiser from Kansas who happened to see it said it would make from 40 to 50 bushels per acre.

When one takes into consideration the manner in which farming is done in that country, and the easy-going methods and ways of the farmers generally, it is certainly surprising that conditions are so favorable. Reports from all parts of the state say that over an average crop has been made, and it has been marketed with profit to the growers.

We think all this may be specially interesting to the readers of this paper, in view of the droughts, cyclones and many disturbances which have taken place in various portions of the West and Northwest.

FLORIDA'S CLIMATE.

Dr. H. R. Stout, a leading physician of Jacksonville, Florida, has written an exhaustive treatise on the climate of the state. The following extract, taken from his report, may be interesting to the readers of this paper:

"As to the equability of the climate of Florida, we may well take the testimony of army officers. Dr. Southgate, in his report, says: 'Rarely is the change so great as to impress the individual in fair health uncomfortably, and the invalid has sufficient warning to guard against it.' Surgeon General Lawson says: 'The climate of Florida is remarkably equable and proverbially agreeable, being subject to fewer atmospheric variations, and its atmospheric ranges are much less than in any other part of the United States, except a portion of the coast of California.' Sir James Clark, in his work on climate, says: 'A long residence in a perfectly equable climate is not favorable to health, even with all its advantages of exercise in the open air. A moderate range of temperature and of atmospheric variation seems to be necessary for the preservation of health.'

"As before remarked, we sometimes in the winter have sudden changes of temperature, caused by a blizzard in the Northwest, and sometimes the thermometer will fall 25 or 30 degrees, and sometimes more, in a few hours; but when we consider that that means a change only from 70 or 80 degrees to 40 or 50, it will readily be seen that there can be but little injury resulting therefrom; in fact, I consider these changes to be beneficial. They act as stimulants to the system, and produce a desire for outdoor exercise. It is the opportunity for exercise in the open air which recommends so highly the winter climate of Florida."

EXCURSIONS TO FLORIDA.

Round-trip excursions to Tallahassee, Florida, from Chicago and Cincinnati have been arranged for the following dates: June 16th, July 7th and 21st, August 4th and 18th, September 1st and 15th and October 6th and 20th. The tickets are good for thirty days, and the fare from Chicago is \$29.80, and from Cincinnati \$22.80.

We leave Chicago either by the "Big Four" or the "Monon" routes, and from Cincinnati we leave over the "Queen and Crescent."

We pass by daylight through the beautiful blue-grass region, and make almost an entire daylight ride from Cincinnati to Florida, giving one a most excellent opportunity to see the country.

If you cannot come to Chicago or Cincinnati and join our excursion, go to your nearest ticket agent and get through rates from him on the special excursion days. Then, if you will advise us when you leave, we will have our manager at Tallahassee meet you at the depot. He will show you every courtesy and attention, and arrange free transportation for you over our own railroad lines while you are visiting Tallahassee.

People wishing to go from the East can make the trip via the Clyde Steamship Line from New York or Philadelphia, and the fare for the round-trip (first-class) is \$46.70. The round-trip fare from Boston via the Savannah Steamship Line is \$49.50. This price includes meals and berth on board steamer to Jacksonville, Florida, and from there it is only a short ride to Tallahassee.

For all information regarding excursions to the Tallahassee country, address

CLARK SYNDICATE COMPANIES,
Care of FARM AND FIRESIDE,
1643 Monadnock Block, Chicago, or
108 Times Building, New York City.

Smiles.

WHO'S AFRAID?

The wise physicians tell us there is danger in a kiss; Disease and death may reach us through that avenue of bliss. The gentle osculation, which our being wildly thrills, May bring us months of sickness and a lot of doctor bills. They say that with the honey we are all so prone to sip The deadliest bacteria may pass from lip to lip. But when a fellow gets a chance to kiss a pretty maid, He's very apt to say, "Oh, hang the doctors! Who's afraid?"

IN THE STEAMER.

In the steamer, oh, my darling, When the fog-horns scream and blow, And the footsteps of the steward Softly come and softly go, When the passengers are groaning With a deep and sincere woe; Will you think of me and love me As you did not long ago?

In the cabin, oh, my darling, Think not bitterly of me, Tho' I rushed away and left you In the middle of our tea. I was seized with a sudden longing To gaze upon the deep blue sea; It was best to leave you thus, dear, Best for you and best for me.

-University of Chicago Weekly.

MRS. McSWAT'S HUSBAND'S SUGGESTION.

THE woman's club is going to discuss parliamentary law to-morrow evening, Billiger," remarked Mrs. McSwat, "and I don't think I shall go. I don't take any interest in it." "Parliamentary law, Lobelia," said Mr. McSwat, magisterially, "is something you can't know too much about. You ought to familiarize yourself thoroughly with its usages. A clear understanding of parliamentary law," he went on, warming with his subject, "would be useful in all the relations of life. If I were asked to name one thing, Lobelia, that is calculated to add self-reliance to character, assist in solving the problems that arise from day to day, and make the burden of life less—" "Now, what is the use of your going on like that, Billiger?" interrupted Mrs. McSwat. "What good would it do me to study parliamentary law, I'd like to know?" "You would learn not to talk when you are not in order," replied Billiger, burying himself in his newspaper again. And Mrs. McSwat went out to the kitchen and talked in a loud and expostulatory tone of voice to Bridget for the next fifteen minutes.—Chicago Tribune.

IT WAS REGULAR.

"Once upon a time," said ex-Congressman Peel, of Arkansas, at the Metropolitan, "I heard Mr. Lanham, of Texas, then a congressman, say to his colleague and friend, Colonel Culberson, that it would be better for both of them to retire from political life and return to their homes and make some money from the practise of their profession. "You know, Culberson," said Lanham, "that \$3,000 a year hardly pays the expenses of living in Washington, and as for saving anything, that is impossible. Both of us can make more money than that practising law." "Yes, Lanham," responded the other, "I admit the truth of what you say. It's no big money, \$5,000 a year, hut, Lanham, it comes powerful regular."—Washington Post.

NO MORE NOURISHMENT.

The little maid had been ill and had struggled slowly through the early stages of convalescence. She had taken "nourishing" broths and "nourishing" jellies until her soul was weary within her. One morning she electrified the family by sitting bolt upright in the bed, and saying: "I want you all to take notice. I am not going to take any more nourishment. I'm hungry and I want my meals, and not another mouthful of nourishment will I eat."

LANDS FOR SALE.

AT LOW PRICES AND ON EASY TERMS. The Illinois Central Railroad Company offers for sale on easy terms and at low prices, 150,000 acres of choice fruit, gardening, farm and grazing lands located in SOUTHERN ILLINOIS. They are also largely interested in, and call especial attention to the 600,000 acres of land in the famous YAZOO VALLEY of Mississippi, lying along and owned by the Yazoo & Mississippi Valley Railroad Company, and which that Company offers at low prices and on long terms. Special inducements and facilities offered to go and examine these lands both in Southern Illinois and in the "Yazoo Valley," Miss. For further description, map and any information, address or call upon E. P. SKENE, Land Commissioner, No. 1 Park Row, Chicago, Ill.; or G. W. MCGINNIS, Ass't Land Commissioner, Memphis, Tenn.

DISCOURAGING.

"Well, how do you like farming? Has the hog-cholera got in your pigweed-patch yet?" asked the friend from the city. Johnson, who had rented a farm to escape an epidemic of appendicitis that was raging in the city, extracted a sliver from his thumb, and replied: "I can tell you, farming isn't the snap folks think. There's lots of work. A couple of weeks ago I wanted to set a hen. The hens were all laying, and not wishing to interrupt them, I set a rooster. I've been working with him ever since. That bird is as faithless to his vows as a summer girl. But my worst stroke of luck was last week." "What was it? Forget to put quilts on your onion-bed?" "No, not that. You see, I had a colt that was in rather poor flesh. One of the neighbors told me to feed it plenty of corn in the ear. I did so, and I am afraid it is going to die. The poor animal has been deaf as a bat ever since."—Truth.

HUSBANDS TO BURN.

The English actors who come over here are intensely English when they first arrive, but they soon show their appreciation of American colloquialisms by appropriating them. A gentleman of this city relates that some time ago, in the New York Club, he met Fred Wright, Jr., the comedian. Some one was telling about a woman who had just married her third husband. "By the way," the gentleman asked, "where is her first husband buried?" "He was cremated," was the answer. "And the second?" "Also cremated." "By Jove!" observed little Mr. Wright, "that woman has husbands to burn."—St. Louis Republic.

ONLY PLAYING.

"I have always thought," he was saying to himself, "that the division of the intellectual history of the race into the three so-called brilliant epochs, the age of Pericles, the Renaissance and the Revolution, is fanciful and arbitrary. To the student of history who marks the advance of humanity, not by the shadows cast by the great names along the wayside of the ages, but rather by those silent influences that insensibly mold character and leave their unmistakable traces in the—" A voice in the next room interrupted the speaker: "What are you doing, Elliottson?" "I am playing, mama," replied the dear little Boston boy.—Chicago Tribune.

NAY, NAY!

Mrs. Wilson, a very prominent lady, tried to get Mrs. Jones' cook away from her, and actually went to Mrs. Jones' house when she was out and offered the cook more money. The next time they met at a big dinner Mrs. Jones did not notice her. Some one who sat between them said: "Mrs. Jones, you know Mrs. Wilson, do you not?" "No, I believe not," said Mrs. Jones. "She sometimes calls on my cook, I understand, but we do not exchange those courtesies."—Boston Traveller.

TOO READY.

The habit of thoroughly assenting to everything that is said to one is a very bad one, and occasionally leads to trouble. "I think," said Mrs. A., who was making a call, "that little Miss Smith is one of the stupidest girls I ever met, and—" "Isn't she!" interrupted Mrs. B. "And so plain—" "Dreadfully!" "Now, I haven't very much beauty myself, but—" "No, indeed," said Mrs. A., cordially.—Tit-Bits.

OUTWITTED THE FOOTPAD.

Dr. Brown, of St. Louis, was walking home late one night, when he was accosted by a footpad. "Gimme your money," said the thief. As quick as thought the doctor turned, and in an offended tone, said: "What are you doing over here? Go on the other side of the street; I'm working this side myself." With a muttered apology for his breach of etiquette, the would-be robber vanished in the darkness.

A CLEAN CHEAT.

Discordant and emphatic sounds were issuing from the private chamber of Mr. O'Hooligan. "Phwativer is th' matter wid yez, Pat?" inquired his faithful spouse. "Matter enough!" quote Pat. "Shure, whin Ol bought this cursed plashter Ol thought Ol hod a bargain; but now, hegorra! Ol know Ol'm shkinned."—Judge.

WONDERFUL.

"Is Spinner an expert bicye-le-ri-der?" "I should say so. He ran over four men last week, and the police didn't catch him once."—Life.

HAIR ON THE FACE, NECK, ARMS OR ANY PART OF THE PERSON QUICKLY DISSOLVED AND REMOVED WITH THE NEW SOLUTION

MODENE

AND THE GROWTH FOREVER DESTROYED WITHOUT THE SLIGHTEST INJURY OR DISCOLORATION OF THE MOST DELICATE SKIN.



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Recommended by all who have tested its merits.—Used by people of refinement. Gentlemen who do not appreciate nature's gift of a beard, will find a priceless boon in Modene, which does away with shaving. It dissolves and destroys the life principle of the hair, thereby rendering its future growth an utter impossibility, and its guaranteed to be as harmless as water to the skin. Young persons who find an embarrassing growth of hair coming, should use Modene to destroy its growth. Modene sent by mail, in safety mailing cases, postage paid, (securely sealed from observation) on receipt of price, \$1.00 per bottle. Send money by letter, with your full address written plainly. Correspondence sacredly private. Postage stamps received the same as cash. (ALWAYS MENTION YOUR NAME AND THIS PAPER.) Cut this advertisement out.

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WANTED AGENTS to sell the "ICELESS REFRIGERATOR": keeps milk, butter and vegetables in good condition using nothing but water, the cooling being done by evaporation. No ice used; no chemicals. Patented 1895. Nothing of the kind ever before introduced. ICELESS REFRIGERATOR CO., 632 Elm St., Cincinnati, O.

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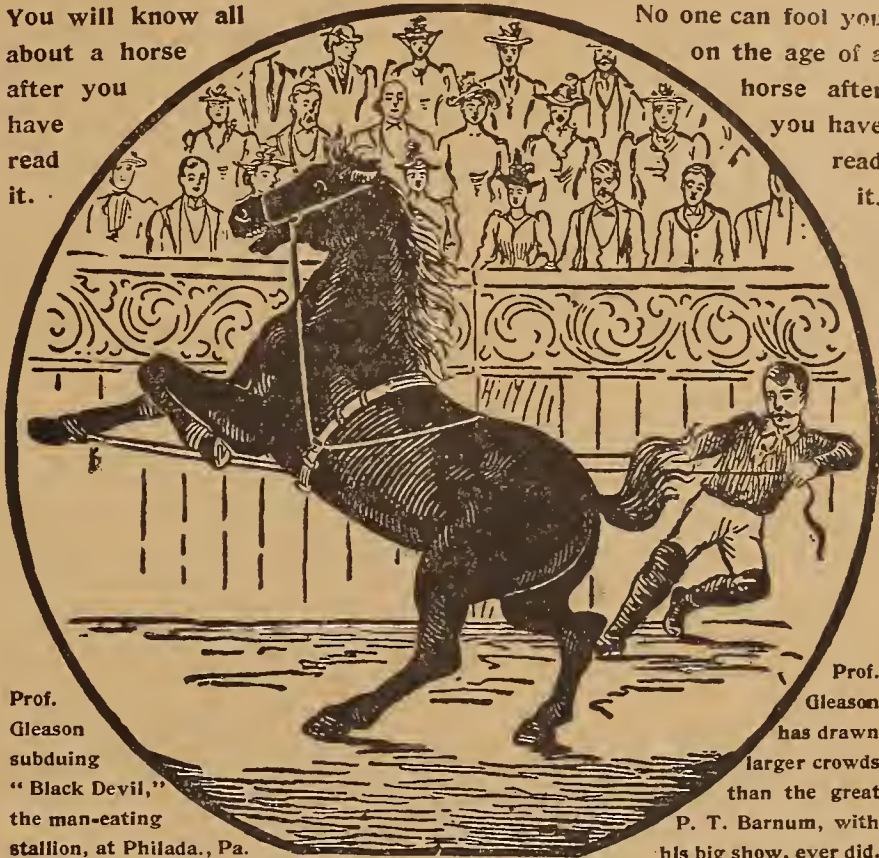
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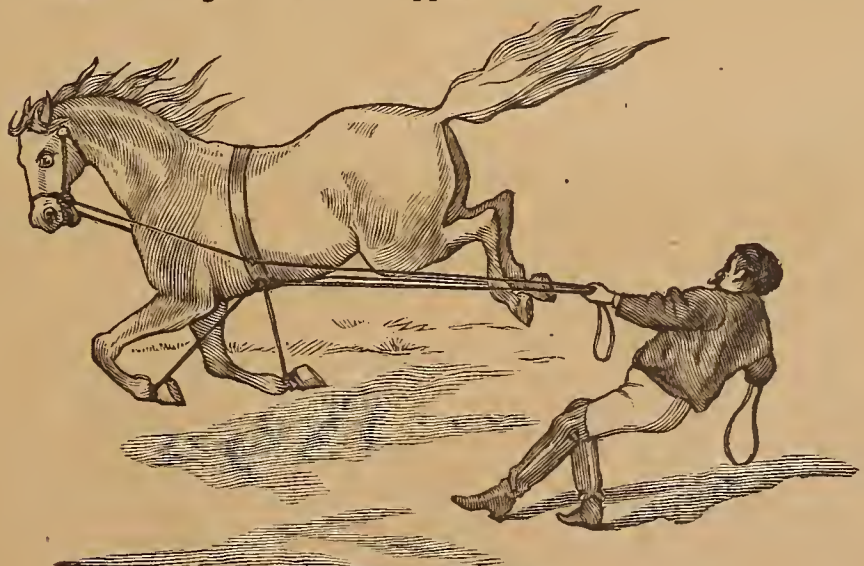
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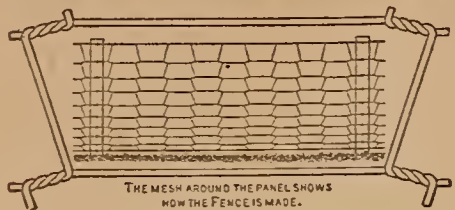
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Humor.

Though a man has fourteen pockets And a woman has but one, He can go through all of his'n While her search has just begun.

He crossed the ocean many times Without a thought of fear; He crossed the rugged Alpine range, He crossed the desert drear; He crossed the Brooklyn trolley tracks, Nor trembled for his life; And yet he doesn't dare to cross His little brown-eyed wife. —Atlanta Constitution.

UNCLE MOSES HEARS ABOUT IT.

"I shore does hope," says Uncle Moses. "dat dey will git dis beah new photograph trick so fine by summer dat a man kin tell wedder melon is ripe."—Indianapolis Journal.

WORSE THAN THE DISEASE.

Family doctor—"Your wife needs outdoor exercise more than anything else." Husband—"But she won't go out. What am I to do?" Family doctor—"Give her plenty of money to shop with."—New York Weekly.

MIGHT MAKE IT WORSE.

"But why do you not print a card and deny the accusation?" inquired the politician's wife. "Deny it," howled the politician, "and then have them prove it? No, I will treat it with contempt."—Truth.

EXCHANGE OF CONFIDENCE.

Mr. Jinks—"I don't know how you will feel about it, sir, but the fact is that my wife, your daughter, is a dreadfully hard woman to live with." Mr. Blinks—"I can sympathize with you, sir. I married her mother."—New York Weekly.

A DEAR FRIEND.

Taper—"I should like two weeks' absence to attend the wedding of a very dear friend." Mr. Gingham—"It must be a very dear friend, indeed, to make you want that much time. Who is it?" Taper—"Well, sir, after the ceremony she will be my wife."

A GOOD PROTECTIONIST.

Miss Gotham (wishing to astound her Aunt Cynthia, from Hayseed Corners)—"What do you think of my new gown, aunt? It was made in Paris." Aunt Cynthia (severely)—"Lau's sake, niece! I allers did hear thet your father was purty close-fisted, but I didn't think he'd go so far as to send to Europe an' have your dresses made by thet cheap foreign pauper labor."—Puck.

TIMELY.

While the train was crawling through the sage-hush district, an easteru capitalist, espying an apology for a dwelling in the midst of the bleakness, remarked aloud: "A man must be a blamed fool to live in such a God-forsaken country as this!" "Excuse me," answered a native, who had boarded the train at a watering-station, "but I think you are mistaken in calling that settler a fool. It takes a blanked smart man to make a living in this country, while any idiot can make a living in a city."—S. F. Wave.

SPURGEON AND THE "ORFLIN."

The following colloquy is reported between the late Mr. Spurgeon and a boy in his orphanage: "Mis'r Spudgln, s'posing there was an orflin 'sylum an' a hundred orflins in it, an' the orflins had uncles and auntses to bring 'em cakes an' apples, 'cept one orflin what hadn't no one. Oughtin somebody give that orflin sixpence?" "I think so, Bob," replied Mr. Spurgeon. "But why?" "'Cause I'm him," said Bob. The story goes that the "orflin" received the sixpence.

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