

FARM AND HOME

CANADIAN EDITION

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2 50 Cents a Year

Dominion and Provincial Affairs

Dominion Expansion.

Canadians stirred the hearts of the Englishmen when they found ours were fighting men. The present is a golden opportunity to demonstrate that this nation can not only fight but that it can make a first-class article of food as well. This latter fact has also been demonstrated by the high quality of our food shipments sent to the army in Africa. If England wants to show a substantial appreciation of our sincerity and steadfastness of purpose in defending the empire, let her people give us a chance to set some of our delicacies of the farm on their tables.

The policy of expansion being pushed so vigorously by the politicians of the greater powers of the world, mostly for commercial reasons, but for political unity as well, has reached our own country and the question has again come to the front of Newfoundland being received into as part and parcel of the Dominion. It has got to come and when it does we will have a well-rounded out confederation.

A Producers' Trust.

"Let us unite agricultural and industrial workers on a co-operative basis, educate and organize," writes F. D. Festner; "form a universal trust for the sole benefit of the working people." Several movements of this kind have started, in one of which Mr. Festner is personally interested. The association which goes about this in the most rational and businesslike way will give the cause the greatest push. The danger is in making retaliation for wrongs suffered the prime object instead of looking beyond to a plan which shall work because in harmony with the eternal laws of justice for all.

Early Seed.

Valuable assistance free is rendered Farm and Home readers in every issue by the description and treatment of animal ailments. Hog cholera, black leg, roup, etc., can usually be prevented by proper sanitary conditions, and a year's file of Farm and Home prescribes the treatment for about all diseases, including those which have secured a hold.

Experiments at Washington by Prof. Gates, a well-known physicist, in cooperation with the weather bureau, indicates that rain and snow are produced by electrical conditions rather than by differences of temperature or currents of air. There is reason to hope for an improved weather service as the result, if not an ultimate solution of the problem of producing rain artificially.

Live stock is going to be high for several years, says the American Agriculturist, as a result of its inquiry showing vast improvement in the

farmers' financial condition. Cattle are worth more than ever, cows are 50 per cent above the low point of '92, sheep have almost doubled in value within five years, and hogs are higher. But the most notable fact is that numbers of live stock have increased only 5 or 10 per cent, while population has gained 25 per cent. This certainly means good times for live stock and dairy interests.

The annual budget of expenditures calls for \$4,585,000 in Quebec and \$3,726,300 in Ontario. Quebec has a public debt of \$25,000,000; Ontario 3,117,700. While Ontario has a population a third greater than Quebec, its civil government, legislation and administering of justice cost more, while Ontario spends very much more for education, public institutions, agriculture, charities and public works.

The foreign trade of the Dominion has increased \$64,000,000 in two years, yet exports fell below imports by some four millions last year. From Great Britain we bought \$37,000,000 and sold \$29,000,000; to the states we sold \$45,000,000 and bought \$33,000,000 last year. The preferential tariff fails to change the course of trade with our neighbors to the south, for while imports of British goods have increased 20 per cent in 5 years, those of the states are 70 per cent greater.

Flying Chips.

A young farmer writes to an agricultural weekly that he went to the city to make money, and made it. But he bartered his health in exchange; the grind was too much for him. "I find to farm it successfully," he says, "that I must use more head work and more skill than I ever did with my work in the city." Of course. He is now the head of a business, making his own policy. In the city he toiled in someone else's treadmill.

The owners of preferred stock in the flour trust, instead of getting dividends are to be assessed. The drop-sift combines are sick unto death, some of them.

The great success of beet sugar factories in the states has spread to the provinces. As the beet sugar industry is yet in its infancy, beet growers or manufacturers should secure a volume of the new book *The American Sugar Industry* before embarking heavily in the enterprise. It may be obtained from the Orange Judd Co. of New York, at \$1.00. This book should be in every public and farmer's library.

The annual statement of the C. P. R. is a striking index of the remarkable prosperity that the Dominion is now enjoying. The gross earnings for the past year, amounting to over \$29,000,000, are the largest in the history of the company, and the directors have been enabled to increase the dividend which has now been placed on a 5 per cent basis. The G. T. R. has also had a

most satisfactory year. In view of the largely increased earnings the companies should be able to make a reduction in their rates for the benefit of the producer.

If a city girl 16 years old can get seven subscriptions to Farm and Home in a short time, with no difficulty, at 50 cents each, as a girl I know did a while ago, what a business our boys accustomed to selling newspapers can do at 35 cents per subscription, with 15 cents cash commission on each!

A man needn't own a newspaper to spread his opinions; witness a Yankee farmer who inscribes quotations from his favorite statesmen in red ink on the eggs which he sells. Thus the breakfast egg may carry more conviction than the morning newspaper.

If you don't see what you want in Farm and Home, call for it. Write to the Editor and tell him what you would like to see in its columns.

Poverty in Prosperity.

Some people seem to resent the assertion that industrial prosperity is general, as long as poverty and the struggle for bread continue to an appreciable degree. Everybody must reach "easy street" before our disjointed time is at right, in their eyes. The Utopia of Sir Thomas More and Edward Bellamy is to banish the condition in which a man must take any thought whatever for the morrow; the struggle will be over then. But poverty has been a good friend to some of us. The debating societies would make short work of the question, "Resolved, that luxury has made more strong men than has poverty." The real enemy in the present industrial system, the one against which Farm and Home is pitted at all times, is the abuse of power. Combined capital is using its power for selfish ends. So long as human nature is what it is, there will be sickness and misfortune, blundering and poverty, but these conditions can be greatly alleviated by keeping up the fight long ago commenced in these columns.

AS FOR POVERTY ITSELF.

with the odds even—well, Benjamin Franklin said that a man was rich not in proportion to what he possessed, but in proportion to what he could go without. I began life working for my board and 50¢ a week, but was quite as happy then as now. Hard work and economy have enabled me to get along, and that's the only way for most of us to get ahead. What anyone can accomplish by this sure and old-fashioned method is to my mind more astonishing (as well as more commendable) than the "big strikes" and "soft snaps" we occasionally hear about. Modest competency for the masses is far better than great riches for the few. That's why the farmer is the backbone of the nation.

Educational Matters.

THE TRAVELING LIBRARY.

The establishment of a system of traveling libraries, whereby the treasure house of knowledge purchased by state funds is open to all citizens of the state regardless of distance from the state capital, marks an era in educational development. At present, the states employing this system are O. Wis., Mich., N. Y. and Kan. In the first three, the only expense is the transportation charge on the books each way. In N. Y. a deposit of \$5 is necessary and in Kan. \$2. Mass. has what is far better, a circulating library in every township in the commonwealth save seven.

For Ohio communities, from 25 to 50 books are sent in each library. These are on every conceivable topic. When in the state library a short time ago, I found one set of books dealing entirely with the subject of music, another was on nature studies, a third on a certain period in American history, while several were on miscellaneous subjects. It will be readily seen of what great benefit this is to the rural community. When one desires to study a certain subject he does not need to content himself with the scanty books at hand, but can secure the best authority on the subject.

Hitherto many intelligent farmers have desired to go into a subject with some thoroughness, but could not for lack of reference. The traveling library obviates this difficulty. One of the greatest blessings is the rich fund of agricultural lore to be had for a trifling sum. The best agricultural works are to be had for the asking. The result is that after learning the practical value of the works, many purchase them for their own library. The possibilities opened up to a rural community and to the schools are almost limitless. Books for study, recreation and reference are all there. The transportation charges seldom exceed \$1.00. One of our libraries with books to the value of \$75 was gotten at a total cost of \$1.04.—[Mary E. Lee, O.

Mistakes—One of my greatest mistakes when I first started farming was fear of running in debt. Want of ready cash prevented me from getting out fruit and nut trees, prevented me from giving my land thorough drainage, which would have paid me back twice over in a few years. I made a mistake in working too hard and not studying enough. Another was in not building a silo 10 yrs sooner than I did. Another was in feeding whole silage too freely without something to balance it, thereby clogging my cows, which proved a great loss. Another was in listening to "hollow horn" doctors instead of employing regular veterinary surgeons. Another was in not paying better attention to poultry, in providing better quarters, etc. I have made mistakes in trying to get along with useless and dull farming utensils, to the injury of both land and work animals. H. D. Boardman.

Army worms are said to have crawled up on the snow in large numbers in western P. E. Island. Army worms have been known to crawl out prematurely before. It is a sure way of destruction.

Farm and Home.

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The circulation of Farm and Home for this issue is

300,600 Copies.

Sworn circulation statements on Farm and Home are sent to advertisers every three months and are made a part of each and every contract.

All Around the Farm.

TERRACING HILLSIDES.

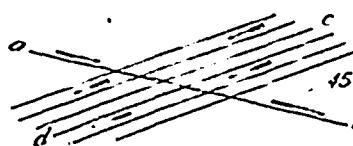
A great drawback to many farms is the washing away of the soil. But there is a cure for almost everything if the remedy is applied in time. On level land and where the farmer raises only grasses and small grain the soil may be held together by the roots of the crops; on the other hand, where the land is rolling and cropped to cotton, corn, etc., the land is sure to wash if there be no drain to carry water from the field. What is known as the hillside ditch will prevent soil from washing very materially, but there are many objections to such ditches. They take up much space from cultivation, cannot be gone over well with machinery and much labor is required to keep them in repair.

The falling terrace does not take a foot of space from cultivation, is easily gone over by any kind of machinery and is easily kept up. I call it a falling terrace because level terraces are used to a considerable extent in some parts of the south. I do not like the level terrace because they have to be made larger to hold the water and crops in wet weather are drowned where the water is held. The falling terrace has a fall of $1\frac{1}{2}$ in to every 13 ft, a greater fall will drown the crops. Almost any carpenter can make a level with a span of 13 ft as shown.

Fasten a small spirit level on a perpendicular piece which swings loose, being fastened by a screw. When the terrace has the proper fall and is made correctly it never breaks and causes the land to wash. Another important matter is to have the rows of cotton, corn or whatever the crop may be, cross the terrace with a certain angle, never more than 75 degrees. The illustration shows land terraced at

an angle of 45 degrees. Suppose a & b to be a terrace with a fall of $1\frac{1}{2}$ in and c & d rows with a fall of 3 or 4 in, the water in rows c & d empties up the terrace instead of down, thereby making less strain on terrace a & b , for if the rows c & d emptied down, the terrace would feel more strain, for the water in rows would be running faster.

The terrace can be made entirely with a plow, although it takes a good many plowings to get the terrace high enough. Hillside ditches can easily be converted into terraces by plowing in the ditch and making a terrace of the old bank. To put terraces on a field where there is nothing to prevent soil from washing, first run off a line with $1\frac{1}{2}$ in fall to



PLAN OF TERRACED AND PLANTED FIELD.

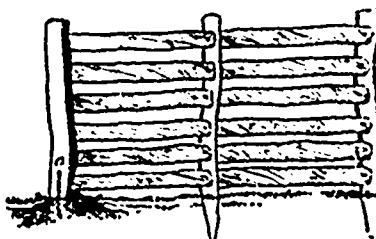
every 13 ft. Take a two-horse plow and make a list where the line was run and plow on each side of this list 12 ft, for the terrace should have a flat of 12 ft. The first plowing will have a very small ridge, but by steady plowing to the ridge a good terrace can be made, although it is always best to have a rain between the plowings to settle the ground and the soil turns so much better.

There are other ways of making a terrace, as with plow, shovels and hoes. First plow as stated above, then take the soil from above and below and put on the list, this requires a good deal of labor, although if the manager understands his business a good deal of work can be done in a day. When the terrace is once made there is never needed a hoe or shovel to keep them up for that can be done with the plow. The main thing after all is to have a good flat, not less than 10 ft. We have them on very rolling land and they do remarkably well. The flat can be made better with hoes and shovels when the terrace is first made. If there is not a good flat, the land will wash somewhat on the order of a ditch.

As there is no land lost from cultivation by the terraces, they can be put from 10 to 50 yds apart, depending on the slope of the field, for on a hillside they should be put closer together than on more level ground. When breaking up land for a crop, always plow the terraces first with a two-horse plow, then between them with a one or two-horse as desired. When planting a crop in rows, plant over terrace and all; don't regard it so far as planting is concerned, although care should be taken not to let plows cut into the terraces during cultivation.—P. H. Mangum, Jr., Wake Co., N. C.

POST AND RAIL FENCE.

This fence has six rails to the panel. One post and twelve 20 penny nails make an excellent fence, taking very little space to stand on. The way the



A DECORABLE FENCE.

rails are nailed to the posts forms a brace and balances the fence. A fence built of good, durable timber should be good for 20 yrs.

Where solid rocks are under posts, drill a $1\frac{1}{2}$ in hole in the rock 6 in deep and bore a hole 8 in deep in the post. Then get an inch-rod of iron cut, as at a in the cut, 15 in long, drive one end in the post; set post up with the lower end of the rod in the hole in the rock, plumb the post, then pour melted sulphur in the hole around the rod until full; keep post still until the sulphur gets cold and you will be surprised at the solidity of your post. Sulphur is different from almost anything else; it contracts when heated and expands

when cooled, therefore is better for the purpose mentioned than anything else known.—W. A. Sharp, Greenbrier Co., W. Va.

THE FARM GASOLINE ENGINE.

Radical improvements the past 10 yrs have so simplified the gasoline engine that it can be readily handled by the farmer for many purposes. For domestic and household work, farm and market garden hands, dairymen and many who do not feel themselves competent to handle machinery, the neat little gasoline engine comes as a great boon. Readily geared to run a grain crusher or grinder, cut ensilage, pulp roots, pump water, operate a cream separator or churn, saw wood or perform other similar work, the man operating a large farm can hardly afford to be without a power machine of this kind. Placed on a stone boat, it can be transported anywhere.

In the gasoline engine will be found simplicity and ease of management, comparative lightness and portability, low first cost and running expenses, freedom from danger of fire or explosion, prompt service at all times, automatic working, so as to avoid the necessity of standing by to fire up, convenient and easily handled fuel, small water supply and no danger of freezing in cold weather. While an engine of this kind, say 4 or 5 horse power, costs \$250 complete, it costs all told not more than 2c per h p per hour, when either 1 or 5 h p is used.

A RABBIT-CATCHING DEVICE.

A simple, easily made and sure-catch rabbit device is made by nailing together two 6-in boards in shape of letter V. Use boards 10 ft long. Dig a shallow



CATCHING A BUNNY.

trench just deep enough to place the trough in. Place the trough in trench inverted, as illustrated, and cover with dirt. When the rabbit enters the trap, take a small pole and push him out into a sack which should be so placed as to cover one end of the trough. The opposite or entering end should be banked over in part to make an attractive entrance and not left exposed as shown in the cut to more completely show the trough.—F. A. E. Tinstman, De Kalb Co., Ind.

DETECTING THE HESIAN FLY.

The Hessian fly may be found in wheat at this time of year without difficulty, particularly if the wheat is badly infested. The larva of the Hessian fly may be found in the young plant when not more than three leaves have appeared. Very soon after the egg hatches the young plant assumes a somewhat abnormal appearance. Of course it would require a trained eye to detect the infested plants so early in the season, yet the close observer will be able to pick out the plants which are infested with the Hessian fly when the larva is not more than $\frac{1}{4}$ inch in length. This may be when the wheat has not more than three leaves. From this time until the fly emerges in the spring, the Hessian fly may be found at the base of and on the inside of the outer leaf sheaths.

The young larva is found inside of the sheath of the outer leaves. It feeds in this position and finally transforms to the pupa, or what is popularly known as the flaxseed stage, in which it ordinarily passes the winter. In the spring the adult fly comes forth and proceeds to lay eggs on the leaves farther from the root. During the winter the fly, in the pupa form, appears and very much resembles flaxseed in form and size, and the color is not unlike that of flaxseed and is glossy, which has given it the popular name of flaxseed stage.

The eggs in turn hatch and the larvae, feeding on the substance of the stalk, weaken it and cause it to lodge, particularly at times of storms and heavy wind. Individual stalks break over and cause what is known in some

parts of the country as "crinkled" wheat. Oats and barley are also infested with this pest. The writer has found as high as 14 larvae on one stalk of barley.

It has been asserted that late sowing will prevent the ravages of this insect. While this may be true, yet the sowing, in order to entirely circumvent the pest, would necessarily be so late that the chances for a maximum crop yield would be materially lessened. Sowing wheat at the latitude of State College, Pa., Sept. 20, would not prevent ravages of this pest. While moderately late sowing will undoubtedly afford a means of keeping this insect somewhat in check, yet it should not be practised with the thought of entirely preventing it. Moderately late sowing, thorough tillage and keeping the land in good tilth will insure the largest returns.—[Prof G. C. Watson, Pa. Exper Sta.]

To Burn Lime from limestone, dig a pit in a hillside 10 ft wide, 16 ft long and build walls 3 ft high on each side of brick or sandstone, and then fill this space with wood between the walls and round it up in the center like an arch. On this build the limestone rocks so as to form an arch to brace itself. When the wood burns out replace with other wood and keep up a regular heat day and night from 4 to 7 days, or until the lime will slate readily in water. The size of the pit can be made larger or smaller to suit the wants of the builder. To burn a large quantity, grate bars across a furnace are best.—[W. A. Sharp.]

The Grange is prospering wonderfully with 109 new granges organized from Oct. 1, '89 to April 1, and 39 old granges reorganized. Last year only about half that number were organized in the same length of time.

The Bees should now be on their summer stands, those low in stores being fed to build up the colonies good and strong. A good idea is to have extra hives clean and ready, so that the first bright, warm day the bees can be transferred into a clean and sweet hive, giving them a fresh start in the new year and saving the time taken by them to clean out the old hive. Don't forget to sow some alsike clover with the medium red clover this month. It makes food for the bees and increases the hay crop very nearly one-half, besides having a far better grade of clover hay. A good way is to mix to every 8 qts of red clover 2 qts of alsike. —[J. H. Denyer, Northampton Co., Pa.]

CHAT WITH THE EDITOR.

J. A. M.—Vermont maple sugar is handled by the Vermont maple sugar market. V. L. Spear, mgr., Randolph, Vt.—S. J. N.: Broom corn seed is sold by nearly all seedmen advertising in F. & H. located in the central states.—N. M.: William Fife of Clinton, Mass., sells Canada wood ashes.—C. D.: For information concerning the Chadburn (N. C.) colony, write to Senator J. A. Brown, Chadburn, N. C.—A. L. J.: The Distributors' league operates in New York city. We have endeavored to learn something about them but without success and cannot vouch for them.

....OUR NEW....

Premium List.

* * *

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Around the Globe.

Fall of the Free State—The relief of Kimberley and Ladysmith and the surrender of Gen Cronje were followed very soon by the collapse of the Boer cause in the Orange Free State, Gen Roberts hoisting the union jack in Bloemfontein, the capital, and declaring the state British territory. The annexation of this state by President Kruger of the Transvaal had just been announced, but the larger and victorious force was the one to decide, and the dispatches (British, of course) described the cordiality with which the Orange Free State people received the English invaders. It was claimed on the British side that the Free State was dragged into the war against its will and gave a half-hearted support. President Kruger tried some years ago to annex this state, but was beaten off by the inhabitants by force of arms. In 1897 the two republics formed the league which has bound them together in this war. The Orange Free State has been notable for adherence to its principles of freedom for all, being far more progressive than the Transvaal.

To Lord Roberts is given in England the principal credit for the rapid success of the campaign in Africa since the arrival of himself and Gen Kitchener. Gen Roberts, like Gen Miles in our own country, was kept in the background by the war office until repeated disasters demanded the nation's best.

The cost of getting to Bloemfontein was about 2500 British soldiers killed in battle, a thousand more dead from disease, about 8800 wounded and 3483 missing; to say nothing of millions upon millions of dollars.

Trusts—The opening of the national campaign and the Standard oil company's distribution of \$20,000,000 in one quarterly dividend brought congress to a consideration of the trust problem. The house committee on the judiciary chose a sub-committee of seven to take up the subject, as follows: Representative Ray of New York, chairman, and Messrs Jenkins of Wisconsin, Overstreet of Indiana and Littlefield of Maine, republicans. Messrs Elliott of South Carolina, Lanham of Texas and Terry of Arkansas, democrats. It was proposed to pass a constitutional amendment, and send it to the states for ratification, giving congress "power to regulate and repress monopolies and combinations, and to create and dissolve corporations and dispose of their property." This policy would require corporations to take out their charters at Washington and would, apparently, deprive the states of the power of establishing and regulating corporations.

Resolutions were introduced in congress calling for the prosecution of several great combinations, notably the Standard oil company. The latter resolution asked that the United States district attorneys in their respective districts proceed against the Standard under the anti-trust law because it has increased the price of its product.

The constitutionality of the anti-trust law of Texas has been affirmed by the United States supreme court, in a case involving the Standard oil company, which concern is likely to forfeit its charter in that state in consequence.

Gatherings—The Methodists observed the week beginning March 25 in penitence and prayer on account of the decrease in church membership and attendance. This condition is recognized by the bishops as extending to all denominations, and is attributed in part to the spirit of research and doubt represented by the so-called "higher criticism."

The first of a series of annual conferences to consider the betterment of the negro's condition is to be held in Montgomery, Ala., May 5-10.

The national farmers' congress this year will be held at Colorado Springs Aug 21-31.

From 20,000 to 30,000 Finns, mainly young men, are expected to settle in the United States this spring and summer, owing to Russia's policy of conscripting young men into the army.

Prize fights are legalized by a new law in Virginia. They are prohibited by a new law in New York.

THE AMERICAN AND FOREIGN PRODUCE MARKETS AT A GLANCE

	Bos- ton	New York	Chi- cago	Cincin- nati	Nat'l lens	Mem- phis	S Fran- cisco	Mon- treal	Lon- don
March	19	19	19	17	19	17	19	17	17
Wheat, p. bu.	—	78½	.67	.51	—	—	11.00	.66	.90
Corn, p. bu.	.33½	.41	.36½	.40	.43	.45	11.10	.46	.53½
Oats, p. bu.	.32½	.39½	.34½	.33½	.31	.33	11.50	.31	—
Rye, p. bu.	.35	.60½	.54½	.61	—	—	11.03	.53	.46
Barley, p. bu.	.51	.50	.41	.50	—	—	11.90	.53	—
Flour, p. bbl.	4.00	3.95	3.80	3.95	4.00	4.50	3.75	4	4.10
Cotton, mid upland, p. lb.	.09½	.09½	—	—	.09½	.09½	—	—	.11½
Cattle, p. 100 lbs l. w.	6.50	6.00	6.10	6.35	4.50	4.00	4.50	—	8.12½
Sheep, p. 100 lbs l. w.	6.55	6.25	6.00	6.00	4.50	4.50	5.50	—	—
Hogs, p. 100 lbs l. w.	6.50	5.45	5.20	5.15	4.75	4.25	5.75	6.75	—
Veal calves, p. 100 lbs l. w.	6.75	9.50	7.75	7.25	5.00	5.00	5.50	—	—
Poultry, p. lb. d. w.	.14	.11	.08½	.08	14.25	13.00	15.20	—	—
Butter, creamery, p. lb.	.26	.25	.24	.25	2.00	2.00	.22	.31	.27
Cheese, factory, p. lb.	.13½	.13½	.12½	.12½	.14	.14	.15	.13½	.13½
Eggs, p. dz.	.19	.17	.16	.16	.11	.11	.16½	.14	.14
Apples, p. bbl.	4.00	4.50	4.00	4.00	5.00	5.00	4.00	4.00	—
Hay, p. ton.	17.50	18.00	12.10	13.75	18.00	16.00	10.00	10.00	—
Straw, rye, p. ton.	14.50	18.50	8.00	7.00	—	—	—	5.00	—
Hops, p. lb.	.14	.11	—	—	—	—	.09	.14	—
Onions, p. bu.	.50	.50	.45	.45	.55	.55	12.25	—	—
Potatoes, p. bu.	.65	.63	.50	.50	.70	.70	11.00	.50	—
Beef, p. lb. d. w.	.08	—	—	—	—	—	.07	—	—
Pork, p. lb. d. w.	.06½	.07½	.07½	.07½	—	—	.08½	.07½	—
Lard, p. lb.	.07½	.06½	.07½	.07½	.07	.06½	.08½	.06	.08½
Hides, p. lb.	.07	.09½	.09	.08½	.08½	.08½	.10	.08	.08½
†P. cental. †P. oz. *P. bx. ⁵ Estimated d. w.									

Business Side of Farming.

THE IMPROVED AGRICULTURAL CONDITIONS

compared with say five years ago, at a time when depression was so widespread and so pronounced, is phenomenal. The produce of the farms of the U.S. the past year was worth to farmers 1600 million dollars more than in either of the depressed years '94-'96, an av. of 31 per cent in values compared with the low point. These statements are made by American Agriculturist in a recent elaborate review of the agricultural situation from a financial and industrial standpoint. The live stock of the country is worth 700 millions more than during the hard times, or a gain of 38 per cent; staple crops 400 millions more than then, while other crops show an increase of 200 millions in value, or a gain of 25 per cent compared with the depression of '94-'96. The produce of live stock shows a gain of 370,000,000, or 40 per cent above the low point. Live stock itself has advanced nearly or quite as much and now exceeds the high point of the boom that reached its zenith in '89.

Farm real estate depreciated terribly during the hard times, but has more than recovered in value, and is now estimated to be worth \$1,220,000,000 more than in '89. The total investment in American agriculture is now placed at 17,550,000,000, a gain of nearly 10 per cent over the comparatively high basis of values of '89. As near as this authority can get at it, the amount of mortgages on farms occupied by their owners is now about 300,000,000 less than at the beginning of the decade. Taken as a whole American agriculture was never in a stronger position. In no other country on earth are farmers so well circumstanced.

Old Cabbage at Fancy Prices—The very sharp advance consequent upon the short crop in N.Y. and other producing states carried the price to \$50 per ton in Mar. This naturally checked the demand, especially with the advent of good stock from Tex., Fla., etc.

Butter at Good Prices—Up to the close of March butter has averaged materially higher than usual, touching 26c in Jan., working down to 23½c in March. A year ago the market held

close to 20@21c for several months. At the opening of Apr. 30, Elgin city was 20c, in '97 same price, in '96 18c. Stocks are moderate and demand good, but owing to relatively high prices and the near approach of spring the undertone of the market is one of easiness.

Hogs Highest in Years—The recent hardening in the hog market carried the price to \$3 25 p. 100 lbs l. w. at Chicago, the best figure reached since July, '95, when \$3 45 was paid. Our home and foreign trade in pork products is excellent and packers are obliged to pay more than they consider the live animal worth. Receipts of hogs at leading western markets are not burdensome.

Restricts the Demand—Cheese continues higher than in years and the consumption is affected thereby. The market continues firm both east and west and the small interior stocks in Wls., Ia., O., N.Y. and Vt. are closely held. Should present good prices induce manufacturers to turn out a lot of fodder cheese the next few weeks, this may hurt the regular market in May.

Active Live Stock Markets are the rule at most centers, sheep selling at the best figures of the year at Buffalo, Chicago, etc. The general av. paid for beef cattle is lower, due partly to the somewhat indifferent quality of the offerings.

High Wool Prices bid fair to hold indefinitely in spite of recent slight weakness abroad. The last series of London auctions of colonial wools showed a slight decline, but our home markets remain steady to firm. World's stocks are considered only moderate and the consumptive demand is very large.

Hothouse Vegetables are in moderate demand, but crowded by fresh stock from Fla. and other southern sections. The past winter has been less trying to far south truck farmers than some of those in the recent past, although late March brought a hard frost. The northern markets are now being materially supplied with string beans, asparagus, parsley, pie plant, cucumbers, etc. California cauliflower has made a good impression the past season in the east.

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for all time is the

Metal Wheel.

We make them in all sizes and varieties. NO FITTING AXLE. Any height, any width of tire desired. Our wheels are either direct or spoked spoke. Can FIT YOUR WAGON perfectly without change.

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Electric Wheel Co.
Box 58 Quincy, Ills.



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NEW STEEL ROOFING. Sheets either
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Price per square of 10x10 feet
or 100 square feet..... \$1.75

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is required to lay this roofing. We furnish
with each order sufficient paint to cover and
nails to lay it, without additional charge.

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of general merchandise bought by us at
Sheriff's and Auction Sales.

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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 SAMPLE and
CIRCULAR.

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23d & Hamilton, Phila., Pa., or 24 Harcourt St., Boston, Mass.

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A Labor Saver,
can do more and better work, either
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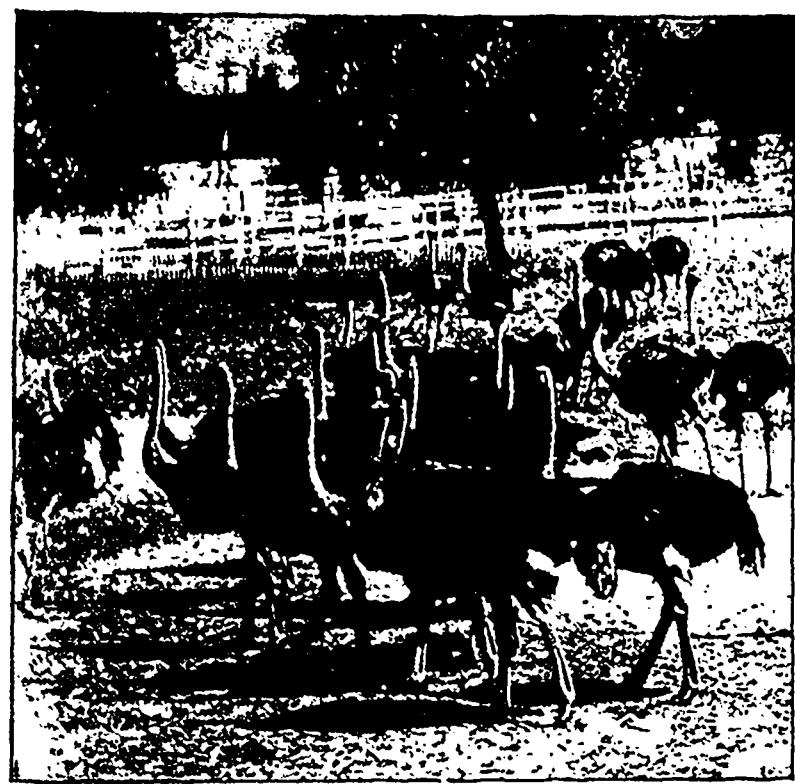
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Ulrich Mfg. Co., 42 River St., Rock Falls, Ill.

than three men can do with common hoe.

Plows, hoes,



Flock of California Ostriches.

The Poultry Yard.**OSTRICH FARMING.**

The occupation of ostrich raising has within the last 15 yrs reached remarkable dimensions in Cal. From the 4 doz ostriches brought over from Africa by Edwin Cawston, and other flocks, an attraction has been created of which capitalists have of late availed themselves, and now an ostrich trust exists controlling the industry.

Some 300 ostriches are owned by this corporation, which has farms in Cal, Ariz and Fla; while the receipts from exhibition of the birds to tourists form no small part of the revenue. The principal revenue is expected to come from their plumage, the demand for which in this country exceeds \$2,000,000 per annum. The creatures are sturdy, easily cultivated in warm climates, of remarkable fecundity, and yield in feathers, after the age of 4 yrs, a constant revenue each of some \$30 per year. Our illustration represents a group of 3-yr-olds contained in one of the corrals of the South Pasadena ostrich farm, Cal, an institution still owned by Mr Cawston individually and outside the trust. One of the sights of Cal at the present time is the ostrich farms, stocked with descendants of those birds that a dozen years ago were brought over from Africa by this pioneer ostrich farmer.

TEN YEARS WITH TURKEYS.

For about 10 years I have taken charge of the young turkeys on my father's farm, and I can say that experience has been my best teacher. When I began I lost about three-fourths of all hatched. Last year out of 50 I raised 48. A cat took the other two. The year before out of 27 I raised 26.

When the turkeys are hatched, dust them and the mother thoroughly with wood ashes and place the mother in a box coop without any bottom and grated at the sunny side so that the little ones can go out when they like. I keep them in this until two weeks old, when they go where they please, only I have them come home at night and let out next day when the grass has dried.

For food for the first week I give bread just dampened with sweet milk or water, with a handful of onion tops cut fine and a little pepper mixed with it. As they become older, give chopped grain, oats, wheat, peas and corn, this I scald with boiling water, when cool, mix in the chopped onion tops with a little salt and pepper and bits of bread. Feed five times a day at regular hours.

Keep the food and water dishes clean and give plenty of fresh water three times a day. The ashes are all that I ever use as a preventive of lice. Under

the above treatment I have hardly a sick turkey. Of course some die, but not as many get sick and die as formerly. They either get killed or drowned.—[A. Taylor, Lincoln Co, Ont.]

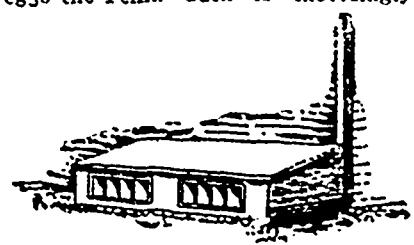
SITTING HENS.

To get the very best results from the sitting hens it is necessary to let them sit in a room by themselves and not fasten them on. Keep corn and fresh water by them and let them come off and go on when they have a mind to. Sometimes it is true they will change nests, but that does no hurt. If all of the nests are covered. By looking in at them once or twice a day there is generally no trouble. The hens that hatch best are the ones which steal their nests.

Before the sitting hen is given eggs, dust her well with insect powder, dust some also over the eggs and when it is time for the eggs to hatch, dust some over the eggs again. It will do no harm to give the hen a liberal dusting with the powder before she is given her chickens off the nest. As a rule, a hen will not leave her eggs or become lousy if ashes are left in the coop so that she may flutter in them when she is off—[V. H. Crossman, Worcester Co, Mass.]

AN INEXPENSIVE DUCK HOUSE.

Ducks are easily the most profitable of all poultry. If the flesh product simply is considered, while as layers of eggs the Pekin duck is exceedingly



ANNEX FOR DUCK HOUSE.

profitable. There can be no doubt that it would be wise for more farmers to keep a flock of breeding and laying ducks, and for this purpose there is no better breed than the large, white Pekin.

As ducks roost on the floor, only low quarters are needed. A low, shed-roofed affair can be put onto the side of the barn or other farm building in the manner shown in the cut, three feet of height being sufficient. Let the pen open into the large building, the partition between being hinged at the top, so that by raising it one can clean out the pen and put in dry bedding.

For Pickling Eggs.—Lime 2 qts, salt 1 qt, cream of tartar 3 oz, boiling wa-

ter 8 gals; stir well and let cool. It is immaterial whether you remove sediment or not after about two weeks. Drop the eggs as gathered (only the fresh ones) in the pickle and keep covered from the light.

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Red Rope Roofing.

The best low cost Roofing and Siding made for FARM and POULTRY BUILDINGS.

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The Globe Incubator

will hatch all fertile eggs. It is easy to operate. Any ordinary intelligent boy or girl can handle it. Our large 64-page catalogue sent free to any address. It tells all about the Improved Globe Incubator, Improved Globe Brooder, Triumph Hot Water Heater for poultry houses. Price, \$11.50. Send for circulars for poultry yards, hot strains of pure bred fowls and poultry supplies. Write for immediate delivery. It only takes a postal card. Address C. C. SHOEMAKER, Box 284, Freeport, Ill., U.S.A.

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often makes good the cost of a 200-egg incubator. Our line consists of the largest and most complete variety of incubators and brooders made by any one. Send 6 cents for 150 page catalogue published in 3 languages. Address DES MOINES INCUBATOR CO., Des Moines, Iowa.

ONE HATCH

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tells all about it, so that beginners understand how to handle bees and make money. Send 10c copy and books on Bee Culture and Management. If you mention this paper, we'll send the leading manufacturers of everything for bee keepers.

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Bees for sale in boxes for sale at \$4.00 to \$5.00; also hives, sections, feeders, and all fixtures. Write for prices. F. H. McFARLAND, Hyde Park, Vt.

INCUBATOR FREE trial. Most perfect. Latest improvements. The New G. Von Culin Catalog part. You'll always plan's 10c. Address AVE. C THE W.T. FALCONER MFG. CO., JAMESTOWN, N.Y.

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GREIDER'S FINE CATALOGUE of prize winning poultry for 1900. The finest poultry book ever. A perfect guide to poultry raisers. Given free of charge & stock from every best strain. It shows the finest hens & describes them all. 50 different varieties. Everybody wants this book. Sent on Instamps. H. H. URKINER, Florida, Fla.

2000 PREMIUMS were awarded my fowl last 12 State Shows in the Largest Poultry Show west. Send 5c for illustrated catalogue FOR SALE CHAS. GAMMERMAYER, Box 60, Columbus, Ohio.

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LEE'S LICE KILLER CLEANS OUT THE LICE AND milles of poultry and game birds without handling fowls or animals. Painted or sprayed on roots, hedge or on rubber roots. Lee's Lice Killer does the rest. We price it with FREE SAMPLE. Our new catalogue of Stock and Poultry Supplies free upon request. GEO. H. LEE CO., Omaha, Neb., or 68 Murray St., New York.

WE pay \$10 a week and expenses to men with traps. Trap on Poultry Compound. Send 5c. Javello Mfg. Co., Dept. 47, Parsons, Kan.

DOGS FOR SALE of all kinds, fancy pigeons, Lop-eared and Belgian Hares, Ferrets, &c. for sale. ALLEGRA, Box 22, Bowes Station, Pa.

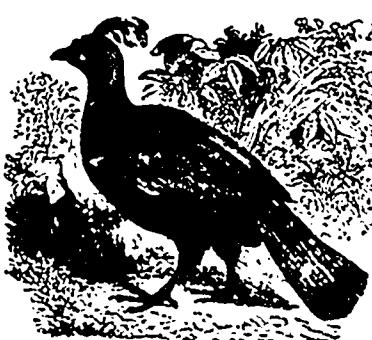
A Diversified Agriculture. DOES SAP FLOW UP OR DOWN?

Maple sap is mostly water and sugar. The sugar is all manufactured in the green leaves and a part of it stored in twigs and trunk of trees to be used in early growth of the next season. The water is all absorbed from the soil. Examinations made in Jan show that the wood is then saturated with sap—about 40 per cent of its weight at that season being water. If the entire tree weighs 10,000 lbs, there is in it some 4000 lbs of sap, and if this contains 3 per cent of sugar there would be in the tree some 120 lbs of sugar in solution in the sap.

During the sugaring season there is probably little movement of this sap within the untapped tree, but this sap may be under great pressure. The pressure, on a good sap day, may rise in such a tree to the startling amount of over 20 lbs to the square inch, as registered by steam pressure gauges used in our investigations. When this pressure is relieved by tapping at any point there is a tendency to drive the sap from all directions out through the tap-hole.

Careful experiments indicate that the sap moves very easily and rapidly with the grain of the wood, but very slowly if at all across the grain, and that, as a result, the sap flows into the tap-hole from above and below, but not to any appreciable amounts from the sides. Two or more tap-holes on different sides of the tree will therefore drain more sap from the tree than will one hole. These experiments indicate also that the upward and downward flow of the sap into the tap-hole is about equally rapid. Sap, at sugaring time, flows both up and down, but not laterally around the tree trunk.—[Vt Exper Sta.]

A Beautiful Pheasant.—The illustration shows a beautiful and exceedingly rare variety of pheasant found in the Himalayan mountains. The "ustra-



THE IMPEYAN PHEASANT.

lion hardly does the bird justice, because of the wonderful brilliancy of its plumage. The Impeyan pheasant succeeds fairly well in aviaries. It deserves more attention than it has received as an ornamental bird.

To Make Charcoal.—cut the wood 4 ft long and have it as near the same size as possible. Level the ground where the charcoal is to be made about 8 ft in diameter. On this set the wood upon end, three lengths high, until the entire space is filled, placing something dry in the center to start the fire. Outside wood should be packed very close together. Cover with leaves and then with sward and earth, leaving just space enough to start the fire, with a 3 or 4 in hole at the top. When the fire gets started good, shut off the draft with earth whenever necessary. It takes from 7 to 10 days to complete the burning, and it must be watched continually. Have a supply of water by to quench the fire with, then draw the charcoal.—W. A. Sharp, Greenbrier Co., W. Va.

For General Purposes on a farm or orchard where two or more mules are used, the farmers' handy wagon is the greatest labor saving and most useful wagon that we have ever used. It has broad tired wheels which turn completely under the low wagon bed and the wagon can be turned in its own length. The platform or bed is 6 by 12 ft and without sides. For hauling anything, from wood to burn in the

grove to oranges grown in the grove, it is simply great, just what everyone who has much hauling needs. We use ours part of the time with two mules and part of the time with four, and for every purpose that can be imagined, and would not know how to get along without it.—[G. L. Tabor, Baker Co., Fla.]

Roup manifests itself by an appearance of chilliness, feathers "on end" and seeking a warm, "sunny side" to mope. An occasional sneeze escapes, followed by a watering at the eyes and nose. Appetite at this stage failing. This continues for a day or two, then the discharge increases to a viscous, malignant catarrh, the eyes swell, comb and wattles turn purplish and the mouth discharges a slimy mucous. No food is wanted, but there is considerable thirst, though not so extensive as during the first stage. Vitality is lowering, and if the bird moves at all it staggers, with drooping tail and wings. Death usually ensues from the third to the sixth day in malignant roup. Sporadic roup is not so rapidly fatal nor so malignant, and is therefore more responsive to medicine. For treatment, see replies to chicken queries.

No machine will hatch chicks so successfully as a well-managed hen; and I have never yet seen the person or thing that can raise a brood of chicks so well as a well-trained hen. By well-managed hen, I mean a hen that while sitting is given one-half the care and attention that an incubator must have. By well-trained hen, I mean a hen that is tame, quiet, not afraid of her owner and will come quickly at a call. Such a hen will raise 20 chicks if she is given half the care required by a brooder. She must have a dry, clean coop, plenty of food, water and grit, and she and her chicks must be dusted once a week with insect powder.—[Fred Grundy, Christian Co., Ill.]

The railroads of the country consume about 1,000,000 a of timber annually. They are now asking the co-operation of the federal government in the economical management of their unused timber lands. The Santa Fe road planted 12,000 ac catalpas 15 yrs ago at a cost of \$125,000, it is estimated that in 10 yrs more the tract will have produced \$2,500,000 worth of poles, ties and posts.

I AM NOW in position to do more for the "Success Anti-dog" weeder than I was the last year, for the reason that I can talk from personal knowledge, and can now recommend the weeder for all purposes for which it is designed, and more than you have recommended it. One person told me after using it after a drift to smooth the ground and work in the grass seed that it was well worth its cost. If it could not be used for any other purpose, for field corn, potatoes, sowed corn, strawberries, in fact, whatever it has been used on it has given perfect satisfaction. R. E. Gardner, Hancock, Mass.

WHY Can we Save You Money on a vehicle, harness, by car or saddle?

Because we have no agents.

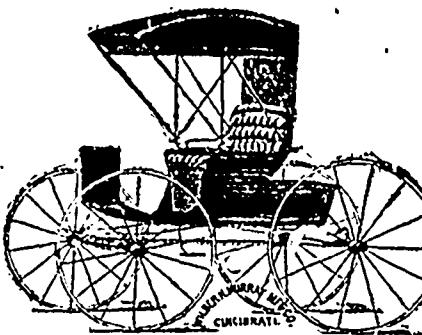
Can we really do it? We say yes. Can we profit without fees to you? We can. How? We will sell you a harness, saddle, or vehicle, without you seeing a single cent, and let you look it over at your freight house and if you don't like it we will give you the biggest bargain you ever saw or heard of, return the goods to us at our expense. We give with each vehicle a 2-year iron-clad guarantee, protecting you from poor material and workmanship. Our vehicle catalogues describe the largest line of buggies, road wagons, pleasure carriages, spring wagons and carts, harnesses, by sets and saddles ever shown in new book. It's free. Read for it.—Merrill Smith Co., 55-59 N. Jefferson St. U-27, Chicago, Ill.

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SURREYS, CARRIAGES, LIGHT
and HEAVY WAGONS, at
lower prices than any other house
in America, quality considered, plus
a two-year bleeding guarantee. See, and we
will be anxious to examine before buying. Write for free Buggy Catalogue.

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We Ship Direct to the consumer At
Lowest Wholesale Prices
the most reliable line of
vehicles, etc. to be found anywhere. Built substantially of
honest material—workmanship the best—one of them
will outlast two of the ordinary
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We ship C.O.D. with privilege of examination. You
risk nothing. Reliable Top Buggy, \$24.00; fine spring
Wagon, \$39.00; strong two horse Farm Wagon, \$44.00;
handsome Surrey, \$45.00; wall mail, "Portland Cutter,"
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WE'RE JUST AS THANKFUL



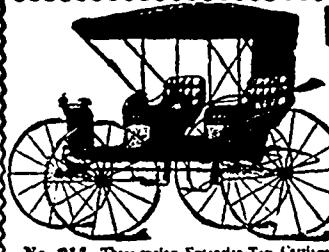
MURRAY TOP BUGGY.
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Also, a full line of Buggies, Phaetons, Sarreys, Spring Wagons, Road Wagons, Delivery Wagons, Farm Wagons, Harness and Saddles, at prices that will interest you.

ALL MURRAY WORK IS GUARANTEED FOR 2 YEARS.

WILBER H. MURRAY MFG. CO., CINCINNATI, OHIO.

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When you buy a carriage, buggy or harness. Choose from the biggest stock and fullest assortment, and pay only the cost of mailing, with but one moderate profit added. Our plan of selling direct from the factory insures satisfaction—your money back if you're dissatisfied with your purchase—and enables you to save the dealer's profit.

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THE COLUMBUS CARRIAGE AND HARNESS CO., Columbus, O.



No. 210 Single Buggy Harness, Price \$15.



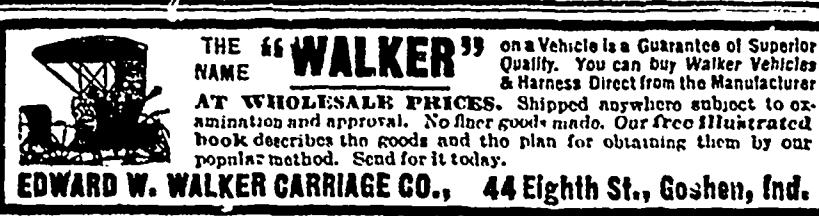
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You can buy one vehicle or harness from us as cheap as dealers can buy in car load lots. Goods exactly as represented. Every shipment subject to examination, if not satisfactory, money refunded. Send for large 112-page Catalogue. It is free. Keep the middleman's profit in your own pocket.

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75 OTHER STYLES.



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EDWARD W. WALKER CARRIAGE CO., 44 Eighth St., Goshen, Ind.

Dairy and Creamery.**KEEP UP THE SUMMER MILK.**

A very large share of Vt farmers are dairymen. Every one of them has a barn more or less well equipped for the winter feeding of his stock. They all labor in summer, sowing, cultivating and harvesting crops for winter use. A large share of them carry, to all intents and purposes, dry cows only in the winter, working hard all summer simply to keep the cows alive during the winter, while they are bringing in little or no income.

These same men, however, often take no thought of means of summer feeding of cows. They depend solely upon the pastures. It happens all too frequently, however, that the pastures dry up and the cows shrink seriously in their milk flow. It is a difficult thing to turn the tide backward. A cow once shrunk in milk seldom regains her former yield, and then with difficulty. It seems the part of wisdom for the farmers to divert some of the energy which they now devote to the growing of food for the maintenance of dry cows to the growing of food for keeping the milk flow during summer. The larger use of soiling crops such as oats and peas, hungarian, rye and the like is well worth while. Considerable amounts may be grown without very great expenditure of time or money, and they are excellently well adapted to help out a short of dry pasture.

There is, perhaps, nothing better for this purpose than silage. It has been very thoroughly demonstrated that a pound of digestible dry matter can be placed in the cow's manger by way of the silo cheaper than in any other manner. The silo capacity of a dairy farm should be made large enough, in my judgment, to enable one to use silage all the time. The silo intended for summer use, however, should be deep and with a relatively small surface area to avoid what otherwise might prove to be large losses owing to fermentation. The stave silo is now coming rapidly into vogue, and is proving so very useful for most purposes, and is so ready put up and comparatively so inexpensive for its tonnage capacity, that it is to be hoped that the number of silos in Vt will rapidly increase in the near future.—[Director J. L. Hills, Vt Exper Sta.]

Cream Will Not Churn—What is the remedy for a cow giving milk that becomes strong in less than 12 hours after being drawn? The cream will not make butter, writes a reader. It is next to impossible, as a rule, to say what causes milk to get strong in a few hours after it is drawn from the cow, but in this case the fact that the cream cannot be churned gives me the trill to the probable cause. The only cream I have ever seen that I could not churn was from the milk of cows near calving, and the milk from cows in this state or condition is many times unfit for human food. If this is not the cause, it may be one of many causes; the most frequent cause is from being exposed after being drawn from the cow to unsanitary surroundings. The lack of care in the handling of milk is a terrible reflection on the intelligence of our people. There is no doubt but we consume more filth in our milk than in any other article of food, and charge the most of it to the innocent cow.—[H. B. Gurler, Ill.]

Bloody Milk occurs from several causes, such as a spongy condition of the glands of the udder, ulceration of the glands of the teat, etc. Use a milk tube to draw off the milk, also bathe the quarter of the udder with cold water for 10 minutes after it has been milked. Mix tannic acid 2 gr., glycerin 1 oz and water 1 oz, shake well and inject a little into the tube of the teat after milking.

The Traveling Dairy School and the agricultural college have done much to improve the quality of butter made on the farm, and for this mankind should be thankful. While better butter than formerly is made on many farms, there is still enough poor butter made to supply the demand for that kind of stuff that sells at the price of poor lard and makes the patrons of common boarding houses die of dyspepsia. Some farmers' wives visit the dairy school, year

after year, and are taught the best methods of churning and working butter and go home, and through the force of habit keep right on making the oleaginous stuff they have turned out all their lives. They know, from the object lessons they have had, that butter should not be churned after it assumes the dimensions of wheat grains in the churn, yet, because they think it is easier gathered with the dash than with the ladle, they keep right on churning till the product is very poor axle grease. The surplus is taken to the corner grocery and sometimes it is sold for butter and sometimes not, but the price received is a knock down argument for them that there is no money in the dairy. The law should compel merchants to label this stuff "poison" or "dangerous" for the protection of the public.—[Frank Hunt, Ont.]

Influence of the Sire—If breeders and dairymen would only realize that "the bull is half the herd," and how thoroughly, in the course of years, for good or ill, the blood and characteristics of the bull impregnate and dominate any herd where he is used, there would be more care used in the selection of the breeding bull. If he prove to be a good sire, his influence for good will be felt for years,—if a poor one, it will take years to eliminate from the herd the bad features he has left behind.—[Valancy E. Fuller, N. Y.]

Winter Wheat Bran furnishes a smaller quantity of nitrogenous nutrients to the animal than spring wheat bran, because of its inferiority in composition and digestibility. There is also a great difference in the protein content of brans.

Young Man, Take a Hint—When you work for a farmer by the month, your board is free, your wages go on wet or dry, and even if you get sick you are cared for. Not so in most other occupations. Your wages come only when you work, but your board bill goes on wet or dry. A farmer just told me his hired man in early March worked two days and boarded seven. Our young men should also take into consideration the temptations in cities to spend money, which is so hard to resist. [Jacob Faith, Vernon Co., Mo.]

It is right for the weak to unite for defense; it is wrong for the strong to unite for oppression.

SHARPLES
Cream Separators.

Don't think if you buy a farm separator you must buy something complicated and hard to manage.

Don't think that because one kind of farm separator requires an hour to wash it that all do.

Don't think that constant repair bills are a necessity just because some one with a complicated separator has to pay them.

Don't think that some other farm separator is as good as the Sharple's because some agent for another condemns the Sharple's. He fears its superiority, is the reason he condemns it. Send for free Catalogue No. 13.

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BUTTER PROFITS

Bestov TRADE SHOW
More money comes with the use of improved machines—and easier work. Send for our big illustrated catalogue mailed free.

"BESTOV" everything for dairymen.

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after year, and are taught the best methods of churning and working butter and go home, and through the force of habit keep right on making the oleaginous stuff they have turned out all their lives. They know, from the object lessons they have had, that butter should not be churned after it assumes the dimensions of wheat grains in the churn, yet, because they think it is easier gathered with the dash than with the ladle, they keep right on churning till the product is very poor axle grease. The surplus is taken to the corner grocery and sometimes it is sold for butter and sometimes not, but the price received is a knock down argument for them that there is no money in the dairy. The law should compel merchants to label this stuff "poison" or "dangerous" for the protection of the public.—[Frank Hunt, Ont.]

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1900 "ALPHA-BABY" CREAM SEPARATORS

Great as has been the previous superiority of the "Alpha" De Laval machines to other separators, the 20TH CENTURY "Alpha" developments place them still further above the possibilities of a tempted competition from anything else in the shape of a cream separator.

NEW STYLES, CAPACITIES AND PRICES.

Old Style "Hollow-Bowl" Baby No. 1,	'50 lbs.	\$50.00
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Improved High-Frame Baby No. 2,	450 lbs.	125.00
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Improved Dairy Steam-Turbine,	850 lbs.	225.00

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THE DE LAVAL SEPARATOR CO.

RANDOLPH & CANAL STS.,
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MONTREAL.

COMPETITORS HAVE FRANKLY ADMITTED THAT The Improved U. S. Separators

ARE THE BEST SKIMMERS ON THE MARKET.



We illustrate herewith our new corrugated bowl, which is giving such perfect satisfaction, and which does not require hot water to flush. A small quantity of skim milk does the work thoroughly—more so than competitors that have central tubes and a multiplicity of discs for the cream to stick to, as the U. S. has neither. Competitors, in their efforts to find something to check the

Victorious Progress of the United States,

have tried to make a big bugbear of using hot water to flush the bowl, but now this, their last criticism, is overcome, and they are at loss to know what to harp on to prejudice purchasers against the Improved U. S. and reduce the constantly increasing sales.

Write for our 1900 or "New Century" catalogue giving full particulars.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.

EMPIRE

CREAM SEPARATORS.

Do you know them? They are superior to all others in points that mean money. Being lightest running, they save work. They miss less than one-tenth of one per cent. of the butter fat. They increase quantity of butter. These are part of their advantages.



GOOD FLAVOR

makes good butter. It's the flavor that sells butter. The flavor of butter depends upon the treatment of the milk. It must be relieved of all odors of animal, stable and food.

PERFECTION
New Dealer
and Aerator

takes out all the animal heat and all bad odors with it. takes out all odors due to feeding cabbage, turnips, etc., or any odors arising from the stable. Makes sweet milk, rich cream and fine flavored butter. Sizes from 1 to 300 cows. Send for prices and free catalogues of Farm and Dairy supplies.

L. R. LEWIS, Dean, Box 20, Cortland, N. Y.

LABEL
White Ear Labels
stamped with any name or address with consecutive numbers. I supply forty recording associations and thousands of practical farmers, breeders and Veterinarians. Samples free. Agents wanted.

C. H. DANA, 11 Main St., West Lebanon, N. H.

Your Cow's Production
will be increased 30% by using our Aluminum
Cream Separators and Utensils. Churn
6100 lbs. Casing Free. Agents wanted.

GIBSON-STEWART MFG. CO.,
Gibsonia, Pa.

Live Stock Interests.
Raising and Feeding Rape.

Get a field of blue grass pasture next to the one where you wish to sow rape. Have the rape field well covered with barnyard manure if possible, and plow as early as you can. Roll the ground and harrow it two or three times to get it in fine condition. In a few days or after each rain, harrow again, once for each time it rains, after the soil is dry enough to cultivate. This will kill all foul weeds and put the soil in the same condition that you would to produce 40 to 50 bu wheat p.a. I sow broadcast about 5 lbs seed p.a. from May 15 to June 1. If sown after this I would drill in rows 28 in apart and use 2½ lbs seed p.a.

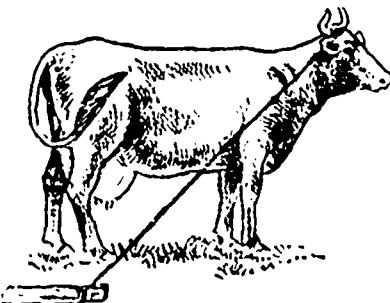
Dry weather is liable to come any time after June 1, but if one will cultivate it about twice where sown in rows, it will insure against drought later on, and give a great stimulus to the growth of the plant, and produce a crop that will make \$20 of finished mutton, pork or beef to the acre, besides enriching the soil to the value of \$5 p.a. for the next crop.

My reason for having a field of blue grass next to the rape is to counteract the looseness of the bowels and make a more perfect ration from using the two at the same time. Last season I purchased 50 yearling Shropshire rams that had been poorly wintered. They weighed 138 lbs each on July 1. I turned them on rape with access to a blue grass field and fed them a grain ration of corn and oats, 2½ lb p head each day. On Oct 1 they weighed 190 lbs each. The gain would have been greater with the same number of lambs or wethers.

There is not a flock of lambs for mutton in O. Ind., In., Ill. or Mich but could be finished to a higher average weight from Sept to Dec in this way than they are by feeding all the long winter months, and until May, as some do. The farm could winter two good breeding ewes for what it costs to fatten one lamb in winter. Feed them grain while on rape pasture and get better profits and in a shorter time.—[L. S. Dunham, Mich., in Shepherd's Bulletin.]

KEEPING JUMPERS AT HOME.

To prevent cattle jumping fences and straying, tie the end of a rope around the horns and the other end about 2 ft from the end of a rail. If the animal



FENCE-JUMPING PREVENTER.

does jump the rail will catch on the fence and hold until released. An animal under these conditions will not try fence-jumping very many times. I have seen a large bull kept within lines by this method.—[S. Dole, Marion Co., Ill.]

CATTLE AND HOGS DID IT.

Ten years ago I began farming by renting an 80 a. farm. I had a team and wagon, four 2-yr-old helpers and three sow pigs as stock in trade. The farm was poor, and the first years we had hard work to make both ends meet. Bought machinery as I could pay for it and the same with everything we needed. What we could not pay cash for we went without. I began by sowing

KENDALL'S SPAVIN CURE.
367 Briggs St., Harrisburg, Pa., Feb. 18, 1900. Dr. B. J. Kendall Co., Dear Sirs—Enclosed you will please find 2c. for which you will please send me by return mail your book which you advertise in your "Treatise on the Horse," which is given away by the druggists, of which I have one. I have also used your Kendall's spavin cure four years, and found it gave satisfaction. I cured a curb which I sprung on a young mare some four years ago. Kindly send me the book entitled "The Doctor at Home," and oblige, S. B. MORROW.

ing clover and changing every two years. Raised our heifer's calves and bought a few good ones and graded up by using the best Jersey male I could get. Sold milk to the creamery. Hogs were graded up by using a full blood Duroc-Jersey male every year and bought a few full blood sows the last year. Have had fair success in the 10 yrs. I have paid \$2125 rent, bought 160 a good land worth \$30 p.a. and am in debt \$800. Have on hand 33 head hogs, 10 high grade Jersey cows and a fine bull, 6 well bred horses and all the machinery needed. Wife and myself have done most of the work. The land grows double the crop it did when we began. Could have done better if we had begun on a good farm, but as it is you will see that cows and hogs, with corn and clover, are the mortgage lifters.—[J. B., Dayton Co., Ia.]

Flying Fox is reported as having been sold from the late duke of Westminster's string of racers for \$196,000, the highest price ever paid for a horse. The grand sire of Flying Fox, Ormunde, was secured by his present owner for \$150,000. At the sale of Flying Fox, the 19 head offered sold for \$370,000.

Black Leg was quite fully described in F & H, July 15, '99. After extended investigation, the Kansas exper. finds this disease exists in every county of Kan., occurring in cattle of all ages and both sexes, the most susceptible age being 6 to 13 mos. During 1896, '97 and '98, 40 per cent of all Kan. cattle owners sustained losses from this disease. In 1898, out of 511 cattle owners, 100 lost over 4½ per cent of their entire herds, comprising 26,700 animals. Last year, 146 cattlemen report an average loss of over 6 per cent of their entire herds. Curative treatment is not possible, but prevention is possible by vaccination, by which means practically all susceptible animals may be saved. All cattle between 3 mos and 3 yrs should be vaccinated annually.—[Dr. Paul Fischer.]

Feeding in transit rates, abolished last fall, have been restored, but the old carload rates have not as yet been conceded by the railroads.

Fur, Hair or Wool can be removed from a hide or pelt by the use of either good hard wood ashes or fresh lime. Mix with water to the consistency of thin paste, regulating the quantity by the size of the skin from which the hair is to be removed, using sufficient liquid to submerge the whole hide without having to be weighted for the purpose. About two days' time will be sufficient to allow the hide to remain in the liquid to cause the hair to slough off easily. Wood ashes, prepared in the same manner as lime, will answer the same purpose, but will usually require about twice the length of time to produce the same results.—[R. Logan, Branch Co., Cal.]

The Angora Goat is one of the most valuable of animals for fleece, pelt and carcass and one of the easiest and cheapest to cultivate. Foreign mohair sells at 45 to 50c p. lb and domestic 25 to 35c. Over 1,000,000 lbs are annually consumed and not over 300,000 lbs produced. Some claim Angora flesh to be as good as Southdown mutton.

The Best Trough for stock to eat from is a hollow tree. Saw to the length wanted, split through the middle, cut out and burn smooth. Nail a board at each end. The grain will then be in the middle and cannot get stuck in the corners.—[Jacob Faith.]

Newly Born Calves require care. Do not allow them to get too much milk the first or second day. Milk from the cow half or more. Rich milk will often cause indigestion and scours in the calf. I have steeped cinnamon bark in boiling water, poured off the tea and given to calves cold.—[Mrs. E. E. Long, Kan.]

A Profitable Experience—A farmer told me how he earned \$60 one year by raising Shepherd puppies. He procured a female Shepherd puppy when four weeks old for \$3. Her diet consisted mostly of corn meal made in mush and old-fashioned johnnycake. Pastry and too much meat are injurious for young dogs. She had two litters in a year, four in the first and five in the second. These were sired by a full-blooded

TEST FOR YOURSELF

The Wonderful Curative Properties of Swamp-Root.

To Prove What This Famous New Discovery Will Do for YOU, Farm and Home Readers May Have a Sample Bottle Free By Mail.

It used to be considered that only urinary and bladder troubles were to be traced to the kidneys, but now modern science proves that nearly all diseases have their beginning in the disorder of these most important organs.

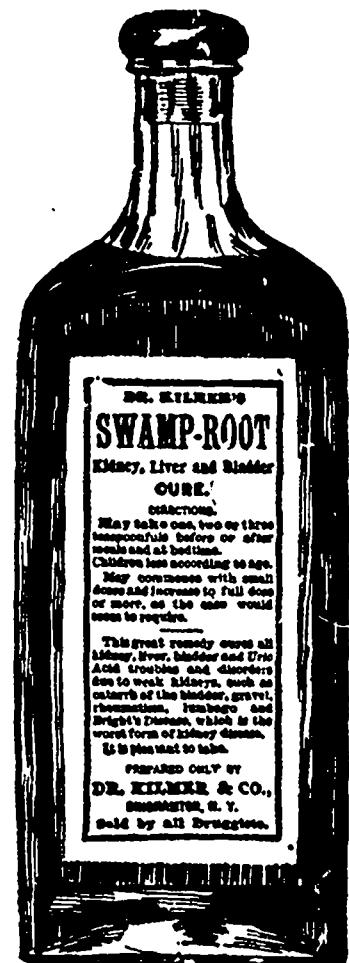
The kidneys filter and purify the blood, that is their work.

So when your kidneys are weak or out of order, you can understand how quickly your entire body is affected, and how every organ seems to fail to do its duty.

If you are sick or "feel badly," begin taking the new discovery, Dr. Kilmer's Swamp-Root, because as soon as your kidneys are well they will help all the other organs to health. A trial will convince anyone.

Among the many famous cures of Swamp-Root investigated in Farm and Home the one which we publish this month for the benefit of our readers speaks in the highest terms of the wonderful curative properties of this great kidney remedy. Mrs. H. N. Wheeler of 288 Boston St., Lynn, Mass., writes: "About 15 months ago I had a very severe attack of grip. I was extremely sick for three weeks, and when I finally was able to leave my bed I was left with excruciating pains in my back. My water at times looked very like coffee. I could pass but little at a time, and then only after suffering great pain. I had no strength and was all run down. The doctors said my kidneys were not affected, but I felt certain that they were the cause of my trouble. My sister advised me to give Dr. Kilmer's Swamp-Root a trial. I procured a bottle of my druggist, and inside of three days commenced to get relief. I continued its use and was soon cured. My strength returned, and to-day I am as well as ever. My cure is exceedingly gratifying to me."

Mrs. H. N. WHEELER



(Swamp-Root is pleasant to take.)
about 1c. It, your kidneys are in need of immediate attention.

If you are already convinced that Swamp-Root is what you need you can purchase the regular fifty-cent and one dollar size bottles at the drug stores everywhere.

To prove its wonderful efficacy, send your name and address to Dr. Kilmer & Co., Binghamton, N. Y., mentioning that you read this generous offer in Farm and Home, when you will receive immediately by mail free of all charge, a sample bottle of Swamp-Root and a pamphlet of valuable information pertaining to kidney and bladder diseases. This book contains many of the thousands upon thousands of testimonial letters received from men and women cured. Swamp-Root is so remarkably successful that those of our readers who have not already tried it are advised to write for a free sample bottle, and to be sure and state that they read this generous offer in Farm and Home.

Shepherd, and in compensation one of the male puppies was given from each litter. There was one female puppy in each lot of dogs. When four weeks old he advertised them in the city papers. The females were readily sold at \$5 each to neighbors who wished to try this line of farming. "Next year," he said, "I intend to go more extensively into this business, raising Scotch collies, Shepherds and hounds. There is more money in this line of farming than in poultry."—[L. M. Cadney, N. Y.]

Cribbing among horses is a habit often found among city horses than country animals. Sometimes they can be broken of the habit by keeping a muzzle on them at all times except when feeding. If this is kept up for several months they forget and the muzzle can then be left off.

I cannot conceive a finer ewe for the range than the Rambouillet ewe of proper type. I cannot conceive a finer lamb for the feeder than the Dorset cross on that sort of ewe. This is experience, not theory, says Joseph E. Wing.

According to the statistician of the federal dept of agri there were 89,114,000 sheep in the U.S. Jan 1, '99, and 41,883,000 Jan 1, 1900. Their average value increased from \$2.75 to \$3.93 and total value from 107 to 122 millions.

F & H is one of the essentials to my success in farming.—[W. H. Moore, Tulare Co., Cal.]

Home of Swamp-Root.

Canadian Farm Affairs.

TOBACCO GROWING IN QUEBEC.

The experience of most Canadian tobacco growers is limited to the culture of the plant. Very little is known respecting fertilization and the relation of soils to types, so that in many instances land utterly unfit to the purpose, owing to lack of fertility and suitableness, is put to tobacco, producing a nondescript article, which very often is afterward treated in such a manner that whatever small proportion might have been good is spoiled with the rest. As is well known to tobacco growers in the United States, the commercial value of tobacco, especially in the cigar leaf types, is derived more from the proper treatment of the plant from the moment it is harvested to the time it is sold than to any previous care.

After long consideration of the matter by the honorable minister of agriculture, he decided to establish an illustration station in the center of production of tobacco. The work to be carried on here is not to be on experimental lines, but rather more illustrative of the processes and methods which have been found to produce the best results in our climatic and other conditions. The main object is to teach how to cure the leaf and how to sweat and pack it, besides the many minor details of the art.

There is no doubt but that in our fall season the atmospheric conditions are very often adverse to the proper curing and drying of the leaf in buildings, affording no control over the natural elements, and the consequence is that the greater part of the quality is destroyed at this stage. Now it is proposed to show the necessity of improvements in the buildings used for curing and drying tobacco, and to this purpose a carefully designed building, embodying all the principles known to the expert cured of tobacco, has been put up at the illustration station, established at St. Jacques, Montcalm Co., Que.

This is not a very elaborate affair and can be built at small cost. It differs essentially from the ordinary barns, in that it is air-tight and is provided with a rational system of ventilation. Artificial heat will also be experimented with, not so much with a view to doing the curing proper, as to completing the drying of the stems and stalks which remain generally more or less full of water when very cold weather sets in. All this work is to be done on a large scale with a view to extreme economy and profits. Then the process of fermentation is to be taught to growers visiting the station. These are the two-principal objects in view, but of course the entire line of operations will be conducted so as to be illustrative of some fact ignored or neglected by growers attached to old methods. Fertilization, especially, is to receive the closest attention; the combined use of chemical fertilizers and nitrogenous plants plowed under will be made a special feature of the work.

The actual average yield per acre is not above 700 lbs of dry leaf, and it is believed that when farmers have learned how to use chemical fertilizers and green fertilizers the average yield will be raised to 1200 lbs with a corresponding gain in the quality of the crop. The expert in charge of the station will also deliver lectures during winter at meetings of tobacco growers, where information will be given to them respecting the requirements of the different markets and general information. It is hoped that by these lectures farmers will be brought to grow a more regular product, limiting themselves to the variety that may be found to succeed best in a particular district and thus create a regular product, which is an indispensable element of success.

Concerning the products of the stations it is proposed to export to Europe all that which may be thought suitable for markets there, the results, including every item of cost from beginning to end, will be made known to growers and their attention turned in this direction. New varieties will be experimented with in view of finding out which will give the best substitute to the tobaccos now imported for the different manufacturing purposes.

The appearance of the '99 crop and the low prices which have ruled the

past year make growers eager to learn something, as they realize that conditions have changed greatly.—[Louis V. Labelle.]

THE BEST APPLES FOR ONTARIO.

Both in importance and general culture the apple ranks first among the fruits. Its period for use extends nearly through the year, as by planting a selection of summer, autumn and winter sorts a constant succession of this indisputable fruit can be easily obtained. My list of the best six varieties for a home garden is as follows:

Yellow Transparent, a new Russian variety imported in 1870 by the U.S. dep't of agric at Washington. Tree a strong grower and an unusually early bearer; fruit pale yellow, good size and good quality, skin clear white at first, turning to a pale yellow when fully ripe. It is the earliest of all apples, and this makes it exceedingly valuable as an early market variety or for domestic use. My experience with this variety is very satisfactory. It never spots, is always bright and clear of skin, of a mild, pleasant yet sprightly flavor. It bears abundantly and at an extremely early age; it should be in every home garden in Canada.

Primate comes next. Tree a strong grower, very hardy and one of the most productive; fruit about medium size, roundish, pale yellow or straw color, with a blush on sunny side; flesh tender and fine grained, juicy and sub-acid; ripens early and continues in season a long time, and is very free from scab. When well grown and perfectly ripe it is one of the finest dessert apples in its season.

My third choice would be **Duchess of Oldenburg**. Large size, streaked with red and yellow, flesh juicy, sprightly and sub-acid; ripening early in the fall; tree a vigorous grower, having fine healthy foliage, bearing abundantly and when very young; succeeds in all sections of the country and is as valuable in the extreme north as in the south and is as hardy as any known variety. These facts, with its freedom from scab, recommend it to all parts of the country, and it is just as valuable in the orchard for market as in the garden for home use.

The **Gravenstein** is very large, round, greenish-yellow, often when well grown having a beautiful reddish shade; flesh tender, juicy and crisp, with a slightly aromatic flavor and of the first quality; tree very vigorous and productive, bearing regular crops of finely-shaped, handsome fruit. **King of Tompkins** Co. fruit is of the largest size, red, making a handsome appearance; flesh inclined to yellow, juicy, tender, with an agreeable rich and vinous flavor which, with its beautiful appearance, makes it a valuable market sort as well as for home use. It bears a good crop annually when well cared for, and commands first-class prices in any market. My sixth choice would be **Northern Spy**.

This apple needs no recommendation, as it has established itself in the minds of all who know it as a variety that has no equal in fine high flavor and long-keeping qualities, retaining its natural flavor through long storage better than any other variety. Its only fault is in the long time it takes to come into bearing, but when it does begin to bear it is a lasting satisfaction to its owner. This fact can be largely overcome by planting **Talman Sweet** and after it have grown a few years top-grafting with Spy. It will then fruit much sooner and be of better quality by this second grafting.—[W. Warnock, to Goderich (Ont) Hort Society.]

Ontario—The L. F. & D R R R have made a survey for an extension of their road through Elgin Co. to St. Thomas. The township of Southwold is cut up with three railroads and several fine farms practically destroyed. There is much local dissatisfaction that the Dominion government has given \$3200 per mile toward this extension. It is another case of a government present to satisfy corporate greed.—Winter until late Feb very mild with but little snow. Since then snow has come in abundance, making it almost impossible to do much teaming in the woods. The past summer being very dry, feed is rather scarce and prices will have a tendency to be high for the same. Prices of most articles which the farming classes require are abnormally high while the prices for those commodities

which they want to sell are low. Here we see the effects of the combines and trusts on the one hand and the lack of co-operation and organization of the laboring classes on the other.—Farmers at Clachan are fairly contented which indicates they are prospering. We can carry on mixed farming, as something is sure to catch the rise in market. This year beans are 1.50 p bu, hogs 5c p lb f w, hay 10. Wheat and beans last year light crop. Wheat went into winter quite uneven, being too dry, although on light land it looks well. Clover seed should be sown as soon as the ground is fit to put a team on. Use a grain drill with a grass seeder attached, setting tubes well back, which makes a perfect seed bed and benefits the wheat if careful to drive the drill between rows of wheat, sowing 10 lbs clover and five of timothy. Winter hanging on in Wentworth Co. The most that can be done is to plan for coming work; this is very important. It is not altogether the line of work that a person is in, but the amount of skill and energy that is put into it that makes success. While we are very much interested in South Africa, it is taking too much energy, men and money from peaceable pursuits for the good of the nation. Poultry, dairying and the pig business are being enlarged and horse raising is getting more attention lately.

Wants the Grange—There can be no doubt but that some farmers' fraternal organization as has been proposed by Secretary James would be a most decided advantage. This want was what gave rise to the grange and later to the Patrons of Industry, but the results of these efforts to organize farmers are not very encouraging to try any new organization along that line. The objects to be attained, as set forth in Mr. James's proposition, viz., to promote the "interest," "education" and "pleasure" of the farmer and his family are very worthy; but the question arises, what are the farmers' interests? In answering this question you at once get into financial, mercantile and political questions, and these, so far, are the things that have played havoc with farmers' organizations. I am of the opinion that nothing we have had as yet so nearly filled the bill as the grange, and if we could have a revival of the interest in that order it would accomplish the objects we have in view better than an attempt to launch a new organization, says C. J. Thornton of West Durham, Ont. In The Sun.

Apple and Potato Barrels—The size generally but not uniformly used in exporting apples from New England to the English markets is the flour barrel holding a little less than 3 bu; the potato barrel is much the same in capacity. Effort is being made in the east to secure uniform state laws regulating the size of all barrels for handling fruits and vegetables, these to be of the capacity of the flour barrel.

Dominion Grange Officers are: Master, Jabez Robinson of Middlemarch; overseer, J. McDougall of Milton; lecturer, J. G. Lethbridge of Strathburn; secretary, W. F. W. Fisher of Burlington; treasurer, James Fallis of Newbridge; chaplain, J. Allan of Churchill; steward, J. G. Mitchell of Glencoe; assistant steward, J. Gray of Lonesborough; gatekeeper, H. J. Dynes of Burlington.

Ontario Sheep Interests are unusually bright, writes the veteran John Campbell in the Sheep Breeder. It is long since in Ont sheep breeders have had such a steady demand at good paying prices for the surplus of their flocks as during 1899. There has been no boom and we trust there will not be. As wool has increased in value considerably, and market lambs are selling at \$4.50 to \$5 p cwt, delivered at the shipping stations, the growing of sheep is certain to increase with us, and that will be one of the results of the general disappointment in producing the bacon hog. With very little experience the conclusion is easily arrived at that 100 lbs of lamb is grown at much less cost than 100 lbs of bacon hog, and it brings an average of \$1 to \$100 more when ready for the market. In my 20 yrs experience with pure-bred sheep, that line of sheep husbandry at present compares very favorably with any year during that time. There is a strong healthy trade with a greater discrimina-

tion by buyers in favor of the good ones than at any previous time. The good, the choice and the extra choice ones find ready customers. The lesson, therefore, is "Produce the best."

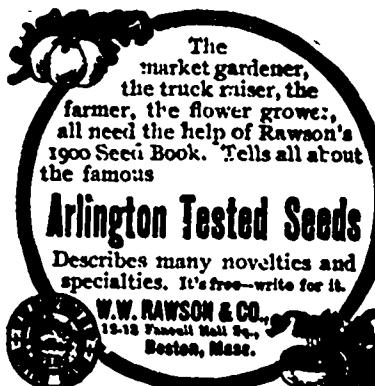
After years of careful experimenting, we now have a long list of hardy, valuable commercial fruits that we can grow as well as they can be grown anywhere. Plantings have not been as extensive as they might have been and we do not produce sufficient for our own market. It would be well if more extensive planting were undertaken. [Pres. C. P. Newman, Que Pomological Soc'y.]

SPRAYING FRUIT TREES.

The question of spraying fruit trees to prevent the depredations of insect pests and fungous diseases is no longer an experiment but a necessity.



Our readers will do well to write Wm. Stahl, Quincy, Ill., and get his catalog, so describing twenty-one styles of Spraying Outfits and full treatise on spraying the different fruit and vegetable crops, which contains much valuable information, and may be had for the asking.



Arlington Tested Seeds

Describes many novelties and specialties. It's free—write for it.

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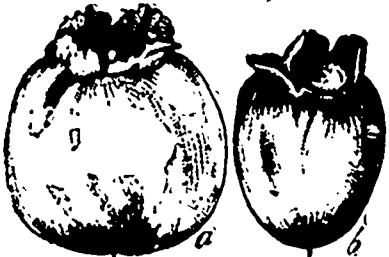
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Windsor, Ont.

Windsor Salt

Gives to butter that delicious sweetness and freshness which brings the high price. Perfectly pure; natural crystals—try it.
THE WINDSOR SALT COMPANY, Limited,
Windsor, Ont.

Large and Small Fruits.**A NEGLECTED NATIVE FRUIT.**

The persimmon is one of our native wild fruits which is susceptible to great improvement by proper selection and cross fertilization. It is a southern fruit, hardy as far north as New York, but is little known outside of its native belt and not given much attention there as regards cultivation. The fruit, which varies much in size and form, ripens from Aug to Dec, and until



TWO NATIVE PERSIMMONS.

thoroughly ripe is very astringent or puckery, but after ripening it is the sweetest of our native fruits, containing 20 per cent of sugar as against 12 for apples, 11 for cherries, 9 for oranges and 5½ for strawberries.

It has generally been supposed that frost is needed to ripen them, but such is not the case for all varieties, for the early sorts are ripe and gone long before frost appears. The native sorts are from ½ to 2 inches in diameter, contain usually from four to eight seeds and vary greatly in shape, as shown by the illustration. The Japanese kinds are larger, heavier and contain fewer seeds, but are less sweet. The trees, in the open, grow not over 40 ft high and are self-fertile, although a few male trees are found which bear no fruit. Varieties do not come true from seed and resue must be had to grafting or budding which is easily done. Owing to a long tap root, the seedling trees are not easily transplanted except when under two years old. They come into bearing from 3 to 5 yrs from the graft.

Persimmons do well on almost any soil, but best, however, on locations similar to that demanded by the peach and plum. They draw rather more heavily upon the fertility of the soil than most other fruits, but send their roots so deeply that they thrive on the poorest soils. The fruit has been greatly improved in Japan, where it ranges in size from 8 to 20 oz and holds relatively the same position that the apple does in the U.S. They are little known in the northern market, but a profitable demand could easily be created by shipping only the choicest varieties. Marion, a native persimmon which was found in Mo., is shown at a, and Golden Gem, a variety of Ind. origin, at b. The Marion ripens in Oct., the Golden Gem in Aug. and lasts for six weeks.

A Mulch for a Strawberry Bed in a windy location has the four-fold benefit of protecting crowns from freezing and thawing, holds back the buds from late spring frosts, keeps the fruit from getting sanded during a storm and while keeping down weeds it retains the

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 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 complimentary to anyone inclosing 10 cents for postage to the Lenox sprayer company, 21 West street, Pittsfield, Mass.—[Adv.]

moisture during a dry time. But the mulch must be loosened in the spring to let the plants push through, else if not smothered entirely they will be retarded.—[Mary E. Cutler, Worcester Co., Mass.]

Catawbas in April— Some good Catawba grapes have been carried in cold storage throughout the entire winter in N.Y. and O. Demand fair but not important, as consumers fail to appreciate the novelty of grapes so late in the season.

The Currant Stem Girdler cuts off the new growth of currant stems and then lays an egg in the pith. To hold in check, trim off and burn all girdled canes 2 in. or more below the point of injury as soon as the girdling is noticed. The egg, deposited an inch below the girdling, will then be destroyed.

If your orchard consists of a lot of undesirable varieties, top-graft with sorts proved to be hardy, long-keeping and salable.

The prudent man builds his grandest successes on the foundation of ruinous failures.

If farmers would do more thinking and a little less hard work, they might better their condition.—[O. L. Briggs.]

Top grafting on Wealthy or Duchess is not to be recommended, as growth is too slow.—[Prof. McCoun, Ont.]

Burpee Seeds

are the most popular

They are sent out only in sealed packages from the New Burpee Building, Philadelphia. A postal card application will bring

Burpee's Farm Annual for 1900 which tells all about the Best Seeds that Grow, as tested at Fordhook Farms, the largest trial grounds in America.

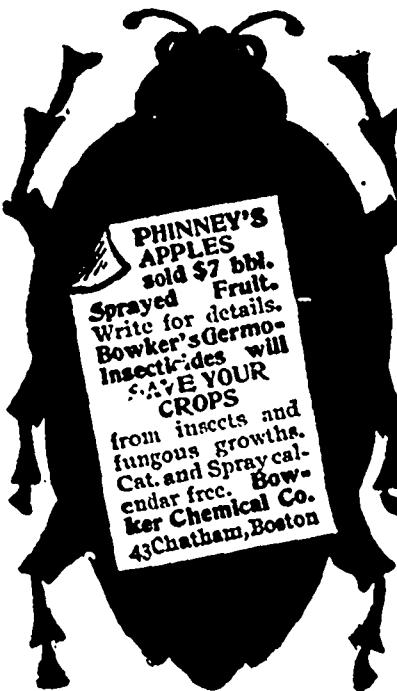
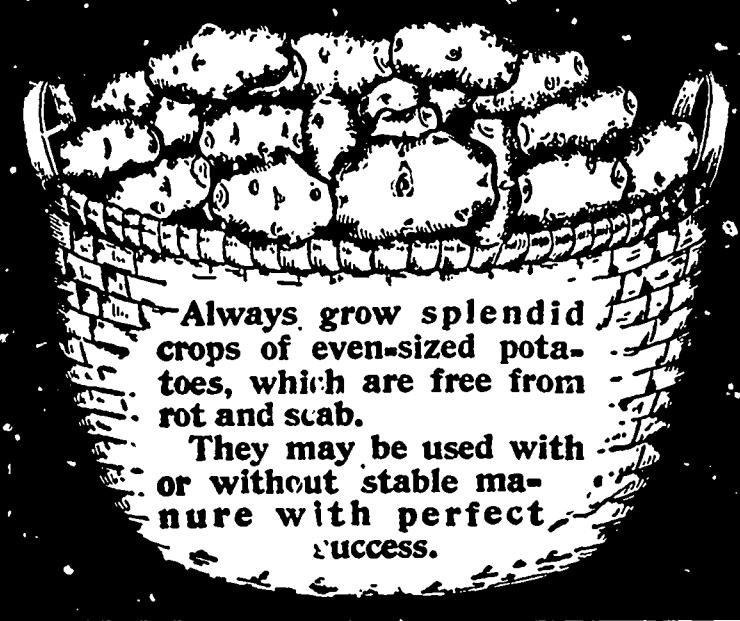
No matter how many other seed catalogues you may have, you cannot be thoroughly posted without Burpee's. Write TO-DAY. Address simply **BURPEE, Philadelphia.**

GREGORY'S SEEDS
For 40 years the favorite with practical gardeners and florists. The new 1900 catalogue describes all varieties. Send for it.
J. J. GREGORY & SON, Marlboro, Mass.

PEAR POSSIBILITIES
are only fully realized by those who plant our
Standard Kiefer Pears.

This pear is renowned for vigor and rapid growth and absolute freedom from disease, etc. This pear is extremely productive, large size, fine flavor and handsome appearance. A good seller. Trees are free from blight; green leaf. Our stock is the best the growers can produce.

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Always grow splendid crops of even-sized potatoes, which are free from rot and scab.

They may be used with or without stable manure with perfect success.

WE SAVE YOU MONEY ON FERTILIZERS.

Buy your fertilizers Direct at Wholesale Prices, and get your money's worth.

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made by JOHN H. JACKSON, ALBANY, N.Y., are the very best that long experience, thorough equipment and superior clay will produce. Tile drained land is the earliest, easiest worked and most productive. Also Sewer Pipe, Chimney Tops, Red and Fire Brick, Oven Tile and Supply Mortar Colors, Cement, Plaster, Lime, etc. Write for what you want. 773 Third Ave.

NEW STRAWBERRY "ROUGH RIDER" LEADS ALL

It is the firmest, latest and best keeping strawberry yet introduced. Extremely large, immovable, productive. Sold at \$200 per qt wholesale season of 1900. Endorsed by best authorities. Order the "Strawberry Farmer" Catalogue free. L. J. FARMER, Box 18 Morristown, N.J.

Buy direct from the grower Apples, Pears, Peaches, Plums, Blackberry & Raspberry Plants.

Full line of nursery stock. Certificate. Catalogue free.

ARTHUR J. COLLINS, Moorestown, N.J.

Success Weeder and Surface Cultivator

The opinion of farmers who have tested it:

"You appear to be the most liberal manufacturers we have ever dealt with. This is the third year we have used the Success Weeder. We used it for corn, potatoes, tomatoes, cabbage, etc., with wonderful results. We had a good two-horse cultivator at the time we bought the weeder, but have not used the cultivator since, as one small horse and the weeder will do more and better work than two teams and cultivators."

J. E. GRAY & SON, Youngstown, O.

Surface cultivation will average 50 per cent. better returns than the old way. Let us tell you all about it.

E. Y. HALLOCK & SONS, Box 811, York, Pa.

The Garden.**ESSENTIALS TO A GOOD GARDEN.**

It goes without saying that a garden soil should be very fertile and one need not expect to get good results from poor or even fairly fertile soil. No, it must be very fertile. Garden crops generally are planted closer than field crops, hence it takes a greater amount of available fertility. A good garden is a pleasure as well as a profit. To have a good garden, aside from the fertile soil which is indispensable, one must have seed and a good grip on the hoe handle or garden plow. "Tillage is manure" is never truer than when it comes to raising the garden truck. So we have the three things needful, good soil, good seed and good cultivation.

One should be liberal in every respect in the garden. Liberal with manure, liberal with seed, with work and with the soil, that is, make the garden large enough. Lean to liberality in everything but growing weeds, and here there should be no quarter given, but let every weed perish miserably and in its youth. This entails work and lots of it. Yet, more than your wife can do and attend to the chickens, milk the cows and do the housework for you and your children and a possible hired man. Be liberal. tend the garden yourself.—A. N. Springer, Tipton Co., Ind.

WORK AMONG HOTBEDS.

It will often be necessary to cover the sash with straw, mats, light manure, etc. on cold and frosty nights. Remove the covering when weather permits at about 9 a.m. or as soon as the sun rests upon the glass, as every effort should be made to give the plants all the sunlight possible, as its rays are vivifying to a degree beyond the amount of its heat, it having a chemical and physio-logical effect beyond explanation.

Even dull light is better than no light, consequently it is a bad plan to cover the sash with mats except for direct purpose of keeping out cold. Give a little air about 10 a.m., cut off the air in the afternoon as soon as it becomes the least chilly, then if necessary cover with mats, etc. about sunset to retain heat. Care should be taken to keep cold winds from blowing in upon the plants when sash are removed to admit air. Great care should be taken in watering hotbeds. Do not give too much water, for if this be done the soil is apt to become soggy and sour. Successive dabs up-in bottom heat from the manure, top heat from the sun, water from daily application and air at mid-day. Without plenty of air the other requisites will be fruitless. All seedlings should be transplanted to other hotbeds, cold frames or intermediate beds when 2 in high.

A LITTLE KNOWN VEGETABLE.

Calsify is easily grown, may be cultivated without trouble, and is easily stored for winter use. The seeds are sometimes planted with a drill, but on account of being so sharply curved at the ends it is rather difficult to obtain an even distribution in this way, unless they are very thoroughly cleaned.

They may be planted thickly, to be thinned later on, or the seeds may be dropped from 3 to 6 in apart in the first place. The soil should be rich, but with well-rotted manure worked deep and thoroughly. Upon the perfect condition of the soil depends the straightness and smoothness of the roots, there being a tendency to branch where fresh manure is applied. The plants should be cultivated as parsnips are. They are very hardy, are not affected by frost and may be left in the ground all winter without harm. But to have the roots ready for use they should be dug in the fall and a root away in soil or sand where the temperature is low. If exposed to the air the roots become shriveled and tasteless and are without value. Although the consumption is limited, prices are high and remunerative and the amount grown is increasing. Whether or not it should be grown extensively is a question that the demand for the vegetable will settle, but there is no question whatever that it is worthy of cultivation for family use in every vegetable garden.

The varieties Long White and Sandwich Island have been tested by the Kan. Experiment Sta. There was little

difference in the total yield, Sandwich Island being ahead, but the roots of Sandwich Island had fewer lateral roots and were smoother. Where a good stand the yield was very nearly a pound to the foot of row.

TRANSPLANTING THE CABBAGE.

Cabbage is one of the market gardener's best paying crops and should have good attention. A gross feeder you can scarcely make the soil too rich. It luxuriates in plenty of good coarse manure. In Indiana, we usually sow seed for the early crop in hotbeds during late February or early March, and when plants are 3 in high transplant to cold frames, and then set in the field in April as soon as the ground is in good working condition.

No danger from frost need be feared, as the cabbage plant, if properly hardened up in cold frames, will stand any frost likely to occur. If not properly hardened up when set and there is danger of frost, cover plants with earth by hoeing soil over them, which is better than covering with any other material. If weather continues cold and dry, no damage will occur to the plants for 3 or 4 days. Henderson's Improved Jersey Wakefield is as good an early variety for this locality as we have tried. Early Waddington is a good second early. Premium Flat Dutch for late is one of our best keepers.—[W. S. Fultz, Muscatine Co., Ia.]

A Labor Saving Dibber.—Take a stick, a, 4½ ft long, about 1½ in in diameter for a handle and fix an iron point on one end. Cut a groove square across the handle about 1 ft from the pointed end, b, ½ in deep, 1 in wide, and make a small hole in center of groove. Take another stick, c, 3 ft long, ½ in thick and 1 in wide and make holes in it, same size as the one in handle, at 12, 14, 16, 18, 20, 24, 26 and 30 in from one end. Fasten to handle with a small bolt 1½ in long.

Using a thumb screw and washer, and fastening at hole same distance from end of stick that plants are to be apart. When using the dibber, have ground marked out with rows proper distance apart. Take dibber and point the measuring stick ahead directly with the row. Make first hole by pushing point of handle into the ground, and notice where end of stick is, make next hole at this place. Now reverse dibber, having stick pointed back of way you are walking, put end at last hole made, make next, and so on. Holes can be made nearly as fast as one can walk, and will be enabled to do the work without the usual fatigue experienced when using the ordinary dibber.—[J. G. Allshouse, Armstrong Co., Pa.]

Succession in Sweet Corn.—For early, early is very hardy. Quincy Market follows in a few days and is a big stopper of large and sweet corn. Miller's Excelsior and Original Crosby are good sorts to follow Quincy Market. Country Gentleman, a very thin-kernelled and sweet variety, comes next. Then follows Stowell's Evergreen and Egyptian to wind up the season.—[J. J. Gregory, Mass.]

A revised estimate of the wooded area of the U. S. is that 25 per cent of the country is in the woods.

Farm Wagons only \$21.50.

In order to introduce their Low Metal Wagons with Wide Tires, the Empire Manufacturing Company, Quincy, Ill., have started upon the market a Farmer's Handie Wagon that is only 20 inches high, fitted with 30 and 36 inch wheels with 4 inch tires, and sells for only \$21.50.



This wagon is made of the best materials known, and really costs but a trifle more than a set of four wheels, and fully guaranteed for one year. Customers giving a full description will be referred upon preference by the Empire Manufacturing Co., Quincy, Ill., who also will furnish metal vehicles of any price made any size and width of tires to fit any auto.

CURES RHEUMATISM FREE

A Simple Remedy That You May Try Without Spending a Cent--Cured Many Cases of 30 and 40 Years' Standing.



82 Years of Age. Entirely Cured of Rheumatism After Having Suffered 42 Years.

If you have rheumatism, write to me and I will send you free of cost a trial package of a harmless remedy, which cured me and thousands of others, among them cases of over 30 years' standing. It is a grand remedy and in order that every suffering reader may learn about it, I will gladly send them a Trial Package free. Many a distressing case of rheumatism, among them some which defied Hospital, Surgeon, Electricity and medical skill, was successfully cured. In Dehaven, Ind., it cured a lady who then cured 10 of her neighbors. In Princeton, N. J., it cured Mrs. C. Morris who had been afflicted for 30 years. In Fountain City, Wis., it cured Mrs.

Jacob Seisser after suffering for 20 years, notwithstanding having consulted several physicians. At 13 Oak St., Vincennes, Ind., this remedy recovered Miss Emma Callender from a case of rheumatism which her physicians considered 3 fatal. Rev. C. Gould of Harrisville, Wis., testifies that this remedy cured two members of his congregation, one who had suffered 16, the other 20 years. Thousands of similar instances could be mentioned where this remarkable potion has been completely cured. Write at once for a free trial package and other information. For it is an honest remedy that you can test before you part with your money. Address: JOHN A. SMITH, 1345 Summerfield Church St., Milwaukee, Wis.

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PAGE

10TH OR 20TH CENTURY?

Two post chairs, but see Page Price on the farm.

PAGE WOVEN WIRE FENCE CO., AMELIA, OHIO.

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Forestry Matters.

PLANT TREES.

What do we plant when we plant the tree? We plant the ship which will cross the sea. We plant the masts to carry the sails. We plant the plank to withstand the gales. The keel, the keelson, and beam and knee, We plant the ship when we plant the tree.

What do we plant when we plant the tree? We plant the houses for you and me; We plant the rafters, the shingles, the floors. We plant the studding, the laths, the doors. The beams and siding, all parts that be; We plant the house when we plant the tree.

What do we plant when we plant the tree? A thousand things that we daily see; We plant the spire that out-towers the crag.

We plant the staff for our country's flag. We plant the shade, from the hot sun free; We plant all these when we plant the tree. [Henry Abbey.

A CENTURY OF LUMBERING.

The present generation is the first one that has ever shown an appreciation of the value of the forests of the country. Past ages have changed the typical character of trees and clearing land has practically exterminated certain varieties of trees. The day of the black walnut as a lumber species, commercially speaking, has now gone by and the same will soon be true of the white pine. White pine is already nearly exterminated in Pennsylvania, and the ship yards in that state are stocked with lumber from distant states. In 15 years, hemlock will be exterminated in Pennsylvania.

The removal of forests from hill-sides does not decrease the rainfall. Four-fifths of the rain falling in a forest area is taken up by the soil, while four-fifths of the rain falling on a cleared area runs off in streams, causing floods and freshets. Last spring, driving along a stream so dry my horse could not be watered, I noticed signs of a terrible freshet. Crossing to a hotel, the landlord said five persons were drowned in that freshet. Continuing across that country, I came to the head waters of a stream encircled by a rich forest growth. I saw no signs of a freshet there. I crossed to a third stream where there was a clearing and there were the same unmistakable signs of a freshet. These three streams were all within 1½ miles of each other. In a nearby town, the assessors were obliged to pay a big bill of repairs caused by a heavy and severe overflow.

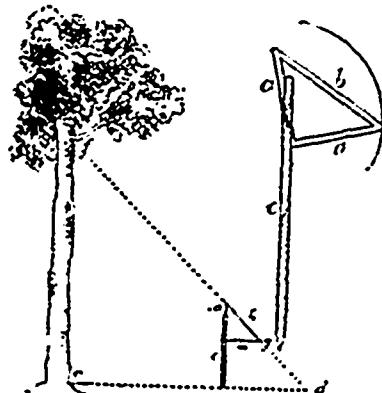
Forests giving off water moderate climate to a considerable extent. Death valley, Cal., is caused by dry winds passing over the tops of the Sierras, being emptied of moisture against the western slopes of the mountain. As the winds descend on the valley at the foot hills of the mountains, they are hot and dry and everything parches under their withering influence. Along the Adirondack range in New York, estimates place the quantity of water given back at 500 millions of tons annually. In these days of machinery, gang and belt mills rip up boards in a twinkling, 50,000 ft. daily. The complete exhaustion of the timber lands of the United States, if kept up at the present rate, will become a reality in 60 years. Regrettable as it may appear, the larger portion of this lumber is wasted and much of it goes to kindle forest fires. Barking for turpentine is destructive to the tree, although not to the lumber. While in some sections of the country wood lands may now be obtained at a very nominal sum per acre, it will be but a few years before wood in all parts of the United States will be worth much more than present values.

To prevent forest fires, legislative action should be taken requiring lumber companies to clear up the wastes of a season's sawing. The Wisconsin assessor has already secured the passage of a bill for that purpose, realizing the necessity for self-protection. Each year the statistics of nearly all European nations show an increase in forest area. It will be but a matter of time before many states will pay a bounty on every acre of trees planted. Such plantings invariably rebound to the good of the state. The Mississippi river system is necessary to a large extent because of the removal of trees about the headwaters of contributing rivers. Kansas and Nebraska are de-

pendent on irrigation. Colorado was originally peopled by gold miners, and the trees felled. There are three states dependent on a single forest area, and Utah is much in the same condition. If the state never dies, its citizens should be bound to leave it in as good condition as it was given to them. Five years ago I went over a barren sand hill where white pine seeds had been planted, germinated and became quite high. Last year, those same saplings were 200 and 300 ft high. In Pennsylvania, 3,000,000 ft of timber is burned annually and in 50 years 1,500,000,000 ft of timber has been destroyed. The white oak is better than the white birch in Connecticut, and many acres can be profitably planted with such trees and the state bountiful on such plantings claimed.—T. J. Rothrock, Pa. State Forestry Commissioner.

MEASURING A TREE.

It is often desirable to know the exact height of a tree, and especially in getting out long timber. It is of importance to know the height to a limb or burl or



AN EASY WAY TO MEASURE A TREE.

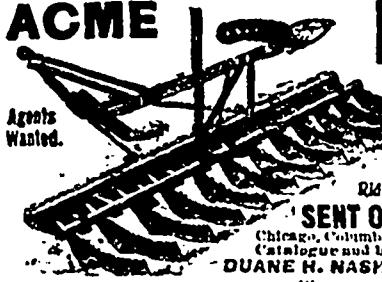
other imperfection. This may be ascertained by means of the following simple device. Take two straight pieces of wood, a & b, about 15 in long and fasten them together at the ends at exact right angles to each other. Connect the opposite ends by means of a diagonal stick, c, having a perfectly straight outer edge. Fasten the horizontal stick by means of a bolt and thumb-screw to a stake, d, about 3 ft long. The length of the sticks is immaterial provided the horizontal and perpendicular pieces are of exactly the same length. Select a point at approximately the same distance from the tree that the limb is from the ground. Set the stake upright in the ground and fasten the triangle in such a manner that one arm shall be perpendicular while the other is horizontal and pointed to the tree. Sight across the diagonal stick at the height which it is desired to measure. If the line of vision comes above, move nearer the tree. If it falls below, move back until the line of vision strikes the desired point. To make due allowance for irregularities of the ground, the distance from the stake to the tree will equal the height of the point taken.

Another method nearly as quick as this is to set a pole of known length upright by the side of the tree. Measure the length of the shadow of both the pole and the tree. These known, use the rule of three as follows: Length of the pole multiplied by the length of the shadow of the tree and divided by the length of the shadow of the pole will equal the height of the tree.—C. O. Grimesby, Washington Co., Vt.

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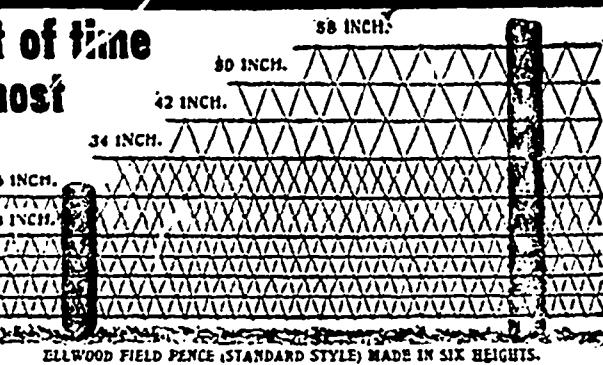
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or the successful fellow who does his farming with one horse will find nothing equal to the "TRAYER JR." Horse Harrow for his purpose. They are capable of the greatest variety of work and do it all perfectly. This one has double tines—the only frameless depth and the other width. A great variety of attachments. Remember that the "TRAYER JR." was the original on getting the genuine "TRAYER JR." for nothing is a good buy.

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S. L. ALLEN & CO., Box 1107-K Philadelphia, Pa.

**APRON LACE.**

Make ch of twenty-five sts and turn.
1st row—Shell in 4th st from hook (or shell

three tr, ch two, three tr in same st), one-half knot st, and fasten in 5th st, one whole knot st, fasten in 10th st, one-half k st, one tr in each of 15th, 16th and 17th sts, shell in 20th st, ch two and turn.

2d row—Shell in shell, three tr on three tr, fasten in end of k st and make whole k st, fasten in ends of other whole k st, one whole k st, fasten in end of last one-half k st, shell in shell, ch two and catch in farther end of 1st shell to make top even, ch two and turn.

3d row—Shell in shell, one-half k st, fasten in ends of whole k st, one whole k st, fasten in ends of whole k st, one whole k st, three tr on three tr, shell in shell, ch two, shell in loop of two ch in 2d row, ch two, turn.

4th row—Shell in shell, ch two, one tr under ch of two, ch two, shell in shell and continue on up as in 2d row.

5th row—Same as 3d until shell after three tr is made, when ch two and one tr under each of the ch of two in 4th row (always making two ch between each of these tr), ch two, shell in shell, ch two and turn.

6th row—Shell in shell, one tr under each of three ch in 5th row, with two ch between each tr and before the shell, each time. Proceed up as in 4th row.

7th row—Same as 5d until shell after three tr is made, when make one tr with two ch between under each ch of two, ch two, shell in shell, ch two and turn.

8th row—Shell in shell, one tr under each ch of two, with two ch between, shell in shell, and continue on as in 6th row.

9th row—Same as 7th till shell after three tr is reached, when ch two and make one tr with two between, under every two ch, ch two, shell in shell, ch two, turn.

10th row—Shell in shell and fasten at end to give rounded appearance, six tr under 1st, 2d, 3d and 6th ch of two in 9th row, fastening down each one at end to make it round, ch two and proceed up row as in 8th row. Continue from 3d row to any desired length.

The insertion is too simple to need explanation. Both shell and k st precisely as in white lace.—[Mrs. L. A. Gullikson.]

CROCHET LACE IN CROSS STITCH

Silk or silk cotton should be used for this lace to produce the best effect. Make a chain the desired length.

1st row—One tr c in every st of chain.



2d row—one tr c in third st, then one tr c back in first st. This forms the cross stitch. One tr c in fifth st, one tr c back in third st again. Proceed across the row, crossing in this way, always one tr c between.

3d row—Same as second.

4th row—Six long tr c (thread over three times) in first cross stitch, one

tr c in next cross stitch, six long tr c in next, one tr c in next, and repeat across the row. pretty finish to winter skirts if made of Saxony yarn or zephyr.—[Emma

This lace should be crocheted very loose and would be an easily made and Clearwaters.

ZIGZAG LACE.

This design is knitted of No. 50, Clark's crochet cotton. This is a very desirable pattern to knit in yarn for trimming woolen house jackets, or winter underwear. Cast on nine sts and knit across plain.

1st row—O, p two tog, k four, o twice, n, k one.

2d row—K three, p one, k four, o twice, p two tog.

3d row—O, p two tog, k eight.

4th row—K eight, o twice, p two tog.

5th row—O, p two tog, k four, o twice, n, o twice, n, k one.

6th row—K two, p one, k two, p one, k four, o twice, p two tog.

7th row—O, p two tog, k ten.

8th row—K ten, o twice, p two tog.

9th row—O, p two tog, k one, o twice, n, o twice, n, o twice, n, k one.

10th row—K three, p one, k two, p one, k two, p one, k two, p one, k one, o twice, p two tog.

11th row—O, p two tog, k fourteen.

12th row—Bind off seven, k six, o twice, p two tog. Repeat from 1st row. [Emma Clearwaters.]

VICTORIA EDGING

Use Saxony wool. Cast on sixteen stitches, knit across plain.

1st row—Sl one, k one, o two, p two tog, k one, o two, p two tog, k three, o two, p two tog, k one, o two, p two tog, k three.

2d row—Sl one, k one, p one, k one, o two, p two tog, k four, o twice, p two tog, k three.

3d row—Sl one, k one, o two, p two tog, k two, o one, k one, o two, p two tog, k two, o one, k three.

4th row—Sl one, k one, p one, k two, o three, p two tog, k three, p one, k two, o two, p two tog, k three.

5th row—Sl one, k one, o two, p two tog, k three, o one, k two tog, k one, o two, p two tog, k three.

6th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

7th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

8th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

9th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

10th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

11th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

12th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

13th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

14th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

15th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

16th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

17th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

18th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

19th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

20th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

21st row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

22nd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

23rd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

24th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

25th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

26th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

27th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

28th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

29th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

30th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

31st row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

32nd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

33rd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

34th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

35th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

36th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

37th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

38th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

39th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

40th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

41st row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

42nd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

43rd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

44th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

45th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

46th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

47th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

48th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

49th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

50th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

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54th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

55th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

56th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

57th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

58th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

59th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

60th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

61st row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

62nd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

63rd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

64th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

65th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

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67th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

68th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

69th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

70th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

71st row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

72nd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

73rd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

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81st row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

82nd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

83rd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

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100th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

101st row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

102nd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

103rd row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

104th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

105th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

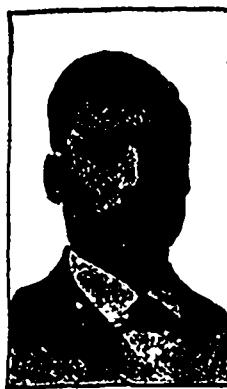
106th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k three.

107th row—Sl one, k one, o two, p two tog, k three, o two, k two tog, k

Success Without a Mortgage.

STUDIED HIS MARKET.

THIRD PRIZE ESSAY, TEN DOLLARS.



A SUCCESSFUL FARMER.

We had lost our home in town by a mortgage, as well as everything else, with the decline of the "boom" in '93, and as the only thing at hand, I was working as a newspaper reporter at \$15 a week, with rent to pay and a family of four children growing up. When a boy

I had spent 3 yrs on a farm and had been a harvest hand in Mich and Dak, sheared sheep, worked in a nursery and run a threshing machine. In the 3 yrs on the farm I had read the American Agriculturist and was always interested in farming.

Something had to be done and I kept my eye out for a farm. Farmers were despondent on account of the low prices of wheat and hops, as well as everything else, and many farms were being sold out at mortgage foreclosure. I finally learned of a farm of 170 a that had been taken in on a \$3000 mortgage, which the mortgage people had rented out for \$10 the year before and was then abandoned. The owner was willing to sell it for \$750 cash. It was an old farm, taken up 30 yrs before. Half of it was bottom land lying along the river; the rest steep hill, covered originally with fir timber, but now with cull trees and second growth.

Ten acres of the bottom had been in hops, and a hop-drying house, three tumbledown barns, an old water saw-mill, a shambling house and several



A WASHINGTON FARMYARD.

smaller outbuildings added to the neglected look of the place. An old orchard of an acre was grown up with weeds and brush, and of the 50 a of land once cultivated barely 20 was fit to plow. The rest had grown up to brush. All the cleared land was thickly dotted with big stumps, mostly cottonwood, but a few cedar.

I had \$200 cash. I made the owner an offer of \$15 per year cash in advance rent for the place for a term of 5 years with the privilege of purchase at \$750 at any time within the term, which was accepted and we moved onto the place. It was off the main road in a rather desolate looking place, which had something to do with the cheap price. Part of the old house was torn down and the remaining part cleaned and straightened up and whitewashed. One of the barns was put in order and the others as well as the old mill torn down to make sheds and fences. The old orchard trees were sparingly pruned and sprayed and a little of the growth of brush in the field cut.

A team of horses, harness, wagon and some other tools, as well as two cows and helpers, some pigs, chickens and ducks were easily procured from farmers who were ready enough to give credit. A new plow was bought and in the spring all the available land was plowed without stopping to dig out stumps or clear out brush, except the small patches and edges that had already been cut. The idea was to raise as much crop as possible for the amount

of work. We were too far from market because of the bad road, to make it profitable to raise such things as required frequent trips to town. Wheat would not pay to raise in competition with the great wheat farms where it can be grown and put on the cars for 20c per bushel, corn will not grow in this country, where the climate is not warm enough for it, but pork, poultry, eggs, butter, potatoes, onions, winter apples and other fruits were apparently the best crops.

The first year we raised 1000 bushels of potatoes on a little over 3 a, which sold at \$15 per ton; 400 bushels of onions on 1 a sold for \$350; also sold some eggs, a few carrots, and eight pigs for \$100. I came out in the fall with a good supply of vegetables and meat for winter, a nice start in pigs for the next year, and a pointer that there was money in turkeys and ducks. Incidentally we found out, at a cost of half our poultry, that three or four dogs and a flock of guinea fowl would go a long way toward keeping away the wild cats, foxes, skunks and other poultry pests.

By the next spring a good many of the easiest stumps were rolled out and a few blasted with dynamite. The edge was cut from brush patches, squaring out plowed pieces. The old land was weedy, but no weeds were allowed to grow. The manure was put on the root crop land, where there was the most work. Good crops of sugar beets were raised, which were fed to horses, cattle, pigs and poultry. Oats were raised for hay. I tried the experiment of sowing barley and Canada field peas together and found it a great success. As soon as the crop would do to eat we began to mow it with a scythe and feed to the pigs, cutting and drying the last of the crop and stacking it the same as hay, but saving out plenty for seed. There are no pea weevils in this country and peas make splendid feed for pigs.

The second year we sold 300 turkeys for \$200 and also made a good profit on the ducks, which were sold while three-fourths grown, and the poultry and eggs paid for all the groceries. It was hardly profitable to make butter. For a few cows it did not pay to buy a cream separator, and dairy butter, no matter how good, would not bring the price of creamery butter. Other work paid better than making butter the old way.

Near the city were a score of dairies which supplied the city with milk. Their cows were good and they used generally thoroughbred bulls; they raised few of the calves. It paid better to sell their milk and buy new cows than to raise the calves. The first year I bought six well bred heifer calves and more the next year and later sold them back to the dairymen at a good profit. The third year 5 a was again planted in hops. This year the crop went a ton to the acre and cost about \$100 a ton to grow and harvest, not taking into account the value of the land. The hops we hope to sell for 12c or better. Turkeys, pigs, cows, eggs and poultry paid best.

The farm is paid for, the brush cleared up, the stumps much less, the weeds kept well out of sight, plenty of fruit trees and small fruits of all kinds set out and growing, and we don't have to worry about where the next month's living is to come from. Neither have we a mortgage hanging over our farm and home.—Jerry Meeker, Pierce Co., Wash.

THE APIARY IN APRIL.

March and April are the most critical months of the whole year with bees and the heaviest losses occur in these months. Many colonies go into winter quarters with scant provisions, which, being consumed about this time, leave such colonies to starve to death. Bees in most localities begin to breed rapidly at this time and to draw heavily on their stores. As a rule, bees will consume more honey now than they do in the 3 mos preceding, hence the importance of looking after them now and furnishing food to all that need it. In localities where the weather is yet quite cold, candy is the best food to give them, but where it is warm enough for them to fly every few days, syrup may be fed them with safety.

To obtain the best results, we should not be content with feeding merely to save the lives, but should now begin stimulating feeding, as this doubles the strength of colonies, and by that means doubles the size of the honey crop. It

requires about one gill of syrup per day to each colony to accomplish this, and it will be found to be a good investment.

We can also furnish the bees a substitute for pollen in early spring, and especially during this month, when most needed. Any kind of grain, ground fine, will answer. I prefer oats mixed with rye or wheat. Set it out in the apiary in boxes; shallow boxes are the best. First take some syrup and get the bees to working on that, then set the syrup in the meal, or spill some of it in the meal, and in this way it is no trouble to get them started. It is a very interesting sight to see them working on the meal, this alone will pay for all the trouble.

At this season dysentery gets in its greatest destruction, and often results in the loss of whole colonies. This disease is brought about by long confinement in cold weather in unprotected hives; in some cases perhaps an inferior quality of honey will bring it on. The best and about the only cure for dysentery is fine weather. A few fine days, which will admit of the bees flying freely, will ordinarily effect a cure, and without this but little can be done. Blocks of candy should be given all affected colonies. This is a healthful diet for them, and they will leave their own stores to feed upon it. A thorough drying out of the hives, chaff cushions and packing of whatever nature, is very beneficial if the weather will admit of it. Bees cannot successfully fly when there is much snow on the ground, and it is better to shade the hives at such a time, so as to induce the bees to stay in except on days that are warm enough for them to fly, when they should have the full benefit of the sun.—A. H. Duff.

PURE FOOD LAWS—A special committee of the U.S. Senate has been taking evidence as to the nature of adulteration in food products. Testimony shows there are practically no manufactured or compounded food products on the market not habitually adulterated. While some adulterations are deleterious to health, all are sold at prices far above their real value. Manufacturers claim adulteration is so general they

must either adulterate or go out of business. All manufacturers profess to favor a federal pure food law. As a remedy the committee distinguish between adulterations injurious and non-injurious to health. The former may be regulated by state statutes and the enforcement of an interstate commerce law; the latter by trade regulations such as the imposition of a revenue tax, as is now done on oleo, filled cheese, and adulterated flour. For this purpose the committee favors the enactment of the Brosius pure food law, its operation to be under the federal dept of agric.

PAINTING OLD FURNITURE—Put a small quantity venetian red or Spanish brown in kerosene oil, mix and apply very thin. Three or four coats should be applied. Then varnish when thoroughly dry. For outside work, use linseed oil, as kerosene will not be durable when exposed to the atmosphere.—[W. A. Sharp, Greenbrier Co., W. Va.]

IF CABBAGE GROWERS would use paris green promptly on young cabbages, killing all worms while young, there would be few butterflies left to lay eggs for later broods. 1 lb paris green to 100 lbs lime or plaster, thoroughly mixed, will kill all worms and not be dangerous even on cabbage.—[F. H. Burnette, La.]

CHICKEN QUERIES—J. T.: The chickens with lumps on eyes, no appetite, etc., have roup. Bathe the eye and head with Arabian balsam and give one quinine pill to each chicken daily.—C. J. C.: The Downy fowl is not a practical breed. The Golden Wyandots are considered one of the best breeds for all purposes, but no better than the Plymouth Rock or R. I. Red.—G. R.'s chickens have fever, closed eyes, bad breath, thin, yellowish droppings; a bad case of roup. Give tincture of acornite in drinking water, 10 drops to 1 qt water. Use Arabian balsam or other good ointment. Separate sick birds and keep in dry, sunny place.—A. V.: We do not advise using oil stoves in the henhouse. There is some danger of fire by dust collecting on the burner. Better cover the house with warm roofing.—Mrs S. W.: The water in which old potatoes have been boiled has sometimes proved harmful to poultry.—N. Y. Subscriber: Ipomeae is the chief remedy for scouring. Sometimes 4-5 rice will cure.

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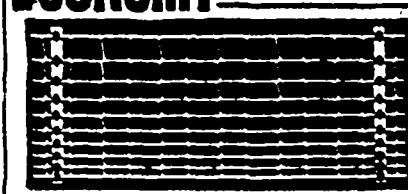
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Plants and Flowers.

A TERRACE FLOWER GARDEN.

It sometimes becomes necessary to cut down large trees that are in close proximity to the house and that leave a very unsightly stump. These stumps, with a small amount of labor and a very little expense, can be made into a thing of beauty. Take any old barrel, knock it to pieces and saw the staves, *b*, through the middle into two equal lengths. Next saw 16 strips of board *a*, 3 in wide, 35 in long and 1 in thick. Slant each end of these pieces so that they will fit together in octagon shape.

Place two of the strips on a flat surface with both ends even and lay on the half staves in a straight line and so that they will fit close together, with



AN ORNAMENTAL STUMP.

about 2 in projecting above the strip intended for the top, the other strip is placed near the bottom. Nail on the staves with shingle nails. When eight sections have been finished, set up the octagon as at *c*, and nail firmly at each joint to a piece of wood made to fit. These pieces should be a few inches longer so that they can be driven into the ground to hold the frame firmly.

Paint the frame red when finished, as this color looks well among the green, and set it up over the stump that you want to hide. Fill with rich loam and plant it with flowers. Of course one can plant any kind of flowers they choose. The one I am doing is very tropical looking, though it contains nothing but common flowers. There is a large sunflower in the center of the top circle, for it is a terrace flower garden, the stump being so high that it required two octagons to hide it, and all around a few inches from the outside edge of the bed are sweet peas, climbing beans and morning glories. In the lower circle a row of geraniums, four-o'clocks, and portulaca flourish. The vines have lovingly festooned the giant sunflower and decked it in many gorgeous colors. In the early morning, when the four-o'clocks are open and the morning glories' bright faces are all aglow, it is indeed a thing of beauty and one that costs but very little to make.

The one described is not far from the well and has a full supply of water which is conveyed to it by a short piece of rubber hose attached to a small spray pump. In filling the tree the stump should be cut as low as possible, so that it may be more readily covered with earth. If the stump is cut high there will be two octagons needed to cover it. The second one will have to be smaller if it will be about the right length for the sections of the inside circle. After the large octagon has been filled with earth, place the small octagon in the center of it over the stump that will protrude and fill it with earth and which will cover it from sight. This will form a terrace and make the flower garden more beautiful. Stumps covered in this way will soon decay and can be broken off with an ax and carted away.—[Mrs. F. C. Kline, La Salle Co., Ill.]

POTTING TROUBLES.

Have the soil in good condition. Make mellow and loose with sand and leaf mold. Mix some time in advance and keep but little cooler than the soil from which the plant to be potted is taken. It should be dryish rather than wetish, the nearer the condition of the soil in which the plant already is the better. The ball of earth in which the plant is growing should not be dry, because, strange as it may seem, no after watering will properly moisten it. Neither should it be very wet, because it will almost surely puddle and prevent the roots extending freely. Some pieces of broken pots should be put in the bottom of the pot for drainage. If pots are very dry, they should be soaked before the plant is put into them.

The pot should not be filled full. Pots that can be handled conveniently across the top with thumb and fingers may be filled to within one-third inch of the top; sizes larger than this should have space left for the thumb to take comfortable hold of the edge, sizes so large as to require both hands to carry them when full should have $1\frac{1}{2}$ in space left at the top. This space should be filled with water and the soil soaked when the plants are watered. Then water should be withheld until the soil becomes dry and the pots give a metallic or bell-like ring when rapped with the knuckles. Imitate nature. Don't keep the plants in a bog by perpetual watering unless you are growing bog plants, which you probably are not.—[M. G. Kalns.]

Scale Insects on House Plants can be best removed, I find, by washing the leaves with strong soap suds. The work may be thoroughly done by taking a cloth or sponge and carefully rubbing every part of each leaf and leaf stem. —Fred O. Sibley.

To Sow Seed in straight rows, either in box flats or out of doors, we know of no better way than to mix the seed with dry sand, put in a bottle and put a quill through the cork as illustrated. By first marking off rows, with the aid of quill and bottle they can be sown perfectly straight. A seed-sowing arrangement of this kind will last for years.

Delaware The farmers of Kent and Sussex counties have organized an iron-bound association which they intend to make a real trust with a capitalization of \$10,000. The land owners having entered into the movement, they will fine members \$10 each for violation of its rules, with danger of expulsion. They propose to handle all kinds of fruits and vegetables. The weather was mild and the roads good until Feb. 16, when the first snow storm of the season occurred, blocking up the roads and stopping travel for a few days. Prospect for fruit of all kinds good. It is a custom in Kent Co. for five or six farmers to join together and erect temporary canneries and pack their own tomatoes for which they realize \$10 per ton after the expenses of packing are taken out, while the large packers pay only \$6. Fat steers are selling for 43¢ per lb. 1 w. corn 35¢, wheat 70¢, hay 15¢ per ton, potatoes 30¢ p. basket, apples 40¢, chickens 10¢ 1 w., butter 20¢, milk at creamery 1 p. cwt.

A large share of the inferior fruit of the orchard should be eliminated by culture.—[G. T. Powell, N. Y.]

Big Gardeners

frequently fail to secure normal profits because dry weather prevents crops from utilizing stable manure; it "firesangs," burns up and dies. This trouble does not, however, arise where they use sufficient supplies of

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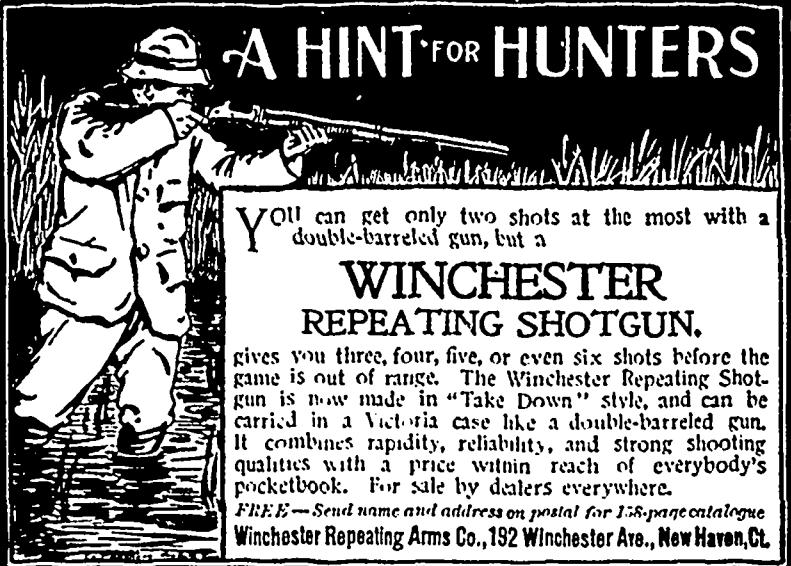
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A HINT FOR HUNTERS



gives you three, four, five, or even six shots before the game is out of range. The Winchester Repeating Shotgun is now made in "Take Down" style, and can be carried in a Victoria case like a double-barreled gun. It combines rapidity, reliability, and strong shooting qualities with a price within reach of everybody's pocketbook. For sale by dealers everywhere.

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THE HOME CIRCLE

Mrs Berwick's Easter Hat.

By Waldo.

IT ALL happened years ago, but the memory of it is as fresh and strong as if it had all occurred but yesterday, and many a good laugh have I had as I recall that Easter morning. We had taken a brief spring vacation, a friend and myself, to experience for ourselves what we had long read of and heard of the joys of sugaring. And that is how we chanced to be up in the little hill town of Worthington at Easter time. We had planned to return home the Saturday before Easter, but finally yielded to the persuasions of our host and hostess, Mr and Mrs Berwick, and decided to remain over until Monday. And this decision settled the fate of Mrs Berwick's Easter hat.

It was in part due to the hat that we agreed to stay over, for from the moment of our arrival Mrs Berwick's hat had been the subject of much good natured banter and many jests. The fact is we had brought up the hat from the city with us. The Berkshire hills affording a limited choice in millinery, Mrs Berwick had written my mother to buy her a hat in time for Easter, giving her a few specific directions, but trusting largely to my mother's good taste. The letter wound up thus: "I want a hat that will show the natives what an Easter hat is." Mrs Berwick was city bred and was living in the country under protest. So the hat was duly bought and intrusted to my care for delivery and in due time Mrs Berwick was trying it on before the looking glass to a running fire of comment and chaff. It certainly was a beauty, a dainty creation from New York and most becoming to our hostess, although we pretended to find all manner of faults with it. So it came about that one of the inducements held out to us to remain over Sunday was the privilege of accompanying Mrs Berwick and her hat to church. We accepted and plans were immediately laid for the morrow.

As I have said, the season was late. There had been much snow that winter and now the last of March, there were still huge drifts and roads were in a terrible condition. It was therefore with a justifiable degree of doubt that Mr Berwick finally consented to Mrs Berwick's suggestion that we attend service at the little meeting house on the tip top of Peru hill, the highest point in Massachusetts, rather than at the Worthington church, some miles nearer. Of course we city innocent & loyally supported Mrs Berwick's plea and the majority ruled despite many a protest from Mr Berwick. But we knew not what we did. And then there was that hat. Worthington could bow down before that hat anytime; it should take Peru by storm first.

Easter morning dawned bright and beautiful and we were early astir, for the ride was a long one at best and we were beginning to suspect a hard one. Mr Berwick harnessed old Jerry, a sober, sedate old family pet, out of whom the interminable hills had long since taken any colts, friskiness he may have had, and presently the open democrat was at the door. While the rest of us were getting in Mr Berwick disappeared. Soon we saw him coming, carefully carrying a five-quart pail. "For goodness sake, John, what have you got there?" exclaimed Mrs Berwick. Mr Berwick handed the pail to me and it was heavy. "We go past Abe Hopkins' place," said he, "and I want him to try my syrup. Promised him I'd bring some over the first chance I had, and now's the chance."

I have said the roads were bad, how had only a hill farmer can know. In places the roads were so grizzled that we were forced to get out in the mud while Mr Berwick skillfully pilot'd Jerry and the wagon across. Twice we took to the fields through openings in the fence, made for the purpose in order to get around huge drifts. Progress was slow. Occasionally the road pitched sharply down hill and the brake with which the democrat was fitted was all that made

descent possible, but for the most part it was up, up, up; it seemed as if we would never stop climbing. The Sunday morning shine disappeared early, for up the steepest parts all save Mrs Berwick walked, and the mud, sticky, slippery Berkshire clay, it was awful. The day was warm and the wind was soft, but it blew as only on those hilltops it can blow. It has always been a marvel to me that they do not have to anchor their roofs up there as they do in Switzerland. Mrs Berwick started with the new hat where it belonged, crowning her bewitchingly pretty face, but alas! the wind whooped and howled and played hide and seek among its flowers and ribbons and threatened to ruthlessly destroy this dainty bit of millinery, so that Mrs Berwick tied a scarf over her head and carried the hat in her lap while we chaffed her unmercifully.

At length the little Peru meeting house was outlined against the sky: it seemed scarce a half mile distant, but Mr Berwick assured us that we still had two miles of hard climbing, the hardest of the trip. The road certainly did not improve, but the goal was in sight and there was every prospect of our being in time for service.

Then there loomed up a huge gleaming, dazzling barrier, a tremendous drift. As before we took to the fields and when we again struck the road, congratulated each other on the surmounting of what was probably the last of our serious difficulties. But it is the little things of this life that are often of greatest moment. Just above the drift on the steepest part of the grade was an innocent looking little gully, a very small gully. It promised nothing worse than one more jolt. Old Jerry stepped over it, the forward wheels struck into it, and then—well, after that things happened at a rate that left no vivid impression of details. The king bolt, weakened by the long strain, snapped as the wheels struck the gully. Old Jerry, startled by the crash, started forward suddenly with the forward wheels, pulling Mr Berwick, who fortunately had a tight hold on the reins, over the dashboard. But the rest of us? Oh, the memory of that wild ride.

Of course with the departure of the forward wheels we were all pitched sharply forward, and then while we struggled to untangle ourselves we started down hill at a velocity that threatened dire destruction. To this day I bless that snow drift. Rushing down the hill backward we struck the drift fairly in the middle and such was our speed that the body of the wagon was thrown completely over with the three of us struggling underneath. Fortunately the snow was soft, otherwise we could hardly have escaped serious injury. As it was, when we had struggled out from the smothering snow and taken account of damages, we found nothing more serious than a few bruises and scratches. Mr Berwick, who had tied Jerry to a neighboring tree, had come manfully to our rescue. He was unhurt, save for his dignity, but his Sunday clothes were a sight.

Suddenly Mrs Berwick bethought her of her hat. "My hat! my hat!" she cried. "Who has seen my hat?" We began the search at once. The wagon body was removed and we plunged into the depths of that drift. Mr Berwick's foot struck something hard and I saw a comical look of dismay pass over his face. He dug in cautiously and then brought out the syrup pail. Needless to say the syrup was not there, but it was full nevertheless and it contained—Mrs Berwick's hat. And such a sight as that hat was! Syrup dripped from every point of ribbon and draggled feather. It oozed through the delicate straw. In fact the hat was the most pitiful wreck that could be imagined. The cover of the pail had evidently been forced off when we first struck, and then in the struggle in the snow someone had forced the pail down over the hat.

There were tears in Mrs Berwick's eyes as she viewed the wreck, and yet for the life of her she could not help but laugh, and as for the rest of us we laughed until our sides ached. "I don't care," said she. "I said from the first that that was the sweetest hat in Berkshire county." "It certainly is now," remarked Mr Berwick, dryly. By this time we had begun to appreciate our own troubles, for save Mr Berwick, not one of us had escaped more or less of a syrup bath, and it was a sorry looking party that finally accepted the hospitality of Mr Hopkins and cleaned up

and made repairs, while Mr Berwick arranged for another wagon to take us home. Since then Mrs Berwick has had other Easter hats, but I suspect she still mourns the one that never got to church.

The better evil is, the worse it is.

GUESS.

What burns to keep a secret? Seal-wax.

When is a brick a tile? When it is a projectile.

When is a confidential friend most to be dreaded? When he takes you apart.

O, How Happy I am to BE FREE from

NEURALGIA

Is what Mrs. Archie Young of 1817 Oaks Ave., West Superior, Wis., writes us on Jan. 25th, 1900. "I am so thankful to be able to say that your SWANSON'S '5 DROPS' is the best medicine I have ever used in my life. I sent for some last November and commenced using it right away and it helped me from the first dose. Oh, I cannot explain to you how I was suffering from neuralgia. It seemed that death was near at hand. I thought no one could be worse. I was so very weak that I hardly expected to live to see my husband come back from his daily labor. But now I am free from pain, my cheeks are red, and I sleep well the whole night through. Many of my friends are so surprised to see me looking so well that they will send for some of your '5 DROPS.'"

RHEUMATISM



"I have been afflicted with rheumatism for 2 years. I was in bed with it when I saw your advertisement in a paper, recommending SWANSON'S '5 DROPS' very highly. I thought I would try it. It has completely cured me, but I like it so well that I want two more bottles for fear I will get into the same fix I was before I sent for '5 DROPS,'" writes Mr. Alexander Putrell of Vanuadale, Ark., Feb. 6th, 1900.

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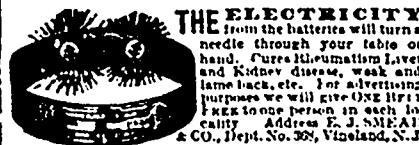
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OUR TALKING BEE.

Why the Boy Leaves—Much has been said and written about "why boys leave the farm." Now if all the boys who have been born on farms or have lived on them the greater share of their lives should all stay where they are, why, I believe that farmers would become a drug on the market. There would be so much produce raised that there would not be a market for all of it. There are very few boys who leave the farm but who have some aspiration to satisfy, and such boys generally, if they have any ambition at all, come out on top. There are some boys who leave the farm who are literally too lazy to do manual labor. And there is yet another class of boys who would prefer to have more money for their own use than the average farmer has. Such boys generally become school teachers, professors, etc. They do not wish to wait till the crop is sold at the end of the year and then stand the chances of getting no clear profit. One reason why the American farmer boy leaves the farm is because he does not receive credit for what he does. He is very observant and reads and thinks a great deal. The father may have made a success at farming, but his ways may be a trifle ancient. Occasionally, if the boy thinks at all, he may have a suggestion to make and he often receives a sharp rebuke. Is it any wonder, then, that the boy becomes disgusted with his father? Some may put forth the argument that the boy ought to stay and inherit some of the property of his well-to-do father on the ground that if he goes away he will be very apt to get nothing. What does the boy care for money? Nothing. Senator Goebel started penniless; A. Lincoln started penniless. Now is it not to be believed that if one starts out into life penniless, or nearly so, he will have as good a chance, if he lives honorably, of reaching the top notch as the one who starts with plenty of means? [No 4 of Letter Circle \$5.]

MY SOLDIER BOY.
I am praying for you, Jeanie,
While the days are going by,
Praying when the sun is shining,
And when stars are in the sky:
"Shield him safe from every danger,
On the land and on the sea,
Hear me! hear me! oh, my Father,
Save him—send him back to me!"

W. F. H.

A Fool's Paradise—I see so many writing their experiences for the Councillors that I want to say something myself. I am an old bachelor of 33, and have lived in the far west for 20 years, most of the time in the saddle, a cowboy, and as such never had the advantages of ladies' society. Yet at about 20 I fell in love with a neighboring ranchman's daughter, wooed and won her, and we became engaged. We were both poor, and agreed that it was best that we should wait until I had prepared a home before we were married. Then for over three years I was the happiest man in all this world—living in a fool's paradise—and then, just as we were about to realize the fulfillment of our "love dream," came a shadow between us. Then came tears, jealousies and separation. We never quarreled; I couldn't do that. I never blamed her; I loved her too well. Yet I have always thought that I did the only thing any man could do, offered her her freedom, which she accepted. I sold out my small and hard-earned possessions, and left there, and I have never seen her since. Yet once since that I held out the olive branch of peace—it was de-



clined with thanks. That was long years ago. I still love her, and somehow I can't help but believe that she still loves me. She is called an old maid now—but time has made great changes—and while I still love her I feel more resigned to my fate now. Yet I get awfully lonesome and tired of living alone all of the time. And now comes another part of my story. I do not drink, use tobacco or gamble, have a quarter section of good land, a log cabin and a few head of stock, all my own, and do not owe a dollar. A little over a year ago I became acquainted with a young lady in the east—a farmer's daughter—through the columns of F & H, and I have become deeply interested in her, and while I have never seen her, she is neat and tidy (her letters show that), and I believe she would make a good wife for a ranchman. She has a better home than I can offer her. She also knows my story—we have been very plain-spoken with each other—and I have been thinking of making her a visit. If I do, and I find her as I think she is, it is my intention to ask her to be my wife. To speak to her of love would be hypocritical—admiration, respect and confidence being all that I would or could offer. I want to hear what the Councillors think of it, especially the female readers. Before I close let me say a few words to the young men of the east: Come west and get you a home. Where I live are millions and millions of acres of government land to be had for the asking. Bunch grass grows abundantly, wood and water are plentiful. The weather, while severe at times, is not like the damp atmosphere of the Mississippi valley. Here it is high and dry.—[Cowboy.]

The Convent—Your advice, Miss Moore, was received with much pleasure. Now do any of you think it would be advisable to take a business course in some college, and did any of you girls ever go to a convent to school, and if so, please tell me how you liked it? I intend going to school at the Ursuline convent next session. Not because I am not a Catholic do I hesitate, but because I have heard they are so strict and cross. Miss Moore, I like your style of writing, because I believe you do it for the good of others.—[Fretful Midget.]

A Push—When you see others down-hearted who cannot get along, feeling that fate is against them, does it ever occur to you that if you gave them a push it would lighten their burden and also give you a light heart? How often a little push means a great deal! A little smile will often brighten a whole household. There is trouble enough for each of us, but we will escape much by looking on the sunny side.—[Katy Dld.]

A Dull Mist—Really, it grieves me more than my tender heart can express to learn that you, dear friends, have changed your names from Tablers to Councillors; for, if I must admit it, anything concerning a table has ever held a peculiar charm for me. Alas and alack! how well I used to stow away for safe keeping those never-to-be-forgotten apple preserves and jars of blackberry jam! How about the overcoat. Niskayuna? Pardon me, but would you mind laying claim to two such articles while you are on the lookout? Just keep your eyes open, and by all the gods, I swear you shall be awarded in due time, but may they also decree that I shall be absent at the time! A charming young lady? Why man, turn your eyes in the direction of Miss Puhlico; mine have been in that direction, except when in the direction of Mr. Codde's sister (by the way, where is that chawming dwother?) and have seen nothing but a dull mist through which I could distinguish nothing definitely, but 'Time, it alone will tell.'—[Bill of the Ark.]

Drowning Trouble—Nella Arnal, do you think that anyone ever takes to drink to "drown trouble?" I know that is quite often claimed as the cause, and it may be that trouble sometimes weakens the will power so that one is overcome by temptation, but in my opinion drowning trouble is used as an excuse to in some degree lessen the reproach and cause more pity and tolerance for that particular drunkard. One might far better commit suicide in some other way, for then one leaves the remem-

brane of the immediate past, but when one takes to drink, all one's past record is forgotten in the shame of filling a drunkard's grave. As you say, the best and surest way to find relief from care and trouble is to take it to the Heavenly Father, but so many haven't this refuge, and these are the ones who are most tempted by drink. Has been, I, too, have often wondered about those writers of the past, especially Kink; but all inquiries seem to meet with the same lack of success. I think they must have gotten a good name and prominence and then dropped gracefully out forever. It seems strange that so few young people in the country are interested in botany. There are few studies I like so well, and the country surely is the place for study. It is, however, difficult to live up alone. [Wyopa.]

KANSAS.

Away with your fashion, your glitter and gold,
I do not desire them, if the truth will be told.
Let me stay here in Kansas, where the hot winds blow,
And the alfalfa blossoms four times in a row.
Ours the land of adoption, not the land of our birth,
But there's no place just like it on the face of the earth.

C. W. M.

Bread and Water—I tried to love my father's wife and was very glad when he brought her home. I had known her before and loved her. She had been with us but a few days when she tried to show her authority and made things very disagreeable for us. It made me wish I was once more with my dear old grandmother. But no, I tried to conquer my feelings. It was of no use. She was worse when my father was away than when he was home. She seemed to take advantage of that time and let loose her temper. One time she accused me of telling a falsehood, which I did not. Thinking she could force me to say what she wanted, she shut me up for a whole week on nothing but bread and water. This was repeated four days again. When my father came home I was allowed to go down and see him, but was forbidden to say anything to him about my punishment. If I did I should have double dose. Of course I was young and easily frightened, so dared not say a word. Not only was she unkind, but cruel, heartlessly cruel, leaving marks on my body that will follow me to my grave. I am

[LETTER TO MRS. PINKHAM NO. 94393]

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and received benefit from it at once. I have taken it ever since and now have no backache, no pain in my side and my stomach and bowels are perfectly well. I can honestly say that there is nothing like it. If I could only tell every woman how much good your medicine has done me, they would surely try it."—MARTHA M. KING, NORTH ATTLEBORO, MASS.

The way women trifle with health shows a degree of indifference that is past understanding. Happiness and usefulness depend on physical health; so does a good disposition. Disease makes women nervous, irritable and snapish. The very effort of ailing women to be good-natured makes them nervous. Write to Mrs. Pinkham, she will help you to health and happiness. It costs nothing to get Mrs. Pinkham's advice. Her address is Lynn, Mass.

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Talks with Our Lawyer.

WILL—D. W. W.: A father makes a will devising to his son a certain farm, and at the time the will is made, telling the son to move upon the farm and live there during the lifetime of the father; the father is to pay for all material put into any improvements upon the farm, the son to perform the labor necessary to build such improvements. The father has since made a new will, leaving the farm to someone else. This would probably not be such a breach of the contract as to enable the son to recover against the father for labor done upon the farm, as the father might change his mind before his death and leave the farm to the son; but if the father should seek to have the son vacate the farm, an action would probably lie against him for such breach. After the death of the father, the son would probably have a claim against his estate for the value of such labor done upon the farm. In case the farm were devised to some other person.

DEED—H. S., N. Y.: A man cannot deed real estate directly to his wife in N. Y. The practice is to deed to a third person and have the third person deed to the wife. The absence of revenue stamps does not make a deed illegal, but prevents the use of it as evidence in a federal court. The omission also makes the grantor liable to a fine. An adopted child inherits the same as a natural child.

JUDGMENT—J. J. B., Vt.: A wife's property cannot be taken to satisfy a judgment against the husband. A judgment carries costs and the costs can be collected if the man who owes them has any property, but if he has moved out of the state and has no property he cannot be imprisoned because the costs are unpaid.

LAND TRANSFER—M. L. W., N. Y.: By the Torrens system of registering and confirming titles to real estate, a court is established to register land titles and make them secure for all future time. Upon a petition being properly brought before the court, the public examiner examines the title, and after notice has been given to all adjoining owners and adverse claimants, an absolute certificate of ownership is issued. Thereafter all incumbrances upon such land, to stand in law, must be entered on the certificate itself. This makes the certificate documentary evidence of the title and for the future dispenses with the examination which at present a purchaser must institute in order to assure himself of the condition of the title. This statute has been recently considered by the supreme judicial court and has been declared to be constitutional in all its provisions.

LEASE—B. M.: A lessee asks his lessor to build a vault in his store and the lessee agrees to furnish the steel and iron doors. When the lease expires, can the lessee remove the doors and take them with him? No. They became part of the real estate and are not a removable fixture.

TIMBER ON DEEDED FARM—A. B., N. Y.: A sells the timber on his farm to C. In the deed to C the timber was not reserved. Can C now stop B cutting the timber? Yes. The deed carried the real estate, including standing timber.

DEED—J. W. F., N. Y.: A deeded a farm to B, describing it by meets and bounds and also describing it by stating its measurement as 100 a more or less. After the acceptance of the deed the land was surveyed and found to measure only 80 a. Has B any redress against A? No. The description by meets and bounds governs. B should have had the survey before he closed the matter.

MISCELLANEOUS—E. A. M., N. Y.: Parties to an agreement to conduct a farm on shares may agree to whatever division of the proceeds they choose.—H. M. S., Mass.: There is no new law in Mass requiring C people selling fruit in Mass to have a license.

CURB—G. H. I.'s horse has a curb. Mix 2 dr. balsalide of mercury with 2 oz lard and rub a little of this on the enlargement once every third week and continue it for several months if necessary.

FARMERS AND THE TARIFF—A Cal pruned grower thinks it isn't right for him to get a better price as a result of the duty on prunes. In the end, however, prunes will be so largely produced as to be cheaper than ever to the consumer, while by growing and handling them on a large scale the producer will still be able to make a little profit. If the iron and steel magnates were as conscientious as our Cal friend, the protection of monopolies would cease. My own idea is that, as long as the country is under the protective policy, the farmer should and must have his share of protection, especially on crops like sugar, tobacco, fruits, vegetables, etc., that are imported so largely or grown in the tropics by coolie labor.

Our Veterinary Adviser.

LAME MARE—C. J. S. has a mare whose hoof grows long at the toe but not at the heel; it is very tender. Shoe her with a bar shoe. Mix 2 dr. emetharides with 1½ oz lard, rub a little of this around the heels once a week and continue it for several months.

DISTEMPER—G. P.'s dog has distemper; there is a discharge from the nose and eyes and it has a poor appetite. Give one tablespoonful of good whisky and one grain of quinine at a dose in a little milk three times a day. Wash the eyes with warm water twice a day.

CYSTS—A reader's pigs have lumps on shoulders. The lumps are cysts, but it would be difficult to give the cause without an examination. After the cyst is opened and all the fluid pressed out, inject a little tincture of iodine; this will destroy the wall of the cyst and it will not fill up again.

OBSTRUCTED TEAT—J. H. S. has a fresh cow and it is with difficulty that the milk can be drawn from one of the teats. The opening at the point of the teat is too small for the quantity of milk which comes down the tube. Use a milk tube to open the orifice and to draw off the milk. If a tube cannot be got, use a knitting needle. After this has been used a few times it will be all right.

SPAVIN—O. N. wants a cure for both bog and bone spavin. For bog or blood spavin, mix 2 dr. balsalide of mercury with 2 oz lard and rub on a little every second week. For bone spavin, have it fired by a qualified veterinarian.

ECZEA—A.—J. S. has a cat that bites itself and the hair comes off in patches. Boil 1 oz stavesacre seeds in 1 pt water for one hour and let it simmer for one hour longer, then strain and add water to make it up to 1 pt. Then wash the cat all over and repeat in a week if not cured. Also give a t-spoonful of cod liver oil at a dose three times a day for a week or two.

HORTICULTURAL MATTERS—A. B.: Australian brown onion seed is sold by W. A. Burpee & Co of Philadelphia, Pa.—Several Subscribers: For information about the early market gardening Chicora colony of S. C. write to Mr. Rissley, 211 South Tenth street, Philadelphia, Pa.—E. D.: Two very good books on spraying are, Weed's Fungi and Fungicides, and Insects and Insecticides, they are sold at 50c each by the Orange Judd company of New York.—Several subscribers: I have not the address of F. A. English of Whitman Co., Wash., on file.

LIVE STOCK AND DAIRY—F. H. W. A.: Barn Plans and Outbuildings, sold by the Orange Judd company of New York at \$1, contains illustrated plans for various sized barns.—W. Z.: Babcock milk testers and other dairymen's supplies are sold by the Vermont Farm Machine Co of Bellows Falls, Vt, the Dairyman's Supply Co, 1937 Market street, Philadelphia, Pa. and P. M. Sharples Dairy Supply Co, Chicago, Ill.—Hide Prices. F. G.: The quotation in F & H 11½ p. lb., related to hides taken off at packing houses, which always command a big premium over country lots.—W. E. E.: The Buckley watering device, made at Poughkeepsie, N. Y., runs the length of the stable and is self watering for stock.

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GOOD CIDER Clear, pure, Long Keeping Cider, and more of it from the small amount of apples can only be secured by using a HYDRAULIC PRESS. Made in various sizes, hand and power. The only press awarded medal and diploma at world's fair. Catalogue and price list sent free upon request.

Hydraulic Press Mfg. Co.
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SILK REMNANTS ALMOST FREE We have purchased a large available supply from several large silk mills. We send a great big package of samples, over 200 pieces, carefully trimmed, for only 25 cts. They come in all colors and designs. Each piece a distinctive pattern. Our 25c. package shows what our remnants are like. We receive letters every day praising our packages and ordering at the same time larger quantities. Write at once. Good goods at a small price.

For All Lame Horses

whether they have sprains, rheumatism, splints, tumors, or other forms of bodily enlargement, see

KENDALL'S
SPAVIN
CURE

Cures without a blemish as it does not blister. As a liniment for family use, it has no equal. Price \$1. Six for \$5. Ask your druggist for

Kendall's Spavin Cure, also "A Treatise on the Horse," the book free, or address

DR. R. J. KENDALL CO., ENOSBURG FALLS, VT.

It towers above them all.

It's Time

You Knew! It's time you used it! Every horseman and owner of domestic animals universally endorse

Veterinary Pixine.

It is supreme in effectiveness. It does more than cure mere sores on speed cracks, scratches, old and chronic sores and skin diseases on horses, cows and dogs that were given up as incurable, this pure, scientific and old-fashioned ointment proved the one absolutely healing remedy. Heals without scab. Money refunded, that's our guarantee that it will not fail. At all druggists' and dealers', or mailed postpaid.

TROY CHEMICAL CO., Troy, N. Y.

We Want AGENTS For The Economy Harness Riveter And other fast selling articles. The riveter can be used in any position. Needs nothing where a rivet or rivets are required. It serves the purpose of a hand tool. Can be carried in the pocket. Agents make \$3 to \$15 a day. Send 50c for sample, loaded with Suntex, and Terms to Agents, Y.B. Foote Co., Fredericktown, O.

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 shirt collar 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,

Portland Mfg. Co. Box 3 Portland, Mich.

The Rocker Washer

WARRANTED to do the family washing in PIECES. INDOOR. No need for washboard; no wear on clothing. Write for special price and description.

ROCKER WASHER CO.

Clinton, N. J., Hayes, Ind.

Liberal inducements to live agents.

THE WORLD'S WASHER NO MONEY IN ADVANCE. No money paid till you're satisfied. Washes easy. Clothes white as snow. No other like it. I joy freight. Circulars free. C. E. ROSS, Clinton, Illinois.

\$833 MONTHLY SALARY PAYABLE WEEKLY WITH EXPENSES Men or Women to represent us in their own state. You able to take charge of solicitors and attend to collections. No investment required. Send stamp for application blank. CO-OPERATIVE CO., 311 Star Bldg., Chicago, Ill.

PARIS SILK CO., NEW YORK, N. Y. We have purchased a large available supply from several large silk mills. We send a great big package of samples, over 200 pieces, carefully trimmed, for only 25 cts. They come in all colors and designs. Each piece a distinctive pattern. Our 25c. package shows what our remnants are like. We receive letters every day praising our packages and ordering at the same time larger quantities. Write at once. Good goods at a small price.

Starving India's Pitiful Cry for Bread

Statistics that Stagger

Fifty Million Starving People—Many of them at Death's Door

THE most pitiful, most heart-rending cry for bread that has ever escaped human lips or reached human ears comes from famine-smitten India's sorely distressed and greatly afflicted people. Fifty millions of human beings in various stages of starvation, and 5,000,000 of these at death's door! The greatest catastrophe of the century is now being enacted, and unless help comes speedily to India's relief, **Ten Millions** of men, women and children must die before the next crop is harvested.

Three months ago the Government placed the number of sufferers at thirty millions; to-day it admits that this estimate was too low and that double the number would probably be nearer the truth. Five millions of these people are now employed by the Government at wages averaging two cents a day each, but the remainder must be relieved by private charity or succumb to starvation. England is doing nobly, but she is not equal to the occasion, and America, with her overflowing, bursting granaries, must speedily come to the rescue or these millions will perish from the very lack of what we enjoy in superabundance.

A Noble Record

Christian America has never yet turned a deaf ear to the pitiful cry of agonizing despair. Ireland, Russia, Armenia, Cuba, Puerto Rico, and India itself bear eloquent witness to her generous and prompt responsiveness to every worthy appeal, and in this calamity, greater than any yet witnessed, she will unquestionably prove herself worthy the noble record of the past, and share in generous measure the abundance wherewith she has been so bountifully blessed.

Help Them to Help Others

Missionaries now working in India have been so affected by the scenes of heart-rending suffering which they have been compelled to witness that, though their hearts are breaking, their tears refuse to flow. They themselves have given all they had and all they could borrow and now they are daily inditing pathetic communications, and sending them broadcast with the fervent prayer that God would move the hearts of their more fortunate brothers and sisters in distant lands to contribute largely in this hour of

India's direst need, and thus help them to help those who are looking to them for salvation from impending death.

Looking This Way

For many years these godly men and women have pointed the people to the Saviour, and countless thousands have accepted him and have been baptized in the Faith. Indeed, the cause of Christ is making wondrous progress among the dense and dusky population of India, and now that disaster has befallen them and death is threatening them, what wonder that they are hoping for help from this country whence hail the missionaries who have told them again and again the beautiful story of one Jesus who went about doing good, who fed the multitudes, and whose followers in this prosperous country are walking in the footsteps of their Master, daily testing their

A Safe Investment

"He that hath pity upon the poor lendeth unto the Lord, and that which he hath given will he pay him again."

Let us each and every one make this investment, and lend to the Lord all we can possibly spare, and in due time he will repay all that we have lent him. How many lives will you undertake to save? Send us word quickly lest they perish before relief can reach them.

The Land of His Birth

This pathetic cry for bread comes from the continent of Asia, concerning which Dr. Talmage says:

Egypt gave to us its monuments, Rome gave to us its law, Germany gave to us its philosophy, but Asia gave to us its Christ. His mother an Asiatic; the mountains that looked down upon him, Asiatic; the lakes on whose pebbly banks he rested, and on whose choppy waves he walked, Asiatic; the apostles whom he first commissioned, Asiatic; the audiences he whelmed with his illustrations drawn from blooming lilies and salt crystals, and great rainfalls, and bellowing

of corn of the 2,500 millions harvested last year, we can fill ten ships, and the greatest life-saving fleet ever organized will speed across the waves and bring hope and life for four months to a million men, women and children.

Let All Join Hands

Let every village be represented. Let every Church, Sunday School, Home and Foreign Mission Society do its share. Let Sunday School Officers, Teachers and Scholars vie with each other in hastening to the rescue of this unfortunate people. Let farmers organize and send car-loads of corn. This is the greatest opportunity of the closing century to do good in the Master's name. We are His almoners. He gave up all for us and now through these starving ones he claims a share of what we have entrusted to our care. Are we unjust stewards? God forbid!

Help or They Perish

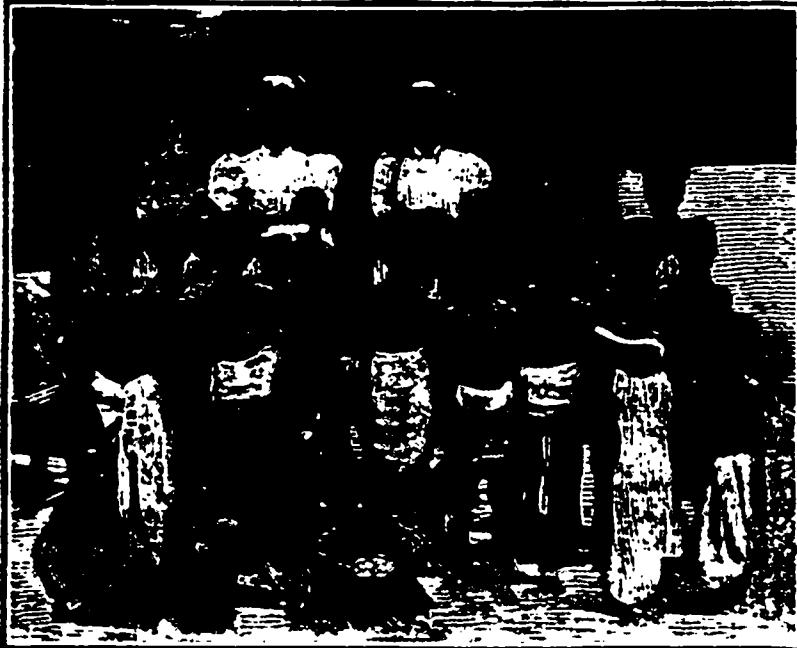
We urge upon every reader of FARM AND HOME to join the life-saving crew and to throw out to these starving people the life-line, before it is too late. Send to us for mite boxes and collect funds. Fill a car with corn and send to us for instructions. If you cannot pay freight charges The Christian Herald will pay the bill. If you cannot send corn send money. Pray that God's people everywhere may realize the importance and urgency of the case and may willingly and cheerfully give, even as God has prospered them.

Young People's Societies, Epworth Leagues, Christian Endeavorers, work earnestly; for the night of death threatens to enshroud a continent. You can give the clouds a silver lining and you will do it. This is The King's business. It requires haste. Every day's delay may prove fatal. Let us then be up and doing. He that sitteth in the heavens watches us. His eye is upon us. What we do let us do it as unto Him, and he that seeth in secret and rewardeth openly will bless us with an everlasting blessing.

The Daughters of the King

There are in every community godly women, sympathetic and kind; consecrated women, who long to do good, as they have opportunity and to aid the poor, the suffering and the distressed. We look confidently to them for aid at this time. They can work, they can speak, they can plead, pray and give. May God call them to this mission and graciously prosper the work of their hearts and their hands.

Every remittance of money and every contribution of corn will be acknowledged in THE CHRISTIAN HERALD.



FAMINE CHILDREN PLUCKED AS BRANDS FROM THE BURNING
The sketch at the American News Home on Dec. 12, 1886, by Mr. Muller

lives by the standard he established, and ever asking themselves, **What would Jesus do?**

Help Them Quickly

And shall they look in vain? Shall they be disappointed? Shall we lead them to believe that our religion is mere profession? Shall we shut up the bowels of our compassion and tell them that American money and American grain are for Americans only—that religion is one thing and charity quite another? Or shall we open up our hearts, our hands, our purses and our granaries, and in the name of our Master whom we serve bid them share with us the bounties of our Heavenly Father's goodness?

Two Cents a Day

Two cents a day will support a life. One dollar will keep a man, woman or child two months from starvation. Ten dollars will save five lives for four months.

Your Opportunity

All may help in this blessed work. Every contribution, however small, will be heartily welcomed and promptly acknowledged in the columns of The Christian Herald. If we can secure a million bushels

ADDRESS: INDIA FAMINE RELIEF FUND,
The Christian Herald, 425 to 432 Erie House, New York