

Vol XXI No 407

MONTREAL, CHICAGO and SPRINGFIELD MASS MAY 15 1900

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50 Cents a Year

### No Royal Road.

**C**OLLEGE graduates—the classical kind, I mean—are now so numerous, as shown by the federal statistics, that they enjoy no particular prominence, even in a small community. Nor should they, unless native ability gives them a fair lead. "Culture," theoretically, makes a man contented with his lot anywhere and the better worker in any sphere. It does so in actual practice if the culture be the real thing, a genuine broadening influence. There are lots of unhappy college graduates driving street cars and doing other ill-paid work, though. In Germany, where the higher education is well nigh universal. Similar conditions prevail in parts of the United States. These things should be clearly understood by young people coming out from schools of learning, and by boys and girls just planning their education, and by their parents. There is no royal road to honor and dignity. A man stands on his own merits in this democratic age.

### A Devastating Fire.

The greatest fire in the history of Canada recently swept over Hull and West Ottawa. The losses, estimated at \$20,000,000, fall heavily on several lines of business, including especially the lumber syndicate. Over 3000 families or 15,000 people were rendered homeless and many are in absolute want. Considering that 2500 buildings were destroyed it is a marvel that only seven lives were lost. The federal government has given \$100,000 toward the relief fund, the Ottawa government a liberal amount. Even the New Zealand government has sent on \$25,000, and many are contributing handsomely to assist the unfortunate.

### Tightening the Web.

Gradually a web of laws is being wound around the liquor traffic so that many of its degrading features are being taken from view and the coming generation is being obliged to hunt it up rather than to have it constantly before their eyes. While the various states have all sorts of liquor laws, from absolute prohibition in some states, down to the open saloon any and almost everywhere in others, yet the Dominion can give Uncle Sam valuable pointers on suppressing the traffic. The fact that a measure has been under serious consideration in parliament, prohibiting the sale of liquor in every province and territory except Quebec, shows the strong public sentiment in Canada against this monstrous and evil traffic.

### Peace, Peace!

An eastern reader, signing himself M. W., wants to see another international peace conference right away, not only to prevent war but to encourage economy and industry and to look after the wants of the worthy

poor. Our friend voices a feeling which is very general in our country, and particularly strong just now. A similar spirit animates many letters. I believe this feeling to be gaining in strength, though gradually, the world over. The Hague conference undoubtedly was the first of a series. Each new war is felt to be more abhorrent and unnecessary than its predecessor. As the people, in distinction from the few, gain in power, wars will be less frequent.

### The Horse Industry

Appears to be enjoying a veritable boom. While the country is practically bare, an order was recently received for 5000 more horses for South Africa. Good remounts are indeed a scarce article. Even after the war ends, good horses will be in demand for some time. What is wanted now is a good, sound, hardy, workable horse, 14.1 to 15.3 hands and 6 to 9 years old.

### Save the Birds.

The fight against insect and other pests will be half won when the public understands thoroughly the principle so earnestly set forth by scientists and the department of agriculture, that of the necessity of allowing nature's balance in the animal world to be preserved. The birds are our best friends, yet they are slaughtered needlessly, wantonly. Some of those we think troublesome are worth far more than they cost in fruit and seeds consumed. There is danger that some varieties of birds will be exterminated. The principle of balancing forces is neatly exhibited in the case of the parasite which destroys the San Jose scale. Rattlesnakes are increasing in certain parts of California, owing undoubtedly to the killing off of other kinds of snakes and of certain kinds of birds. Illustrations of the principle could be multiplied almost indefinitely. The case of the birds is a serious one. The boys should be taught their value, that they must not kill them. Farmers will stop as soon as they realize the situation.

### The Labor Market.

One of the questions that will soon perplex farmers will be the labor problem. With so many off to war, labor on a boom in the states and our own factories all busy, our farmers may well afford to begin looking around now for harvest hands. 'Tis none too early.

One of the interesting features of the fall fairs in recent years has been the exhibits of farm machinery. It looks as though the magnificence of these displays is to be a thing of the past, as the largest of the manufacturers have decided not to exhibit in the future at either the large or small fairs.

If the agricultural papers of Canada many letters are appearing from prominent farmers urging organization and

to operation. Several schemes are put forward to accomplish the object, but the indications are that when the farmers get together again for mutual protection it will be in the old grange halls. There will be some maneuvering, a waste of good ink, a good deal of jaw-smithing, but that is where the farmers will land. There is no other port in sight.

The influence of trusts upon trade during boom times is one thing, their influence during a period of depression may be quite another. The time to keep them within reasonable bounds is now.

Arbor day, like town meeting, "passes off quietly," but although it may be little celebrated at the time, it serves to remind people to plant trees during several weeks following. It is well worth while.

One of the best and most economical forms of fire insurance is to keep chimneys, flues, fireplaces, etc. in a safe condition. The recent report of a state insurance commissioner says that over one-fourth of the fires among farm buildings in his state the past year caught from defective chimneys and flues, and from sparks from chimneys. Where buildings are old and wood is used for fuel, the risk is great. People living within call of a steam fire engine can better afford to let their property run down.

The net cost of running the United States government in 1897 was 302 millions, the appropriations of the present congress for 1901, substituting the probable postal deficiency for the appropriation, are about 443 millions. The army appropriation jumps in this time from 23 millions to 111; navy, 30 to 61; pensions, 111 to 145. These "items" account for the most of the increase.

One of the latest speakers to tell the boys they will do better to stay on the farm is an ex-congressman who started in the country himself. Well, there are going to be more farmers in congress—though that was not his point. And a lot of money is going to be made in farming. At the same time, the city needs some of the country-bred youth. Some of the most successful young men in agricultural pursuits to-day worked in the large places long enough to catch the modern spirit of hustle and then went back home to put it in operation.

Russian officials are making plans toward converting the entire petroleum industry of the Caspian sea oil fields into a government monopoly. It does not appear that Russian oil magnates have forced consumers over there to pay a 30 per cent advance for the burning fluid, yet here is a hint for our own Standard oil company. Patience is a prominent virtue with our common people, but even this has its limits.

### Dominion and Provincial.

#### A PROSPEROUS SEASON AHEAD.

Never was there a brighter outlook for farmers in the maritime provinces. The spring has opened up very early. Seeds of all kinds, potatoes, oats and wheat are cheaper than for many years, greatly lessening the difficulty of farmers to procure seed of the best quality. A year ago potatoes were 25 to 40c, oats 45c and wheat \$1.50 to 1.75 per bu. Now seed oats of good quality may be procured for 30c, potatoes for 20c and wheat 1 to 1.25. Much fall plowing has been done, greatly accelerating early spring seeding and the outlook for grain prices next fall was never brighter.

What has been greatly to the benefit of the maritime farmer this year was the abundance of all kinds of feed, necessitating no purchasing of feed as in many other years, thus keeping the money in the pockets of the farmer which for several years in the past has been paid out for feed. As a result more cattle were fed this past winter than for years. Good prices were realized for fat cattle this spring. A new market has sprung up in their midst in the growing town of Sydney, which will need a large amount of mutton, beef and poultry. Added to the growth of the cattle industry is the unprecedented high price of pork, which for sometime past has been selling for 5c per lb, a price not realized for many years.

But standing out centrally in bold relief amid them all is the maritime dairy industry. So mild a winter as the past has been and the abundance and cheapness of all kinds of feed strengthen the growing dairy industry as never before. The maritime creameries probably have never begun the cheese season under more favorable auspices. The number of cheese factories has increased fully 25 per cent and the most blind and pessimistic must admit that the possibilities of the biggest bonanza dairy year in the maritime provinces is now well begun. The closing year of the glorious nineteenth century is indeed bright. Let every farmer embrace the present opportunity and share the prosperity.—[J. A. McDonald, P. E. I.]

The N. S. government is placing some first-class horses on the Provincial farm at Truro, including Clydesdale and Hackney stallions and mares. The Clydesdale seems to be the popular and money making horse in Ont and Que and now the maritime provinces are becoming interested.

Free transportation of exhibits to and from the Halifax (N. S.) exposition of the maritime provinces over the government railways is promised by Minister Blair. With this inducement, every farmer ought to have something to place on exhibition. The bigger the fair, the better for the country. Get ready for the big fair, Sept 12-20.

The long-suffering "consuming class" have during 18 long years been "bled" to enable a few of our manufacturing magnates to amass colossal fortunes. If present arrangements to include even more favorable preferential tariff rates are to some extent lightening burdens, we are not going to weep many tears even if the British manufacturer at a distance of 5000 miles is smart enough to capture a share of the trade.—[J. A.]

# Farm and Home.

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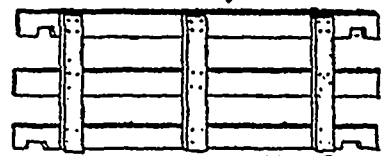
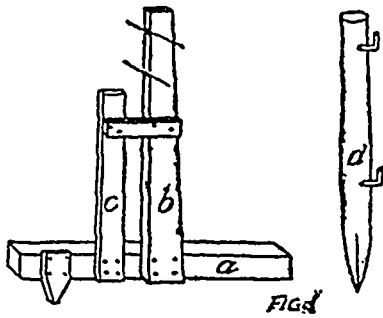
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## All Around the Farm.

### HANDY AND PORTABLE FENCES.

There are several kinds of movable fences, the general utility of which will command them to the attention of farmers. Fig 1 shows two supporting de-

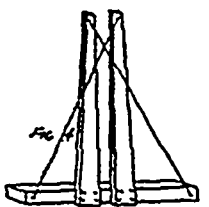
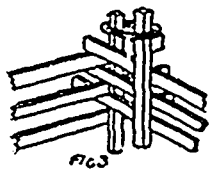


A HOMEMADE FENCE.

vices, either one of which may be used to hold the panel shown in Fig 2. To make the device in Fig 1, take a piece of 2x4 or 3x4 scantling a, 4 ft long, and nail on one side a piece, b, of 1 1/2 in material 4 ft long, 5 in wide at the lower end and 2 1/2 at top; the piece, c, is 2x1 in, 3 ft long. These uprights are connected by a crosspiece at proper height and are just far enough apart to admit the ends of two panels, which rest on the base and the crosspiece. The panels may be made of 16-ft fencing boards, and the movable fence will be suitable for confining hogs, and with a couple strands of wire stretched above panels, will be high enough for cattle.

The device, d, in Fig 1 is still easier to make. Taking posts 4 to 5 ft in length, sharpen one end and bore two 1/2 in holes in the side of each post, about 3 in deep, and at suitable distance apart. Take an iron rod, 1/2 inch in diameter, heat and bend one end into a 2-in right angle, cut off this hooked end, leaving 5 in of a straight shank, and make twice as many of the hooks as there are to be posts in the fence. Drive one in each hole in posts, leaving a space of 2 in between post and angle of hook. These posts should be made and finished complete whenever the farm work permits and if the panels are ready, it is short work to drive the posts into the ground and hang the panels on the hooks, making a very convenient fence. Of course, the posts can be of any dimensions, and the panels can be made different from those used with the device a if it suits better the farmer's purpose when constructing the fence.

Another fence which is very handy and can be moved from place to place is made by taking three 2x4 scantlings, each about 4 1/2 ft long, and three 16-ft boards for the panels, and setting up



when finished in zig-zag fashion, as shown in Fig 3, using an iron ring on end pieces to hold panels in position. If desired but two boards may be used to make each panel, and a couple of strands of wire used to take place of middle board. Panels for this kind of movable fence can be made from light poles, 12 or 14 ft long, using four shorter poles in each panel for cross-pieces. Make notches in the poles and crosspieces when nailing together and this makes a light, strong panel. Fig 4 shows the invention of a western farmer, and it may be found useful to the farmer who has plenty of old fencing rails for making a straight and semi-portable fence. The base piece is a 2 1/2 ft scantling of any reasonable breadth and thickness, and the uprights nailed to it are similar to the piece b in the device shown in Fig 1. Leave space

between uprights to allow ends of rails to be inserted; brace with wires as illustrated. Build the fence five rails high, below where wires cross, and put sixth rail on top of wires, pressing it down to tighten them. When stretching wire above panels, to make the fence cattle-proof, never use barbed wire. Animals which smooth wire will not restrain are not adapted to be confined with portable fences, and I consider barbed wire unnecessarily cruel in every case where used, no matter what kind of fence.—[J. G. Allshouse, Armstrong Co, Pa.]

### ECONOMY IN MANURING.

Land should be well supplied with humus or vegetable matter. This can be done most cheaply by growing cow-peas or clover and turning them under. Too much of such crops will sour the land. As an offset, a dose of slaked lime, say about 40 bu p a, should be applied about once in 5 yrs. The lime will not only hasten the decomposition of the organic matter, but will also unlock some of the latent plant food in the soil, notably potash. By a thorough system of cultivation, the physical condition of the soil can be greatly improved, enabling the air to have more free access, thus causing oxidation and the soil water to percolate more freely. This will dissolve the plant food and move it about in the soil so as to be readily available to the roots.

There are only three ingredients of plant food which have to be considered in feeding the soil. These are phosphoric acid, potash and nitrogen. The last-named can be furnished by clover or peas, while the other two can be purchased cheaply on the market in the form of acid phosphate or bone for phosphoric acid, and muriate of potash or sulphate of potash for potash. These materials should be applied directly to the land, to be sown to clover or peas, so as to insure a heavier growth and thereby a larger absorption of nitrogen. [Bryan Tyson, N C.]

### EXPERIENCE AGAINST THEORY.

I have read much of late on the subject of like producing like, or natural laws as applied to agriculture. I believe in natural laws, I believe in accumulated knowledge, but reject the idea of all knowledge being accumulated upon general principles or limited scientific investigation. Practical experience has gone a long way toward obtaining facts and accumulating knowledge. Theory without practice amounts to but little, and imperfect investigation of natural laws often leaves us in the dark. We have certainly learned but little from scientific investigation in reference to the cause of cheat from wheat, oats, barley, etc. Attempts have been made to do so but have thrown but little light upon the subject.

Men of learning, close observers and students of research, many of whom once ridiculed the idea of wheat, rye, etc, being converted into cheat or chess, have stopped their ridicule and freely confessed there is something in it. We must have a clearer conception of the phenomenon. Have scientific investigators entered into a practical test of this mooted question? Or have their declarations been made upon general principles of like always producing like? Agricultural science has too often ignored the import of accidental occurrences. I strongly maintain that like does not always produce like. If the laws of nature are inexorable what would become of the evolution theory? If the laws of nature were inflexible, how could the higher type of vertebrate life been developed from the lowest, which is claimed by some of our most scientific men? If they are inflexible, what would be the character of our tomato to-day, and our potato, and many other vegetables which have been brought up from so low a type that once they could not be utilized as food? Their characteristics have been entirely changed. And if change to a higher life can and is made, why cannot an arrest and a revision of her laws take place by some accident? I am clearly of the opinion

"That this world is not governed by chance;

By laws every action is bound; And back of each strange circumstance A reason may ever be found."

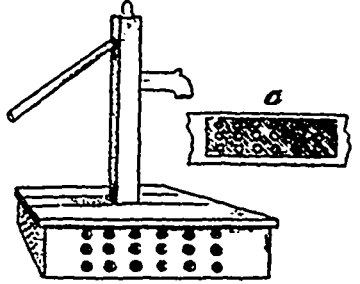
And so back of this phenomenon a reason may be found; a cause for this mysterious appearance of cheat in

wheat, oats, barley, timothy grass, etc. No scientific or practical minded man can believe in the inflexibility of natural laws. Uninterrupted natural laws bring unerring results. But when interrupted, deflection takes place and often reversion, an effort to return to the original type or species. Under my own observation I have seen wheat sown free from all impurities and in land where cheat had never been seen, and as the wheat was about in the "boot," sheep had broken through and eaten it off in a complete circle before discovered, and to the exact line of their ingress nothing but cheat was matured.

Another case: A field of heavily tilled land was cleared and planted in corn. Next year it was put in wheat and all around the fence next to the woods where rabbits, squirrels, etc, had eaten it off, nothing was matured but cheat. These are facts founded on personal observation and facts which claim cannot be successfully controverted. A little more practical experience and less scientific theory and we will get much closer to facts.—[R. R. Reeves, Buncombe Co, N C.]

### VENTILATE THE WELL.

The illustration shows a plank frame covering the well, with small holes bored on all sides for ventilation. The



WELL PLATFORM AND VENTILATOR.

holes of each plank should be covered by a piece of wire mesh or netting, as shown at a, to keep out animals and insects. Put the wire netting inside the box.

### CULTIVATORS IN A CORNFIELD.

Four acres of land were divided into tracts of one acre each at the New exper sta, and each tract was cultivated by a different cultivator, the same one being used on each throughout the summer. The cultivators used were a corn plow, to represent the deep style of cultivation, and the spring tooth cultivator to represent the shallow cultivators. In the fall the corn was picked from each acre and weighed. The yield was for deep cultivation 59 bu p a, for shallow cultivation 69 bu. The land receiving shallow cultivation was stirred to a depth of 3 in, that receiving deep cultivation 6 in.

Shallow cultivation for corn possesses two advantages over the other method. By stirring the soil to a depth of only 3 in the air does not penetrate so deeply, and it does not dry out to such a depth. A study of the roots of the corn plant show that many of them would naturally grow within 1 or 4 in of the surface, but when the upper layer of soil is dry they cannot obtain any nourishment from this layer.

### OUR ADVERTISERS.

It is the intention of the publishers of Farm and Home to admit into their columns none but reliable advertisers, and we believe that all the advertisements in this paper are from such parties. If subscribers find any of them to be otherwise, we will esteem it a favor if they will advise us, and we will at any time give our personal attention to any complaints which we receive. Always mention this paper when answering advertisements, as advertisers often advertised different things in several papers.

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tion of the ground. Another injury to the corn crop from deep cultivation is the tearing out of the corn roots by cultivator wheels. By pruning these roots the ability of the plant to secure nourishment is greatly hindered and the crop injured thereby. It is very important that the cultivations should be sufficiently frequent to prevent a hard crust from remaining on the ground for any length of time.

**FARM NOTES.**

Cleanings from the hen house is one of the best manures for pumpkins and similar vines; it also benefits the hen house to be cleaned once or twice a month but daily cleaning is best.

Early planted corn is best. Corn needs much moisture to mature good ears. Most farmers quit cultivating corn when it should be harrowed, levelled between the rows to retain moisture. It's hard on one horse, as the corn is as high or higher than the horse, but as only one horse can be used at a time he should be rested at each turn.

Plant cowpeas between the corn rows with a one-horse planter. In absence of a planter mark with a single shovel plow and drop by hand. Cover with one-horse harrow.

One of the best and cheapest rough hays for stock is sorghum cane. Sow after corn is planted in June, 1 to 2 bu seed p a. On rich soil 2 bu will yield 3 to 4 tons p a of fine hay. If too thin on rich land, stalks will grow too large, will be hard to handle with a pitch fork and not so good for feed. Both sorghum and Kaffir corn planted thin for seed grows stalks too large to be good feed excepting the blades.

Millet makes a good hay if cut before quite ripe. Sow in June or July. Early sown is more liable to be killed by rain, also liable to grow more weeds. Ripe millet seed is injurious to brood mares and cows and no better egg producer exists.—[Jacob Falth, Vernon Co, Mo.

**Broom Corn**—Living in the midst of the broom corn district, I have never seen so much excitement about planting broom corn as there is this season. During the past 20 yrs every time broom corn became high in price every farmer in the section went to raising it and by the time the crop was made the corn was down below the cost of production. Many men have lost a considerable amount of money in raising broom corn, and several have been "broke" financially. When only a small section of country raised broom corn, it generally brought a good price, but the broom corn area has been so extended in recent years that with anything like a full crop there will be enough produced to supply the demand for 2 or 3 yrs. With a good crop, 12,000 acres will produce all the broom corn we have a demand for. It looks now as though there would be four times as much planted. In Kan, 27,000 a were planted in broom corn in 1899, while in '95 there were 134,500 a. The '95 crop sold as low as \$20 p ton. Considering the rent of land, cost of handling, marketing, etc, the crop will cost \$50 p ton to raise. It is thus possible for farmers to lose a considerable amount if the crop is a big one. Our demand for broom corn is about 30,000 tons per year, and from present indications it looks as though ill would plant enough to produce that much alone, to say nothing of Tex, Okla, Kan and Neb. It will pay farmers to post themselves thoroughly before planting extensively of this crop.—[P. C. Phelps, Mart all Co, Kan.

All Colonies of Bees should now be good and strong, especially if stimulating feeding has been done during the past month. The fruit trees are now showing fast signs of coming to blossom. Have your supers for comb honey ready to put on if you wish to obtain the finest grade of honey. We have clovers and other varieties, but have made a practice for some years to get a first crop from fruit blossoms. I can positively say that the finest grade is obtained from fruit blossoms. It is more than worth trying. The crop may be small, but rich in value.—[J. H. Denyer, Northampton Co, Pa.

To prevent the leaf spot of beets, use the bordeaux mixture, applied half strength. It can be applied with a horse sprayer, wetting six rows at a time.

**THE AMERICAN AND FOREIGN PRODUCE MARKETS AT A GLANCE**

The highest quotations of wholesale prices for standard grades of farm produce in the leading markets of the world on the dates named; poorer stuff lower.

	Boston	New York	Chicago	Cincinnati	N Orleans	Memphis	S Francisco	Montreal	London
May	5	5	5	4	4	4	4	4	14
Wheat, p bu,	—	.73 1/2	.65 1/2	.73	—	—	11.00	.68	.81
Corn, p bu,	.48	.45 1/2	.39 1/2	.42	.48	.48	11.05	.47 1/2	.57
Oats, p bu,	.31 1/2	.28	.23	.26	.32	.34	11.15	.32 1/2	.47
Rye, p bu,	.66	.56	.53	.63 1/2	—	—	11.00	.62 1/2	—
Barley, p bu,	.51	.53	.45	.50	—	—	1.85	.50	—
Flour, p bbl,	3.90	4.30	3.90	3.90	4.00	4.50	3.75	4.00	4.00
Cotton, mild upland, p lb,	.09 1/2	.09 1/2	—	.09 1/2	.09 1/2	.09 1/2	—	—	.11
Cattle, p 100 lbs l w,	6.50	5.85	5.75	6.35	4.50	4.00	4.20	—	6.12
Sheep, p 100 lbs l w,	6.00	5.85	5.60	5.40	5.00	4.50	4.40	—	6.14
Hogs, p 100 lbs l w,	6.75	5.00	5.35	5.45	5.75	4.50	5.90	6.00	—
Veal calves, p 100 lbs l w,	6.50	6.00	7.25	6.25	5.50	5.00	5.40	—	—
Fowls, p lb d w,	.12	.09 1/2	.09	.08 1/2	14.50	13.25	15.00	—	—
Butter, creamery, p lb,	.20 1/2	.20	.19 1/2	.20	.21	.25	.17	.16 1/2	.19
Cheese, factory, p lb,	.12	.12 1/2	.10 1/2	.12 1/2	.13 1/2	.13 1/2	.15	.11 1/2	.13 1/2
Eggs, p dz,	.15	.14	.11 1/2	.11	.09 1/2	.10 1/2	.15 1/2	.11 1/2	.15 1/2
Apples, p bbl,	5.60	5.00	4.75	4.75	5.50	5.75	5.00	5.00	—
Hay, p ton,	17.50	18.00	13.00	15.00	18.00	16.00	9.50	10.00	—
Straw, rye, p ton,	15.00	15.00	8.50	7.00	—	—	—	5.00	—
Hops, p lb,	.14	.14	—	—	—	—	.10	.13	.16 1/2
Onions, p bu,	1.00	.50	1.00	.95	1.25	1.50	16.00	—	—
Potatoes, p bu,	.50	.65	.35	.47	.60	.60	1.75	.35	—
Beef, p lb d w,	.08 1/2	—	—	—	—	—	.07	—	—
Pork, p lb d w,	.08 1/2	.07 1/2	.06	—	—	—	.08 1/2	—	—
Lard, p lb,	.08 1/2	.07 1/2	.07	.07 1/2	.08 1/2	.08 1/2	.09 1/2	.10	.08
Hides, p lb,	.07	.09 1/2	.09 1/2	.08 1/2	.07 1/2	.07 1/2	.10	.09	—

**Business Side of Farming.**

**CROP ACREAGE AND OUTLOOK.**

Farmers have made generally excellent progress in seeding operations this spring. Corn planting is now underway, moving north rapidly, and unless unexpectedly delayed will soon be completed. All the big staple crops will start out with every reason for anticipating liberal harvest returns next fall, providing weather conditions are favorable. Autumn sown wheat came through the winter in good shape; some complaint from a few states. Farmers in the northwest have been favored with an early spring, enabling them to seed wheat rapidly, and Minn and the two Dakotas will show a heavy acreage. Fair winter prices and a healthy condition of the market insure a liberal area under corn, especially as the demand is so great for feeding to live stock. A liberal oats acreage is noted, the crop now making good growth where early sown. Cotton planters have suffered some delays, but the excellent prices mean a liberal total acreage.

So far as special crops are concerned, unusual interest is this spring manifested. Flaxseed has for months sold at the highest price in years, and the west will have a big acreage. A doubling in the price of broom corn will stimulate seeding in that specialty. Onions have been rather low, but last year's splendid crop made money for farmers. A sharp advance in beans the past winter means a large acreage in Cal, Mich, N Y, Me, etc. It is altogether too early to talk of overproduction, even should climatic conditions prove auspicious from first to last. Our export trade is splendid, and will continue to absorb an important part of our farm surplus.

**INDIFFERENT GRAIN SUPPORT.**

May sunshine and shower and advices of rapid seeding have not been conducive to strength. Wheat has sold close to the lowest prices on the crop, on the basis of 65c p bu at Chicago. But the bear element is not particularly aggressive, because the next crop is by no means made, and stocks of old wheat are being whittled down rapidly through home and foreign requirements. The recent strength in corn, when the market advanced well above 40c p bu, has given way to more easiness through increased offerings, yet the market is

healthy, distribution large. Oats and rye are inclined to follow corn and wheat respectively, and barley is dull but steady to firm. Flaxseed has sold at the highest price on the crop, \$1.76 p bu for No 1.

**GOOD PRICES FOR STOCK CATTLE**

Farmers are paying all the way up to \$5 and better for selected feeding steers at Buffalo, Chicago and the Mo river. This indicates the faith pinned to the cattle feeding industry, corn growers evidently making money in converting grain into beef. The market for fat cattle is fairly active and steady, although without particular firmness. The export trade in live steers and dressed beef is large, and so with the home consumption.

**American Corn at Paris**—A feature of the U S exhibit at Paris will be the practical demonstrations of the food value of corn by means of an exhibit. All the varied forms of corn foods will be prepared in full sight of visitors, and samples distributed free. The work is under the care of the dept of agri, and the demonstration is being prepared by the American Maize Propaganda. This practical education of the European races should result in an increased demand for our corn.

**Maple Sugar Is Higher** in the eastern markets than usual. The crop in N E proved unusually light and buyers in the country readily paid 9@10c p lb, or perhaps 2c better than usual; special trade 12c. Sugar orchards in northern N Y, O and Mich yielded fairly well.

**Turnips in Carloads**—H. E. S. Mich: Unless you can sell turnips and potatoes in your local market, consign to a reliable commission dealer in Chicago or other large city. It is difficult to dispose of a carload of turnips through other channels. The dealer receives and peddles these out to retailers in lots of one to three bbls; in the markets rutabagas are often classed with turnips.

**Unshorn Sheep** are no longer desirable in live stock markets, with the season so far advanced. They command only a small premium over shorn lots, not enough to pay for the wool. The markets are well supplied with western lambs, and while these command good prices, they affect the entire list.



**Steel Wheels**  
Staggered Oval Spokes.  
BUY A SET TO FIT YOUR NEW OR OLD WAGON  
**CHEAPEST AND BEST**  
way to get a low wagon. Any size wheel, any width tire. Catal. FREE.  
Electric Wheel Co., Box 56, Quincy, Ill.

**Many a Farmer**

will paint his house, barn, sheds and fences with **Magnite** when he learns how easily and cheaply it can be done. With Weather-proof (rain-proof) and Interior **Magnite** you can paint outside and inside at a quarter of the cost of oil paint. **Magnite** can be used by anyone. Mixed with water; won't scale or wash off; makes wood fire-resisting. Sold by dealers; twelve colors and white.

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Boston, Mass.

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Warranted the lightest, strongest, cheapest & fastest Full Circle Baler in the market. Made of wrought steel. Can be operated with one or two horses. Will bale 10 to 15 tons of hay a day. Write for description and price.  
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We have on hand 2500 square BRAND NEW STEEL ROOFING. Sheets either flat, corrugated or "V" crimped.  
Price per square of 10x10 feet or 10 square feet..... **\$1.75**  
No other tool than a hatchet or hammer is required to lay this roofing. We furnish with each order sufficient paint to cover, and nails to lay it, without additional charge.  
Write for our free catalogue No. 27, of general merchandise bought by us at Sheriff's and Receiver's Sales.  
"OUR PRICES ARE ONE-HALF OF OTHERS."  
**CHICAGO HOUSE WRECKING CO.**  
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**METAL CEILINGS and SIDE WALLS** in elegant designs. Write for Catalogue.  
The Penn Metal Ceiling and Roofing Co., Ltd.  
224 & Hamilton, Phila., Pa., or 24 Hancock St., Boston, Mass.

**HANSON HYDRAULIC RAM**



The most efficient ram in the market for size and price. Send for circular and price.  
**HANSON & RHODES,**  
120 West 32nd St., New York.

**HOOD'S SASSAPARILLA**

In stomach troubles, has a "magic touch," promptly relieves distress and all other dyspeptic symptoms. It makes rich, pure blood, gives strong, steady nerves.

**CREATES AN APPETITE, AIDS DIGESTION.**



### The Poultry Yard.

#### TURKEYS ON THE FARM.

When my three hen turkeys had laid their first laying, I broke up two, setting the other one on 15 eggs, making the nest so that the eggs lay flat, not rolling on each other, and setting the rest of the eggs under hens, so they would hatch about the same time with those under the turkey, then I let the hen-coop be near the turkey's coop, so the young ones would be by the turkey in the day time. This turkey coop needs to be large, but I let the hen cover some of the little turkeys at night.

Keep the old turkey quiet, but the young need liberty, and they must be kept dry in rainy weather. When they are little I give each one a drink of milk, and give pepper and milk to drink every day, keeping a small dish setting by them. Feed bread and milk with pepper in it. I see that they all eat or drink every day. I feed much curd, made from thick milk. Cracked buckwheat is excellent when they are old enough to eat it. I feed buckwheat once a day and clamshells pounded quite fine.

As soon as they are large enough, I get them to roost in a tree, then they need less care, feeding only 2 or 3 times a day. When the other two turkeys had laid their second utters, I set them both, taking out all the old straw and putting in new before placing the eggs in the nest.—(S. E. Miller, Albany Co., N. Y.)

#### AMATEUR TURKEY RAISING.

A man who knew nothing about poultry consulted a turkey raiser and began work. He took an old wagon bed without bottom and with pieces of boards made the sides 2½ ft high. One edge of the pen was over a chip pile where five or six pans of ashes had been piled. Two-thirds of the inclosure was over bluegrass sod. One-half of the pen was roofed over so as to keep out rain and the remainder was covered with wire screening so as to admit sunshine. Into this commodious and pleasant shelter the mother turkey and her 12 little ones were placed about May 20. An old dripping pan placed under the edge of the coop was filled with clean water once or twice every day.

The mother turkey was fed wheat and corn, while the young ones received nothing but cheese made from sour milk. There was plenty of room in this inclosure, plenty of light and sunshine, and as the young turkeys were

able to get out and go about the yard, they did exceedingly well, not one of them being injured by lice or dewy grass. The old turkey was not let out until the latter part of August, at which time the young ones were sufficiently strong to stand any kind of weather.

#### HINTS IN HENOLOGY.

Bran is a good laxative food for young chicks.

Notice which hens lay the largest eggs. Sometimes the largest hens lay smallest eggs.

All nests should be movable. Lice collect behind permanent nests and give a great deal of trouble.

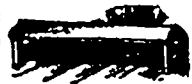
After the hatching season, all surplus cocks should be marketed, as their food is a total waste and is quite a serious item of loss.

Cleanliness and pure water are important items in prevention of cholera and bowel diseases. Don't let the drinking water stand in the sun.

The great mistake of beginners is to attempt a large number of breeds.

#### POULTRY FEEDING DEVICE.

Fowls waste much food, and make unfit for eating much more, by getting into the dishes containing their rations. Many devices have been arranged to meet this trouble. An excellent one is shown in the illustration. The top is hinged, and so can be raised to put the food inside. The fowls can then insert only their heads at the sides and ends. The roof-shaped top, having a sharp apex, affords no chance for getting upon the feedbox, and remaining there, as is the case with flat-topped covers. This device will also aid in keeping the hens from pecking at each other when eating, as the space for moving their heads about is limited.



COVERED FEED TROUGH.

Advantage of Brooders—Allowing that a hen will bring up 20 chicks in good shape it would take eight hens to bring up our incubator hatch of 200. Now put the chicks in three brooders, so they won't be crowded, and the oil will cost for the lamps about 3c per day. How much less can you feed the eight hens for? I never saw a louse on a brooder chick and I raised about 1000 in '96. So that does away with dusting for lice.—(H. O. Allen, Vt.)

Queries—G. H. M.: The continued blindness is a result of roup. Nothing can be done for them and they are

hardly worth keeping alive.—L. H. W.: Gluten meal is a good poultry food if fed with plenty of bran or other bulky matter. Storrs exper sta poultry department says artichokes, if cut up fine, or cooked and mixed with the morning mash three times a week, are all right.—S. R. C.: The R I Red breeders at their meeting during the Boston show voted to disqualify the pea comb and appointed a committee of five to revise the existing standard and report at the next annual meeting.

Buff Leghorn Experience—No new variety has ever taken a stronger hold on the admiration of fanciers as well as farmers. I started with a trio: the two hens were a little too light in color and the cockerel was a gr J buff with a little dark in the tail, and I bred from them the following season about 30 good birds. Every hen was a true Cochitn buff, the cock-



erels did not run so well in color, but I do not think the Buff Leghorn will, if properly bred, show any larger per cent of defective birds than some older breeds. They are similar to other varieties of Leghorns and are superior in some respects, being somewhat larger and laying a larger egg, and yet holding to the true Leghorn type.—(W. G. Jamison, Pa.)

The Luxury of Fresh Eggs—There are 100 many farmers who fare sumptuously on eggs in their various palatable forms who never for a moment take time to think how much money they would necessarily expend were they obliged to purchase this same healthful, strength giving food.—(O. D. Schock, Berks Co, Pa.)

Free Meat—Spade up the runs or let the fowls follow the plow in the field. The best kind of fresh meat supply is right underfoot.

Best Chick Food—The trouble with raw corn meal dough is that it often causes several kinds of bowel disease, especially if allowed to get sour. Bake the food or feed dry, granular oatmeal for the first few weeks, supplying plenty of water to drink.

Feed wisely, plentifully and regularly. Keep water always before the chicks, Guard carefully at night.

A Very Large Business has been built up by some of the carriage and harness manufacturers by dealing direct with the consumer, this plan of operation having a big saving to this class of people. The last company to enter into this plan is the Kalamazoo carriage and harness company of Kalamazoo, Mich, and if the goods they manufacture are as nice as their catalog would have them look we are sure they must be up to the highest possible standing. We have no doubt but what this is the case, for this company are strictly manufacturers and not jobbers, and every vehicle they sell is produced in their own works and is guaranteed. The catalog is a handsome one, and we would advise the subscribers of F & H to send for it. It is sent free if you mention this paper. Address them as follows: Kalamazoo carriage and harness company, Kalamazoo, Mich.

**STEAM TRACTOR**  
The best Engine, Horse-power, Thresher, Clover-baler, Dog-power, Fly Thrasher and Binder, Fan-mill, Feed-mill, Saw-machine (circular and drag), Land-toller, Ensilage and fodder cutter, Shredder, Root-cutter, Corn-sheller, Round-silo, Address: GEO. D. HARDEN, MFG. Colesville, N. Y.  
Please tell what you wish to purchase.

**SWAN'S STANDARD ROOFING**  
Can be applied by any one on steep or flat roofs.  
Low Price!  
Durable!  
Fireproof!  
If you are going to build, or have leaky shingle or tin roofs, SEND FOR SAMPLES AND CIRCULAR.  
THE A. F. SWAN CO., 114 Nassau St., N. Y.

**\$2.45 OUR RELIABLE Two-Burn Gasolene Stove.**  
Perfect in Construction, Easy to Operate, Light in Weight, Convenient to Handle, Is an Ideal Stove in Every Way.  
Our supply was arranged for before the advance in iron and steel otherwise we could not sell it at this price. Our guarantee: Your money back if not satisfied. Our mammoth Catalogue of 1,000 illustrated ranges will be sent prepaid on receipt of 15 Cents, which part of express charges, and will be refunded on receipt of the first order. By a superior process in color photography we are able to bring out many of our goods in natural colors, showing the beautiful tints in carpets, curtains, furniture, draperies, etc. This catalogue is a real dictionary of your own, quoting wholesale prices everything to Eat, Wear and Use. References: Any bank, railroad or express office in Chicago. JOHN M. SMYTH COMPANY, Established 1867. 150 to 166 W. Madison St., CHICAGO. Order by this No. 500 F.

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about results in hatching chickens of the success of the poultry business. By **The Petaluma Incubator** and set your mind at rest. It will turn imperfectly hatched into perfect ones. Hatch perfectly. Hatch high percentage. Hatch to 90%. We pay freight in the U.S.  
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leave the nest and the hen's house in short order if you use our **EVAPORATING NEST EGG.**  
It keeps the hen, the house and the nest absolutely free from vermin of all kinds. Easy to apply; always at work, and odorless throughout entire year. Especially good for sitting hens. Only 25c per doz. by express. Big thing for agents. Send today for eggs and territory. Circulars and terms free. NETHAWAY & HANSON, Dept. G Waboo, Neb.

**INCUBATOR FREE**  
trial. Most perfect. Latest improvements. **The New G. Von Culin.** Catalog free. Poultryman's plans 10c. Address: AVE. OF THE W.T. FALCONER MFG. CO., JAMESTOWN, N.Y.

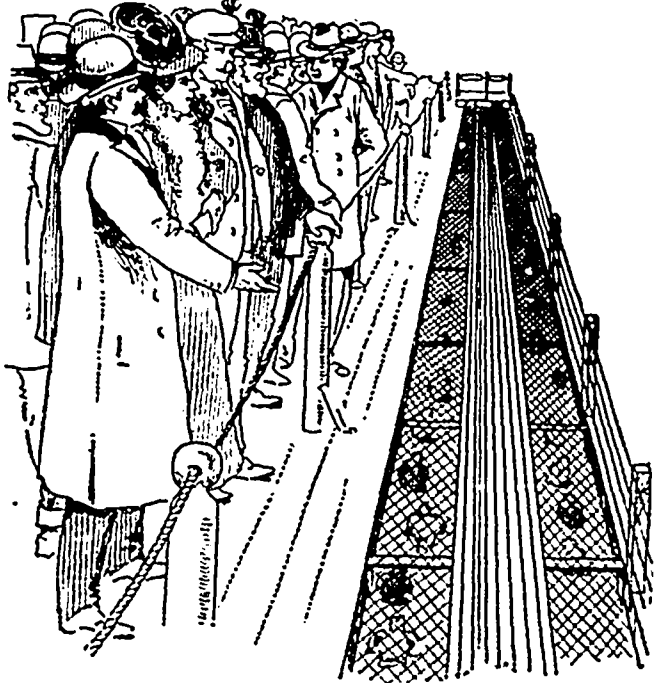
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and how to get it. A CLEANING IN THE FUTURE. handsome illustrated semi-monthly magazine, employing the best experts on the subject. Samples valuable. Look up Bees and Beekeepers' Supplies free to all who mention this paper. **The A. I. Root Co. Medina, O.**

**DEATH TO LICE** on hens and chickens 64-p. Book. For sale by J. J. LAMBERT, Box 301, Apponaug, Va.

**DOGS FOR SALE** of all kinds fancy breeds. Best cared and Belgian Hares, Ferrets, 6c for catalogue. **LANDIS, Box 33, Bowers Station, Pa.**

**GOLDMETER** in pocket case for hunting minerals, gold and silver, also rods and needles. Circular 2c. **H.G. STAUFFER, Dept. F. H. Harrisburg, Pa.**

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We want at least one good agent at every postoffice where we are not at present represented, to solicit subscriptions to **FARM AND HOME.** This is a rare opportunity for men and women out of employment, and even for enterprising boys and girls who wish to engage in profitable work through the spring and summer months. If you can canvass all of the time or part of the time and would make money easily and quickly, send at once for our new terms to agents and complete premium list, which we send free on request.  
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Watching Chicks at Exercise.

A common cause of sickness and loss among early chickens is lack of exercise. Young chicks require constant activity just as growing children need an immense amount of exercise to keep them in health and vigor. In H. H. Stoddard's book, the New Egg Farm, several devices are described for keeping the chicks at work. The one shown in the illustration was exhibited at a fair in Nebraska. The chickens are kept running from one end of the yard to the other by means of a clock work arrangement, which at intervals shakes grain into the litter.

### Sheep and Swine.

#### LAMB FEEDING IN COLORADO.

The lamb feeders of Col are meeting with unusual success this year, and the losses they sustained last year will be more than made up. Larimer Co is feeding about 190,000 head against 225,000 last year. The number in the state, however, is probably larger than ... year, it being estimated at 600,000 head. Northeastern Col. and notably Morgan Co. is taking rapid strides in the industry. Southeastern Col is also making a good showing.

Lambs for the feeding pens were bought at better figures than last year. Then followed a most favorable winter, with both hay and corn at living prices. The only unfavorable features have been the poor quality of much of the alfalfa hay and the exceedingly heavy fall of rain and snow during late March and early April. The rainfall in the Poudre valley since Jan 1 amounts to more than 7 in, almost double the normal, and most of this fell in April. These storms put an almost immediate stop to the growth of lambs and also hastened shipments to market, a fact that doubtless had the effect to depress the market.

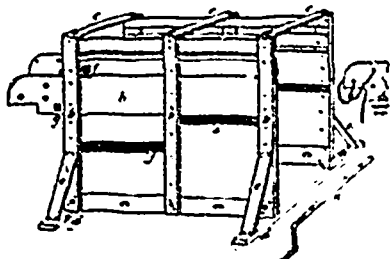
Besides the effect of the wetting of the fleeces, the feeding pens became sodden with excessive moisture and in some cases absolutely flooded, so that the lambs had to be removed to other pens standing on higher grounds. Feeders did what they could to relieve the situation, but the storms came in such rapid succession and were so heavy, that remedial measures were only partially effective. The measures resorted to were frequent bedding with dry straw, the digging of drain ditches and the plowing up of the ground inclosed within the pens. An almost entirely new problem was presented to feeders which they will no doubt take measures to solve in the future.

In one case sheds were caved in by heavy snows and about 75 head of lambs either killed or maimed. Roads leading from the feeding pens to the railroad stock yards also became very muddy and shipments were difficult, and the lambs when arriving at the cars were heavily encrusted with mud.

But these drawbacks have had a serious effect and feeders are rejoicing over the best run of prices known in the history of the industry in Col. The prices have averaged considerably over \$7 per 100 lbs in Chicago markets, while there were spurts as high as \$7.50 and 7.75. It is conservatively estimated that the net profits to the lamb feeders in northern Col this year will amount to at least \$400,000. April 15 only about 50 per cent of the lambs had been sent to market. Some very large single shipments were made from Fort Collins, a train in some instances numbering 45 double decked cars going out behind two powerful freight engines. Of course Chicago gets the great bulk of the product, with South Omaha and St Joe taking a part.—[H. A. Crafts.]

#### DEHORNING MATURE CATTLE.

In the work of dehorning mature cattle, it is essential that they be securely held. The best plan I know of is by means of a rack, as illustrated, and



A DEHORNING RACK.

which I have used with hundreds of head of stock. For its construction, take two scantlings, a, a, 2x6 in by 6 ft. Bore three 1 1/2 in holes through each piece, one in middle and one at each end. Put in three rounds, each 3 ft long, which makes the main frame. Bolt on six upright pieces, b, 2x4 in and 5 ft high, one at middle, the other two at ends, on each side. Mortice or bolt on three crosspieces, c, at the top of uprights, each 3 ft long, to keep sides from spreading. Then nail on two oak planks, d, 2 ft 10 in above the main frame floor, 1x12 in by 7 1/2 ft; allow 12

in to extend in front to tie the animal's head to. Then board up the sides nearly solid except for two slats, the lower one, to put a board, f, 1 ft wide, through, to prevent falling down while dehorning; the slot, g, being used to put a windlass, h, through, to draw the animal to the front of the stock.

Nail two strips on each side to top of uprights, each 1x4 in and 6 ft long. Then spike on two 2x4 in pieces 5 ft long, d, across each end of the frame at the ends and on the bottom. Let them extend out 1 ft on each side. Brace them firmly as shown at c. The head of the animal is fastened with a rope through the holes shown at protruding end of board h. A peg is inserted under the animal's neck at g. The windlass is attached to the rope about the animal's head and the head is drawn down close and tight against the board h.—[J. M. Tanner, Butler Co, Ky.]

When Weaning Pigs shut the sow up instead of the pigs. She needs rest and will gain faster on a corn and water diet if penned than if running a-field. Let the pigs run; they need the exercise.

Sisal Grass for Tying Wool is discontinued by some buyers, as some of the fiber adheres to the wool and follows it through the manufacturing process. A smooth, hard rope is recommended.

Hog Packers Conservative—At the recent advance, which carried hog prices to nearly 6c, the slaughterers in western packing centers have shown unwillingness to take hold freely. Prices have receded fractionally under liberal supplies, but the market is in every way healthy and encouraging.

Breed and feed affect the value of wool from the manufacturers' standpoint. Indiscriminate crossing is unprofitable. A sheep poorly nourished cannot produce a healthy fleece.

A small linen, flax or hemp twine is best for tying wool.

Coarse, heavy paint marks should be avoided in marking sheep.

Salt sheep in the pasture.

Sheep require as pure water as a man.

#### Making the Farm Pay.

Thorough Cultivation Pays—An inch of rain on an acre of ground weighs 110 tons and yet all this weight will evaporate in a short time if allowed to do so. Water comes out of the ground just as oil burns out of a lamp. It is drawn up through small capillary tubes by the heat of the sun if you could reach in and cut the wick of a lamp between the oil and light, the light would at once go out and the oil be left in the lamp. Cultivation of the soil breaks up and rearranges the tubes, preventing the water below from escaping until another rain reforms these tubes so that the ground ought to be cultivated after every rain, especially after every beating rain. Where a harrow can be used it is a good thing to break up this crust as in a corn field, but in a garden a harrow is too heavy and not high enough to run over tender plants. A Hallock weeder is just the thing for this work. It is 12 ft wide, having three rows of spring teeth that are 8 in apart in the row and about the same the other way. The teeth are flat on top and round at the bottom.—[C. E. Kittinger to S D Hort Society.]

The Miller's Toll—1 worked in grist and merchant mills 30 yrs ago. The varieties of wheat raised in these parts at that time were Canada Club, Rio Grande and Fife. In grinding for merchant work we made a barrel of flour or 196 lbs from 4 1-3 to 4 1/2 bu wheat, making from 43 to 45 lbs flour from 1 bu wheat. Of course no toll was taken in this case. In grinding grists the law allowed one-eighth to be taken for toll. Generally, after taking one-eighth, a miller would make, if of good yield, from 34 to 37 lbs flour to the bushel and about 10 lbs bran and 5 lbs shorts, so that the farmer would take home 49 to 52 lbs including flour, bran and shorts. We used those days for grinding what was known as the French barr stone, and we made good flour, too. Since my time the roller process has superseded the old French burr, but, judging from the poorness of the bran and shorts

made now under the new process, there should be a greater yield of flour. Wheat skins or bran may be thicker now and therefore heavier than when raised on the virgin soil when the country was new. Do the readers of F & H believe there is anything to this? Perhaps the new process modern miller will throw some light upon the subject.—[G. H. Davey, Rock Co, Wis.]

Tobacco must have good size to command good prices. Short tobacco sells for short prices. Poor land or poor cultivation makes short tobacco. Lugs or all kinds of defective leaves sell low. It requires good land and good cultivation to get good leaves. It requires good leaves and proper firing and hand-lining to make a fine, finished tobacco. A common crop raised and banded in a haphazard way never pays for raising. A small crop of good, fine, well-finished pays much better than a large crop

of common. For export purposes a large majority of countries using American tobacco want dark colors. Good sound leaves, nicely cured and of good size always pay the planter a profit.

Oxeye Daisies can be exterminated if not allowed to blossom. Its seed will not germinate until 12 days after the daisy blossoms, so it is safe to begin haying of daisy infested fields about a week after the daisy begins to blossom. Put daisy hay is as rich as the best timothy in nutritive value.

The policy of improving the grades of live stock by importing the best blooded animals for breeding purposes has proven very profitable. The operation of large alfalfa farms for breeding and fattening calves is becoming a popular and money-making business in the southern valleys of Arizona, says Gov Murphy.

- ARMSTRONG & McKELVY Pittsburgh.
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- SOUTHERN Chicago.
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FREE For colors use National Lead Company's Pure White Lead Tinting Colors. Any shade desired is readily obtained. Pamphlet giving full information and showing samples of Colors, also pamphlet entitled "Uncle Sam's Experience With Paints" forwarded upon application.

National Lead Co., 100 William Street, New York.

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to investigate the difference between our prices and those of agents and dealers for the same grade of work.

#### ...WE DO NOT SELL...

through agents or dealers, therefore we do not have them to protect, and in making our prices are enabled to figure them as low as the grade of work we manufacture can be sold. We save you the profits that are added between the manufacturer and the consumer, by selling direct to you from our factory. This has been our method of selling for the past twenty-seven years, and we are today the largest manufacturer of vehicles and harness in the world.

No. 48—Single Strap Collar direct to the user exclusively. We make 178 styles of lar and Home Harness. Tryke vehicles and 63 styles of harness and ship anywhere with nickel trimmings, \$11. For examination, guaranteeing safe arrival. Send for free catalogue showing all of our different styles. Good as well for \$10.

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CONSUMERS CARRIAGE & MFG. CO., Chicago.

**Dairy and Creamery.**

**THE FARMER'S COW.**

Of the two chief dairy breeds competing for the patronage of milk producers in America, the Holstein-Friesian and Channel Islands cattle, that breed must eventually prevail which proves itself best adapted to the wants of the great plain people—which proves itself a business breed for business men. Wealthy men who are in no way dependent upon their country property for an income can afford to take up a breed of cattle as a hobby, just as they can afford to stock their parks with deer; but the common farmer and dairymen who is not in the business for his health but for his livelihood, in order to succeed must have that breed which will return the largest net profit for labor, investment and feed.

In its efforts to add the thinking element in the selection of breeding stock for the improvement of his herd, the Holstein-Friesian association is ever at the front. Its official tests are not made by the foremen of wealthy owners, or by the owners themselves, but by the officers of the various state experiment stations and so vouches for. Nor is the cow credited with an indefinite amount of water, salt and casine as butter; but every milking is tested for butter fat with the Babcock test and the cow credited for butter on the basis of the amount of butter fat she has produced. The buyer does not have to take the seller's word; the state vouches for everything. In the light of hundreds of these official tests, the results attained having completely buried the only really official tests of Jerseys known, those of the World's Fair, the Holstein-Friesian has proved itself the greatest of butter breeds while its supremacy in milk production has never been denied.

It was formerly asserted by those interested in rival breeds that while the Holstein-Friesians might give very large quantities of milk, yet the milk was thin; but this criticism was largely the result of ignorance for average Holstein-Friesian milk will compare favorably as to butter fat with that of the average cattle of the country, while as to quantity there can be no comparison at all. With the lowering of prices for milk and its products, the vealing of surplus calves becomes of more importance, and there is no veal that will compare with Holstein-Friesian, or its grades. The calves are large to begin with, grow rapidly and fatten readily, so that at four to five weeks old they dress from 100 to 120 lbs. As to beef, no sane man would claim that dairy cattle make the best; but if a Holstein-Friesian cow or heifer meet with misfortune, and lose the use of a part of her udder, she does not have to be buried, or to be almost given away as a "canner," for the local butcher is always glad to get her at a fair price and she makes excellent beef. Strong of constitution, and not dainty as to feed, for milk butter cheese veal, and dairy beef the Holstein-Friesian cow stands high in the estimation of business farmers and dairymen.—[M. H. Gardner, Wis.]

**TWO GOOD SOILING CROPS**

Along the line of progressive stock-raising, soiling crops have become indispensable. No stockman worthy of the name depends solely on pasture and meadow. During July and August the richest pastures dry up, leaving nothing but scar and woody blades and tufts for stock to feed on. The result is a marked decrease in the milk flow, necessitating the feeding of costly grain and meal or other substitutes. The swine equally with the cows feel the effects of the dried and burnt-up pasture, for the decreased milk flow from the cows reduces the swine ration proportionately.

Green soiling crops make a good substitute for skim milk in feeding swine. Sow crops which may be cut and fed to animals to supplement the pastures. Corn will not answer, as it does not come early enough. Several crops do well in warm climates, but do not answer in our more northerly regions. Two crops, however, answer for a very large portion of the country and are as nutritious as any, besides making large growth. Peas, oats and vetches, a bushel of each per acre, sown broadcast not later than May 15, and covered with disk harrow, may be cut for cows and pigs eight weeks from sowing and a

second cutting may be taken from what was first cut sometime later. Vetches is a crop not much used. The seed is fairly cheap; all the leading seedsmen keep it in stock.

A good second crop for sowing June 15 to 25, is barley and peas, 1 1/2 b. of each per acre. For this crop any mellow piece of ground answers, if kept cultivated once a week. Both the peas and the barley may be put down fairly deep, about 3 in will be right. They may be put in to this depth with the disk or row in the absence of the drill. For a first cutting this crop will be found the very best. Much is said lately about rape, but barley and peas will be found a strong competitor of this crop without the trouble of cleaning and cultivating.—[J. O. MacDonald, P. E. I.]

**WHY A SEPARATOR PAYS.**

A half-hundred-times practice is that of carrying whole milk to the creamery, either by a single milk collector or by every dairymen carrying his own milk. The editor recently visited a Vermont creamery where each Patron delivers his own milk daily. Each dairymen has to haul his milk 1/2 to 6 miles or more each day. This is a most foolish frittering away of valuable time. If the average time consumed by patrons in delivering milk is one hour per day, at least 25¢ per day should be charged for time, use of horse wagon etc. This amounts to \$1.75 per week or 91 per year. If the creamery has 55 patrons, this amount would represent 5000 as being spent in hauling milk. A single good collector could probably be hired for less than one-fifth of this amount.

A first-class hand cream separator can be bought for \$125. If a separator was put in, the discontinuance of teaming the milk alone would more than pay for a separator for each patron of this Vermont creamery in two years. Again fresh warm milk is in the best possible condition for skimming and a larger per cent of cream is secured. The fresh, sweet separated milk is also the best for hog or calf feeding. Again if cream only is received at the factory, the investment in apparatus can be considerably reduced. The small hand farm separator is becoming very popular in creamery sections and its effective work and great saving will bear the rigid inspection of any creamery patron.

**Watering Stock**—How often a pail could be filled and set out for young stock and poultry were it not for their tipping it over. Sharpen a long stick of some strong wood and when the pail is set out drive the stick beside it inside the handle. This will do for calves, lambs, colts and even poultry. Don't allow the pail to become filthy or the water of too long standing.

**Study Your Cows** closely, watch their feed box to see that they clean up their food thoroughly and are keen at the next feeding. Watch their droppings to see that no food passes through them undigested. Watch results closely in conjunction with any new feeding you may try. Never make too radical changes in the character of feed. Treat your cows kindly; feed them regularly; milk them at a fixed time each day, and if possible always have the same person milk the same cow.—[Valancy E. Fuller, N. Y.]

**For Raising Calves** weaned from the cow one of the best appliances is a fairly hard but pliable rubber teat to which is attached a rubber tube, which drops into the pail of milk. The rubber teat is attached to a standard and the pail hung on it, and all attached to a block, which can be hung up at any desired height. The appliance works with my calves to perfection.—[Alpha Messer, Windsor Co., Vt.]

**Three Calves to One Cow**—We keep only one cow, because I do not wish to make any more butter than we need. Last fall I got two more calves, thinking to turn them out this spring and let them live out all next winter, as only very little snow falls. I cut timothy hay, put it in a big can and boiled it daily to make hay tea. Used the hay tea to warm the milk.

At first I put two eggs in the three feedings made once a day until the calves became strong. Eggs are good to prevent scouring and my calves were very fond of the tea. Milk stands not over 12 hours, so not to let it get sour. I now have three fine, big calves running in the pasture. Have just bought three more. That will make six fine calves since Oct with one cow a milk.—[Mrs C. E. Kinney, Pierce Co., Wash.]

**The Milk Market** in the big eastern cities is unusually firm this spring. In the Boston territory the surplus is very small, farmers getting a much better price. At N. Y., the milk exchange quotation is 2 1/2¢ p qt.

**My Six-Legged Pig** was raised from a litter of seven, dropped last July 20. Both extra legs grow from the right flank. The pig also has a double set of



A SIX-LEGGED MONSTROSITY.

urinating organs and uses both. The left front foot has five claws. The pig is healthy and will eat anything. While the picture is none too clear, the live animal looks like the rear end of a pig growing on the flank.—[Philip Kimmer, Miami Co., O.]

**A Spray Pump** that does work of factively and whose parts are durable, being made of the very best material, is sold by the Granite State Evaporator Co of Albany, N. Y. Supplies needed for spraying are also handled by this company at bottom prices.

**SHARPLES CREAM SEPARATORS ALWAYS THE BEST.**  
THE SHARPLES CO., Chicago, Ill. P. M. SHARPLES, West Chester Pa.

**Perfect Butter**  
—the kind which brings the highest price in any market can only be made from perfect milk. All bad odors and flavors of animal, feed or stable must be removed.  
**THE PERFECTION Milk Cooler and Aerator**  
will do it quickly, cheaply and perfectly. Made in various sizes from 1 to 300 cows. Send for price and catalogue of Farm and dairy supplies. L. R. Lewis, Mfr., Box 29, Cortland, N. Y.

**A CHALLENGE**  
We challenge anyone to produce a hand separator that will run as easily (and at the same time skim, as much milk and skim as clean) as the  
**REID Hand Separator**  
The Reid 1900 Separator gained the first week three pounds of butter from the same amount of milk as before. It is the lightest-running machine I have ever seen.  
O. W. Hines, Bristol, Pa.  
Write for the book.  
**A. H. REID**  
30th & Market Sts., Phila.

**THE "NEW CENTURY" A Grand Success.**  
JACKSON, MICH., Feb. 26, 1900.  
It affords me pleasure to report the U. S. "New Century" separator a grand success. I find it vastly superior to either the old pattern or the DeLaval, both of which I have been using side by side. I find the capacity increased about 50 per cent. It is a smoother and lighter running machine and a closer skimmer.  
H. P. PROBERT, Breeder of Jersey Cattle.  
We furnish a complete line of Dairy Apparatus. Catalogue free.  
**VERMONT FARM MACHINE CO., Bellows Falls, Vt.**

**"ALPHA-DE LAVAL" CREAM SEPARATORS.**

The De Laval Cream Separators were first and have always been kept best. They have always led in improvements, which imitating machines must await the expiration of patents to use. The 20th Century improvements give them still greater capacity and efficiency. They are immeasurably superior to any other system or method that can be employed in the separation of cream—saving \$3.- to \$5.- per cow per year over any other centrifugal method, and \$5. to \$10.- over any settling system.  
I have over 200,000 De Laval machines in use—ten times all others combined. Machines are made in all styles and sizes—from \$50.- to \$800.- Send for new 1900 catalogue.

**THE DE LAVAL SEPARATOR CO.**  
RAILROAD & CANAL STS., 74 CORTLAND STREET, CHICAGO. NEW YORK.

**SAVE YOUR MONEY.**  
Every can of butter fat (cream) which escapes into the skin milk is money lost. The calves and pigs get it, but you can't afford to feed them on cream. Our Improved  
**Patent Aquatic Cream Separator**  
takes out all the cream in two hours' time. Beats the best creamery made and costs less than half as much. For 1 cow up to 40. Price, \$5. to \$11. Write for FREE catalogue and testimonials. We want reliable agents in every locality.  
Aquatic Cream Separator Co. 177 Factory Sq. Watertown, N. Y.

**New York State Veterinary College**  
Cornell University, Ithaca, N. Y.  
Free tuition to New York State students. Extended announcement. Address  
Prof. JAMES LAW, F. R. C. V. S., Director.

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not by injurious chemicals but by proper care. Air and cool it in the  
**Champion Milk Cooler and Aerator**  
It removes all odors and bad flavors. Keeps milk pure and sweet. Costs little. Look for "Milk and Ice Cream" sign.  
**CHAMPION MILK COOLER CO.,**  
Milk Dealers' Supplies,  
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We carry a complete stock of all kinds of RUBBER and LEATHER BELTING. We buy our goods at Sheriff's and Receivers' Sales. Write for FREE ILLUSTRATED CATALOGUE No. 27 on Hardware, Pipe, Roofing, Plumbing Material, Wire, Rope, Dry Goods, Clothing, etc., etc. OUR PRICES are ONE-HALF of OTHERS.  
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**VICTOR Low-Down WAGONS**  
Strongest, most durable, all-metal wheels, wide tires. Axles, hounds, bolsters, etc., of thoroughly seasoned woods. Cost one-half less than high wagons.  
Positively guaranteed. Write for description and prices.  
**GEO. ERTEL CO., Quincy, Ill.**

**\$50 a Month Easy!**  
We can give you something to do that will make you \$50 a month without any trouble right around your own home. A Big Money Maker. Send your name and address, anyhow. Please investigate. Write to-day.  
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Canadian Farm Affairs.

Letters from practical farmers stating briefly the conditions of crops, sales, quotations and similar items of interest are welcomed. Short, pithy accounts of farmers' meetings and the helpful points brought out may be included. New ideas and short cuts in farm work are especially solicited. Where future prospects for a special crop are unusually bright, our readers want to know it. We have space for short, crisp, newsy jottings from each state.

THE PREFERENTIAL DUTIES.

Much interest will be manifested throughout all the Canadian provinces in the working of the new Canadian preferential tariff in favor of the United Kingdom, as touched upon in F & H, May 1. The Canadian tariff, it will be remembered, was in '97 so adjusted that the duty on articles entering Canada from Great Britain was made, beginning with April, '97, an eighth less than the rates from other parts of the world. A year later this reduction in duty in favor of Great Britain was increased to a quarter, and now it is announced that on July 1, the reduction will be increased to a third. This means that articles imported into Canada from Great Britain and certain of her colonies will only be required to pay two-thirds of the rates on articles imported from the United States and other parts of the world. This latest change is intended to further increase the imports from Great Britain and restrict those from other countries adversely affected by this reduction.

Four years ago, or during the fiscal year '96, imports into Canada from Great Britain (the last year under the rate uniform for all parts of the world) were 31 per cent of the total imports, while those from the United States formed nearly 51 per cent of the total imports. In '99, under the full effect of the 25 per cent reduction in favor of Great Britain, imports from that country formed only 25 per cent of the total imports of Canada, while those from the United States formed 59 per cent. The proportion of the total which was taken from Great Britain had thus materially fallen under the new preferential tariff, while the proportion taken from the United States showed a positive increase. A large portion of imports from the United States are raw materials for manufacture, these entering Canada free of duty and are not affected by the preferential tariff, while at the same time tending to grow with the industrial progress of the Dominion.

The following official figures show the total imports into Canada in round millions of dollars, and the amount from Great Britain and the United States respectively during the past 20 yrs. It will be observed that the imports into Canada from Great Britain, which in '80 formed 48 per cent, were in '99 scant 25 per cent of the whole, while those from the United States in '80, 40 per cent, were in '99 more than 59 per cent of the total. In view of this showing, it will be highly interesting to watch the movement of our foreign trade after July 1, when additional inducement is made to import direct from Great Britain.

IMPORTS INTO CANADA.

[In round millions of dollars.]

Table with 5 columns: Year, Total Imports from U.K., Per cent from U.K., Total Imports from US, Per cent from US. Rows range from 1880 to 1899.

A New Industry—The continued denudation of forests over Ont has caused a considerable advance in the price of wood during recent years. Coal imported from the states retails at around \$6 per ton. The item of fuel is one of the heaviest expenses to the housekeeper in central Ont, an ordinary residence being estimated to consume not less than \$100 worth of fuel

per year. It has been found that the extensive peat bogs of Kent and Essex counties can be used to advantage much as peat is used in Ireland. A company has recently been incorporated and will at once begin the turning out of this product. It is estimated there are 100,000 a of peat bogs in the province, some bogs running 20 ft deep. Peat is superior to coal in its absolute freedom from sulphur and absence from smoke, soot, dust and clinkers.

Ontario—Horton Co is as good an agricultural purposes as any county outside the southern peninsula. It consists of a general agriculture and is easily accessible from Toronto, Bolton or Guelph. It has been settled many years and the farms which average about 100 a each are held at \$30 to 70 p a. Buyers visit this section for cattle and hogs annually. About the usual number of stock are kept from year to year by the farmers. The people are comparatively well off, most of them having good buildings, basement barns and storehouses. Winter wheat does well. Aside from wheat most of the corn raised is fed to stock. Apples are produced in paying quantities and usually shipped to England. The southern part of the county is extensively interested in fruit growing, Oakville a Lake Ontario shipping an immense lot of small fruits to Toronto and other central points. Many western Ontario farmers were short of feed this spring and turned their cattle out to pick up what they could before the snow was fairly off the ground. The result is that many young cattle who were forced to live on a diet of wind and water are in a very poor condition and will not make much growth this summer. The outlook for wheat in southwestern Ontario is good last year it was almost a total failure. The little town of Warton, Bruce Co, with 2000 people, is the first place in the province to have a beet sugar factory. Machinery is being purchased and six tons of sugar beet seed have been secured. It is claimed Ontario could as well produce all the sugar consumed in the province, as sugar can be produced in Michigan. The cut of logs the past season in Ontario is estimated at 800,000,000 ft, one-half being in the Georgian bay district.

Nova Scotia—Kings Co is well known for the superior quality of its potatoes and their prolific growth, running from 200 to 350 and even 400 bu p a. All kinds of roots grow well in its rich and fertile soil. The country is dotted over with thriving towns and villages, and the scenery is varied and picturesque. Taking into account its many advantages, the price of farms in this beautiful county is not high, as good farms may be purchased at \$3000 to 15,000. W. C. Archibald of Wolfville is setting 10,000 pear trees at Port Williams of Bartlett, Louise Bonne, Duchess, Lawrence, Howell, Anjou and Clairgeau varieties.

Cape Breton—Farming in Inverness Co and in most of the rural and agricultural parts of the island is in a most primitive condition. Farmers follow the most primitive methods and true to the intuitions of our Celtic race, they are slow to change ways and methods venerable with age for any new and modern system let it be ever so approved. It is true that hitherto we were practically side-tracked. Until a few years ago when the Intercolonial railway was built through the island, there was no ready and free and regular communication with the outside world. Any little trading that was done was carried on by the precarious method of small coasting smacks and schooners and all sorts of sailing craft. But even now, with railway communication, we are so far from an market outside the island, that there is practically no inducement to farmers to try to raise foodstuffs for sale. But with the sudden development of the iron industry in the two Sydneys, at least North Sydney expects steel works to start there this summer, the market has come to our doors. I was amazed the first spring I was here to see smacks from Prince Edward Island in here selling oats and potatoes to our farmers. Cape Breton farmers were buying these, not to change seed grain or seed potatoes, but because actually they had not received of those products what would supply home consumption and save

enough for seed. I have been preaching, in season and out of season, ways and methods of improving farming, but without much success; still there are slow but encouraging indications that by and by our farmers will or may begin to farm. A young man who was away in the United States for a number of years, came home a year ago, took hold of his father's farm and is doing all he can to enlighten his neighbors and the community. They first laughed at him as a crank; but already they begin to see there is reason in his madness.—[Subscriber.]

Evading Monopoly Transportation - It seems the fixed policy of governments not to dictate any freight rates to their subsidized lines, and fruit growers have only one alternative—to employ other lines for fruit transport. After a careful consideration of this subject I am fully of the opinion that as this trade develops the only profitable means of transport will be by small fruit steamers from Bay of Fundy ports, much the same as oranges are exported from the Mediterranean and bananas from the West Indies—and with loading ports at Annapolis, Kingsport, Horton and Hantsport and a pier now being provided at mouth of Cornwallis river, fruit growers can find foreign markets without the aid of any subsidized monopolist lines, at about half the freight now paid. Within the next 5 or 10 years we must provide for an export of over 1,000,000 bbls annually and the steamship company which secures this business from Bay of Fundy ports, at half the present cost, will have one of the most profitable export trades from this continent. It is now certain that steamers can be loaded once a week in Minas Basin from wagons direct from the orchards, and it only requires the united effort of fruit growers to secure this at once.—[Pres J. W. Bigelow, N S Fruit Growers' Ass'n.]

Maine—Snow off the ground April 9 in Kennebec Co. Fruit trees are looking fine, being full of blossom buds. Grass winter killed severely. Most of the farmers are sowing grass seed where the grass was killed out; it winter killed badly. Potatoes sell at 50c, eggs 12c, butter 22c, apples \$3 to 3.50, hay 10 to 12. It has been a poor season for maple sugar and syrup making; syrup sells at \$1.20 per gal.—Elbridge Beedy of Franklin Co has 12 sheep that dropped 21 lambs. I. L. Jones shipped 25 lambs on which he realized \$7 to 12 each. Walter Keene of Palmyra has a cow that recently gave 7.2 gals milk in one day and at the Newport condensed milk factory it tested 5 per cent butter fat, which is equivalent to 3 lbs butter.—The town of Brunswick owns 1000 a of what was once pine land, but long given over to fire and huckleberries. The tract is to be replanted with white pine, \$100 having been appropriated to buy seed. As the land is now unproductive, the new plan of artificial forestry is expected to be ornamental as well as profitable.

Washington—Over 3000 a wheat have been seeded on the reservation in Whitman Co at Tekoa. The contractor gets two-thirds and the Indians one-third the crop. The grain acreage is unusually large. Creamery prospects are brightening perceptibly. White brome grass is considered one of the best pasture grasses for high dry land. Fat hogs are in demand at \$4.75 l w and the supply hardly fills the demand.—This promises to be one of the most profitable years to sheep men in the history of the sheep industry in this section. The price of both sheep and wool hold up well and the wool clip promises to be unusually heavy. The mild winter has permitted sheep to come through in better condition than usual. They are stronger and fatter and have a better coat of wool than usual. This is the lambing season. Everything points to a big crop of healthy lambs.

Heirs—There is no telling how long it will take to extinguish the rights of absent heirs of real estate. The mere absence of the children will not give the brothers and sisters right. The rights remain in the children and their heirs.

Green Arsenite or arsenate of copper is practically the same composition as Paris green and has the same effect

on foliage. It contains slightly more poison, is cheaper in price and better to use, as it stays in suspension longer.

Good resolutions are like fainting women—they should be immediately carried out.

KIDNEY TROUBLE Is a deceptive disease—thousands have it and don't know it. If you want quick results you can make no mistake by using Dr. Kilmer's Swamp-Root, the great kidney remedy. At drug stores in fifty cent and dollar sizes. Sample bottle by mail free, also pamphlet telling you how to find out if you have kidney trouble. Address, Dr. Kilmer & Co., Binghamton, N. Y.

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**The Mohair Industry.**

**ANGORA GOATS.**

Considering that millions of pounds of mohair are imported annually, there is a good home market, and for clean, well-cared-for hair, there



A THREE-YEAR-OLD ANGORA NANNY

is a good profit in its raising. To say nothing of the great value of the animals for breeding purposes. The Angora goat is a native of the province of Angora in Turkey in Asia about 300 miles inland from Constantinople, but it is about 20 yrs since any were imported into this country from there. The breeding of these animals has been for many years one of the leading industries in Cape Colony South Africa and it is fair to say that the interest and intelligence devoted to them in that part of the world almost parallels that given by our breeders to the leading breeds of cattle and sheep in this country.

Among those who have handled them for a series of years they are no longer regarded in the light of an experiment. Their excellent and valuable qualities are rapidly becoming better known in a more general way. One of these characteristics is their adaptability to lands which have been hitherto regarded with so much disfavor. On these, where there is an abundance of underbrush, the goats are in their element. The Angora is essentially a browser, and while it will thrive on grassy land, it feels much more at home among hills, and scrub brush, and on such a character of range will attain its highest development. It is of an active temperament, which prompts it to travel over a good deal of ground in search of its food, and for this reason, while it does not in any way interfere with other stock, it does not like to be herded in the same flock.

Where range of suitable character exists, a pasture of any given capacity can carry a flock of Angora goats without detriment to other stock, because the goat will eat brush and weeds which other stock refuse, and will also enrich the more open land with their droppings, derived from a class of food which would otherwise be wasted. Where confined to a limited area they will effectually destroy underbrush by keeping the leaves eaten off. They are sometimes kept with this object in view, though most breeders who realize their value give them access to ample brush, which they regard just as a sheep man does his grass, and for the same reason would not wish to graze it so closely as to destroy it. Angora goats will live largely on the twigs and bark of sappy underbrush and the leaves of evergreens in winter, and are rarely fed in the south at any time of year, but in more northern latitudes, where feeding and sheltering are necessary, such protection as is usually accorded to sheep will more than suffice to keep Angora goats in the same condition.

The meat of the Angora goat is excellent and is not distinguishable from mutton of the same age and condition. It is very largely sold as such in many of the larger markets, besides being regarded as a staple in the districts where it is raised. The methods employed in handling Angora goats are in the main very much the same as those followed with sheep. They can be herded in about the same sized flocks in mountainous ranges as sheep can in more level country.

The most marked difference in the system of management is through the kidding season when instead of allowing the newly born offspring to follow

the dam, as in the case with sheep, the kids are kept back in the pen when the flock goes out in the morning. It is not until they are about 2 mos old that it is safe to allow them to run freely with their mothers, as the latter cover too much ground for the strength of the kids. During the earlier weeks of the life of the youngsters they are often allowed to go out of the fold after the flock has gone off for the day. They will then content themselves with nibbling the young grass and leaves within easy access of the pen, never leaving it to go any distance until their dams return at night. Where handled by experienced breeders 100 per cent of kids are often raised to the number of breeding does, the few losses being made up by twins, of which about 7 to 10 per cent are generally dropped in a flock of well-bred Angoras. The percentage of twins in well-bred Angoras is not as high as in a flock of common or native goats.—[W. G. Hughes, Tex.

**Helps for Farm and Home.**

**CHAT WITH THE EDITOR.**

F. J. K. Write to the secretary of the board of railroad commissioners at the capitol of each state for list of railroads in the state.—E. D. Some good books on house plans are: Reed's House Plans for Everybody, price \$1, Homes for Home Builders, 1. How to Build a Home, 1; Fuller's New Cottage Homes and Details, 4, Barn Plans and Outbuildings, 1; all are sold by the Orange Judd Co of 32 Lafayette place, New York.—G. C. asks whether a ram's capacity to pump water may be doubled in point of distance, as well as in quantity, by increasing the supply of water per minute to the ram at the spring. Providing the delivery pipe is sufficiently large to prevent friction in the pipe line with a given delivery of water, the distance pumped makes almost no difference in the quantities delivered. If the delivery pipe is too small to carry the water delivered by the ram, frictional resistance is developed, which is equivalent to an increased head, and an additional supply of power water must be furnished to the ram to overcome this resistance whatever it may be.

**LIVE STOCK AND DAIRY**—Pa Subscriber: Milk tubes are sold by all dairy supply houses. Write to the Dairymen's Supply Co, 1977 Market street, Philadelphia, Pa.—D. McJ.: Poultry commission houses include F. W. Brockman, 809 N 3d St, St Louis; Trescher & Miller, 922 N 3d St, St Louis; A. W. Bear, 119 E 4th St, Kansas City; Papendick Produce Co, Kansas City.—V. J. D.: Write to the U S dept of ag., division of animal industry, for reports on tuberculosis. They are free.

**ABOUT POTATOES**—Ground which has been planted continuously for years with potatoes becomes deficient in available potash and phosphoric acid and the resulting crop is st. and unmerchantable unless sufficient fertilizer is restored each year, which should contain more of the mineral elements than is usually found in manure. The growth of vines and quality of the tubers show this to be the case. The volunteer crop of L. A. S. did not come from small potatoes left over winter on top of the ground, for the freezing would spoil them; they came from tubers which were so deep in the ground that they were not plowed up and had the frost drawn out of them by the earth. They will grow this way in our natural potato soil for years in the meadows as a weed. Potatoes which are kept buried during winter retain their solidity and are much longer in coming up. The reason they yielded better than the regularly planted crop was because of the deep planting and early, natural planting, combined with the more favorable condition of wintering. A lot of vigor is lost by the drying and sprouting of tubers in the house cellar. This is not a case of reversion, or of bud variation. Tubers are scions, not seeds. Seeds of potatoes would not bring large tubers or foliage of potatoes the first year. Small potatoes often give good results in yield. Maturity and care in wintering have more to do with good yields than size. A change of seed is often beneficial and I cannot see why the second crop should have greater adaptability, says C. E. Chapman of N. Y., a potato expert.

**POISON OAK**—E. R. wants a remedy for the cure of poison oak. Bathe the afflicted parts three times a day with a little of the following: Acetate of lead 1/2 oz, glycerin 2 oz and soft water 1 qt. Also take five drops of Fowler's solution of arsenic at a dose in a little water three times a day after meals. Continue this treatment for several months if necessary.

**NOTE**—I. D. N. Y. A. living in N. J. gave B. also living in N. J. his promissory note for \$20. Afterward A. moved to N. Y. and has not paid the note. What satisfaction can B. get. A. having no property? None. A. has done nothing criminal.

**Our Veterinary Adviser.**

(Questions for this department are answered in turn, but on account of the large number of queries received it is often some weeks before replies can be printed. In case an immediate answer by mail is desired, \$1 should be inclosed.)

**SWELLING ON CHEST**—H. H. has a pony which is fat and has a swelling on its chest. Give it regular exercise; also 2 dr nitrate of potassium at a dose three times a day in small mash. Hand-rub the swelling well several times a day.

**THRUSH**—E. W. L.'s horse has thrush in the feet. Wash out the cracks of the frog with warm water and dry well; then put dry calome into all the affected parts and repeat this every second day until the feet are healthy. Keep the feet dry while under treatment.

**INDIGESTION**—S. R. E. has a cow that would walk around in a ring, always to the same side; she is better now but has a poor appetite. The trouble was indigestion, which affected the head. Give 1 oz each tincture ginger, gentian and chloride of iron at a dose in 1 qt oatmeal gruel three times a day.

**STIFFNESS**—B. F. W.'s cow is stiff and when she gets up makes a grunting sound. Her appetite is not good and she does not chew her cud. Give at one dose 1 1/2 lbs epsom salts and 1 oz ginger dissolved in water. After the physic operates, give 1 oz each tincture of chloride of iron, ginger and gentian at a dose in 1 qt of oatmeal gruel. Loss of cud is not a disease, but a result of any disease.

**CAKED UDDER**—C. F. S.'s cow's bag caked, also what is best to give horses and cattle when they are bitten by a rattlesnake. Mix 2 dr iodine with 2 oz vaseline and rub a little of this on the udder once every second day. The best remedy for rattlesnake bite is good whiskey and bathe the part with a lotion made by mixing 1 oz acetate of lead with 1 qt water.

**MEGRIMS**—Mrs G. U. P.'s mare has a nervous twitching of the head and neck and sometimes all over the body nearly every time she is hitched up and driven a short distance. This is a derangement of the nervous system and is usually incurable. Give 1 oz br. mide of potassium twice a day in bran for one week, then skip a week and give again if necessary.

**BUNCH ON TEAT**—H. B. W.'s cow has a bunch on one of her teats. Take a knife and scrape off the skin or crust, then apply a little terechloride of antimony to it. In three days remove the scab and apply a little more of the antimony until the lump is removed. Mix 2 dr oxide of zinc with 6 dr lard. Apply a little of this once a day to heal it. If the cow is giving milk, use a milk tube to draw off the milk while under treatment.

**FOUNDER**—M. L.'s mare ate too much corn, got sick, then became very stiff, got a little better and then got worse again. This is a case of founder and it is likely that she will be always more or less stiff. Give 1/2 oz nitrate of potassium at a dose twice a day in a bran mash. Mix 2 dr cantharides with 1 oz lard, rub this around the coronets, let it remain on 24 hours, then wash off and turn out to pasture for the summer.

**SCOURS**—A. S. M.'s cows have the scours. Change the food and give each 1 dr of sulphuric acid and 1/2 dr sulphate of iron in a small mash or a quart of starch gruel at a dose three times a day until cured.

**FUNERAL EXPENSES**—J. L. C., N. Y.: A debt for funeral expenses is a preferred claim against an estate. If a man knowingly makes a false statement to a commercial agency and afterward buys goods from one relying on such statement, he may thereby lay himself open to criminal prosecution.

**EXEMPTIONS FOR DEBT**—D. A. E., Me.: A single woman has the same exemptions as to attachment for debt as has anybody else. The list of exemptions in Me is too long to publish here, but includes wearing apparel, necessary household furniture, \$150 worth of books, fuel, food supplies, tools of trade, one pair of working cattle, or one pair horses or muler, two swine, one cow, 10 sheep, \$50 worth of domestic fowls and \$500 worth of land, if the required certificate is filed in the registry of deeds, making it a homestead.

**PREFERRED DEBT**—X. Y., N. Y.: If an administrator squanders an estate and doesn't pay the preferred debts and a relative pays for the cemetery lot, does that relative thereby make himself liable for the preferred debts? Of course not. A married woman of full age and sound mind may devise her separate real or personal property by will without the husband's consent in the following states: Vt. Ct. Ohio. Ind. Wis. Minn. Neb. Va. Cal. Nev. N. D. S. D. Mont. Wyo. Utah, Ala. Miss, Fla. La, Ariz and D. C.

**Talks with Our Lawyer.**

Questions for Our Legal Adviser are answered in turn, but on account of the large number of queries received it is often some weeks before replies can be printed. In case an immediate answer by mail is desired, \$1 should be inclosed. Subscribers to eastern edition should address the Springfield Office, western edition readers, Marquette Building, Chicago. Gardner & Burns, 916-918 Marquette building, Chicago, have charge of western edition legal inquiries; for the eastern edition Charles H. Beck with, Esq. of Springfield, Mass.

Caution: Subscribers in asking questions regarding the distribution of estates should state all the facts and circumstances, if real estate is involved, where it is situated, etc. A question like this: "How much of her husband's property does a wife hold?" cannot be fully answered in this column, as the law varies according to the facts, and the whole law is too long to be printed in full, and hence our answer may be misleading.

**THE WAR REVENUE ACT OF 1898** provides that no telegraph company shall transmit a message without affixing a stamp. E. D. S. of N. Y. says a telegraph school has a pen line four miles long for the practice of its students, but serves the public at 2c a message. He wants to know if they must stamp their messages. Probably the courts would hold that they must.

**BARN HAY TRACK**—Mich Reader: A track for horse fork in a barn would probably be considered a portion of the barn, and as such is a fixture. If G had sold the farm to A, he would have no right to remove the track.

**WATER RIGHTS**—A. S., N. Y. A land owner cannot close a water course running over his land, to the damage of other riparian owners. If he does, such persons may break down the obstruction or sue him for damages.



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### The Garden.

#### HOW TO GROW BIG SQUASHES.

My land is made in good condition, being heavily manured every year. It is of a gravelly formation with about 16 in of clay loam on top. A 300-lb squash can be grown on any part of it by the following method of cultivation. For each hill I intend to plant, about April 1, take two good wheelbarrow loads of hen manure, and mix with four barrows of good soil taken from some other part of the lot; this is mixed a second time April 15. May 1, I add four barrows of well-rotted manure and mix thoroughly, then about May 18 make the hills and plant. Dig out a space 7 ft in diameter and 14 in deep, fill in my compost mixing, and with it some of the best earth which was thrown out, and when finished, the hill will be about 10 ft in diameter and 6 in higher in the center than the surrounding level. Then plant the seed.

Hills want to be about 20 ft apart; work the ground well until the plants begin to run. When about 3 ft long I rutch the ground all over for 20 ft in diameter around each hill with horse manure 3 in deep and stake the vines down with sticks to keep the wind from rolling them about so that they may root at every joint. It is of great advantage to keep the vine from fruiting as long as possible, by pruning all fruit bloom off until about the last week in July; this will give time enough to mature a 300-lb squash by Oct 1, for there must be a big vine to produce a big squash.

I practice stitilizing a few of the first blooms that come, when I think the vine is strong enough to grow a good specimen, by cutting off some of the fresh false bloom, trim the corolla or flower leaf off, and rub the stamen in around the fresh fruit bloom, this is necessary when fruit bloom comes on a morning that is unfavorable for bees to do their work and it assures the setting of the specimens just where you want them; it also gives extra vigor to the growth of fruit to be well pollinized. When the first perfect specimens have set well, say 4 or 5 inches in diameter, cut all other fruit and blossoms off and nip the ends off vines and all bloom that shows twice a week so that the vine is not exhausted with the great quantity of false bloom that would naturally come. Now while the great growth of the squash is going on, I use liquid manure twice a week along three or four of the principal vines of each hill, often six pails to the hill if it is in a dry time. Great care must be taken to give plenty of water; for instance, in 1893 when I grew the great specimen that was the largest on exhibition at the World's fair it was a dry time with us in Ont. and having the advantage of the town water service, I sprayed each hill twice a week through Aug and early Sept, drenching the ground each time. [William Warnock, Huron Co, Ont.

#### CULTIVATE EARLY AND OFTEN

After a garden crop is planted and fairly started in growth the most assiduous cultivation is necessary. No weed or blade of grass can be permitted to share its store of nourishment. The lawful plant, like a prudent sovereign, will tolerate no rival near its throne. For the cultivation of cabbage, potatoes, cauliflower, peas, beets, lettuce, squash, cucumbers, egg plant, peppers,

#### How to Grow Good Fruit.

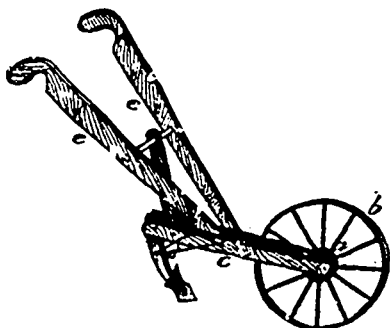
The superintendent of the Lenox sprayer company of Pittsfield, Mass. has delivered an address before the Lenox horticultural society at Lenox, Mass. The address bore chiefly upon spraying and general culture of orchard and field crops, how to do it, do it cheaply and good, and how to obtain the most profit from your labor in the easiest manner. The address is quite lengthy, about an hour's talk. Owing to other matters ahead of it we cannot publish it in this issue. Had this address been placed on the market in book form it no doubt would have sold at a good price. The full address, profusely illustrated, in pamphlet form, was intended to be sent free to fruit growers and owners of estates, free for the asking, but to prevent imposition by the curious and disinterested, the book will be sent to fruit growers or owners of estates inclosing 50 cents to the Lenox sprayer company, 21 West street, Pittsfield, Mass.—Adv.

etc. I use a fine-toothed, deep running cultivator, penetrating to a depth of 8 or 9 in until the plants have spread out a healthy growth of roots from 4 to 6 inches in length; then we stop deep cultivation, but endeavor to have the surface well-worked to a depth of from 1 1/2 to 3 in, according to the character of the plant, using the small-toothed cultivator or hoe; thereby keeping the surface well-powdered, opening small crevices for the admission of the sun's rays and enabling the soil to absorb dews and rains. We continue this process until foliage interferes.

The results bearing possible drawbacks of disastrous drouths or damaging storms are usually early crops and the best prices of the market. With us, lettuce, celery, turnips, beets, cabbage, cantaloupes and potatoes are of a grown very extensively as a second crop. The potatoes being planted between July 20 and Aug 10 generally result in an enormous yield within 10 weeks if cultivated under favorable conditions, often yielding 250 to 300 bu p a. and while the green vines are frequently killed by frost and potatoes are not fully developed, they do not sprout until late in the winter or early spring and are therefore excellent seed, even superior to the northern potato, as they grow more vigorously and mature earlier. Our soil is a brown limestone. [E. F. Weinstein to Nat'l Farmers' Congress.

#### A HANDY GARDEN PLOW.

Any one with a knack for making things can make this plow, excepting perhaps the rim of the wheel and the shovel. The rim, b, should not exceed



HOMEMADE PLOW.

18 inches in diameter and should have eight small holes to nail spokes through. The hub, a, should be made from tough wood, 2 in thick and 4 inches in diameter. The wheel on my plow is from an old metal baby carriage. The two horizontal pieces, c, are 1x2 in by 2 ft. Shank for shovel, d, is 1 1/2 in long. The handles, e, are cut 1x5 in by 3 ft. The upright brace and round for handles to suit height and width it is desired the handles to be. The braces on shank are made from heavy wire looped for bolt on shank and fastened with large screws to horizontal pieces. The handles are bolted on the top of horizontal bars with 1/2 in bolts. I made the shovel from an old ditching spade 3 1/2 in wide and 6 in long cut across the blade and it was just the right shape.—[N. A. Clearwaters, Vermillion Co, Ind.

#### HOW I RAISE EGG PLANT.

When setting plants, start in a corner of box with trowel and after the first plant is removed divide them evenly clear to the bottom of box, so as to get all the dirt have found it best to thoroughly soak the soil and let them stand a few hours; then the earth will stick to the roots better and can set with less trouble. I dig a hole with a spade so as to have plenty of room to fill in with loose moist soil. Set the plants considerably deeper than they are in boxes, tramp the earth firm but gently with one foot, then draw loose soil around plant with trowel; do not hill but leave ground level. I set plants 3 ft apart in the row, rows 4 ft apart.

My plants bear enormous crops. I think I have raised as high as 25 to the plant. The land must be rich to attain these results. When the seasons have been very dry, I have found that sprinkling a large tablespoonful of salt around the roots is of value, raking the ground with steel rake afterward. Do not let the soil get on the leaves, or heart of plants. Cultivate the ground once a week if it

is not too wet. I think it better to cut fruit than pull, so as to leave piece of stem on plant. They are not fit to eat when ripe; should be used when half or two-thirds grown. I find the New York Improved as good as any I have tried. I think if people know how to prepare and cook egg plant they would be more generally used.—[William Box.

#### IMPORTANCE OF PROMPTNESS.

Some vegetables are very slender and easily stunted in the earlier periods of their growth. If the soil is badly infested with weeds, it will be necessary to resort to almost daily cultivation during this most important period in order that the plant may have every chance to grow. The increased product will repay for all extra trouble taken or work given. Earliness is also very important. Early garden truck is a delicacy relished by all after the winter diet of meat. Especially is earliness desirable for the market. The earlier the product is marketed, generally, the better the price received. Every farmer's garden should have a variety of vegetables. Not only should onions, beans, radishes, peas, lettuce, potatoes, cabbage, corn and pumpkins be grown, but enough space should be had for strawberries, raspberries, blackberries, currants, gooseberries, cauliflower, flowers, tomatoes, mangoes, egg plant, etc. It should not be left to the wife to cultivate mealy, the man of the house putting in an odd hour occasionally only. But turn the tables or at least let the husband do fully half of the work. A better garden will be the result, a better feeling will permeate the husband's morals and better health will be the lot of all the family. A good garden is a wonderful saving of doctor's bills. Try it and see.—[A. N.

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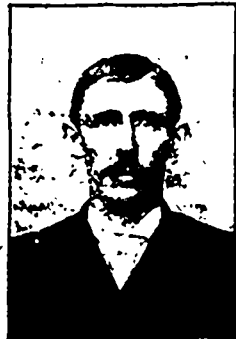
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**Success Without a Mortgage.**

**FROM POVERTY TO AFFLUENCE**

HOW A HUSTLING CAROLINIAN SUCCEEDED.

[Sixth Prize Essay.]



Born on a farm—in '69—in Guilford Co., N. C., I attended public school during winter until 19, getting what education I could. When 19 or 12 yrs old I began earning money by catching rabbits and birds, and having small truck patches I saved money carefully and

when \$1 or 2 had accumulated gave it to father to keep for me. Kept on increasing my means by raising a hog or calf and working spare days for neighbors until 29 yrs old.

At 20, father agreed to set me free without a horse, or work for in another year and he would give me one. I chose the former offer, was then 20 yrs old and had \$155 in cash, one cow and calf and a patch of wheat sowed. In the fall, took all my money and bought a young mare and began farming on share with father. On Sept 1, '92, married a young lady of 18 yrs and had to borrow the money to buy my license of \$3, but did not have to give a mortgage for it. We went to live with my father. I need not say we moved, for we had nothing to move except ourselves.

In the spring of '90 we began trucking, raising sweet and Irish potatoes, cabbage, beans, onions, tomatoes, etc., marketing them seven miles from the farm. We found ready sale at good prices for produce. At the end of the year we found we had made considerable money for our year's work. We invested our money in more cattle, some farming tools, horse property and bought and planted 90 fruit trees on father's land. The next spring we began work in good heart. Increased our crop, added some new vegetables, also chickens and sold butter. Raised a large crop and prices were high, netting a good profit for our work. With our money this year we bought a half interest with father in a wheat drill, mowing machine and hay rake, some young cattle and some more horse property.

We began work in the spring with increased courage, leaving off some crops that did not pay so well and increasing in those that did. Found more money in cabbage and potatoes than anything else. We raised a good crop and prices were still high, making another good year's work. In the spring of '93 father gave us 14 a of land on the side of his farm. We planted a part of our crop on this land but kept on cropping with him. We raised a fairly good crop but prices were not as good owing to the beginning of the panic. In Aug. '93 we began building a home of our own, having \$50 in cash to begin with. We built a house 34 ft long 16 ft high and 14 ft wide with stable front and porch 6x24 ft, containing four rooms, with hallway above and below. There is also an extension on the back side 24 ft long 12 ft wide with porch on side 7 ft wide. This contains kitchen and dining room with pantry included in end of porch. Bought ready mixed cement and put it on myself. When completed it cost \$500 but less my own work. We moved in in Nov.

The spring of '94 found us in our new home with no garden or any other buildings, having built in the woods. We went to work and planted a good crop, a part on our own land, but kept on cropping with my father. We put in every spare moment we could get cleaning up and making improvements around our house and building a good well house 3x1 1/2 ft. We raised a fairly good crop, but prices were still low and produce was hard to sell for cash at any price, making us very little profit for our year's work. In the fall I sowed 16 a wheat, bought and set 10 fruit trees, apples, peaches and pears, and enclosed a garden 30 ft square with poultry wire. We found by examining our account book that our pro-

fits were short. But we were not discouraged.

When spring came, we began planting another good crop, reducing the crop of cabbage and all summer vegetables on account of low prices and dull sales, and planted more sweet and Irish potatoes, corn, oats, peas, etc. We kept on making improvements during the summer. Built a potato house 16x18 ft. Dug a cellar and walled it with brick 6 ft high, laid the foundation on the wall and put in a set of joists and built a house 1 1/2 stories high above ground. Used the cellar for keeping potatoes, first story for a work shop and second story for storage room. Increased the wheat crop and bought and set 50 more trees. We raised a very good crop but prices continued very low. We found at the end of the year we had made expenses and a very little clear money.

During '96 and '97, our crops were about the same as in '95, but found more ready sale and at some better prices. We sowed good crops of wheat each year and bought some more young cattle to eat straw and hay, sold some heaves and a few milch cows. Set more fruit trees and increased our poultry to 30 hens and built a good hen house. Drilled about 120 a of wheat each year for neighbors at 30c p a. Worked part of the time during winter at carpenter's work and harness making. We managed to make expenses and a very small profit.

The spring of '98 opened with brighter prospects. We sold our wheat for \$1 p bu and the prospect fair for good prices for vegetables. We hired a boy 4 mos. planted a good crop of sweet and Irish potatoes, sowed onion seed for sets and planted a general variety of vegetables, set 40 more fruit trees and several strawberries and sowed more wheat in the fall than ever before. Irish potatoes were a very small crop and barely paid expenses. Sweet potatoes made a heavy crop and found ready sale at good prices, other vegetables made fairly good crops and found ready sales. We found at the end of the year we had made more clear money than any other 2 yrs since '91.

Last spring we began work with increased courage. Hired a boy for 8 mos, bought 62 a of land adjoining us paying two-thirds down and giving my note for remainder. Planted good crops of potatoes and vegetables; also 3 a tobacco, built a tobacco barn and sowed 21 a wheat. Last season was unfavorable owing to excessive wet weather in spring and drought in summer and fall. We raised only a moderate crop but prices have been exceptionally high. We made considerable clear money and expect to meet the note when due.

Have kept an account book ever since we were married, jotting down every income and expenditure. Inventory is taken Jan 1 of each year, the same as other business men do. I think every farmer should do this, as it enables him to better understand his business and see his mistakes and avoid them. Have never used whisky or tobacco; always contribute toward building churches in the neighborhood and take a great interest in public schools. We attribute what little success we have had to the following rules we have tried to follow:

Industry and strict economy.  
Honesty and fairness in all our dealings.

Always sell more than we buy and never go in debt for things we can do without.

Always try first to raise a year's supply and then all we can to sell.

Make all the manure we can and increase the fertility of our farm and improve it in as many ways as we can.

Always cultivate our crops well and market produce in the best condition possible.

Read good farm papers and profit by others' mistakes and successes.

Never loaf around town or take stock in politics.

Last, but not least, we are contented with our station in life, never worry or fret over things of which we have no control. We just try to get all the happiness out of this life the way is in it.

By following the rules above we have always been able to get credit whenever we wanted it without giving a mortgage.—J. M. Davis, Guilford Co., N. C.

**When Raising Double Petunias** from seed, save all the weak looking plants, as they are almost sure to be double, while the strongest ones are often single.

**Plants and Flowers.**

**VINES IN TREE FORM.**

Wistaria and trumpet creeper are beautiful when grown in tree form. When the young vines are planted set a stout stake which will be about 8 ft above the ground and set two or three vines close to it. Tie the vines firmly to the stake every few inches, removing any branches which may start out, and let the vines grow to the top of the stake. Then pinch out the ends to cause the vines to branch, but do not let any start out below the top of the stake.

After the new branches get to be a few inches long, pinch out the ends once more and continue until a bushy top is formed, after which the vines can be allowed to grow at will. By this time the vines will be strong enough to support themselves without the stake and it can be removed. Often the vines are allowed to twist around each other like a rope when climbing the stake, which makes them much stronger. When well trained, the vines make an umbrella-shaped canopy which is an ornament to any lawn. Vines so trained flower more freely than when allowed to climb as they please, as a rule, such vines do not blossom until they reach the top of the building or other support furnished for them, but grown in this way they have no support after a short time and must blossom for want of something else to do.—[Marlan Meade.]

**CHURCH AND CEMETERY TREES**

In southern Erie Co., Pa., a new church was finished, and a landscape gardener was hired to level the ground, seed it and plant shade trees; the church was built on a corner of two streets. The sides next the streets were planted with 50 Car poplars of one year's growth from the slip. These were 4 to 10 in long cut from side branches of trees and stuck in long rows in some convenient place and kept free from weeds. Every one made a tall sapling the first season.

These one-year-old trees were set out for shade in this churchyard 3 yrs ago; when they were set the tops were cut off to give the trees a branching habit. To-day, they are magnificent, well-formed shade trees. They never sprout around the roots nor make such sky scrapers as the Lombardy. They will make more growth in 3 yrs than the Lombardy will in 10. Another advantage for churchyards: they do not lose their foliage after the first frosts all at once, like the maple, but hold their dark green glossy leaves until late in the season, getting rid of them a few at a time, and they do not pile up and become a nuisance. The Erie cemetery has a border on two sides of these poplars and the annual trimming keeps them all the same height. It is a sight that is very pleasing to the eye. One long street has these trees on both sides the whole length and it is called Poplar street. For a quick-growing, all purpose shade tree it has reached great popularity in the last 10 yrs.—[Mrs John Galliard.]

**Amaryllis Bulbs** which have bloomed this winter should now be made to rest withholding water so no new leaves form. By this means a crop of flowers will be produced in autumn, each bulb being able to produce flowers twice a year if so treated.

**Rose Slugs** should be watched closely as soon as leaves begin to unfold. Spray with a solution of one tablespoonful of white hellebore in 2 gals water, or an ordinary solution of whale oil soap.

**Raising Tuberoses and Gladioli for Market**—The season last year proved very unsatisfactory for bulbs of all kinds on account of the terrible drought and grasshopper plague, but our tuberoses and gladioli stood their ground, especially the former, every bulb sending up one to three blooming stems. I never save any tuberose bulbs, but purchase new bulbs every spring, get them of nurserymen by the hundred. They are never coddled, nor started in the house, but the bulbs are kept in flour sacks in a warm room until June 1. Last spring when we were ready to plant, we had taken off a crop of 20 doz radishes; our tuberoses and 3 bu of gladioli were taken out and

planted in long rows marked out with the corn marker, so they could be cultivated by horse. The tuberoses were all stuck in the rows by hand with one-third of the bulb sticking out of the ground. This was all the covering they received then, but later, when the cultivator ran through, some soil was thrown on the rows, but not enough to cover the bulbs. They came into bloom early and the blossoms were all marketed before frost. The gladioli were dropped in rows 6 in deep, like potatoes and covered with the wheel hoe. This was the last planting, as we had made two other plantings of gladioli in April and May. So many people fall with tuberoses, for they put them out too early and plant too deep. [Mrs John Galliard.]

**Hydrangea Paniculata** needs considerable pruning to bring the best results; cutting back well toward the larger branches, which tends to produce enormous panicles of bloom though less of them. The wood cut away can often be rooted in sand.

**Mildew** can be prevented by the application of flour of sulphur with a bellows. As it is easier to prevent than to cure, it is well to commence early.

**Achilleas** can be kept beautiful all the season if blossoms are removed as fast as they fade. New shoots come up from the root constantly to replace those removed and a constant show of blossoms is the result.

**A New Edging** for the canna bed is the beautiful squirrel tail grass which can be raised from seed. It forms an odd, but attractive border, the long graceful plumes and grassy foliage hiding the unsightly lower stems of the cannas.

**Nasturtiums**—Instead of training the climbing nasturtiums upward, let them run over the ground naturally. Much stronger stems are produced, finer foliage and more blossoms. The vines also protect the roots from the effects of the sun, forming a sort of mulch, so less water is required.

**Azaleas**—When through flowering, plunge the pots in the ground in a shady place, give water every day and spray the foliage twice a week. If the roots become dry, the plant is ruined, and if not sprayed, red spiders spoil the foliage.

**Verbenas**—Set the plants out in a slanting position, pegging down the new shoots, placing soil over the places where they touch the ground. Attention of this sort will cover the ground with new growth in a very short time.

**Aster Beetles**—These must be hand-picked, as no practical remedy is known for them. Take a pan of water in which some kerosene has been poured and knock the bugs into it. The kerosene kills them instantly.

**The Cold Frame in Summer** is just the place for rooting slips of hardy roses and other hard wood plants. Put in sharp sand to make a layer 3 or 4 in deep, then take cuttings of suitable size and plant them in the sand. Glass must be shaded in some way, either by canvas or whitewash. The cuttings will root quickly if proper attention is paid to watering them, and they can then be transplanted to another frame or be potted off. They will require partial shading for a time, but can gradually be accustomed to full light and sun. The plants need not be removed from the frame until quite late, when they can be headed out in the open ground and if given proper protection will survive the winter nicely. Many of the roses will blossom the second season, and I have seen them bloom in the frame during the first summer. Slips taken later than the first of June do not do so well, a smaller proportion of them rooting.—[Lena A. Holmes.]

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### How a Mortgage Was Lifted.

#### SUCCESS FROM A NUTMEG FARM.

In the spring of 1886 I bought the farm where I still reside, giving a mortgage of \$6,000 and obtaining a loan of about \$1000 from other sources. The farm was deeded as 212 acres, more or less, and a good house, that could be used for two tenements, and other buildings in fair condition. It contained a fair lot of apple orchards, also about 15 acres woodland, which was used as best I could in helping pay. My family consisted of wife and three daughters, another daughter was born in 1888.

The farm was adapted to general farming and dairying with stables very comfortable for winter dairying. I started with about 15 cows, sending cream to the creamery, gradually increased the herd to 25. I grew all the hay possible, cutting the dry stover for my animals and setting all the hay. I tore up all the old natural mowings and pastures that could be plowed satisfactorily and by thorough fertilizing doubled the hay crop in a few years, besides doubling the number of cows kept. At first I had to buy cows occasionally, but that took money which ought to reduce mortgage, so I decided to keep a Jersey bull from some good herd and raise my heifer calves on skim milk. This increased my cows very easily and I soon found I could sell a few cows each year to help materially in lifting the mortgage.

Kept quite a lot of pigs to use up the waste articles, skim milk, etc. and by cooking cull apples found they were valuable in growing pork. I sold at from 100 to 200 lbs dressed and fattened from 20 to 30 pigs per year according to conditions. I always had some potatoes to sell and help out, but I never depended on them as a main crop. Also had about 100 hens to help along. The first year I paid interest and expenses and \$50 on mortgage, not a very bright prospect.

The second year I started in better shape with more cows and stock. Had a good apple crop which sold at good prices and was able to pay all bills and \$1000 on mortgage. This successful year gave us the assurance that with good health and no misfortune, we should be able to pay for our home. The next year I built an ice house and made some necessary repairs, and paid a few hundreds on the mortgage. In 1890, we had a fair apple crop, while the crop was generally a failure, consequently got the benefit of high prices. Good returns generally for all crops helped reduce the mortgage \$1600 again.

In January, 1891, I had the misfortune to lose my left hand which made me entirely dependent on hired labor to run the farm. At the end of 11 years the mortgage was canceled. In 1893 I set out 500 peach trees and increased each year to 1898, while I now have 1500 trees. The crop of 1898, which brought remunerative prices, made the financial returns very satisfactory. The peach orchard was well started but gave no help in paying mortgage. I also have a few hundred Japan plum trees just coming into bearing.

Our home has been supplied with good papers and periodicals, suitable for all members. Had organ and music lessons for daughters to help make home pleasant. Have entertained friends and acquaintances liberally and contributed to help associations that the family were interested in. Our membership in the grange was a strong factor in our success, also the teachings of our experiment stations, and the helps of the best agricultural papers. I paid cash and used all labor-saving machinery practical. Used home-mixed commercial fertilizer quite extensively. Had nothing to do with fast horses. Directed labor for income instead of show. Always had oxen to help with the work. Depended on dairy, hay and pork for cash sales. Always sold what was in demand for cash but never depended on peddling produce. Every week I carry produce, potatoes, extra fruit, anything I have that will sell to stores that I buy of extensively and am satisfied that has been best for me. I have always pumped successful farmers for information to help me; and last but not least, hard work of myself and family with care in expenditures, has made our attempt at mortgage lifting a success.—[Clifton Peck, New London Co., Ct.]



A Yankee Farmer's Home.

### Orchard and Berry Patch.

#### THE FRUIT GROWERS' NEEDS.

The fruit grower of to-day must have the ability to adapt himself to new methods, new fruits and new markets. By use of cold storage and rapid transit, the finest fruit from every land can be found in any large market, both in and out of season, for while the fruits of one hemisphere are first waking from their winter's sleep, on the other the summer sun has done its work and the ripened fruits are on their way to distant markets. With the world as a market, competition is keen, and only the best fruits in the best condition will pay. Furthermore, it generally costs much less per ton to produce large, first class fruit than the poorest, meanest specimens that are ever offered. Small fruit exhausts the tree more rapidly than large fruit. It will thus readily be seen that improved varieties which produce uniformly large, fine fruit are the more economical manufacturers of fruit, and also that the product is more salable.

The tree which needs a good deal of pruning to keep it in proper form and vigorous health should be replaced by one that has a better habit of growth, for every ton of wood taken unnecessarily from an orchard represents at least as much weight of fruit. Many varieties have two or three superior qualities, but woefully lack in many others. The fruit grower of to-day is simply the manufacturer and should have the latest and best improvements. Of course there never can be one variety which will be best for all purposes, but it is perfectly possible to produce varieties which for their own special use can be relied upon to produce full crops of the best fruit without fail. All this can be done by careful selection and breeding.—[Luther Burbank, Cal.]

#### SPRAYING FOR SAN JOSE SCALE.

There are two methods of fighting the San Jose scale which has a foothold in all the important fruit growing sections of America. One is by the use of fumigation with hydrocyanic acid gas and the other by spraying with kerosene and water, crude petroleum or whale oil soap. Hydrocyanic acid gas is one of the deadliest gases known and is safe to use only in hands of an expert and under known conditions. For the treatment of nursery stock it is the best method and sure in its action. It's method is expensive to use in orchard practice, as it requires an outfit of tanks to put over each tree or bush. But for the fruit grower the simplest method is to use a spray.

A 20 per cent mixture of kerosene and water has been found by the Cornell (N. Y.) exper. sta to kill the scale and is safe to use on trees that are either dormant or in leaf if applied on a sunshiny day when the sun will quickly evaporate the kerosene. Pumps are now made that will emulsify pure kerosene and water at the time of ap-

plication. The experiments at Cornell extend over several years and seem to be conclusive. The experiments with crude petroleum are not so extensive and have been carried on largely by J. B. Smith of N. J., who says he has killed all scale with it. It should be applied while the trees are in a dormant state and can be put on pure. There are several different strengths of crude petroleum and further tests are needed to determine which is best. Whale oil soap is disagreeable and difficult to handle, but may be applied if used while hot. When cold it becomes thick and sticky.

Horticulture at the Pan-American Exposition at Buffalo will embody all the latest achievements in the science. The grounds will be richly embellished with trees and shrubs, foliage and flowering plants. A large building will be devoted to fruits and exotic plants, while a floral display will include more than 500 beds of popular flowers. The water features of the exposition include a grand canal more than a mile in length which completely encircles the main group of buildings.

Setting the Farm Strawberry Bed—The common practice of plowing up, or digging up at random, the young plants from a strawberry bed is not conducive to improvement of the varieties. The most successful growers are learning that it pays to select from the best individuals each generation. In fact it is advisable to keep a patch on purpose for breeding. Of course a grower cannot take time to select individual plants for his customers, but he can select his breeding plants each year from the best plants of the preceding year and thus gradually improve his breeding plants and through them the general crop.—[Prof. A. S. Hitchcock, Kan. Exper. Sta.]

Diversity and rotation of crops improve the soil, make more and better home supplies.—[Frank Everett, Ark.]

### Farm Problems.

#### FARMERS' FAILURES.

'Tis sad, but none the less a fact, that half life's failures come from want of tact. Ingersoll wrote a book about the mistakes of Moses. There are very few farmers but what could write a book about their mistakes and it would make interesting reading. A singular characteristic of the human race is that every one must learn by their own experience. It is the only true teacher and the best one if not bought too dearly. Now is the time for the prudent farmer, before he begins the season's work, to study and contemplate what is best to do, see where he made mistakes and failures last and past years and endeavor to avoid them this season. Many make failures because they never stop to think until it is too late. Careless methods and poor judgment are the cause of more than one failure. The unavoidable will happen and misfortune overtake some; such is life; that is the exception not the rule, but such must take renewed courage and fully appreciate existing advantages with a determination to overcome all obstacles until they meet with success. The careless and shiftless, who let everything go to rack and ruin, have no one to blame for misfortune. Success in farming, as in any other occupation, requires good judgment and discernment; not how much you do, but how well you do it.—[W. J. Casson, S. Dak.]

Our Grand Country is large and a person need not confine himself to a locality where he cannot do fairly well. I have been in more than half the states of the Union and think I can safely say that many persons are not where they should be. In Kan., there is plenty of room for a large number of good farm hands, mechanics and others. The crop of wheat now coming on is immense and will require more men to harvest it than there are now in the county. If some of the dissatisfied men who are readers of F & H would go to where the work is, they would better their condition.—[J. W. Lovern.]

The Prune Problem on the Pacific coast will probably be strengthened by the pledging of 90 per cent of the Cal product to the Cal cured fruit association and of fully 90 per cent of the northern Pacific crop to the Pacific northwest cured fruit association. The net prices received by growers will be several dollars more per ton than if competition were to continue among growers, as in the past, in the disposal of the product.

A Correction is requested by Mrs. F. H. Phelps of Kan., who wrote the fourth prize essay on Success without a mortgage, in F & H April 15. She says they raised 400 bu wheat last year instead of 4000.

HOLDERS OF BEANS are very firm in their views, and offerings are small.

What is the best and cheapest power for general farm purposes, asks a subscriber. This is a matter of growing importance in many sections to farmers who are in a position to make use of it. We should like to hear from our readers as to the kinds of power used, the original cost of it and the running cost per week or month.

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PUBLISHERS OF THE "NATION,"



# The Last Day at the South School.

Written for Farm and Home by Helnetto Lovewell.



"HEN in school yet?" Mrs. Gale asked, as she stooped to pick up the borrowed tin she had just dropped.

Mrs. Brown carefully let the last drop of hot fat fall from the

doughnut she held poised on a fork before replying. "No, Mary, I ain't. I don't generally get in till the last day, fur, as I tell Joe, I hear about what's going on in the school right here at home, morn' 'sif I went in and set through one or two classes."

"Well, I dunno, Sarah, there's a good deal said this term about the teacher, and I feel it's my duty to find out what's going on. Fur's I've heard, the children all think she's perfect, and that to my way of thinking is reason enough for desirin' a change. To my mind, children never like a real good teacher. I dunno as you remember Jane Bartlett, that taught when I went to school. The young ones didn't like her because they were scared to death of her, but she jest know how to teach them 'rithmetic and spellin'. Land! they would slug the multiplication table to Yankee Doodle, and many's the time I've seen her stand over Lame Wood with a ruler till he could spell the words he missed."

Mrs. Brown lifted her eyes from the pan of savory, beautifully browned doughnuts and fixed them upon the face of her guest. "My brother Joe used to go to her," she said, "and I remember how he'd study his spellin' book to home nights till he could spell the words backwards and forwards, but as soon as he'd get up to spell he couldn't remember one. Every time he missed one she'd give him a crack with the ruler, but after all, I dunno as she ever taught him to spell."

"From what I hear said," put in Mrs. Gale darkly, "this last teacher is about the worst fur notions of any they've had since they began talking about these normal ideas. From what they tell, she's the only real graduate that has ever taught here, and I heard her telling Charlie Spooner that she come out here to study existin' conditions and get a broader view of her work. I shud have had more respect fur her if she'd said she was teachin' fur the money she got."

"So Charlotte was a-tellin' me, but hev you heard about there not being any last day this term?"

"That's just what I was goin' to mention. I think somethin' ort to be done about it." Mrs. Gale's thin lips set themselves in unpleasant lines and her high-pitched voice rose with excitement. "I heard her a-tellin' Mrs. Gillman right before little Harry that the idea of an exhibition at the end of the term had been given up years ago, and that she couldn't spend time fur special preparation. I saw fur a girl a-pretendin' to teach school, that don't take interest enough in her work to get up a last day. It is pretty small talk. Sakes alive! how we ust to count on the last day fur weeks be-rehand!"

Mrs. Brown occupied herself by unbuttoning her sleeves and slowly unrolling them until her large bare arms were again covered. "Probably she's like all the rest of them, teach a few terms and then get married. They are tellin' though that she is makin' a regular fool of that Charlie Spooner. Miss Jones told me that she sends her letters up to the office by John and every week she sends two to the same person. She looks real mighty and Charlie might know she is only triffin' with 'em."

"Did you know about her getting a telegram last week?" Mrs. Gale broke in, "about some ball game or other?" Hob Lewis brought it up and Miss Gates was real scared of giving it to her fur fear it was bad news, but she opened it cool enough and Miss Gates told Mary she jest yelled, 'Seventeen to nothin'!

I'm so glad!" Miss Gates spoke up and asked her if that was better than 16 to 1 (you know Edwin is a Democrat), and she laughed and said it was the result of the greatest football game of the season, and she knew someone who played. From pictures I've seen, there ain't no great difference between football and prize fightin'."

Mrs. Gale sighed profoundly. "As I said, I dunno how much the children are learnin'. I say it stands to reason that if children are all over a teacher, she can't hev much government, and a teacher has got to hev government. Fred Lyman told his Aunt Hannah and she told me, that when that Elliott boy said ramrods was what women jammed their hats on with, she jest laughed out loud. Now wa'n't it her duty to restrain herself? What kind of a way is that to govern children? I'm glad enough that my children got through going to school years ago, and I don't take a mite of interest in the school, but I should like the privilege of goin' in the last day, same's I allus hev done."

Mrs. Gale rose from her chair and wrapped her apron over her head. "I must be goin' now, I've left bread in the oven." Suddenly, "Do look at this, Sarah," broke out the departing guest, as she gazed out from the side window along the stretch of road, where at the top of a sharp rise stood the white schoolhouse that for years had been kindergarten and university to the youth of district number three. Perched upon a high stone wall, a bag of books swung over her shoulders, contentedly eating an apple and gazing toward the western sky where the marvelous tinting was fast turning to somber hues, was the figure of a tall girl. As the two women watched, she sprang to the ground and ran easily down the slope. "Look at that and tell me if she has had much bringin' up."

Sarah shook her head, but made no reply, and Mrs. Gale with sudden thought of her neglected bread hastened home.

It was never known just how it happened that Dastown had united with a neighboring town in the hiring of a superintendent, but the action had been deeply regretted, and between the long-suffering individual who filled the position and the committee, chosen for their firm adherence to the views of their fathers, was constant friction. In vain had he striven to have the pupils of the outer districts carried to the center of the town and there establish with the united forces a graded school with well-trained and salaried teachers. The proposition was bitterly opposed, old John Gillman was reported to have said that "his children got holt of enough deviltry as it was, without gittin' any more from the town young ones."

It was through this superintendent's instrumentality, however, that Catherine Mason had come to teach in district number three. She was eager to learn of new conditions and if possible remedy and perfect them. It was a firmly fixed idea, she found, that if a child had not got his lesson at 4 o'clock, he should be punished, and that severely, preferably by the use of the rod. "They will not treat the child as an individual," she had despairingly ejaculated to the superintendent. "They won't tolerate any evidences of the young animal. Why won't they study their own children and help me with data?"

The general superintendent gave his hearty laugh. "Don't expect too much, they are of sterling material, after all, in spite of unreasoning and unrooted prejudices, and have the children's welfare at heart. Rest assured that your influence will make itself felt in time."

Ca' she laughed good-naturedly when the children told her of the preparat. as for previous last days, when for weeks before they had studied their "pieces" and their fond mothers had worked on new dresses. Some had even confided the number of braids in which their hair had been confined the night before and of its wondrous crimped appearance upon the eventful day. Had she realized the significance of this custom to the parents and children, she would never have treated the matter as lightly as she did. To her the idea of wasting precious moments in such a way seemed folly, and she gave the matter little thought. The children, innocent little mischief makers that they were, were quick to report that "teacher wa'n't going to have no last day," and all unknown to the earnest young

worker, the matter was being deeply agitated throughout the district where the doings of the "schoolma'am" proved a never-failing source of interest. Mrs. Jones voiced the opinion of her neighbors when she stated plainly that she "shud go in school jest as she allus had done, and set there, even if there wa'n't nothin' to see."

The last week drew to its close and Catherine worked constantly for the completion of cherished plans. She had determined to keep up regular recitations to the last moment. Especially was she anxious to demonstrate to a class in fractions why they "inverted the divisor and proceeded as in multiplication." How she wished they had never seen that odious rule. Friday came quickly, and at quarter past 1 a rap at the door caused Catherine to admit Mrs. Jones. Before 2 o'clock the astonished young teacher had welcomed some 20 "parents and friends." Nothing daunted, although compelled to send to the neighbors for chairs, she strictly adhered to her program, but she felt the disparaging glances and realized the unfavorable feeling.

Never had she shown an example of better teaching than now, in her brief reviews, her inductive presentation and her crisp drills, and she felt secure in the fact that she held the children's full rest and attention. Her enthusiasm and magnetism could hardly fail to affect the stern array of critics, and many a severe skeptic felt in a dim way that the pupils were gaining more than they realized.

At 20 minutes of 4 the children were asked to lay aside their books. Quickly and quietly it was done, and 30 pairs of eyes were fixed upon their teacher. Rising from her chair Catherine faced her waiting audience and smiled.

"My dear friends," she said, "you have come here to witness a last day exhibition for which I have made no preparation. I am glad, sincerely glad, that you have come, but I am unwilling that you should judge my work by a few recitations, a song or two, and a sample lesson in reading. I do appreciate your interest. I am so glad, gladder than you can possibly realize, if you would only try to learn just what I am doing or trying to do, but one day at the close of the term isn't the best time to do this. Come in any time and come often. When you wonder how a certain principle is being taught, come and I will show you. Let me tell you of the real results of the apparently strange methods I use; I realize the lack of time in your busy lives for this, but what you can for your children's sake spare, use it so it will every moment pay. I want you to know what I am doing, but more what the children are accomplishing. Teaching is only to be valued in the degree it shows the children how to teach themselves, all through their lives they must be their own teachers. Your interest is the best possible incentive for them to do their best."

"Won't you believe that we teachers have the children's welfare most deeply at heart? We try to study them in the few hours they are with us, but think how much wider are your opportunities, you who have watched each budding characteristic, you whose lives are centered in them. Won't you tell us about them? Come to us frankly and tell us wherein we fail to do them as you wish. Do you realize, can any of us realize how much depends upon these childish minds? Cannot you feel a lack in your lives? See to it that it doesn't come into theirs. Cannot you remember the words of some one teacher in your school days who made your life richer by a simple stated ideal, by a vivid picturing of some goal toward which you were asked to strive? Which helped you the more, the loving thought that has remained with you all these years, or the pounding into your head of long divisions? Is it wrong to take some time to show the children the lives of men like Lincoln, to teach them a little of Longfellow and Whittier and Emerson? Some of you ridicule our 'nature study.' Can we give these little people a more beautiful conception of God than in the wonders of his creation? Will you not strive to make this in truth the last day of His curiosity, the last day of listening to unverified reports, the last day of the old unsympathetic, narrow system, and the beginning of a new day when teacher and parent shall work together solely for the nourishing of the best that is in the child and the creating of new

ideals, the broadening and widening of dawning conceptions, and the fruition of the highest type of human life?"

Flushed with excitement from the unworked and unrealized eloquence, Catherine dismissed the pupils, and bent over them a moment later, touched with the sincere sorrow of their good-bys. A constraint existed among her auditors. A few made some stilted, worded remark, but the greater number passed quickly out, leaving Catherine alone with the children—the children who had found no meaning in her words, but were quick to understand the tender light in her eyes.

"Well, Charlotte, what did you think on't?" Mrs. Jones asked, hastening down the road after the tall, lank figure of Miss Atkins. Miss Charlotte snifted contemptuously. "What she said sounded well enough, and I presume there was those that took considerable stock in it, but I say, Mary, that 'tain't preachin' we want in a teacher, it's practice. There won't no good come from changin' from the solid ideas of our forefathers. There ain't no way to teach readin' but to learn them their letters, and when the Bible says 'Span the rod and spoil the child,' I don't presume to see it in any other light or account of a girl like her."

Miss Charlotte expressed in a measure the views of the majority, for the instinctive homage they for the moment gave to the teacher's words was partly obliterated by their firmly fixed prejudices—theirs by birth and environment. Yet a start had been made along the line desired, which after experience of both parents and teacher strengthened.

### A PRONUNCIATION MATCH.

Pronunciation matches are in vogue conducted after the manner of the old time spelling matches. At a recent parlor match the pronouncers closed slides, each contestant being allowed but one trial. The hostess had previously prepared a list of words, writing to noted authorities for "the latest" in doubtful words.

Those who care not to spend so much time may take the Century dictionary for authority, or Webster's. An hour in the nearest public library will prepare a long list. Trifling prizes were awarded the winners, and a consolatory prize to the lad who missed every word.

After the match closed funny games were played, as a relaxation after the more sedate feature. One was a contest of skill. The company went marched single file through a long room, at the entrance of which sat a bushel basket of peanuts. She or he who could seize the largest handful passing and carry them, without dropping one, to the basket at the opposite door was awarded those remaining in the first basket after all had passed. The winner was a woman, who secured 48, but there was only a quart left for her prize. Those in the second basket were "passed around" amid much merriment.—[The Maine.

### OUR PREMIUM OFFERS.

Everything advertised in the premium list of Farm and Home is kept on hand throughout the year and can be obtained at any time. Those of our readers who have been unable to get up a club as yet can do so now, and still receive some of the splendid premiums offered. A careful examination of our premium list, which we send free on request, will show an excellent and varied assortment of good things, and some of the greatest and most astonishing offers ever made by a responsible journal.

State Flowers—The state flower of Alabama, Nebraska and Oregon is the goldenrod, Iowa and New York the rose, North Dakota the wild rose, Colorado the columbine, Delaware the peach blossom, and Idaho the syringa. Maine, the pine tree state, chose the pine cone and tassel, Minnesota has the moccasin flower, Montana the bitter root or bitter sweet (I am not certain which), Oklahoma the mistletoe, Utah the rego lily and Vermont the red clover. Wisconsin and Rhode Island have a tree, the beautiful and useful maple. Other states may have flowers, and at this time of writing the Massachusetts legislature is trying to choose a floral emblem for that state.—[Allie L. Nay.

# Vales of the Valley

When spring is generous with song and sun,  
 And apple blossoms falling snow the ground;  
 When brooks delight to babble, flash and bound,  
 And rapid ripples with the grasses run;  
 Amid thick leaves the lily cups are spun  
 In looms invisible, devoid of sound;  
 The airy shuttles ply their magic round  
 Until the marvels are divinely done.

As twilight's golden purples fringe the west,  
 And fraught with fantasy we dimly hear  
 A merry chiming as of elfin bells,  
 From pealing petals rhythmically pressed,  
 A delicate fragrance fills the atmosphere  
 And of the dew's celestial mission tells.



## MEMORIAL DAY.

[Written for Farm and Home.]

Flowers, flowers, our dearest, our best,  
 Let us strew where our brave ones are laid at rest!  
 Let us make each grave all fair and sweet,  
 Fit for the passing of angel feet!  
 For, ah, it may be they are with us to-day  
 Whose names we honor, this beautiful May!

EMMA C. DOWD.

## APPLE BLOSSOMS.

Have you seen the apple blossoms in the spring—  
 In the spring?  
 Have you seen the apple blossoms in the spring?  
 Pink buds nodding to the light,  
 Crumpled petals baby white,  
 Just to touch them, a delight  
 In the spring.

## MEMORIAL DAY.

Do you know what it means, you boys and girls  
 Who hail from the north and the south?  
 Do you know what it means,  
 This twining of greens  
 Round the silent cannon's mouth;  
 This strewing with flowers the grass-grown grave;  
 This decking with garlands the statues brave;  
 This planting of flags,  
 All in tatters and rags;  
 This marching and singing;  
 These bells all a-ringing;  
 These faces grave, and these faces gay;  
 This talk of the blue and this talk of the gray  
 In the north and the south, Memorial day.  
 Not simply a show-time, boys and girls,  
 Is this day of falling flowers,  
 Not a pageant or play,  
 Nor a holiday  
 Of flags and floral bowers;  
 It is something more than the day that starts  
 War memories a-throb in veteran hearts;  
 For across the years,  
 To the hopes and the fears,  
 To the days of battle,  
 Of roar and rattle—  
 To the past that now seems so far away,  
 Do the sons of the blue and the sons of the gray  
 Gaze—hand clasping hand—Memorial day.  
 For the wreck and the wrong of it, boys and girls,  
 For the terror and loss as well,  
 Our hearts must hold  
 A regret untold  
 As we think of those who fell,  
 But their blood, on whichever side they fought,  
 Remade the nation, and progress wrought.  
 We forget the woe;  
 For we live and know  
 That the fighting and sighing,  
 The falling and dying,  
 Were but steps toward the future—the martyr's way!  
 Adown which the sons of the blue and the gray  
 Look, with love and with pride, Memorial day.

[Selected.]

Bobs—My favorite is history. I am very fond of skating and sleigh-riding. We have a very long hill in front of our schoolhouse, and the bobs go over it like the wind. I have a Daisy air rifle. How many have one?—[Dewey (Eleven).]

## Young America.

More Than Satisfied—I received the premium rifle and am well pleased with it. I can hardly understand how you can give such valuable premiums for so few subscriptions. I find when canvassing that those who have use for the paper renew gladly, because they find F & H good value for little money. I find looking through the Ludington list that all accounts I have sent you are O K and whenever I have asked you to discontinue or make a correction on anyone's account, you have done so promptly. I also received the rebate of 50c which you send extra for 10 new names. For all kind favors please accept my thanks.—[Merton J. Stovin, Ludington, Mich.]

Not So Easy—I would like to know if the writer of "deceitful girls" ever stopped to consider whether there are any deceitful boys. I think they are just as numerous as the girls. It is nothing in our part of the country for a young man to be going with three or four girls at the same time, and then pretend to each one that they are the only one in the wide world for him. But I would like to inform the boys that they can't always deceive the girls as easily as they think they do.—[True Blue.]

Half-Past 16—Twentieth Kansas Jayhawker. I think you are all right. My favorite friend is a soldier, too. He is at Manila now, and of course I do not hear from him very often, but hope to see him in two years at least. The boys around here tell me it is just because he is a soldier and wears the uniform that I like him, but they are mistaken, for I do not think the uniform makes the person, do you? Some one in the Young Americans' department asks, "Why is it we do not send our ages?" Well, I am just half-past 16.—[Ohio Pippin.]

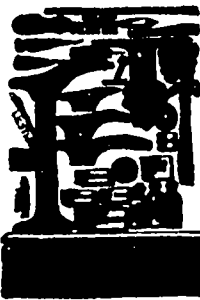
Banjo—Sunbeam. I play the banjo. Last winter I bought a new one, and yours cost just 20 cents more than mine. Yours cost \$11 and mine cost \$10.80. What is the name of yours? Mine is called the Mystic. What are some of the pieces that you play?—[Heartsease (Seventeen), New York.]

Our Youngest—I am a little girl five years old. I live in sunny Kansas. I have never been to school, but I can read in the third reader and papers. My mamma is my teacher. I was in a buggy this fall and the horses ran away and threw my grandma and me out on the hard pavement street. Grandma's wrist was broken, but I did not get a scratch. I have no brothers or sisters, so I play with my pug dog and little red wagon. I enjoy reading the girls' and boys' letters in F & H very much. My mamma has taken F & H four years. We got Wood's Natural History for a premium this year. I think it a good book.—[Mary M. McClelland.]

Hero and Heroine?—Who in the history of the United States is your hero or heroine, and why? Make the answers short, crisp and to the point; I believe they will prove interesting. If we don't agree with any one say so, tell why, and make rather a debate of it. If any one has a better subject to offer, do so.—[Reba (Seventeen), Louisiana.]

Nice Brother—We don't hear from Coddle's Sister any more. I think she must have a nice brother. I am sure I have. He is very handsome and tall; I love him very much and he is liked by everybody, old and young. I heard a man say the other day he did not believe he had an enemy, and I don't think he has.—[Blonde.]

Great-Great-Grandfather—I live on a farm where my great-great-grandfather used to live just after the Revolution. He cleared it and set out some trees, one an apple tree which bore fruit last year, although 100 years old. There is part of a large stump of a tree which the British cut for a mast, which broke when it fell, thus spoiling the mast. My great-great-grandfather built a sawmill on the brook, where he worked, keeping his horse in the mill. Just as soon as he



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would shut the mill, down would he jump upon his horse and ride home for dear life for fear of wolves, which infested the country. Once they followed him home, and when he got home his wife opened the door and he drove right into the house to keep them off. In the dooryard now stands an old oak tree over 120 years old that measures 10 feet around it.—[Silver (Fifteen), New Hampshire.]

Stones—I t. 'nk chronic whispering is an incurable disease, as is chronic note-writing. Our teacher is not very strong on corporal punishment. He thinks that talking will do more good. I think he will "get left" on that point. Dear little Water Lily is running a great risk, and I think that if she would be a little school girl, she would profit by it. I do not intend to offend you, Water Lily, but I just express my opinion. I have read a great many books and I like Washington Irving's works and Miss Alcott's better than any I have read. I write short stories, but I never let anyone read them. I am in the sophomore grade of high school and have four studies. What we lack in quantity we make up in quality. How many Y A's like to study stones? I do and am gathering a collection. I have several different kinds. We live near a creek and I have a good opportunity to get them.—[Pansy, Illinois.]

Shooting an Oil Well—One day I went to see an oil well shot. The well was about 120 feet deep. The oil is found in a hard rock about 1150 feet below the surface called Trenton rock. The oil is used for burning and for making coal oil and is good for greasing machinery. The oil is black. The nitro-glycerin is very dangerous. Sometimes it explodes when the man is taking it to shoot a well. If it explodes it will kill the man and the horses; the wagon would be torn into splinters. When the glycerin explodes in the well it forces the oil out of the well and it goes into the air about 125 feet. The derrick is about 74 feet high. Sometimes they tear the high derrick down and put three poles up for a derrick. Sometimes they have to pull the sucker rods, then they put a pulley at the ground and one at the top of the derrick, and a rope through the pulleys, and hitch a team to the end of the rope and then pull one rod up, and then unfasten it and pull another until they get it all pulled out. The wells are about 500 feet apart.—[Homer Fent (Nine), Ohio.]

## OUR PUZZLE CONTEST.

SECOND INSTALLMENT FOR MAY.

2. Geographical Charade—My first often serves me for company; my second is an annoyance to printers; my third is an article, used everywhere in the United States; my fourth is a river in Europe; my whole is an important mining city in South America.
3. Anagram (one word)—MISS MORE COIN.
4. Biblical—Where is the word level first found in the Bible? Give book, chapter and verse.
5. Drop Letter Puzzle—E-I-T-A-I-N.
6. Square Word—I. To wander; 2. gumbo; 3. to reckon (oh); 4. a companion.



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CANNING STRAWBERRIES.

For a 1-qt can of fruit when done, 2 qts fresh berries will be required. The berries should be looked over and washed; a colander is useful for washing them in. Then put them into a granite basin and put this into a steamer over briskly boiling water, cover closely and steam 10 minutes, or until the fruit is just heated through. In the meantime take 2 cups granulated sugar and put in a granite or porcelain stewpan, add 1 cup boiling water and set over the fire to melt and come to a boil. When the berries have steamed as directed, lift them out carefully into a can and immediately pour over them the boiling hot syrup which you have prepared. If this does not fill the can to brimming over, add enough boiling water to flush the can, put on rubber and screw top in place and the berries are done. Be sure they are tightly sealed. My judgment is that it is best to put only enough berries in the steamer at one time for a can of fruit. Of course you can keep more than one steamer going if you desire.

It is very important in canning to have all cans perfect, to have the rubbers intact and the tops perfect. If the edge of the cover is bent up even a little it will offer an opening for the air. When I empty my cans during the winter, I always cleanse and air them thoroughly, then drop the rubber in the can on which it belongs, put the lid on and set away ready for next canning season, thus saving myself the trouble of picking out and trying on perhaps a half-dozen rubbers and lids before I get one that fits the can.

To prevent cans breaking when filling them with the hot fruit, place them upon a wet cloth folded several times. It does not matter whether either cloth or can be hot or cold, they will not break. Cans that have been used for pickles should be put in a boiler with warm water and add concentrated lye, bring the water to boiling point, and then take from the fire and let the cans lie in it until the water is cool enough for you to handle them. The covers should also be treated in the same way, and rubbers that have been used on pickle cans should never be used again. You have the surety that your fruit will not spoil if put into perfect cans, perfectly sweet and clean and the canned goods put away in a dark place. The material should not be overripe when canned.—[Jane L. Clemmens.

WILD DUCK.

Roast Duck with Potatoes: Clean an 1 mallard or two teal, and at 9 the following morning place in a kettle with enough water to cover them. Allow them to boil briskly for two hours and remove to a baking pan. Add a lump of butter the size of an egg and all the liquor in the kettle. Pare potatoes, wash and put in the pan with the ducks. Bake for one hour.

Roast Duck with Dressing: Boil for two hours in water to cover nicely, and add water from time to time as is required. Remove to the bake pan and make a dressing as follows: Bread crumbs 4 cups, with enough of the liquor from the kettle to soften, 2 eggs, butter the size of a walnut, salt, sage and pepper to taste. Bake the duck for three-quarters of an hour, then add the dressing and bake for 15 minutes.

Fried Duck with Gravy: Cut in pieces, salt, roll in flour and fry in hot lard. When done, make a gravy with the grease left in the spider, and pour it over the fried duck. Serve very hot. [Catherine Blane.

A Delicious Cream Sponge Cake—Three-fourths cup coffee. A sugar, 1/2 cup rich sweet cream, 2 eggs, 1 1/2 cups

THIS WILL INTEREST MANY.

F. W. Parkhurst, the Boston publisher, says that if any one afflicted with rheumatism in any form, or neuralgia, will send their address to him at Box 1501, 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.—[Adv.

sifted flour, 1 heaping teaspoon baking powder, 1 teaspoon extract lemon. Sift the flour, measure, then add to it the baking powder, sift again. Separate the eggs, beat the yolks up lightly, whip the whites until very stiff, add the sugar to the whites, beat again, then add the yolks, cream and flavor, lastly the flour. Fold this lightly through. Never beat a sponge cake after the flour is added to the batter. Bake in a moderate oven. 1 cing. Two eggs (whites), 10 tablespoons powdered sugar, 1 lemon (juice). Beat the whites until stiff, add to this the sugar (a spoonful at a time), beat until white and smooth, and spread over the top and sides of cake.—[Sara Brandis.

Pin Money in Seedlings—Two years ago this spring, after an unsuccessful hunt over town at grocery stores and nurseries, I went home disappointed, as nowhere could I find celery or pepper or cauliflower plants. That set me to thinking that there had probably been others who would have been glad of such plants, so last spring I went to town and laid in a supply of cigar boxes, next I consulted the advertisements in this paper and sent for several seed catalogs and invested a few dimes in choice red and yellow mango seed, cauliflower and celery, and a packet each of double petunia, verbena and Marguerite carnations. The seeds soon came and I carefully numbered and labeled my boxes and planted them, and when they were an inch high I thinned them and reset in larger boxes, I found a ready sale for them among our neighbors and disposed of several dozen at the grocery stores. My profit was \$6.75 and we had all the plants we wanted and a large bed of beautiful flowers to repay me for my work.—[Marion McConkey.

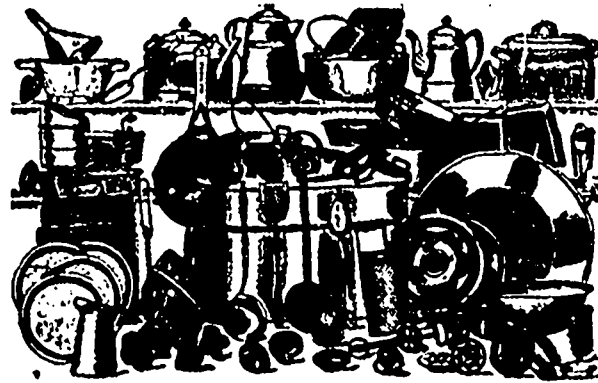
Rhubarb Sauce Peel and cut rhubarb in one-inch pieces. Put in a saucepan, sprinkle generously with sugar and add enough water to prevent rhubarb from burning. Rhubarb contains such a large percentage of water that but little additional water is needed. Cook until soft. If rhubarb is covered with boiling water, allowed to stand five minutes, then drained and cooked, less sugar will be required. Rhubarb is sometimes baked in an earthen pudding dish. If baked slowly for a long time it has a rich red color. [Miss Farmer's Cook Book.

Dandelion Wine Pour a gallon of boiling water over 2 gallons of dandelion blossoms and let stand 48 hours. Then strain and add 2 lbs white sugar, 2 lemons, sliced, and a hard yeast cake. Allow the wine to stand three weeks. Strain again and bottle.—[L. M. A.

To Polish Horns—To prepare green horns, boil them in very strong lye to loosen the pith and remove unpleasant odor. When they are perfectly dry fasten the small end in the vise of a work bench, and with a drawshave remove the rough surface from the large end. Do not cut too deep, or gash the horn, or shave it too thin toward the tip. Saw off the large end smoothly, then scrape with a piece of glass. Here again care must be taken that the edge of the glass will not scratch. Scrape until a perfectly smooth surface is secured, getting the right angle in making the strokes, otherwise the glass will make scratches, and every scratch requires labor to remove. Here many fail, they do not sufficiently scrape the horn. Polish with fine sandpaper. There are easier and quicker methods, but I have never seen any horns that looked as nice as these I have finished after this formula. I should have mentioned that after the first process the horns should be varnished with the best of white varnish.—[Sarah E. Wilcox.

O. A. B. to polish horns for ornament, scrape the outside rough part off with a good sharp rasp, then scrape smooth with broken glass, then use fine emery paper on them until they are smooth as satin, then take warm sweet oil and whiting to polish up with, rub the horn all over with the oil, then take the whiting on the hand and polish till it satisfies you. There is nothing that will give the soft polish that the hand will.—[Mrs M. J. Hourigan.

Aunt Tabby Don't Araminty write pretty? Uncle Hiram: Waal, she sartinly don't write platin.



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OPIMUM and Liquor Habits cured in 10 to 20 days. No pay till cured. Write DR. J. L. STEPHENS CO., Dept. A. G. Lebanon, Ohio.

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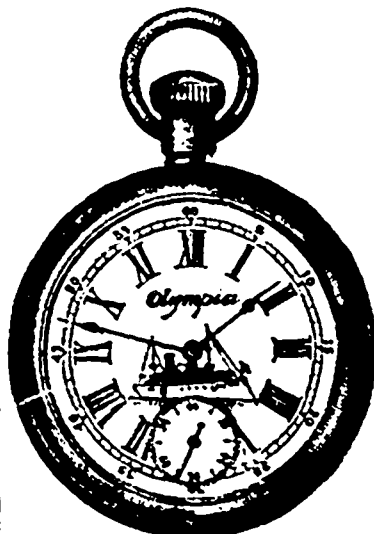
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The Olympia Watch.

A GREAT WATCH FOR THE BOYS. GIVEN for only FOUR New Subscribers, or with Farm and Home One Year for \$1.25.

We here offer what we consider the best watch ever sold at the price. It is a stem-winding and stem-setting watch and the movement is the latest style put on the market by one of the largest watch companies in the country.



WHY THESE WATCHES ARE SUPERIOR TO ALL OTHERS.

- 1st—They are the same size as high-price watches.
2d—They are accurate and reliable timekeepers.
3d—They are thoroughly tested in different positions before leaving the factory.
4th—The cases are strong and well made, heavily nickel plated, with hinged back.
5th—The movement contains the best type of American Lever Escapement; the pinions are of finest steel, hardened and polished to a point equalling glass.

WHY YOU SHOULD HAVE ONE.

- 1st—We offer it on such liberal terms that you cannot afford to be without one. (See offer below.)
2d—They are not only for the boys but for the men as well. To see one is to want one.
3d—Everybody needs a reliable timepiece, and although you can pay more for a watch, you can not get a better one for all occasions.
4th—You don't want to carry your \$50 watch when you are fishing, hunting or working, because if you lose or break it the cost is considerable.
5th—In the past, cheap watches have been so large and bulky that the majority of people did not care to carry one, but this defect has been remedied and everybody wants one.

OUR GUARANTEE. We hereby agree that if, without abuse, this watch fails to keep good time, we will upon return to us within one year, repair or replace it with a new one. Where can you find a watch with more good qualities or a stronger guarantee?

OUR OFFER—We will send this watch, which we fully guarantee, free as a premium to anyone sending us four new subscribers to Farm and Home at the club rate of 25 cents a year, or two new subscribers and 50 cents additional. When old subscribers are sent twice as many are required in each case. Price if purchased, only \$1, or with Farm and Home one year \$1.25. Postage paid by us in each case.

Address all orders to FARM AND HOME Springfield, Mass., or Chicago, Ill.



# STITCHES

## A B C OF KNITTING—III.

[Concluded.]

There are really only two stitches in knitting, the plain and the purl or seam. All the pretty edges and other patterns you see are made by putting these together in different ways, with perhaps a little variation. Some of these variations might trouble you a little if you were working alone, so we will "pick out" this pattern together and learn, too, what those "short" words mean that you see in the printed directions.

Use cotton yarn or very coarse thread at first, just for practice, then later, if you want to make a long piece, No 60 or 70 thread would look very fine and lacy. No 17 or 18 needles would be about right. For making edges or anything narrow a short needle is better, made by cutting off a long needle and filing it to a blunt point like the other end. Cast on fourteen stitches loosely and knit across plain. \*K two (k means knit), then put the thread around the right needle twice. This is called th o twice "for short." Now you are ready for p two tog, which means purl two together. You learned how to purl (or seam) in the last lesson. This is done just the same way except that you put the needle through two stitches at once. Be sure to put the thread back under the needle, then repeat the directions between the two stars. K one, th o twice, narrow (or n), which is simply knitting two stitches together, th o twice, n again, k one. This finishes the first row.

2d row—K three, but before knitting the third stitch notice that it is a loose thread instead of a regular loop; that was made when you put the thread over twice in the last row. It is to be knitted just the same as a regular stitch, but be careful to slip off only one thread, leaving another loose thread just like it on the left needle. P one with this thread just the same as if it were not loose. The thread between the needles will seem very long, but that will be all right, for it is going to be part of one of those pretty twists in the finished pattern. K two, p one, k one. \*Th o twice, p two tog, k two. \* repeat between stars.

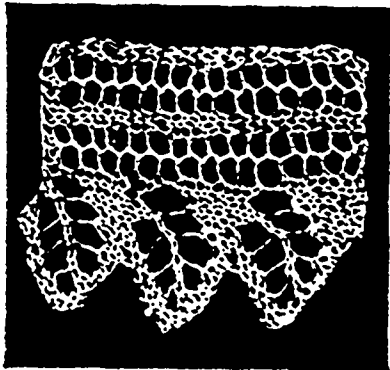
3d row—K two, th o twice, p two tog. \* repeat between stars. K three, th o twice, n, th o twice, n, k one. Now you can begin to see a little of the pattern. 4th row—K three, p one, k two, p one; as far as here this row is like the 2d, and those same awkward loose threads come in again. Now k three. \* Th o twice, p two tog, k two. \* repeat between stars.

5th row—\* K two, th o twice, p two tog. \* repeat between stars. K five, th o twice, n, th o twice, n, k one. This row is like the 3d except in one place, k five.

6th row—K three, p one, k two, p one, k five. \* Th o twice, p two tog, k two. \* repeat between stars.

7th row—\* K two, th o twice, p two tog. \* repeat between stars. K seven, th o twice, n, th o twice, n, k one.

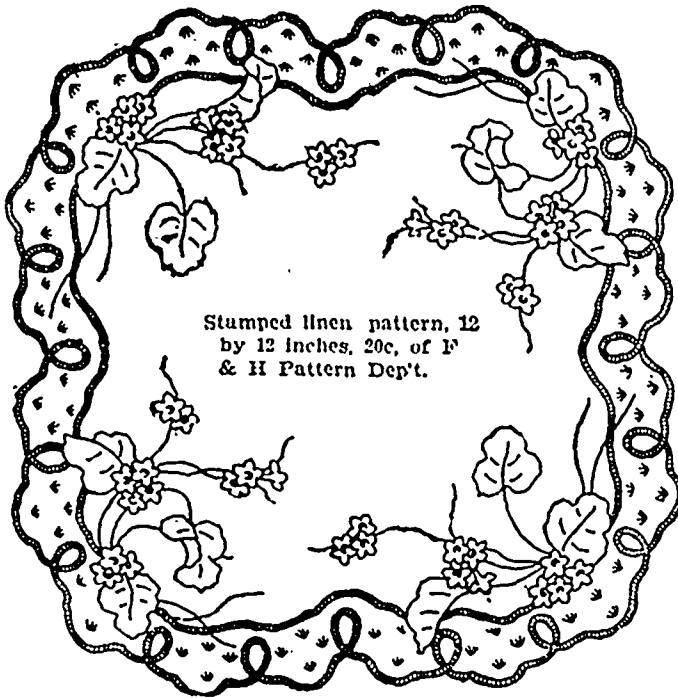
8th row—K three, p one, k two, p one,



k seven. \* Th o twice, p two tog, k two. \* repeat between stars.

9th row—\* K two, th o twice, p two tog. \* repeat between stars. K fourteen.

10th row—This finishes the scallop and to round it off bind off eight. Then k five. \* th o twice, p two tog, k two. \* repeat between stars. Repeat these ten rows for all the scallops. On the last row of all bind off the whole row. Sometimes you will see a stripe in knitting

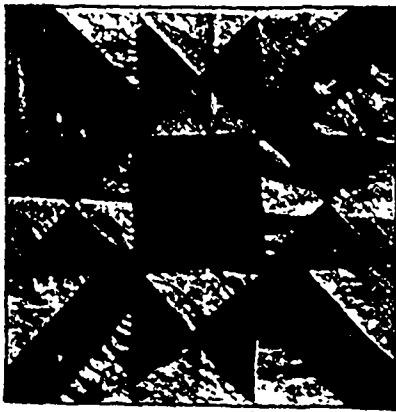


Arbutus Doily.

with just straight or crinkly threads running across. That is done by dropping a stitch off the needle without knitting it and letting it ravel out to the beginning. In knitting a round piece like a stocking, more than two needles are used, but the stitches are the same. It will require much practice to become a fast knitter, but perhaps by and by you will be so expert that you can even read or almost go to sleep while knitting, as you have seen grandma do many times.—[B. A. W.]

### RUSSIAN TEA QUILT.

This pretty pattern makes a nice quilt pieced entire of red and white, or of red, white and blue. If a patriotic quilt be desired. It is so simple anyone can



pattern after the illustration. Light and dark prints may be used if desired, and the blocks set together with plain strips of dark. Blocks should be about nine inches square when finished.—[A. R. A.]

### FLUTED OAKLEAF EDGING.

Cast on twenty-two stitches.  
1st row—K sixteen, o, n, o, n, o, k two.  
2d row—K nine, k eleven, leave three stitches on the needle, turn and knit next row.  
3d row—K fourteen, o, n, o, n, o, k two.  
4th row—K ten, p eleven, k three.  
5th row—K eighteen, o, n, o, n, o, k two.  
6th row—K eleven, p eleven, leave three stitches on the needle, and turn as in second row.  
7th row—P eleven, k five, o, n, o, n, o, k two.  
8th row—Knit plain.  
9th row—K three, p eleven, k six, o, n, o, n, o, k two.  
10th row—K twenty-four, leave three and turn.  
11th row—P eleven, k seven, o, n, o, n, o, k two.  
12th row—Slip and bind six stitches, knit the rest plain.  
In the first, fifth and ninth rows, slip the first stitch.—[L. G. Ross.]

## Don't Go Blind or Deaf

But write to DR COFFEE, Des Moines, Ia. for his eighty-page book telling all about his mild medicines that absorb cataracts, white spots, blindness and all eye inflammation, deafness and head noise at home.



W. O. COFFEE, M. D.

**13000 Patients Cured Last Year.**

He can do for you what he did for these people; write to-day. Address, Dr. W. O. COFFEE, 334 Good Block, Des Moines, Iowa.

### 77 Years Old and Cured of Cataracts on Both Eyes.

Too old to permit an operation for being cured until she learned of Dr Coffee's new method of curing cataracts—she travels from Aurora, Neb, to Des Moines, and has her sight restored perfectly—and can see to read the finest print.

Des Moines, April 12, '20—To whom it may concern: This is to certify that I am 77 years old; that I live in Nebraska, in the town of Aurora; that I commenced to lose my sight over one year ago from cataracts on both eyes, and, having a son, H. E. Hammond, living at 1310 21st St. Des Moines, Ia., I decided to visit him last fall and consult an oculist in Des Moines. He took me to Dr W. O. Coffee and I went under his treatment for the cure of cataracts by absorption, as I was too old to be operated on. I have carried on this treatment for nearly five months and yesterday he turned me off as perfectly cured.

I can see as perfectly as I ever did, can thread a needle without glasses; and I want to say to anyone afflicted with cataracts of the eyes and blindness that Dr Coffee's new absorption method does cure them and that his terms are very moderate.

LUCINDA HAMMOND.

### A WONDERFUL CURE OF DEAFNESS.

It required Thirteen Months—But He Is Cured by the Home Treatment.

Auburn, Sac Co, Iowa, Jan 15, 1900—This is to certify that I am fifty-four years old, that I have lived in Sac Co thirty years, that I commenced to get deaf and have trouble with my ears twelve years ago, and I have gradually got worse until I could not hear conversation, or preaching, or a watch tick. No treatment seemed to help me until I wrote to Dr Coffee, at Des Moines, and began his home treatment. The first three months I did not seem to improve any at all, but it being my only hope I stuck to it, and I am thankful to say that my hearing is now almost perfect, my catarrh is cured, my rheumatism has all left me, and I seem to be in perfect health. I want to say to everybody that is deaf, if they will stick to Dr Coffee's treatment he will cure them. Yours respectfully,

THOS GORMAN.

## TERRIFF'S PERFECT WASHER



SENT ON TRIAL at wholesale price. If not satisfactory money will be refunded. SOLD under a POSITIVE GUARANTEE to wash as clean as can be done on the washboard, even to the wrist- and neckbands of the most soiled shirt, and with far greater ease. Does not wear out the clothes. Economizes soap, labor and time. AGENTS WANTED. Exclusive territory given. Big money made. For terms and prices Address:

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with 8 sets, 3 Pins in a set, different colors, to match all shades of cloth; sell to your friends for 15 cents a set and get free your choice of Three Beautiful and Costly SOLID GOLD-LAID RINGS. Set with large Opal, Twin Garnet or Simulation Diamond. Send name. No money wanted unless Pins are sold. GLOBE GEM CO., Providence, R. I.

## The Thousand-Shot Air Rifle.

Shoots 1000 Shots Without Reloading.

Given for Only 6 New Subscribers or 3 New Subscribers and 75 Cents.

### SIMPLE, STRONG and DURABLE.

This model is similar in principle to the celebrated Marlin Repeating Rifles, which are sold for \$25.00. It is a new feature in Air Guns, it holds a thousand B. B. shot, and is most simple in its working; it is a Gun anyone would be proud to carry and own, and shoots with precision and throws a shot for a long distance. All parts are interchangeable and replaced for a few cents. It is made in the best manner, makes but little noise and is entirely free from danger. It has a handsome varnished walnut stock and fine nickel barrel, and weighs but 5 pounds. Thousands of these rifles are now in daily use and giving the best of satisfaction. Have left but a limited number of these Rifles. We offer them while they last on the following special and remarkably liberal terms.

Given as a premium for only 6 New subscribers or 3 New subscribers and 75 cents. Price only \$1.50, including a year's subscription to Farm and Home. Former price, \$3.00. Sent by express, receiver to pay charges, which will be light. Give name of express office if different from postoffice address.

Address all orders to FARM AND HOME Springfield, Mass., or Chicago, Ill.



EARNING MONEY AT HOME.

FROM THE GARDEN.

How to provide for the future of her two little fatherless ones and not leave home, was the problem that Mrs. Brown had to deal with.

The few acres left after the debts were paid were mostly in berries and fruit trees, and she could not easily market them, as the city was eight miles distant. Her husband had never made much headway in laying up money for the inevitable rainy day, excepting to have his life insured, but one busy week he neglected going to town to pay his dues, and a runaway team made it too late forever. Friends advised her to live with relatives and sell the little house, but she was attached to it and preferred being independent.

In the spring before the strawberries were ripe she went to the city to solicit orders for canned strawberries, jams and jellies. The members of the lodge responded liberally and furnished the cans, paying so much per can for plain canned berries, and furnishing the sugar for the preserves and jellies. She hired a stout girl to help her, and dozens of boxes of carefully labeled berries left the farm that summer. Blackberries were made into jams and jellies. Peaches were preserved, spiced and some simply cooked and canned. Apples were made into jellies and butters, also plum and pear butter found a ready market. Occasionally orders for vegetables came with the fruit, and her increasing trade made it necessary to hire a man each week to deliver orders. Her cows and poultry occasionally added a few dollars to the bank account outside of their 'bring. Her customers are more than satisfied and the account book showed \$175 to her credit for her summer's work, clear of expenses.

Orders for the next year proved her venture was a success. She is happy at having kept the wolf from the door by her own efforts, and not having to depend on friends and relatives for maintenance. In the near future more small fruit will be set out, and the preserving business will be carried out on a larger scale, which proves the demand for clean, wholesome, unadulterated canned goods, as the labels are all dated and signed by the maker. [Marion McConkey.]

PUT FALSE PRIDE ASIDE.

If one really wants to or must earn money at home, there is no doubt in my mind but there are ways, plenty of them, if one is well and has tact and energy to just take right hold of the work and do it. Have as a motto, "No work is beneath my dignity if it is respectable, honest and will not hurt my health." False pride must be put aside and one must go into the work believing she will be successful. If you expect to fall, and work in a half-hearted way, whatever you do will not help you much. I know of several women who are able and ought to be at work, but they cannot do what they want to and they will not do what people want them to do. I have no patience with such people. In this vicinity if a woman cannot leave home, taking in washing and ironing pays as well or better than any other work, unless it is going from home to do such work by the hour, also housecleaning. Some call this working at home, because one is only gone from home part of the time and is always at home nights. Women here get 15 or 20 an hour and some that cook get 25. If you go from home to do the work, if you work past noon you get your dinner, and often something besides is given to you.

I know of a woman who has in 16 years saved \$1600 besides taking care of herself and family. She was a widow with three children, one an infant. That child was graduated from a high school in June, 1896. She earned her money washing, ironing, scrubbing and doing any other respectable work she was asked to do. She is trusted and

respected. I admire that woman for her good sense. How many men in a hundred who work out by the day and lose more or less time can save \$1600 in 16 years? If Mrs. P. J. T. will write, telling her circumstances, I think I can suggest to her many ways of earning money at home, yet success or failure rests mostly with herself. The best work is often close at hand, so do not look too far off and miss it.—[Allie L. Nay.]

AS WE THINK.

A Cold World—I am a farmer boy, I am proud to say, although it sometimes seems that there is no place in the cold world for me, yet I remember that some of the greatest men on earth were farmer boys, and I am encouraged to press on. I am not going to back down, because I believe everybody has a calling to perform, or they would never have been created.—[Jack Sillster.]

Ideal's Ideal—Do you not think the Lord created one sex as good as the other? Certainly he did, and if there is any difference, I would like to know how it was brought about. Of course there are exceptions of good and bad in both. So instead of looking across at the opposite sex and complaining of their faults, let us all strive to improve our own, and this can only be accomplished by "looking to home" and mending our own faults and failures. By so doing we may prove to be our ideal's ideal. Well, I do not want Bishop to think I am one of those preachers he talks about, but just a list-near.—[Gordon.]

Dismally—Cowboy, I wish you the best of luck in your second adventure, but let me warn you not to rush headlong and marry at your first meeting. We had such a case in our neighborhood and it turned out, oh, so dismally. One was sold as much as the other, and after two years of jangling, agreed to disagree, she returning to her old home, hundreds of miles away, richer—in experience. Nevertheless, Cowboy, let us know how you succeed. [Lola.]

Suggestions—Though not a farmer, I like to read your paper, containing as it does useful information for the home also.—[G. F. Haab, Jr.]

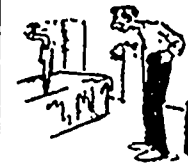
In regard to stepmothers, girls, treat them well, for we may all be stepmothers some day.—[Sisters.]

Miss Minnesota, are you going to be a writer of the Dickens order, or only of the village poetess type?—[Centennial State.]

I am glad to see so many standing up for the stepmother. I am one myself, and although we are all the best of friends, it hasn't always been pleasant. [Sadie.]

Queer Lover—Cowboy If the girl had wanted her freedom she would have asked for it, and unless she did you should not have offered to free her. She felt hurt and insulted and thought you were seeking freedom for yourself when you were so willing to set her free. Any self-respecting girl would be glad to free her lover under such circumstances;

and any girl who would marry a man she thought was anxious to set her free could not think much of herself; neither would you think much of her if she had married you. You cannot blame the girl for declining your "olive branch" after such treatment. If both of you are free and you still love her and you think she loves you, why don't you find out? I think you are a queer lover. What is the matter with you? Are you backward or are you conceited? I can't make out which. Do you expect a girl who feels that you have slighted her to "kiss and make up" without an apology from you? Do you expect the girl to make the first advances? A good girl will never do that. Your sweetheart took the only course open to her when she accepted your offer of freedom. Pocket your pride if you love her and write to her, be candid and explain that you still love her and always loved her, and that you



released her because you thought she wished it, not because you wished it; ask her again to marry you, and if she loves you and is convinced that you are speaking the truth, she will let bygones be forgotten, and you both may be happy. The lonely life you live has made you morbid, suspicious and jealous. A manly man will not hesitate to acknowledge his faults. If your sweetheart refuses you again, you may be sure she never loved you and you may be sure that you would not forget her while you thought she loved you. Marriage with love is heaven on earth, without love marriage is a living hell. "Respect, admiration and confidence" will not do for a happy marriage while you love someone not your wife. Love may come after marriage, but only when one is fancy free. It is unfair to ask any girl to undertake the responsibilities and burdens of a wife and mother while you love another woman. [New York City.]

Address Wanted—Cowboy's address is wanted by a number of readers. Will he kindly send the same to the Editor?

Poor Old Judge Sewall's corpse has been buried up these many years by stones cast at him by people who have no sin. It is simply waste of strength to hurl any more slurs at his memory. I perhaps he was way behind his time (?). But when I consider how he judged to the best of his knowledge, how he decided as he supposed for the public welfare and safety, and when I recall the fact that he carefully reconsidered the matter and was convinced that he had condemned the innocent, when I see the despair of his soul as he realized that he could not bring back to life the dead, when I see him enter into his closet and close the door, when I hear him in anguish plead with God to forgive his sin, when I see him again and again on each sad anniversary of his sentence-giving, refuse all food and go apart, alone, till setting of the sun, when I see him close his life in this deep contrition—then I cry, "Spare his grave! pity the dead!" Nay, rather almost worship him who could judge himself so more than justly!—[Good Faith.]

Pocket Money—So much has been said about what the wife should have to get spending money from, that it is good to read what Au Revoir says (Feb 15) about having but one pocketbook for him and his wife, though perhaps one for each and free to both (as it has been with my wife and me) would be

Mrs. Barnard Thanks MRS. PINKHAM FOR HEALTH.

[LETTER TO MRS. PINKHAM NO. 12,994]

"DEAR FRIEND—I feel it my duty to express my gratitude and thanks to you for what your medicine has done for me. I was very miserable and losing flesh very fast, had bladder trouble, fluttering pains about the heart and would get so dizzy and suffered with painful menstruation. I was reading in a paper about Lydia E. Pinkham's Vegetable Compound, so I wrote to you and after taking two bottles I felt like a new person. Your Vegetable Compound has entirely cured me and I cannot praise it enough."—MRS. J. O. BARNARD, MILLTOWN, WASHINGTON CO., Md.

An Iowa Woman's Convincing Statement.

"I tried three doctors, and the last one said nothing but an operation would help me. My trouble was profuse flowing; sometimes I would think I would flow to death. I was so weak that the least work would tire me. Reading of so many being cured by your medicine, I made up my mind to write to you for advice, and I am so glad that I did. I took Lydia E. Pinkham's Vegetable Compound and Liver Pills and followed your directions, and am now well and strong. I shall recommend your medicine to all, for it saved my life."—Miss A. P., Box 31 ABBOTT, IOWA.

THE Pleasantest, most powerful, effective and never failing REMEDY for

Rheumatism Sciatica, Neuralgia, LA GRIFFE and CATARRH! If all knew what thousands know of the efficacy of "5 DROPS" as a Curative as well as a Preventive of any Ache or Pain known to the human body, there would not be a family in all America without a bottle of "5 DROPS!" Send for trial bottle, 25c, or large bottle, containing 300 doses, \$1.00, 6 bottles for \$5. SWANSON RHEUMATIC CURE CO., 160-164 E. Lake St., Chicago, Ill.

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TEST PELVIC FINE CONES for all cases of [of] rectal, prostatic or bladder disease [case and Complaints of Women] Dr. Foote, 129 East 28th St., N. Y.

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20th Century Pellets Create perfect condition. Ready nerves for everybody. No harmful drugs (Special) 1 Month's trial by mail 25c. Darragh & Rich, Station G, New York.

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A Practical Journal for Housewives.

THE HOUSEKEEPER is a thirty-six page monthly, beautifully illustrated with half-tone plates, and full of good things from cover to cover. The departments of Fashion, Fancy Work, Home Talks, Music and Art, Mothers' Council, Etiquette and Toilet, Entertainments, etc., Horticulture, News and Comment, Our Young Folks, Queries and Replies, etc., each presents unrivaled features. It is certainly a wonderful fifty cents' worth. Its popularity is attested by the fact that 140,000 women take it.

SPECIAL CLUBBING OFFER. Believing that many of our readers would be glad to subscribe to this valuable journal, we have arranged the following special clubbing offer:—

Table with 2 columns: Item and Price. The Housekeeper, Price \$3.50; Farm and Home, \$3.50; Webster Dictionary, \$3.25; Buckeye Cookery, \$3.50; Total, \$17.75.

All for 75 cts

The Webster Dictionary is a work of extraordinary interest to all classes of progressive people. It contains 22,000 of the best words which is all the average person has any use for. It also contains twelve departments of exceptional interest, contains 1200 Pages, handsomely bound in imitation leather covers and is especially designed for pocket use. Buckeye Cookery contains 235 pages illustrated, and over 200 tried and approved recipes on cooking, canning, pickling and preserving, etc. It also contains a medical department, and a collection of medicinal recipes of great value. Do not delay or fail to take advantage of this remarkable offer, for never before was so much offered for so small a sum. Remember we send both papers a full year and the two books, at the very low price above named. Address all orders to FARM AND HOME, Springfield, Mass., or Chicago, Ill.

**Farm and Home Council.**

more convenient. Eggs, poultry, butter, etc, might or might not furnish a fair amount of spending money for the wife. If she were extravagant, incapable or shiftless, perhaps the amount at her disposal should be limited and the same with the husband. But when both are capable, honest, economical and industrious, there seems no occasion for partiality in the amount of spending money each should have. And it also seems right that all in the family should do their fair share as needed for its proper maintenance, even though wife or daughters need to do some work considered as properly belonging to men, and vice versa. Not that it would be best generally, but only in cases that ought to be rare, and when the necessities or happiness of the family require it.—[Thomas J. Powell.

**A Great Wrong**—The pocketbook question has been well discussed, but there is still another great wrong to women which to my thinking is as grievous. When man and wife start poor, and both work hard, live economically and raise up a large family, and both succeed in earning a home, say 80 or 100 acres of land,—after the wife has helped to earn what they have, she has no share, no right, it all belongs to the man, and the man refuses to provide for her. True, she may have a third,—yes, a third of what she has worked hard for.—[One of Them.

**Correction**—In the Council columns far May 1 was an error of make-up which made the two paragraphs beginning respectively "Cruel parents" and "Once more" read wrong. The first three lines at the top of the third column on Page 220, under the former head, belonged at the top of the first column on Page 221 in the "Once more" paragraph.

**Inquiring Friends**—Mrs M. L., we would like to publish your excellent letter, but the subject makes that course unwise.—R. G., we believe Theodore Thomas, the great orchestra leader, has his headquarters in Chicago now.—Mrs H. M. R., in the potato yeast recipe in our April 1 issue, you can use any of the various kinds of yeast in the "one cup" referred to. Half a cake of compressed yeast dissolved in a cup of water will do also.—S. B., gluten bread may be made the same as wheat or entire wheat bread or biscuits, using all or part gluten flour.—Mrs L. W. C., "s c" in crochet means single crochet.—Mrs W. H. Q., we can't give specific cures for diseases in this journal.—J. A. H., we know of no fluid that a watch can be dipped into in order to clean it.—Mrs N. M. B., we don't know what marketable use "sumac bobs" can be put to. You should advertise your Belgian hares.—Can someone tell how to make "shrimp paste"?—Leonie, there seems little doubt that the astrologist's art is founded on natural scientific laws, but he may not always interpret them rightly.—Phillip, the answer to your coin query is given in our Feb 15 issue, Page 94.—J. W. M., directions for a knitted oak leaf tldy were given in our issue of June 1, '98.—Subscriber, the biograph is controlled by the American Mutoscope company, New York city.

**Teddy's Ride**—Do you wish to hear some of my experience? I am a telegraph operator on the Erie railroad. It was Sunday afternoon, fine wheeling and a model day. I went to see "her." She greeted me with smiles and in due time suggested that we should go for a ride. We started for the town of C—, intending to go to church. We got nearly there and of course something had to happen, so she dropped her handkerchief. I dismounted to recover it and when I got started again she was quite a distance ahead. Just at this point the cause of all my trouble shot by me on another wheel (a fellow of course and homely at t' all). I saw his game instantly. It was down grade. I soon gained on him. There was a sharp turn just before we reached the church. She was already there. I was coming around the curve slick and safe while the other fellow wasn't so successful. He needed the whole 20-foot road to make it. So he ran into my front wheel, turning me toward the sidewalk.



Well, he reached the pretty girl, while the sidewalk struck my front wheel. I came home on the train with a sprained ankle, and I didn't leave home again for three long weeks. The fellow went home with the pretty girl, and they added insult to injury by sending me their regrets. I have got that handkerchief yet. I have also made a "will," leaving all my blessings to that fellow. And I have lots of faith in girls.—[Teddy.

**Ruling by Love**—I am glad to see so many of our young people interested in literature. No time is wasted that is put in in reading good literature. My favorite prose writer is Mary J. Holmes. Her language is so simple and easy to understand. Longfellow is my favorite poet. I do not enjoy reading Cooper's works very much because he is not at all plain in what he wants to say. I am a teacher and am just finishing my first term of school. I have an excellent school and a good attendance, enough to keep me busy all the time. Let us hear from more of the young teachers and let them give some of their methods of teaching. How many can teach a six months' school without having to "administer justice" to some of the pupils? I never had a rod in the school room the entire term, for I never had occasion for it. A teacher can manage her pupils better by kindness than by force. Telling a child day after day that he is a naughty child will not make him a better one; but we must select some good trait of the child and encourage him in it, and by so doing you can overcome all his naughty habits and in a short time you will have made a good child out of perhaps the most naughty boy in school. Teach the pupils the first rule, "Learn to love your teacher," and if you succeed in doing this you will have no trouble with them. Do not have your pupils overburdened with rules, as some teachers do. Make as few rules as possible and you will readily observe that you will have no trouble in having a good school. The only rule I gave my pupils was this, "Always do right." There isn't anything I enjoy better than to be in the school room with about 30 bright, intelligent pupils. It is so interesting to teach the little tots and to take notice of all the queer ways they have. Teaching is the only way to learn the nature of children.—[Toots.



**Bookkeeping**—I am bookkeeping for a merchant in the city and like my work very much. I have taught one term of school, but like bookkeeping far better. I like living in the city very well, but I don't think there is anything like living on the farm. But where I can do the best and earn the most money, there I am satisfied. Don't think me stingy, for I am free-hearted enough. Papa lives on a farm of 80 acres and it is situated 80 rods from a pretty little lake, which makes it very pleasant.—[Old Maid of Nineteen.

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The boys are all such bright young men,  
The girls as good as gold.  
The virtues of the Honor Brights can never half be told.  
SECRETARY No 80.

**Summer Boarders**—Among the many good things in F & H, I see no mention of summer boarders, and as I am thinking of taking a few this summer, would like to hear from those who have had some experience. I do not mean on any special point, only a general plan to help boarders have a pleasant vacation. Such an article would interest and help me, and perhaps others.—[Mrs C. M. S., New Hampshire.

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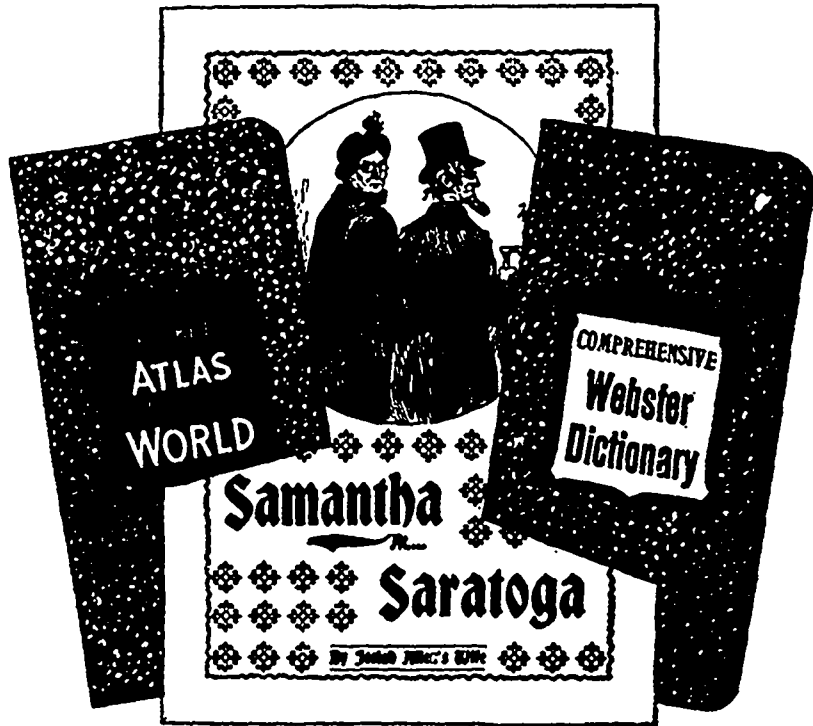
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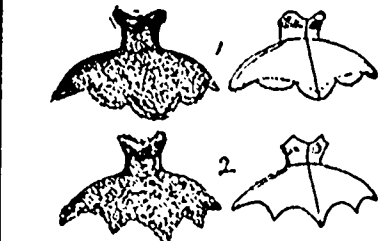
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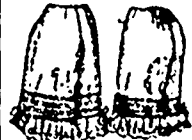
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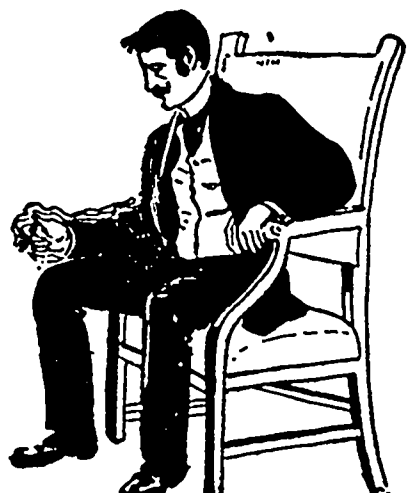
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hard blows with a hammer, until the lead is flat and smooth on both sides. Or, take a copper rivet of the required size, place the small end in the hole and pound it flat. The lead does well enough when the utensil is to be used only on top of the stove, but the copper rivet is all right for any use.—[Marian Meade.]

Mollie May in New York.



My Dear Julia: I went to such a nice informal reception, Thursday evening, given in honor of one of our rising young artists, and I fairly reveled in the artistic atmosphere. Then there was such a gathering of pretty women in new gowns fresh from the hands of the modiste! The pale colors predominated, such as beige and gray, and there were many white cloth gowns which looked extremely chic. All the skirts were long, in fact, they swept the ground, and were profusely trimmed with tucks, ruffles, ribbons and lace. Not a plain skirt was seen and would indeed have seemed out of place. One sweet maiden who poured at a tiny tea table decorated in pale, blue-green had on a charming white organdie gown, which I must describe to you. You could copy it easily in any color and have a most fetching gown. The skirt was laid in tiny box pleats from

the belt to within 14 inches of the hem, where they were allowed to flare, giving generous width around the bottom of the skirt. Two ruchings of the organdie trimmed on both sides with pale blue satin ribbon trimmed the bottom of the skirt on about 10 inches apart. The upper ruche was set on in the line of deep scallops. The waist was laid in pleats to correspond with those on the skirt, and finished off around the shoulders with a tiny skin of the organdie, edged with the ribbon trimmed ruchings of the same. The tiny elbow sleeves were finished off with a band of ribbon and a smart, perky bow. This gown was very simple but effective, and seemed quite a relief from some of the over-trimmed lace gowns.

What impressed me at once when I entered the rooms was the remarkable variety of sleeves. Long, tight-fitting ones, the short elbow length and then the new bishop sleeve, the forerunner of the full sleeve, which we are told will soon come in style again. This one, sleeve with its tight-fitting upper part and loose, baggy lower sleeve is indeed quite the latest thing and stamps a gown at once as quite up to date.

Of course you are anxious to know what I wore and how my gown compared with the others. I bought a foulard silk early in the year and had such a hard time selecting a color, as the new shades were simply bewildering. However, I chose an o'le-rose background with an indistinct white pattern running through it. The skirt is box pleated (very narrow ones) and trimmed with small ruches of the same material edged with rows of black velvet and white satin ribbon. The waist has such a pretty collar of finely tucked organdie, edged with cream lace, which comes across the shoulders at the back like a sailor collar and fastens at the bust with a black panne velvet knot and ends. The chemisette and collar are of the organdie and lace. The sleeves are very dainty and copied from the latest models; tight-fitting at the top and turning back at the elbow with a tiny cuff of lace to show a full undersleeve of the white organdie with a lace-trimmed cuff striped across with narrow velvet ribbon.

This gown has been wonderfully serviceable for little informal affairs, and soon I shall be able to wear it calling and to the theater. I made a little sketch and enclosed it, as you might like to copy it in a thin gown of some sort. I must come to a close now, but the next time I write you I will tell more of my visit in New York. Lovingly yours, MOLLIE MAY.

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JOEL SMOAKER, Editor *Farmer and Dairyman*, North Yakima, Wash. Subscribed and sworn to before me, this 3d day of January, 1899. JAS. R. COE, County Clerk.

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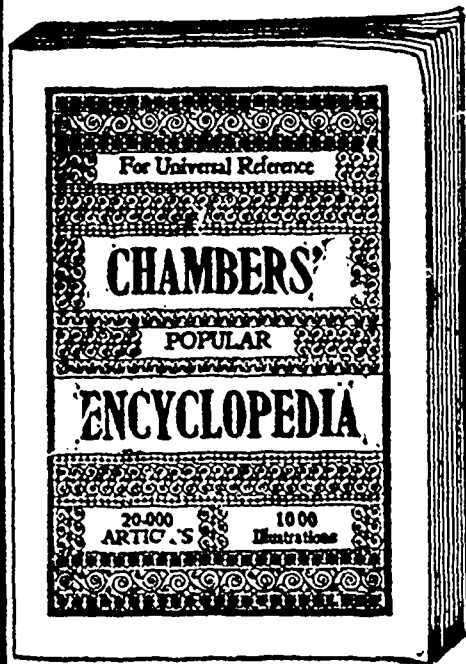
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Around the Globe.

Nicaragua Canal—Ignoring the Clayton-Bulwer treaty and the fact that Admiral Walker's canal commission had not yet reported and might not report in favor of the Nicaraguan route, the national house passed by a vote of 225 to 45 Congressman Hepburn's canal bill. The motive apparently was to express a hearty belief in the canal project. It was generally understood that the measure would not pass the senate at this session. Some of the Washington correspondents said that another motive was defiance of C. P. Huntington's railroad lobby, which opposes the enterprise. The bill provides for the purchase of needful territory, the construction and ownership of the canal by the government and its "defense" rather than its "fortification," this latter a concession to opponents who plead our international relations as opposed to fortification.

The "Free Home" Bill, which has been before congress for years, was passed by the house of representatives. It provides that the government shall issue patents to homestead settlers on agricultural lands already opened to settlement, on Indian reservations; shall pay the purchase price to the Indians, and shall pay the endowments to agricultural colleges from the sale of public lands, in case of deficiency. These payments involve \$1,200,000 annually. Of the 29,000,000 acres in Indian reservations opened to settlement for which the government is to pay, or has paid \$35,000,000, about 8,000,000 acres have been taken and about 2,000,000 are supposed to be still available for agricultural purposes. The venerable Galusha A. Grow of Pennsylvania, the oldest member of the house, spoke in behalf of the bill recalling his speech for the agricultural homestead bill 48 years ago, when he was the youngest member of the house.

A Pan-American Congress will be held next year in the City of Mexico, through the instrumentality of our state department. All the republics in the western hemisphere have accepted the invitation. Not merely the fostering of our trade with central and South America is desired, but an opportunity to dispel the impression that our government has designs on Central and South American territory.

Church Gatherings—Worldly amusements, the liquor curse and divorce were considered by the Methodist general conference in session at Chicago. This great gathering followed close upon the world's conference of evangelical missionary bodies at New York. The missionary gathering was notable for enthusiasm and the disposition to simplify creeds and get together. The daily attendance at the meetings was 15,000. An international organization was formed after its close to carry out various plans set forth at the meeting.

Status of the Islands—Charles H. Allen was inaugurated governor of Porto Rico May 1, and addressed his fellow citizens of the island with the utmost cordiality and the promise of liberty and progress. Meanwhile the question just how far the islands taken from Spain are subject to the federal constitution is before the United States supreme court, in several cases recently entered. Decisions in all of these cases are not expected during the present term of the court. In the case of Porto Rico, the civil government bill as passed makes the island neither a state nor a territory, like Hawaii. The inhabitants are not citizens of the United States, but of Porto Rico, under the protection of the United States. Cuba and the Philippines are under a military rule, entirely at the discretion of the president of the United States, the former having promise of home rule as soon as she demonstrates her fitness for it.

Trusts—Standard oil's March dividend of 20 per cent was followed by a May 1 dividend of 10 per cent. This company has raised by 10 per cent the wages of 25,000 employees throughout the country.

A blow at trusts is a recent decision of the appellate division of the New York supreme court, which decides that the investment by a trustee of the funds

in his possession in the stock of an industrial combination formed for the purpose of controlling prices is illegal and unauthorized. The judgment also decrees that the trustees in the case in which the adjudication was made shall pay over to the estate, out of their own pockets, the sum thus invested, the same as if no such investment had been made.

Parcels Post—Following upon the parcels post treaties with Germany and Nicaragua comes a third which has recently been consummated with Venezuela. It is said that negotiations along this line are progressing favorably between Postmaster-General Smith and the British postal department.

Personal Germany's crown prince, Frederick William Victor Augustus Ernest, became of age, at 18 years old, May 6, which event was celebrated throughout the empire with thanksgiving and praise. The future sovereign is described as a modest, thoughtful youth, with large gifts of intellect, who looks like his father, Emperor William. His children of the emperor are six sons and one daughter.

Capt Chadwick of the navy was severely reprimanded by Secretary Long, in a public letter, for saying unpleasant things about Admiral Schley to a newspaper correspondent, who printed them in his paper. The correspondent, Capt Chadwick said, abused his confidence, the conversation being private. Chadwick was captain of the cruiser New York in the Spanish war and Admiral Schley was in command of the Brooklyn.

Bear Envoys constituting a peace commission, sailed from Rotterdam for the United States in the hope of enlisting popular sympathy for their cause. They are President Wessels of the Orange free State parliament, Dr Mueller, the Orange free State minister at The Hague; Dr Boeschoten, Dr Fischer and others.

American Lumber for Japan—A timber raft containing 14,000,000 ft is being made up at Puget sound for Japan. It will be conveyed by a half dozen gigantic tugs. This is the greatest enterprise of the kind ever undertaken, and may be the forerunner of an extensive business if this first raft can be successfully tugged across the Pacific.

New York follows the example of Massachusetts in making a law prohibiting the wearing of song birds on hats.

Thousands of Japanese have entered the United States at Port Townsend, Wash. or from Canada. The danger of a war between Japan and Russia is probably responsible for this immigration.

There was wholesale slaughter of miners by an explosion near Salt Lake City, at Scholfield, nearly 300 being killed. Public sentiment is demanding precautions for the safety of miners.

Representatives of a large number of agricultural and mechanical associations of the Dominion recently urged the Canadian governor-general to ask for a grant of \$100,000 to hold a Dominion exposition at Toronto at the same time the Pan-American exhibition occurs at Buffalo.

There have been organized in the U S in the past dozen years about 10,000 co-operative creameries which make yearly about one half billion pounds of as good butter as the best dairies. It is generally admitted that creamery butter is worth 25 per cent more on the average than the homemade article, so it takes but little figuring to show that creameries are of \$25,000,000 benefit to the farmer each year. To say nothing of the general enterprise which has brought about a large increase in the amount of the products.—[A. Lyman Mass

Beware of Tree Agents—A new tree-agent scheme is reported by some of our readers. The agent of an Ohio nursery company agrees to plant an acre to fruit trees, such as apples, pears, plums, peaches and small fruits, for \$110. One-half the price is to be paid down and the balance at the end of 5 yrs, and they agree to take one-half the fifth year's crop for the \$55. During this time they will send a man to trim the trees and advise as to their care. As

the nurserymen are well aware that only a small part of fruit trees planted ever live to bear, especially when set by inexperienced men, they expect the 55 first payment to cover the cost of trees, planting and profits and anything received after that is clear gain. It is not advisable to plant several kinds of fruit together in this way and the one who tries it will be sick of it in a few years. The trees to plant an acre can be bought of reliable nurserymen who advertise in Farm and Home for less money and the buyer can have the choice of varieties, while in the other case he would have to take what nobody else wanted and varieties which would probably be unsuitable or undesirable.

Judicial Scoring on Oleo—The Ohio supreme court has ousted the Capital City Dairy Co, one of the two oleomargarine manufacturers of the state, by compelling it to sell its product uncolored. The decision is based on the violation by the company of the law forbidding the use of artificial coloring matter in oleomargarine. Without coloring matter, there are but few who will buy the stuff. The decision is a great victory for the dairy interests, but has been appealed to the U S superior court.

The Kieffer Pear has become one of the most prominent fruits of the day. The price of trees has greatly advanced and nurserymen are unable to supply the demand. Bearing trees had a good crop last year. The Kieffer has depreciated the value of the luscious and faultless Bartlett, Lawrence, Anjou and others of this class. It may be shipped to foreign lands and many have been sent to Europe. The practice of labeling canned Kieffer Bartlett is not to be commended, as when canned they are as good as any other variety.—[R. S. Emory, Md.

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