

Vol XXI No 410

MONTREAL, CHICAGO and SPRINGFIELD MASS JULY 1 1900

o 50 Cents a Year

The Year's Trade.

The trading of a country is a pretty sure index as to its prosperity. For the past fiscal year, the import and export statement shows a far larger volume of business than ever before, about \$360,000,000, or nearly 40,000,000 more than last year. In spite of a shortage in vessels the export trade shows a steady increase, Canadian produce having been sent abroad to the value of \$158,800,000 for 11 mos to June 1. Gradually the Canadian producer is learning how to put up produce in a form demanded by foreign consumers and the better this is understood the wider should be the market and greater the quantity exported.

It Will Pay.

With a prospect of bountiful crops and good-to-high prices for them, I hope a large number of readers will plan to attend the best fairs. These come at a season when you can best get away. The fairs are a great educational institution. No matter in what branch of farming you are interested, even if only as a consumer, you will at most of the exhibitions find enough of interest to more than pay for the trip. It is not yet so late but that, if a little extra care and attention be given the chickens, a favorite vegetable, or even the selection of some of the choicest grain, a premium may be secured. By all means go and see what the farmers of other parts of your state, competing in the sale of similar products to your own, are doing. It will pay, and be lots of fun.

Belgian Hares.

They are getting frightened in California, and no wonder, for fear the million or so of Belgian hares raised there as pets or for market will overrun the state and that the awful experience of Australia will be repeated. Dr Palmer of the state board of agriculture says that everything possible should be done to prevent the liberation of the animals. The craze for Belgian hares has extended to the Atlantic coast, and the peril is therefore a national one.

How to Sell Produce.

The value of a good salesman or saleswoman is beginning to be understood in the farm produce line, as it is appreciated in other branches of trade. The art of selling any kind of merchandise has passed the old book agent stage. The seller must have good things, attractively put up, and he (or she) must be a gentleman or lady in manner. He must have the book agent's courage and persistency without his brass; courtesy and tact are the winners. Enterprising sons, wives and daughters who are getting regular customers for farm products by such means as described are laying the foundations of a larger business career. As illustrating the value of tact, it has been discovered that German manu-

facturers have continued to hold the South American markets against the United States and England because they have better salesmen; men who are not over smart and do not bore their customers, but win their confidence and their orders through personal friendship.

The Institute Excursionists.

Well paid for the trip, is the general expression of the excursionists who visited the Ontario agricultural college and experiment farm during June. He who visits this grand institution for the first time is bewildered by the variety and extent of the work, both practical and experimental. The annual visitor notes with eager interest the development of plans, the effect of experiment work, examines the variety tests of field crops intelligently, and when he returns home, resolves to be a better and more studious farmer. The excursions to Guelph are a great thing for the farmers of Ontario and are doing much to popularize the institution and extend the results of its work.

Prohibition Marches On.

Prohibition is now the law of the land over Prince Edward Island. The Farquharson government, as one man, just before adjournment last month, placed a law on the statutes forbidding the sale or barter of intoxicating liquor, which is intended as absolute prohibition. Manitoba, too, is deeply in earnest in its stringent prohibitory law. With Quebec in line, nothing would hinder the enactment of federal prohibition throughout the Dominion. While Quebec can hardly be expected to change its position for many years, the prohibitory laws of all other provinces and territories, if followed up by strong public sentiment, should keep the coming generation farther than ever before from the evil effects of the saloon. In the meantime Quebec is a rich field for temperance agitators.

Four words tell the story of the famine in India treeless plains, drouth, starvation. There are too many people in proportion to the number of trees. Over in Egypt the Nile is gradually drying up, and elsewhere in Africa the Congo, because of the destruction of the forests at their sources. The Sahara was once fertile. We are beginning, thank Providence, to know the value of a tree in America.

No better incentive to high-class farming can exist, so far as this year's crops are concerned, than the sharp advance in wheat, the firm condition of the hog market at the highest price in some time, and the eager search for horses. But it is only the producers of the best of these products that realize the most satisfactory returns.

Give yourself and your men a fair nooning in these hot days. You wouldn't expect a valuable horse to work hard immediately after a hearty meal. All hands will work better after a little rest.

Dominion and Provincial.

SUMMER ACTIVITIES.

Nova Scotia—The spring in the Conwallis and Annapolis valleys opened about two weeks later than usual. Farming operations were greatly delayed by cold weather and frequent rains. Fruit trees were all in bloom June 16, and never before has there been such a show. The pear, plum and apple crop will be a very heavy one. Insects are numerous, but are kept down by intelligent spraying. A great many new orchards are being set and in a few years the valley in the blooming season will be one huge bouquet. The hay crop will be large, as none of the dykes or uplands had any winter-killed; pastures are splendid and frequent showers have done away with the need of any hose on lawns. Peaches will be a small crop after the abundant one of 1899. The potato crop, which is a very important one, should be large. Although the season was late, farmers have sown less grain and planted largely of potatoes, many having 40 a. The bug is here in full force, and it is the insect year, caused by the mild winter. Small fruits, and native or wild berries will be an enormous crop. Farmers are now sowing large quantities of turnips and buckwheat. The outlook is indeed good.

Canadian Horses have been in great demand for the imperial forces in South Africa and several large shipments have been made. In an address at Montreal Lord Minto pointed out what a profitable field for the Dominion there may be in the way of the export of horses. There is a continuous demand for good mounts, and Canada is superior in this resource to most countries.

To Get Rid of Rose Slugs the work should be undertaken before a bug is to be seen. While buds on rose bushes are very small and before the bugs have begun to appear, the surrounding soil should be soaked with kerosene emulsion and have plenty of soot stirred on. I treated two or three large rose bushes by stirring the soil for about 2 ft around the bush, digging down as deep as I could without disturbing the roots, then mixed in a lot of manure. After smoothing and pounding it down with the spade, I laid flat stones all over to keep the chickens off. Two or three times before the roses were in bloom, I lifted the stones and picked out the grubworms which I found very thick directly under the stones, then sprinkled the ground with kerosene emulsion and soot. When the bushes were covered with roses what a relief it was not to see the bugs. Soot is also good for killing currant worms and should be put on while the bush is damp.—[Marie.]

Picking Clapp's Favorite Pears—Some years ago I had on some nursery trees very near the street a quantity of Clapp's Favorite pears, which might be a temptation to vacation boys if left to ripen on the trees. I recalled what the late Col Wilder said of the importance of harvesting that variety while it was yet green and hard. Aug 1 I gathered one half of the pears and spread them upon a blanket in a cool room. In two weeks' time they had turned yellow, with red cheeks and become mellow. When I carried them to

market, Mr Marsh's clerk said, "We will be glad to have all you raise if as sound and handsome as these." What remained on the trees were picked Aug 15, they had grown in two weeks to be of double the average size of those picked Aug 1, but were yet hard and were ripened by the same process and were large and juicy with a touch of lemon acid sweetness, most refreshing. It cannot be too impressively impressed upon growers of pears that the Clapp's Favorite, if left on the trees until it turns yellow, will be rotten at the core and worthless while it is one of the very best pears if ripened in the manner I have indicated.—[J. W. Adams, Hampden Co, Mass.]

Manitoba—The early season had most flattering prospects for crops. As the season has advanced, lack of rain has retarded the growth and filling out of plants and many crops will be disappointing. The hay crop, June 14, was reported from all parts of the province as very light and with a continuation of dry weather the wheat crop will be severely affected.

Canada's Tobacco Imports last year included 5,856,600 cigars, mostly Cuban, 2,212,000 cigars, 194,400 lbs manufactured tobacco. Exports included 3,000,000 cigars, 158,000 lbs cut and plug and nearly 400,000 lbs scrap and cuttings.

Ontario—The production of the section around Victoria Co includes stall-fattened cattle, mutton lambs, bacon hogs, creamery butter, factory cheese, red clover and alsike seed. Some stock for breeding purposes is also raised. Egg production is getting to be a large item. Population is dense for an agricultural country. Markets have improved greatly in recent years and can be called good. British markets take nearly all the surplus. There is a growing tendency to increase live stock so as to convert all possible farm productions into more finished and therefore more valuable commodities.

The C P R has 20,600,000 a of the richest land in Manitoba and the northwest, donated by the Dominion government, and has also sold nearly 4,000,000 a. The C P R owns more land in the northwest than the entire cleared land of the great province of Ontario. This land is being sold at \$3 p a, so the land subsidy alone is worth over \$60,000,000. It is said the C P R is the largest land owning corporation in the world.

The Northwest Territories are not only being settled rapidly by miners but large numbers of farmers are locating and making permanent homes. The same can be said of the Dakotas, Montana and Minnesota. The northwest is being appreciated as never before, because of its rich soil, healthful climate and generally favorable conditions for farming.

The maritime board of trade of N S, N B and P E I holds its annual meeting at Kentville, N S, Aug 15. Several matters of vital interest to the economical conditions of these provinces will be considered.

The fruit obtained from the home garden is so much superior to that obtained in markets it is worth a great effort and considerable annoyance to have on one's table an abundance of such choice, fresh, ripe fruit.

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All Around the Farm.

IN THE ALFALFA HARVEST.

The alfalfa crop all depends on the way the spring starts out. If weather is warm and some rain falls so that the alfalfa does not suffer for moisture before water can be had from irrigation ditches, it makes a rapid growth and is in blossom June 1. If it has grown under good conditions it will be from 2½ to 3 ft tall and yield 2 tons p a. Its blooming is the signal for mowers to put in their work. What is cut one day is raked into windrows the next and left there to cure. Like clover, alfalfa suffers by much handling. If the weather remains fair the juice-filled stems are dried sufficiently to stack by the third or fourth day.

Before the advent of the machinery now used in stacking, the "nutting up" of alfalfa was a very heavy piece of work, and one crop was scarcely harvested before another was ready to cut, for if water is properly applied, in about six weeks from the time of cutting, alfalfa is in bloom again as long as the warm weather lasts. But with the later inventions it is estimated that 40 tons may be put in the stack in one day, provided three gatherers or "go-devils" are used. With these machines and the stacker the work is all done by horse power. The hay lies in windrows. The gatherer takes it up and carries it to the stacker, which runs upon three wheels, one under the driver's seat and one at each corner near the horse's heads. All over the field, be it far from the stack or near by, the horses come in pushing the load before them; a load that almost hides them from sight of one directly facing them.

Having deposited its load upon the stack, the stacker lowers to the ground the part of the machine in which the hay is lifted. This is similar in shape to the rake of the gatherer, with a



Stacking the Alfalfa Crop.

light frame attached to keep the hay from falling off as it rises in the air. The horses bring in their load and are driven squarely up to the stacker, the rake teeth of the gatherer sliding between the rake teeth of the stacker. The man in charge of the stacker places a fork against the hay so that when the horses are backed the load remains on the carriage of the stacker. The word is given to go, and the boy in charge of the horse attached to the stacker leads him out. Slowly and safely the load of hay rises above the stack, as illustrated, and is carried around until it reaches the point somewhere on that stack 40 ft in length where it is most needed. The foreman "trips" it by a rope and the hay falls to the stack. The horse is backed, the carriage lowered and everything is in readiness for another loaded gatherer. [S. E. Howard, Weld Co., Col.]

CULTIVATE CORN SHALLOW.

Because many prominent corn growers advise it, as do experiment stations where the two methods of deep and shallow cultivation have been tested.

Because loose soil is exposed to the air and dries out. With shallow cultivation there is less loose soil and therefore more moisture above and about the corn roots.

Because 2 in of loose soil will, for all practical purposes be as good a mulch as 4 in.

Because deep cultivation, especially the latter times over will destroy and injure the roots of the corn that grow out from 2 to 5 in below the surface of the ground, and because no corn plant will give its best results whose roots have been mutilated in this way.

Because in a field where there is not an unusual growth of weeds shallow cultivation will kill and destroy them as well as deeper plowing.

Because there is less soil exposed to washing rains and carrying away by winds.

Because in a wet season the shallow method is equal to the deep cultivation, if not superior; and in a dry season there is no questioning its superiority.

Because we believe that 2 in is sufficient and that a stirring of the soil to a greater depth than 3 in between the rows of growing corn, will lessen the yield.—[J. L. Irwin, Nemaha Co., Kan.]

CARE OF THE POTATO CROP.

The modern method of growing potatoes is much cheaper, easier and faster than 20 yrs ago. A boy can care for more acres than his father could then. Soon after planting run the smoothing harrow over them, or, if hard, lumpy or well crusted, use a spring tooth, with lever set, and run it 2 in deep. As soon as one can follow the rows, run a cultivator between the rows as deep as possible and stir all the soil between the plants; if it will not "get there," use a one-horse plow, and the deeper the better. Make ridges and furrows, deep and wide. In a day follow with a weeder or smoothing harrow and level off. After this, have the weeder set on the cultivator so it can-

not run more than 2 in, and insist on it that it never goes deeper.

The roots will be 18 in long and meet between the rows by the time the foliage is 10 in high and they must not be cut off. The practice of beginning with shallow cultivation and going deeper each time is both harmful and foolish. Long feeding roots are essential to rapid growth. If planted 4 in deep, as they should be, I would not hill up at all, but continue constant, shallow cultivation until midsummer and after every shower, to prevent crusting, until digging time. Potatoes do not require so very rich soil, but it must be mellow, loose and moist. The constant working will naturally work some dirt toward the plants and they will not get green.

Take good care of the leaves. The best way I have yet found is to use a spray atomizer. We load it with bordeaux mixture and paris green to kill bugs, flea beetles and ward off blight. It is applied by hand, and every part of the hill covered. We use a strong solution of bordeaux and paris green because we apply such a small portion to each hill. A few quarts is enough for an acre. The bordeaux mixture has an invigorating effect on plant growth and drives away flea beetles as well as preventing blight.—[C. E. Chapman, Tompkins Co., N. Y.]

THE RUTABAGA CROP.

The rutabaga contains 10 per cent dry matter, while the mangel contains but 9 per cent and the turnip 5½. The rutabaga and the carrot are about equal in nutritive value. When timothy hay is worth \$9 a ton, a ton of rutabagas are worth 3.21 and a ton of potatoes 2.63. The rutabaga or Swede must not be confounded with turnips; it is a much more valuable crop.

The rutabaga is an indispensable crop to all who keep live stock, horses, cows, pigs or sheep. There is a general opinion among dairymen that rutabagas are not fit food for the dairy cow. This is mostly prejudice. The sweetest butter I ever ate was at a hotel last winter; the maker of the butter was present and assured us that the cows from which this butter was made ate a bushel of rutabagas per day. If precaution is only taken to feed to cows just after milking, as much as a bushel a day can be fed without deleterious results in the butter. For pigs, boiled turnips mixed and fed warm with meal make an excellent growing and fattening ration, and for wintering sows or shot stock there is no better or cheaper feed than raw turnips (rutabagas), and for sheep the flock that does not receive a daily ration of turnips is not the profitable one.

The ground intended for rutabagas this spring was plowed last fall and harrowed. In late April rather a light coat of horse manure was applied. It was plowed under 4 in deep and harrowed once since. It was planted June 15. Top-dress lightly after plowing with any short, fine manure and harrow thoroughly. Had I any rough, strawy manure I would apply it before this last plowing. Sow in drills 36 in apart and scatter some good acid phosphate in the drills to give seed a quick

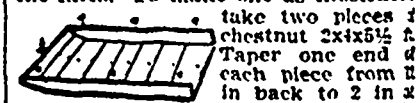
start. Sow with a hand drill at once 2 lbs p a. The horse cultivator should be run between the drills every 10 days until after thinning, which should be to 10 in apart in drills.—[J. A. MacDonald, P. E. I.]

Sow 10 Lbs Clover on every acre of your crops. It will make a thick mat several inches high by plowing time and will be a fertilizer equal to 10 tons of manure per acre. Its long roots go down where no others do and bring up phosphoric acid and dissolve plant foods.

Forage Crops on Sand—The species of salt bush which are at all likely to be adapted to the climate of Mich are annuals and will not make a permanent sod. The soils of Newago Co are well adapted to the salt bush, but I somewhat question whether these annuals will make a profitable growth in Newago Co climate. L. A. W. might get some seed and try planting in a small way. A legume which the Mich exper sta have tried somewhat extensively seems far more promising than the salt bush. The sand lucerne has been raised 3 yrs, and on June 4, was a swamp of forage, although the soil on which it is growing is a very light sand. We chose purposely the very lightest sands on the college farm for the test of this legume, and find that it does splendidly on just such very sandy soils as are to be found in Newago Co. We have harvested from this light sand over three tons of well-cured hay per acre per year, and the plants are still very promising, being neither winter killed nor seriously injured by the drought. The sand or hairy vetch may be sown in the fall with a fair expectation of a good crop next spring.—[Director C. D. Smith.]

Baling the Hay Crop—Every large hay grower now bales his hay. The most popular size for a bale is 100 lbs. A bale of this size is more easily handled and thus adds value to the hay. There are many persons who make a business of baling hay, going from farm to farm like those engaged in threshing wheat. They charge a certain price for baling and furnishing the wire, regulated somewhat by the prices of hay. Every farmer who raises more timothy hay than is necessary to meet the requirements of his own farm should bale it before carrying it to market. The farmers in every thickly-settled community would do well to sow timothy enough to justify them in buying a baling press, which in the marketing of 300 or 400 acres of hay will pay for itself in a single year. The press may also be used in baling clover hay and wheat straw, the latter being worth \$4 p ton or more baled.

A Stone Boat is very serviceable on the farm. To make one as illustrated



take two pieces of chestnut 2x4x5½ ft. Taper one end of each piece from 2 in back to 2 in at the end. For the bottom, spike to the 2x4 in pieces a 2x4 chestnut plank crosswise. Then take three pieces of an old wagon tire 5 ft long, weld a ring in the end of one piece and bolt in on the bottom to draw by in the middle, as at d. Bolt the two pieces on the outer edges of the boat, the bolts to run up through the side pieces. Three bolts at each side, as at a, is enough. To keep the sides from splitting, two ½ in bolts may be put through at each end.—[Timothy Seawick, Litchfield Co., Ct.]

The Canada Thistle can be eradicated by careful and persistent spading in such a way as to prevent the plant from appearing above ground, by early after-harvest cultivation of the stubble ground, by frequent introduction of hoed crops into the rotation, by seeding much with clover, taking one or two crops of hay, then plowing the clover sod shallow early after harvest and cultivating frequently through the fall, and by summer fallowing.

The Cattleman who has built a silo and is handling to the best advantage his corn crop from the time it is planted until turned off the farm, as a finished product, is taking the shortest cut I know of to prosperity.—[A. P. Ketchen, Ont.]

The Poultry Yard.

FEEDING FOR GROWTH.

To push young chicks along and keep them in health, there is nothing better than boiled eggs mashed up, shells and all, with two or three times their bulk of stale bread crumbs, or cracker crumbs, thoroughly mixed. Mix not more than enough for one feed of this at a time and give them only what they will eat readily and quickly. Feed stale bread soaked in milk, either whole, skimmed, or buttermilk after the milk has been squeezed out by hand. Only one feed of this should be prepared at a time, as it will sour if left to stand any length of time. Millet seed scattered in the litter about the brood house or the short grass, plump wheat screenings, oats and corn ground together, with an equal quantity of bran, and made into Johnny cakes,—are good for the youngsters.

After they get to be three weeks old cracked corn and whole wheat may form a larger part of their diet, increasing it as they grow older. Better results are attained by a judicious alternation of all, day by day, or feed by feed; it keeps the appetite sharp and they are always on the lookout for the new surprise at meal time. Don't forget the pure clean water, they need that whatever the feed. If the soil does not supply grit in proper shape and size it should be furnished them; a dish of charcoal where they can help themselves, or a handful in the soft feed four or five times a week, will prevent most of the ordinary bowel troubles. No tonic or stimulant should be needed at this age, but if a brood gets suddenly chilled, a dose of some good condition powder will help to put them on their feet again.—[B. Holmes, Jr.

HOW I SUCCEEDED.

Before I had attained any degree of success in the poultry business, I started with a flock of 50 hens and at the close of the year I made them pay \$1 a head or 50 on the flock. I figured, as many others do, that if 50 will pay 50, 200 will pay 200, but somehow hens don't figure that way. They figure that just in proportion to the increase of the flock the profits will decrease in the same ratio, especially with beginners. I started with 175 the next year, and before the winter was over I began to discover the truth of the above maxim, which if more generally known would save many heart-breaking sobs of the overzealous beginner. The following year, I told my folks that I would sell all but 25 hens and make a study of them and if I could not make them pay I would go out of the business. At the close of the year I made them pay 2 a head and I was satisfied. The following year I increased the flock to 50. At the close of the year I made them pay 2 a head and was satisfied. The next year I increased the flock to 65 and woke up the morning of the new year and found I had made 3 a head on common, mixed hens with eggs at the ordinary market prices at the stores. When I got up to a flock of 200 hens I had to be satisfied with 2 a head profit with eggs at common market prices. During last winter there were rolled out of my flock of 130 hens 70 to 80 eggs daily.—[L. S. Richards, Mass.

Watch the Turkeys—Never let a turkey steal her nest. If she does, ten to one it will not be found until she hatches, and probably not a chick will she raise; for turkeys are the wanderers of the barnyard habitats, and the weaklings will be lost in the wet grass or hawks or crows will pick them off. Young turks cannot stand dampness, therefore keep them dry and warm, letting them out only when the weather is sunny. Grease their heads to prevent lice.—[L. L. Trott, Me.

Little Ducks have to be taught to know a chicken mother. They don't understand her language; have to learn it just as you would a foreign tongue. If you put them out in a coop when hatched, have a small yard in, so that they cannot stray away from the hen and get chilled.—[Follow an older flock until they fall over exhausted. The flock that did the best for me was kept with the hen in a large box in the

kitchen window for several days. The first food was moistened bread which they ate from my hand. They didn't seem to know enough to pick it up from the floor of the coop, and paid no attention to the old hen's vociferous calls to come to dinner. While this method is rather tedious, one is paid for the trouble by the rapid growth of the youngsters, besides it takes away that natural timidity with which Pekins are almost always endowed.—[Mrs Leonard Johnson, Delaware Co, Pa.

Buff Beauties—Those who especially admire the buff breeds prefer this variety of Leghorns because to its deep, rich plumage it adds the practical qual-



PAIR OF BUFF LEGHORNS.

ities of other Leghorns, being a prolific layer, early maturing, with yellow legs and skin and very vigorous. The color is probably obtained from an infusion of blood from the R I Reds. The cock has rich buff colored hackle and saddle, so deep as to nearly approach a brown. The standard gives for the tail a deep, rich buff or copperish bronze. The rest of the plumage is light. White or black feathers disqualify.

Poultry Queries—C. H. S. complains that his ducks lose the use of their legs. If they have a wet place to sleep in it will cause this trouble. Give plenty of oyster shells, feed less shorts and more corn meal.—W. R. B. has fowls with symptoms of cholera, yellowish droppings. His hens are getting some sour or moldy food or impure water. Remove the cause and if possible, change to new ground.—J. S. G. has hens dying from some mysterious disease which causes the crops to burst open.

It is possible they are getting some poisonous food. Better change the location.—C. H. E. asks cause of unnatural growth of wing and tail feathers. The trouble is brought on by close confinement and cover feeding and lack of green food. In very young chickens the trouble is caused by weakness of the stock, often caused by inbreeding.—B. L.: I do not know of any home-made egg stimulant which amounts to anything, as healthy fowls need no stimulant except plenty of meat and a variety of grain and green food.

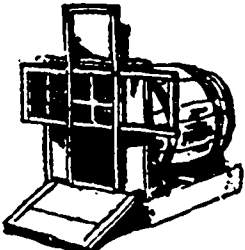
A Market Egg Box—Where one markets his eggs to private customers or at the stores even, the egg box shown herewith will be found very serviceable. It is a box about half the length of a 30-doz egg carrier, with a



handle and fitted drawers, each drawer being fitted with pasteboard egg fillers. A drawer of eggs can thus be taken from the box and carried into the customer's house, the box itself being left in the wagon. The bottom of each drawer may well be covered with coarse bran, and the pasteboard fillers placed on these, thus providing a soft resting place for each egg.

The Best Food for Turkeys when just hatched is stale wheat bread moistened with milk and hard-boiled eggs crumbled fine. Season the feed lightly with black pepper. When three weeks old, commence with corn meal cooked or scalded. A little bone meal and meat will be a great help. The cause of turkeys dying when they begin to feather may be lice or lack of stimulating food. This is a critical period with young turkeys. They should be kept dry with plenty of food.—[R. G. Burinton.

A Barrel Coop Up to Date—A useful modification of the old-fashioned barrel



coop is suggested by a Maine correspondent. The barrel or box rests on a pair of runners or sled to which the front and a set of doors are attached, thus keeping the bottom of the coop perfectly dry. The revolving doors turn on a half-inch bolt. One door has fine wire bars, another has two bars which keep the hen inside; another has glass for stormy weather and the fourth allows both hens and chicks to go in and out.

Geese will destroy a fair-sized garden should they have free passage there for an hour.

BINDER TWINE IMPORTANT NOTICE

THE MARKET IS LOWER

WE NOW QUOTE PRICES AS FOLLOWS:

No. 1	No. 2	No. 3
PURE WHITE SISAL 8½¢ per pound. Runs 455 to 515 feet to the pound in 50-lb. bales.	STANDARD 8½¢ per lb. Runs 455 to 515 ft. to the lb. in 50 and 60-lb. bales.	MANILA 11½¢ per pound. Runs 550 to 625 feet to the pound in 60-lb. bales.

As stated in all our advertising relating to Binder Twine—and we meant all we said at the time—when the season opened there was an uncertainty regarding supply and prices. Later developments prove that the market instead of going higher has gone lower, therefore it gives us pleasure to state that in accordance with our long established custom our customers are entitled to the

DIFFERENCE BETWEEN THE NEW PRICE AND THE OLD.
As we have sold many thousands of farmers, it may be a few days before our customers receive checks in settlement of the rebate their accounts will be credited with.

JOHN M. SMYTH COMPANY,
ESTABLISHED 1867
150 to 155 also 217 and 225 West Madison St., CHICAGO

GOOD WHEELS

MAKE A GOOD WAGON. Unless a wagon has good wheels it is useless. THE ELECTRIC WHEELS are good wheels and they make a wagon last indefinitely. They are made high or low, any width of tire, to fit any axle. They can't get loose, rot or break down. They last a long time. Catalog free. Electric Wheel Co., Box 56 Quincy, Ills.

SUCCESS SILT EDGE

Potato Harvester

A practical, perfect working potato digger at a price that every farmer who grows three acres of potatoes can afford to pay.

Every potato grower in the United States should write for full description and price.

D. Y. HALLOCK & SONS, Box 811, YORK, PA.

GOING TO FEED OATLE

or hay or both this season? There is a better fence made for surrounding food lots, barn yards, or the farm in general than THE ADVANCE FENCE. Perfectly made, all interests, and for stock. SOLD DIRECT TO FARMERS AT WHOLESALE. Nobody can buy it any cheaper. Write for circular and special discounts. ADVANCE FENCE CO., 117 Old Street, Ferris, Ill.

MONEY SAVED IS MONEY EARNED.

You can save all the expense of mending your harness with the Key-Brand on a Stroking Machine. Make your own Check Mates and Hangers. Rivets, Hoops, etc., any thickness of leather. Agents wanted.

HARTMAN MANFG. CO., Box 11, Elwood City, Pa. Or Room 68, 200 Broadway, New York City.

Paint Your Hen

house with Magnite—the water paint. Ten times more durable than whitewash; won't peel, wash or rub off. Fire-resisting, anti-septic; keeps out lice. The most economical paint for all farm buildings. You can apply

MAGNITE

to almost any surface; costs ½ less than oil paint. Exterior (weather-proof) and Interior; white and twelve colors. Sold by dealers. Book free.

J. A. & W. BIRD & CO., Boston, Mass.

OUR ILLUSTRATED Premium List.

Our Complete Premium List which should be in every home will be sent free to such as have not received it on application. It is handsomely illustrated and contains upward of 200 useful and valuable premiums, and some of the greatest and most astonishing offers ever made by responsible publishers. Now is the time to get up clubs, and by doing a little work for Farm and Home you may secure one or more of the many good things offered, free of cost. Sample copies and everything necessary to a successful canvass, sent free on request.

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FARM AND HOME,
Springfield, Mass., or Chicago, Ill.

Organize and Educate.

AN ENTERPRISING PATRON.

One of the most successful and interesting farmers in the United States is



STATE MASTER G. D. HORTON.

pure bred cows graze about one of the finest grange halls in the country. He has a handsome residence and owns and operates 8 of the 16 cheese factories in the township.

Brother Horton was associated with the first grange movement in Michigan, 26 yrs ago, being a charter member of Fruit Ridge grange and has been master 20 out of 26 yrs. During over 20 yrs of his membership Brother Horton missed but three meetings of his grange and these on account of sickness.

Under the well-planned leadership of State Master Horton, the Mich state grange has made a phenomenal growth during recent years. At the Nov session of the national grange, 75 new granges were reported as having been organized during that year.

From Jan 1 to May 1, 72 granges have been organized, from Jan 1 to April 1, 124 granges reported a total gain in membership of 1300 or an average of 10 1/2 for each grange.

for the first quarter of this year, showing continued prosperity. Mich now comes well up to the front in grange strength and influence. The seven leading states in grange strength at the present time are: N Y 500 granges with 45,000 paid up members, Me 355 granges and 25,000 members, N H 290 granges with 22,500 members, Mich 400 granges and 20,000 members, O 350 granges and 19,000 members, Pa 477 granges 18,500 members, Mass 148 granges with 15,000 members.

CARVING A SUCCESS.

The most successful man in this vicinity I know of is not the wealthiest man, neither does he enjoy the largest income, but the results he has himself achieved entitle him to the place. Left fatherless and penniless at an early age, in a community where the pauper is solitary and despised, he is now, though still a young man, the owner of three good farms well stocked and having good buildings.

He put into vigorous practice what he knew about farming and butchering. Five or six miles away was a flourishing village where a large amount of fresh meat was consumed. This farmer set himself the task of supplying the market as far as possible. It is as much within the farmers' province to furnish meat as to sell milk and butter.

To those of his meat customers who desired it, he furnished butter and lard; also eggs and sometimes fruit. Of all the animals slaughtered at the farms not so much as a toe nail went to waste. The second farm was also paid for in a few years and there was a fat bank account.

Pure Food Legislation means laws to prevent the adulteration of food, to protect the public health, to protect consumers of food products from fraudulent impositions and producers of these products from fraudulent competition.

For the better preservation of health, have pleasant homes and cheerful company, provide a good cook, let her have plenty of fruit for the table, fresh milk, eggs and fresh vegetables.

Our Veterinary Adviser.

Questions for this department are answered in full, but on account of the large number of queries received it is often some weeks before replies can be printed.

GARGET-L. B. wants a remedy for garget. In the early stages of the disease foment the udder well with hot water for half an hour three times a day and after each bathing apply a little of the following: Acetate of lead 1 oz and water 1 qt; also give 1 1/2 lbs epsom salts at a dose.

SORE FOOT-Mrs F. W. has a cow that has a breking out just above the hoof. Poultice it for a few days with linseed meal. Then mix 1 dr chloride of zinc with 1/2 pt water and apply a little twice a day.

INDIGESTION-J. M. C. has a horse that seems to be well, but is very dull, and loose in the bowels. Mix 4 oz sulphate of iron, 4 oz nitrate of potassium and 2 oz nux vomica, divide into 24 doses and give one twice a day in bran mash or if he will not eat it in bran, put it into 1 qt oatmeal gruel and pour it down.

RHEUMATISM-E. C. C. has a hog that is very lame in both hind legs; he can stand on them, but is in great pain. Give 15 drops oil of gaultheria, 25 drops tincture of opium and 1 dessertspoonful of cod liver oil at a dose three times a day.

BRINE-A. D. M. has a hog that got 6 qts pickle brine and it died in 48 hours. Brine should not be given to hogs, as it will cause inflammation of the stomach and bowels.

RHEUMATISM-W. A. B. has some pigs which get lame in one hind leg; also chickens that have scum over their eyes. Give each hog 15 drops oil of gaultheria and 1 dessertspoonful of cod liver oil at a dose three times a day after meals.

SORE MOUTH-M. W. F. has a horse whose mouth is sore at the corners and it will not heal. In such a case rub the sore part with nitrate of silver once, let it alone for three days, then mix 30 gr tannic acid, 1 oz of glycerin and 1 1/2 oz water, and apply a little once a day.

CHAT WITH THE EDITOR-V. V. G.: The "white mold" on gooseberries is mildew, a fungous disease for which the proper remedy is bordeaux mixture sprayed over the bushes about the time the fruit has set. It is too late for this year to begin this work to save the crop of fruit for this season.

MARRIAGE BETWEEN COUSINS-Subscriber, Kan: The following states prohibit marriages between first cousins by blood; in the other states such marriages are permitted: N H, Ohio, Ind, Kan, Ark, Nev, Wash, N D, S D, Mont and Wyo.

KENDALL'S SPAVIN OURE



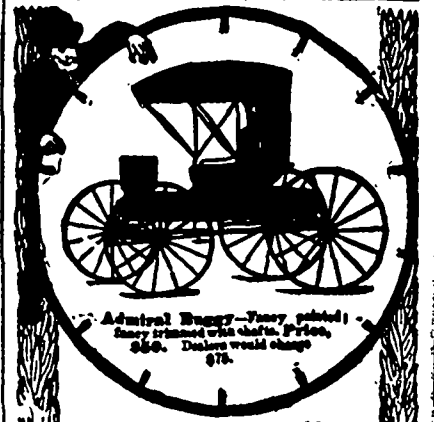
The old reliable remedy for Spavin, Rheumatism, Sprain, Cuts and all forms of Lameness. It cures without a blister because it does not blister. Price 25 Cts per Ounce. As a Remedy for Family use it has no equal. Ask your druggist for Kendall's Spavin Oure, also "A Treatise on the Spavin" by Dr. J. S. Kendall, D. V., published by Kendall's Spavin Oure Co., Lansing, Mich.

In the Blood

Here is the origin of a majority of human ailments, -scrofula, salt rheum, pimples, humors, sores; troubles of the stomach, nerves, liver and kidneys, all have their starting point in bad blood, and therefore all may be cured by purifying, enriching, vitalizing the blood with

HOOD'S Sarsaparilla

The Best Medicine Money Can Buy.



We Sell Vehicles and Harness at Less Than Wholesale Prices.

On the above buggy the saving to the purchaser in the neighborhood of \$100. The quality is all right in every particular. To assure you of this we will ship this buggy anywhere subject to your examination and approval. If not right and satisfactory you return it at our expense.

Advertisement for Steel Roofing, featuring the text 'STEEL ROOFING' and 'THE ONLY TOOLS YOU NEED.' It includes details about the tools and materials used for roofing, such as 'We have on hand 2500 square BRAND NEW STEEL ROOFING' and 'Price per square of 24 1/2 feet \$1.75'.

Advertisement for Ginseng Seed & Plant, featuring the text 'GINSENG Seed & Plant.' It includes details about the product and its availability, such as 'We are headquarters for Ginseng Seed & Plant' and 'AMERICAN GINSENG GARDENS, 802 BELL, New York'.

Advertisement for Diamond Profit Hydraulic Press, featuring the text 'DIAMOND PROFIT HYDRAULIC PRESS.' It includes details about the press and its uses, such as 'Diamond Profit Hydraulic Press' and 'Made in varying sizes, hand and power'.

Advertisement for New Buggy #26, featuring the text 'New Buggy #26.' It includes details about the buggy and its features, such as 'Two new styles of buggy' and 'Please mention FARM AND HOME when writing to advertisers.'

Live Stock Interests.

HANDLING BEEF CATTLE.

A Breeder's Practical Experience.



GOOD CATTLE, abundance of cheap winter food and good sound judgment in feeding are essentials to success. First, decide on the particular class or type of cattle to be kept, being guided by

market demands, making personal tastes a secondary consideration. Demand changes. Ten years ago the export trade required great, heavy 4 or 5-year-old steers weighing 1450 to 1800 lbs. Then it was quantity, now it is quality. To-day we find neat little 2 or 3-year-old, well-finished animals, weighing 1250 lbs up, will command top prices. If weight can be combined with quality, so much the better, but quality is of first importance.

QUALITY IS DETERMINED

from a butcher's standpoint among cattle by the greatest per cent of weight in those parts of the carcass which give the highest-priced cuts. To do this a steer must be well sprung in the ribs, thickly fleshed along the back, with a good straight underline and well developed hindquarters. Avoid a light-flanked, bare-backed animal as you would the evil one. The sire must be purebred. It is poor economy to save 50c or \$1 in the first cost of the calf and lose 10 to 15 when placed on the market. The prices at which purebred stock can be obtained leave no excuse for the use of an inferior animal. Neither

BREEDING OR FEEDING

will of themselves, separately and alone, produce satisfactory results. Only by the co-operation of these two factors can success be obtained. We must breed for quality, and feed for weight. By far the most important period in an animal's life is the first 12 mos. I like to have calves dropped in the fall, can more easily coax them along and teach them to eat and when weaned in the spring they can be turned on fresh grass and will receive little or no check, but go vigorously along. Other things being equal, fall bred calves will be better animals at 30 mos than their competitors, dropped in the spring, will be at 36. When 2 or 3 mos old, teach the calf to eat a little clover, hay, oats, bran, etc. A hundred weight can be added to the live weight of a calf at less than one-third the cost of the same gain on the same animal at 3 yrs of age. Mr Stewart, an authority on feeding cattle, found the average cost of feeding nine animals for the first 12 mos was \$3.39, during the second year 7.97 and the third year 12.54 for every 100 lbs of gain. The cost of feed when the experiment was made, however, was much higher than to-day.

During the finishing period, care should be taken to prevent the cattle losing in the fall what they have gained during summer. It is poor policy to allow cattle to shiver around during the cold rains and frosty nights of late fall and early winter, consuming as fuel that fat which it has cost good money to produce. Run them under shelter nights and supply a feed of hay or turnips, turning them out to grass again when the weather moderates. The change from summer to winter ration will not then be so violent, and cattle will be 50 lbs per head heavier on Jan 1 than if allowed to rough it. An abundant supply of

CHEAP WINTER FOOD

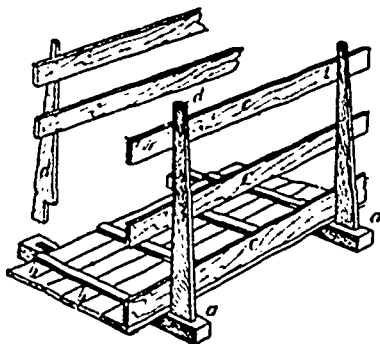
is essential to success. Cattle cannot be finished at a profit on hay and grain. Something that can be produced in larger quantities and at very small cost must be provided, and corn, whether cured as fodder or ensilage, fills the bill. It is beyond all doubt the best and cheapest winter feed. J. Whoever has an abundance of straw will find that by growing roots to feed with it, he can feed cattle at a cost which will compare very favorably with corn. Field roots have a feeding value apart from the digestible nutrients, in that they exercise a beneficial effect upon the digestion and general health of the animal. Cattle getting liberal rations of succulent feed, such as roots or ensilage, will have the sleek, thrifty appearance of grass-fed cattle, and there will be little trouble with indigestion or having them go off their feed, as is often the case

with cattle fed exclusively on dry fodder and grain.

In the compounding of a grain ration for finishing cattle, there is room for the exercise of a good deal of judgment, since our object in all feeding operations is to obtain the greatest gain for the smallest possible cost. Stockmen must have a knowledge of the relative feeding values of the various grains at his disposal and must at the same time consider their market price. It is a mistake to start cattle off early in the season on too heavy a ration of grain. The tendency is to induce indigestion, and cause the cattle to go off their feed. It is better to start them off on a very light ration, and keep gradually increasing the quantity until during the last four or six weeks the cattle are receiving all the grain they can profitably consume. It is well to bear in mind that it is not the amount of grain that we can crowd into a steer's stomach that makes him fat, but the amount which he is able to digest and assimilate.—[A. P. Ketchen, Huron Co, Ont.

A HOG-LOADING CHUTE.

A substantial chute for loading swine may be made as portrayed herewith. The bottom or foundation crosspieces, a a, may be of cedar or some light



A MODEL HOG CHUTE.

wood, about 6 in square with a hole mortised in each end, about 2x5 in, and as long between holes as the wagon box is wide. Lay on these the floor, b b, of 1 in lumber, pine being best, 8 or 9 ft long. Across this nail strips 1 in square to prevent the animal from slipping. For the sides, the uprights, d d, are of 2x6 in material, tapered at the top and a shoulder formed at bottom end to fit mortise hole in a. The slats, c c, are nailed to the inside of uprights, d d. If the uprights, d, are mortised strongly into crosspieces, a, the side pieces can be slipped out of the floor piece and the whole chute hung up in a sheltered, out-of-the-way place, and it will last much longer and be more satisfactory to the owner than if left encumbering the yard and in all sorts of weather.—[W. J. Peal, Wellington Co, Ont.

In Sheep Breeding, one of the greatest weaknesses with Americans is that they do not adhere to a fixed type. Some men handle sheep for a while and then dispose of them and take up pigs, because sheep are too low in price, and then they go back to the sheep business when the pig market becomes dull. The man who will take up one breed and develop that, who will stick to his line, learn all he can about the work he has taken up, will come out in the end in advance.—[Prof C. S. Plumb, Ind.

The Rambouillet Sheep possesses a very strong constitution which enables the lambs to stand the severe weather which often prevails at lambing time in many of our western states. Their constitution also aids them in developing early, and they make one of the best breeds for western range breeders who ship their lambs to market in the fall. The full blood rams show their good qualities very plainly when they have been properly bred and cared for. Their large frame indicates strength and their ability to carry a great deal of flesh when placed in the feeding pen. Their fleece enables them to stand more cold than the fine wool sheep, with a greater proportion of oil, and their appetites are proof of their excellent fattening qualities. The ewes are always good milkers and make the best of mothers for range breeding. Their herding qualities cannot be improved.

Sift Sulphur under the wings of hens while incubating, as a lice preventive.

The Handy Mechanic.

A FARM WHEELBARROW.

For one of 50 lbs weight, get a wheel 20 inches in diameter, put on a tire 1 1/4 in wide and an axle 12 in long. Handles should be 4 1/2 ft long, and of 1 1/2 or 1 3/4 in material and be placed 20 in apart at inside of ends. Bolt a block of hickory wood on lower edge of handle 2 1/2 in deep and set the axle of the wheel in it, 1 1/4 in below the handles. Three cross bars 1 1/2 by 1 1/4 in, the first bar 1 in behind wheel, the second 21 in behind the first bar, outside measurement, the other bar in center. Fill in the bottom between the handles with the best pine lumber slat 1/2 in thick and 2 1/2 in high. Set on dashboard on a square with the bottom, made of half-in pine and 10 in high. Legs, 1 1/2 in square and 15 in long from top of the handles. Make frame of very best second growth hickory or white ash and put tenons together with white lead. Iron off with light braces of best Swede iron and give two coats of good paint. If wheel is made light and edges neatly dressed the weight should not exceed 30 lbs.

A box for using on a wheelbarrow is handy. Make with end pieces 3/4 in thick, 6 in wide, 2 ft 5 in long. Make a hand hole in center. Nail on for sides two pieces 1/2 in thick, 5 in wide and 3 ft 7 in long. Nail flush with the bottom. Cover the bottom with good 1/2 in lumber and chamfer off the ends even with the sides 5 in back. Such a box will hold 3 bu filled level.—[S. H. Mitchell, Ont.

To Rid a Barn of Rats, place a water-tight barrel in a dark corner, making the top accessible to the rats by setting boxes near it, or placing boards or poles so that they may climb up. The head is taken out and the barrel filled about three-fourths full with trash, corn-cobs, chips, etc. On top of this put anything to entice the rats. After they become familiar with the surroundings and resort to it regularly, clean out the barrel, fill it about three-fourths full of water, throw in enough chaff to cover the water, and put in a small block with a piece of bacon tacked on each side. The first rat will jump in to eat the bacon, the next one will not hesitate, and then there is a fight for possession of the block. The noise brings other rats, and when they get in, no matter how many, they will drown. Allow them to visit the barrel for a week at least before the water is put in.—[J. W. Prescott.

In building the farm home, its sanitary condition should receive the best thoughts of the architect.

Jottings from the Farmers.

Profit in Woodlands—Three years ago I had 8 a of pine chopped down and just 16 yrs ago this land was in cultivation and not a tree in the field. Many of the trees cut in the 8 a would measure 18 inches in diameter, and a 16-ft log could easily be obtained. The oldest tree on the 8 a could not be over 15 yrs old from seed. I hardly think the south will ever have a wood famine for we have several kinds of timber which grow very rapidly. It would be a very profitable investment to plant a large forest to the mulberry. The timber is valuable for fence posts and mulberries are a great hog food which will pay for setting of trees many times every year. A native tree in Miss, growing mostly on our low lands; some bear fruit 3 mos in a year.—[J. H. Van Neess, Jr, Clarke Co, Miss.

Crested Layers—It has been said that crested fowls are not practical, but I have 43 crested hens which average over 30 eggs a day and occasionally as high as 39. They are Houdans and Polish. They laid all winter when it was zero weather a portion of the time. [W. B. Pease, New York.

A Peculiar Pest in Bear Lake Co, Idaho, has caused serious loss. Ground squirrels have appeared in such numbers as to do great injury on many farms. Shortly after the young are born they leave the unirrigated hillsides and go to the wheat fields. Two weeks of work by them and a wheat field looks as if someone had been in it with a dull scythe. The squirrels show a peculiar fondness for a certain joint in the stool of the wheat and they eat it through and it falls over as if partly cut. The squirrels are not as large as a house rat.—[C. J. Blanchard.

Lay out the yard or farm surroundings with the very best health of the family in view, not only as regards the house, but the barns and outbuildings as well. By complying with the laws of nature, much can be done to stand off preventable diseases and to greatly decrease the ravages of unpreventable epidemics which will thereby be unable to exert their full power.

Heavy Switching Charges—The federal court has just decided that the railroads can collect \$2 switching charges on live stock shipped to the Union stockyards at Chicago. This case has been in the courts four years.

The pasteurizing of all cream for butter making may soon become a general practice of the creameries. The plan may easily be adopted by any creamery and is worthy of investigation by every creameryman.

WALTHAM WATCHES

The best and most reliable time keepers made in this country or in any other.

"Riverside" trade-mark. Movement is jeweled throughout with rubies and sapphires. For sale by all dealers.



There is a Great Difference between "hard wire" and "Page Wire."

PAGE WIRE CO., ADRIAN, MICH. Please mention FARM AND HOME when writing to advertisers.



GEM FULL CIRCLE Baler Warranted the lightest, strongest, cheapest & fastest Full Circle Baler in the market. Made of wrought steel. Can be operated with one or two horses. Will bale 10 to 15 tons of hay a day. Write for description and price. GEORGE ERTEL CO., QUINCY, ILL.

The Dairy.

HAND SEPARATORS SUSTAINED.

We have often had occasion to note the practical use of hand separators on dairy farms and the growing use and popularity of these machines indicate that all the claims which have been made for them by the manufacturers have been sustained. The old method of caring for milk and cream will not do in these times, says an exchange, when every fraction counts in the ultimate profit for the year's work and operations upon the farm; hence farmers and dairymen must take advantage of every appliance which is calculated to reduce the expense of manufacturing the raw product into finished goods. We note almost without exception that where hand and power cream separators have been used, not only by general farmers, but dairymen as well, that they have proven invariably satisfactory—when, of course, they have been in competent hands when operated; and where unfavorable results have been obtained the cause has been traced in almost every instance to the incompetency of the operator, either in the handling of the product or in the manipulation of the machine.

There are so many good machines now on the market, made by reputable houses, and guaranteed to do the work in a satisfactory manner, that it is unnecessary and unbusinesslike for anyone to buy a machine which is not guaranteed to do its work. The manufacturers of this line of machines in the United States, and those who handle the best makes of separators, guarantee every machine which they send out, and it is very seldom indeed that we hear any complaint arising from the use of this class of machines. We urge upon our readers the importance of a careful study of this question. While the first cost of a hand separator may seem considerable, yet such a machine will more than repay for its first cost in a single year's saving of the product of fifteen cows or more. This, taken together with the very easy manner in which the work may be carried on, and the tremendous saving in the way of labor of those who had previously looked after this part of the work, should be sufficient argument for farmers to buy a machine of this kind at their very first opportunity. A cream separator, like all other machines, must be well taken care of, and if so it will last for a number of years with a minimum cost for repairs.

Buttermilk Pot Cheese—Fill a kettle with buttermilk fresh from the churn, heat slowly on the back part of the stove till the curds separate (at no time coming to a boil), then cover the kettle and set off till partially cool, when dip the contents carefully into a cheesecloth bag, hang it up and let drip till dry. Finish by working salt through and molding with the hands. Pure buttermilk is very rich and pot cheese thus made of it will be found much more palatable than the rubbery curd article made of sour milk.—[F. O. Sibley, Otsego Co., N. Y.]

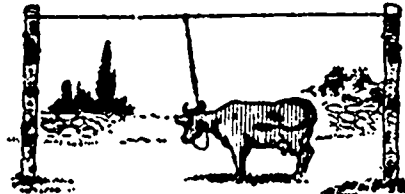
Thick Cream is obstinate stuff to cool to a low temperature by a rapid, continuous process as creamery men would like to handle it. It is a poor conductor of heat and does not flow freely like milk and thin cream. The part that comes to the cooling surface thickens, sticks there, and does not give the rest any show. We finish up the cooling of our thick cream by setting in tall slim cans in ice water. This applies to 45 per cent cream to be cooled to a low temperature. Cream of a lower test is readily cooled enough for churning as fast as it flows from the separator. [Supt Bradford, Turner (Me) Creamery.]

New York Milk Dealers' Ways have been investigated by Mr William Graves in the interest of a syndicate who proposed taking over the New York city supply from the F S M P A. Mr Graves' statements show that, no matter how clean and wholesome milk may be when it leaves the farm, after it comes into the city middleman's possession it will bear the closest inspection. Milk is a staple article of food affected by uncleanness to a greater extent than any other food. Dealers in New York conduct their business in their stables. Many of the principal ones have their offices attached to their stables, and their method of cleansing

cans is worth the investigation of the board of health. Milk is sold bottled and in cans, and in cases the milk is served the second time in unwashed bottles, and there is no knowledge as to who last used the bottles, whether they have been in house, hospital, institution, or in places where epidemics and diseases are prevalent. The cans returned to the railroad stations in the country are found sent in an unclean condition without being washed. These are the receptacles in which the agent of the dealer is supposed to transport the product back to the consumer. Much milk, if not adulterated, is reduced in quality, thus evading the laws established by the board of health.

Oleo in Pennsylvania is to have a hard time from now on, if the mandates of Gov Stone are enforced. The oleo disclosures resulting in the resignation of Dairy Commissioner Wells and the appointment of Jesse K. Cope, a prominent Chester Co dairymen, as his successor, is expected to curtail largely the fraudulent sale of that product. Gov Stone, in an open letter, charges the new commissioner to enforce the oleo law fearlessly and without prejudice.

To Tether a Cow—My method is to set a row of posts across a field and stretch a smooth wire across the tops. On the wire, between each post, place a



A SIMPLE WAY OF TETHERING.

ring 3 or 4 inches in diameter. Then with a halter on the animal, attach a rope of any desired length to the ring on the wire and to the halter. Of course the length of the rope will limit the area the animal can graze over. If the animal is inclined to be wild or easily excited, it is well not to have the rope too long or it may become tangled in it. [J. L. Irwin, Nemaha Co., Kan.]

New York's Milk Trust—The only "milk trust" in New York city is the New York consolidated milk exchange. The members of that trust produce no milk, own no farms, do no work and have no care in the matter of production. They simply sit at the city market gate, dictate to the producers, sell the milk to retailers, receive their cash, hand over to the farmers the pittance per quart which they establish as the "price" for milk, pocket the balance and grow rich. These are the men, simply and solely business parasites, who are keeping down the price of milk. They have thrust themselves between the producer and consumer of milk. A more impudent, a more avaricious, a more vicious trust than the New York consolidated milk exchange cannot be found in the United States to-day. This vicious trust can be, and it will be, utterly smashed by the farmers who produce the milk. It is only a question of time when the farmers will exercise their power, says the New York Farmer.

The Grout Bill, which has attracted so much attention in congress, will be voted on Dec 6 by the house of representatives, three days after the assembling of congress for the short session. This bill provides for an increase of the tax on oleomargarine colored to resemble butter, from 2 to 10¢ p lb. Such oleomargarine cannot be lawfully sold in 32 leading states, but 62,000,000 lbs were illegally sold therein last year, hence the demand for national legislation. The bill reduces the tax on that oleomargarine made in its natural white color, from 2¢ to 4¢ p lb, so the workingman may have the mixture if he wants it and does not need to take it if he does not. Over 200 of the 356 congressmen are said to favor the passage of the bill.

While Gathering Cream, a felt blanket is the most practical thing for the cream gatherer to use to protect cream from heat or cold. Where the load of cream has to be out in the heat of the day for a number of hours the cans should be closely packed in the wagon and lumps of ice put on top of the cans. Ice lying on the bottom of the

wagon produces very little effect. Cream thoroughly iced and blanketed, whether on a wagon or in a car, can take no possible injury from transportation in the hottest day. Arrived at the factory, cream for churning is tempered and ripened as soon as it conveniently can be.—[Supt Bradford, Turner (Me) Creamery.]

A Co-operative Creamery without any dividends to provide for in watered or other capital stock, can afford to and does pay the patrons the full receipts of the creamery, less operating expenses and interest payment to be met, for the milk.

A Producer Says—Give us a better price for milk sold through the F S M P A and it means a better product, better cows, better stables, better feed-stuffs, purer water to drink, better ventilation in winter and warmer stables. These things are out of the question with present prices.—[J. E. H.]

I have seen farms where from 5 to 8 milch cows are kept simply for family use. They are half fed and give little milk. One good cow given half the feed of five would save labor as well as food and give better milk and more of it.—[A Southern Reader.]

A good road requires a well underdrained soil, a good foundation and good road material for the surface.

Oftentimes our enthusiasm runs low and we become careless in consequence. If we only had at such times a little of last winter's enthusiasm, imbibed at the institute, it would be worth its weight in gold.—[A. N. Springer, Ind.]

"Will some one please chase the cow down this way?" said the funny boarder, who wanted some milk for his oatmeal. "Here, Jones," said the landlady, in a tone that was meant to be crushing, "take the cow down there where the calf is bawling."

The Many Acres of non-productive farm lands and their reclamation from swampy or marshy condition is given very intelligent and practical treatment in a little book bearing the title "Benefits of Drainage and How to Drain," published by John H. Jackson, Albany, N. Y. The subject is very completely covered and plain directions laid down for economical and effectual drainage. For this work Mr Jackson recommends the round agricultural drain tile. The book is sent free by the author to anyone who lives in the New England, Middle, Atlantic or adjoining states.

Too Severe Pruning causes a tree to grow more rank. This should be avoided and yet enough wood taken out to let the sunlight into the tree to color and perfect the fruit, keep the tree within bounds, remove superfluous and injured parts and to facilitate spraying, cultivating and harvesting.—[F. C. Sears, N S School of Horticulture.]

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107 Pines Hill, New York.
Please tell what you wish to purchase.

"UNCLE SAM" EVERY TIME FOR GOOD WORK
MAPLE BARK FARM, Greenwich, Conn., May 20, 1900.
"Have used the No. 5 U. S. Separator twice every day for over three years, and during that time it has never missed a skimming, doing perfect work and not a cent for repairs. We think the U. S. far superior to all others we have seen or tried. Uncle Sam every time for good work and simplicity. It is our opinion that the U. S. Separator will last a lifetime without very large expense, as all the parts that may wear can be replaced at a trifling cost. We find The Davis Swing Churn and Eureka Butter Worker the best of their kind. It pays every time to buy good dairy apparatus, and the Vermont Farm Machine Co. is the place to buy it."
Write for descriptive circulars of what you want in the Dairy Dept.
VERMONT FARM MACHINE CO., Bellows Falls, Vt.

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Cream SEPARATORS.
You want to know why they are best. Of course you do. It's easy to say "best," but why? Skim extraordinarily clean and turn easy; but that's no reason, for some others do nearly as well. Smooth, solid, finer cream than any other. That's one reason. Simple to wash, easy to understand, more durable than any other. Ask ten year user. Not a dollar for repairs. Safer, handomer, worth more. For fuller information send for Catalogue No. 88
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that you could work it by hand, and does it easier
Reid's Butter Worker
will work a batch of butter in from 3 to 5 minutes; mixes salt in thoroughly; lessens labor, saves time, improves the quality.
Write for catalogue of dairy helps of all kinds.
A. N. REID, 20th and Market Sts., Philadelphia.

Better Butter
Send for our large free Illinois catalog. All about "Bestov" dairy supplies.
The Dairyman's Supply Co.,
1287 Market St., Philadelphia, Pa.

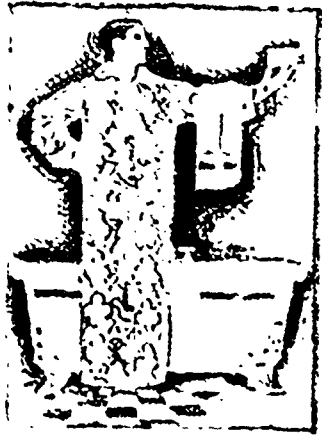
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W. Sawney 1919

ON THE LINKS



The pleasure and benefit of health-ful exercise are increased and made more permanent by the bath which follows. Ivory Soap, because of its purity, its mild creamy lather and the comfortable feeling of perfect cleanliness that results from its use, is the soap most generally preferred for the bath. It floats.



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The Farm Water Supply.

UTILIZING THE WATER POWER.

It is surprising that a larger use is not made of the ram system of raising water to a higher level on many farms, when there is an ample supply in a stream running at the lower part of the property. Whether for house or garden purposes, a proper water supply is essential. In order to make the use of a hydraulic ram possible, there must be a slight fall and a good supply of water, and it has the great advantage over the windmill of working continuously, whereas the operation of the windmill is subject to the prevalence of some motion of the air. If you have a supply of water to which you can connect an engine, placing it at a level of 2 ft or more below the surface of the water in the supply, and drain away the power water that escapes from the engine, you will thereby get a constant flow of water delivered to the higher point, without any attention or expense, except the replacing of a valve once in about 2 yrs.

The improved hydraulic ram, a cross section of the interior of which is shown herewith, will pump 30 ft high for every foot of fall up to a height of 575 ft. and can be had of a capacity of 15,000 gal per day. Considering the ordinary hydraulic ram without regard to the double supply feature, suppose the opening at H to be closed. The valve at B being open, the water from the source of supply at more or less elevation above the machine flows down the drive-pipe A and escapes through the opening at B until the pressure due to the increasing velocity of the water is sufficient to close the valve B. At the moment when the flow through this valve ceases, the inertia of the moving column of water produces the so-called ramming stroke, which opens the valve at C, and compresses the air in the air chamber D until the pressure of the air plus the pressure due to the head of the water in the main is sufficient to overcome the inertia of the moving column of water in the drive pipe.

This motion may be likened to the oscillation in a U-tube. At this instant the column of water in the drive pipe has come to rest, and the air pressure being greater than the static head alone, the direction of motion of the moving column is reversed and the valve C closes. The water in the drive pipe is then moving backward, and with the closing of C a tendency to a vacuum is produced at the base of the drive pipe; this negative pressure causes the valve B to open again, completing the cycle of operations. At the moment of negative pressure, the little-sifting valve E admits a small quantity of air, and at the following stroke this passes into the air chamber, which would otherwise gradually fill with water, the air being gradually taken up by the water.

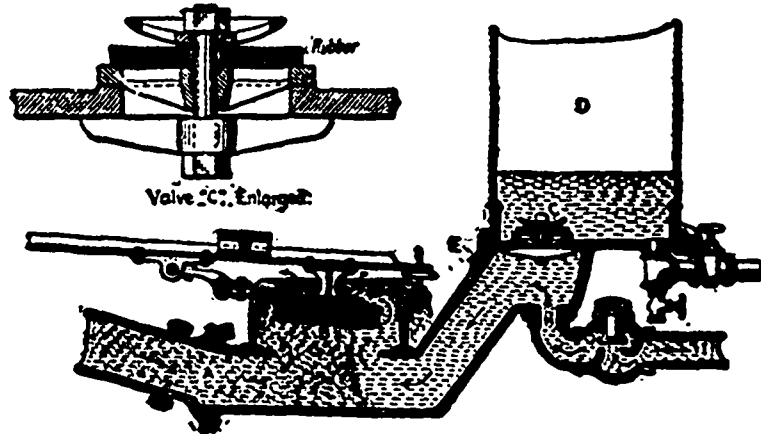
In many machines the mistake is made of making the waste valve H sufficiently heavy to overcome the static head of water in the drive pipe. In fact, most writers on this subject, including the Encyclopaedia Britannica, state that the weight of the waste valve H must be greater than the pressure of the static head of water on its under side, so that it may open when the column of water comes to rest. In the machine which we are describing this would be practically impossible on account of the large area of the opening at H.

In this machine, the valve H is made as light as is consistent with the necessary strength; the negative pressure at the end of the stroke is relied upon to open the valve. With the largest size of these machines, this valve is 15 in in diameter, and with a head of 8 ft, which is a common head for use with hydraulic rams, the static pressure on the under side of this valve is 53 lbs; it can be seen that the great shock of a valve of this weight would rapidly destroy the valve and its seat.

The waste mechanism of this engine consists of a large part with flat ample opening and a large rubber valve with a balance counterweight and spring seating, removing almost entirely the jar of closing. The valve C in the air chamber consists of a rubber disk with grid-iron parts and convex seats, fastened at the center and lifting at the circumference, as shown. The effort is to transfer the power from the shock of the driving water through to the air cushion with the smallest possible amount of friction and jar.

After the closing of the valve C, the

pressure of the air in the air chamber forces the water in the air chamber out into the delivery pipes. With this engine the manufacturers claim to elevate water 30 ft for every foot of fall in the driving head; the machine is built in capacities as high as 175,000 gals per day, and the efficiency of 82 per cent is claimed. The most important detail in which this style of an engine differs from the ordinary hydraulic ram is the waste valve. It will be seen by the illustration that the counterweight on the projecting arm of this valve permits the adjustment of this valve to suit varying heads and lengths of drive pipe. By adjusting the counterweight so that the valve is nearly balanced, the valve comes to its seat very quickly after the flow past it begins. The result is that the ram makes a great number of short, quick strokes, which are much easier on the mechanism than slower and heavier strokes. Of course the stroke must be sufficiently powerful to act efficiently in overcoming the head in the delivery pipe. The adjustable weight permits



An Improved Hydraulic Ram.

this to be effected with the greatest efficiency.

When a pipe is attached at I, the engine is termed double-acting; spring water or that which is purer than the water used to drive the engine may then be supplied through I, and by a proper adjustment of the relative flow of the impure driving water, and that of the pure supply, the engine may be made to deliver only the pure water into the mains. This method is used where the supply of pure water is limited.

White Blast of Onions is so called from the fact that the tops are prematurely whitened, and become wrinkled and shriveled, due to the attack of thrips. The insect passes the winter months in matted grass, among old weeds and other rubbish, as well as among cull onions and refuse that have been left over in the fields in the fall. It makes its way from grassy margins or ditches to the rows of onions adjoining. It winters over in the piles of cull onions and refuse in the fields, and begins its work there, spreading from thence outward. Wherever the grass and weeds along ditches can be rooted up and destroyed it prevents the harboring of this pest. Wherever the old, dry grasses and weeds, along the margins of onion plantations, can be burned, the effect will be to destroy myriads of the pest, and to prevent their breeding the coming season. With frequent, drenching rains, there is not much likelihood of a severe outbreak, but in case of drought, the insect is likely to work more or less serious injury. A spray of 1 lb whale oil soap dissolved in 5 gals water will destroy the pest, and the use of this mixture is recommended on the first appearance of the insects in the fields. At time of first appearance it will probably only be necessary to treat very small areas along the margins of fields, or small, isolated spots in order to permanently check their increase.

The Hester Squash is a type of Sibley's Hybrid and is of a golden yellow color. For many years this squash has been considered a standard for home use. New Hester squash possesses all the good features of the Sibley. The Hester is earlier than the Sibley, but it is a wonderful keeper and under proper conditions it will keep in sound condition until late in spring. It is one of the finest squashes for pies.—[S. L. Watkins, El Dorado Co., Cal.]

The Garden.

A MARKETING BOX.

In making picking and shipping boxes, for ends, take good dressed pine lumber 1/2 in thick and 8 in wide. Cut so the upper edge will be 9 1/4 in long and lower 7 1/4 in. For sides, use lumber 8 in wide and 3/4 in thick. Cut them so the upper edge will be 19 in long and the bottom edge 17 in. Cut bottom of same stuff slack 17 in long. Use wire nails 1 1/4 in long. Nail on outside of box in center a strong basket handle, using 3/4 in wire nails. Such a box will weigh 3 lbs, will hold 1/2 bu without heaping, will last as long as five common baskets and cost but little more. They are better than baskets for shipping. Make shipping covers 8 in wide, 3-16 in thick, and cut off square 18 1/2 in long. Cut two pieces 7 1/4 in long from a 1/2 in square strip, bevel so they will fit exactly inside the box and close to ends. They should fit in so the top sur-

Orchard and Berry Patch.

MARKETING THE PLUM CROP.

In most cases experience has proven that plums, if shipped to market in 10-lb grape baskets, provided with handles, and put up in neat, presentable shape, will bring the producer a greater percentage of profit than if shipped in half-bushel or bushel crates or packages. A careful picker can fill the basket direct from the tree, but the usual plan is to pick into large receptacles, then, carefully sorting the plums, place in packages ready for market. This frequent handling removes a great deal of bloom from the fruit, which removal should be avoided as much as possible. By the use of a single table as illustrated, plums and other similar fruits are easily assorted. The top of the table should not be over 2x2 1/2 ft. The sides and back, r, r, r, may be 8 in wide at the back, tapering to 3 in in front; the front guards, o c, should be less than 3 in high, leaving a 6 in space between the inner ends; the slanting board, g, is 6 in wide. To operate the table, the assorter occupying a chair in front of the table, with a basket on his lap. Both hands can then be used in removing the leaves, limbs, damaged or imperfect fruit, throwing the refuse into baskets, w, w, on the floor. The perfect fruit, or that intended for shipping, is rolled in front, and passes over the incline, g, into the basket. This table need cost but little, and may be made in as crude or elaborate a form as wished. In working, the elbows can rest upon the guards, o c, which will make the operation much easier. An ordinary table can be fitted with these simple appliances and quickly removed after the shipping season is passed.—[I. S. Yates.]

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The Currant Cane Girdler lays an egg in the new growth and then punctures the cane all around so that it breaks off and thus furnishes better condition for the larvae, which begin and work down in the pith, but no injury is apparent unless next spring when the canes begin to die after the leaves start. The simple remedy is to cut off an inch of the girdled cane and drop it on the ground. For the currant worm, use paris green until the currants are 1/4 in in diameter, and then hellebore, both in water, about one tablespoonful to the gallon of water. This pest comes on early and feeds and grows rapidly so that in about 10 days' time from hatching it is ready to go into the ground, and a second brood comes out, so that an early application is more effective. Spray with the bordeaux mixture and paris green until the berries are 1/2 in in diameter and do not use the bordeaux again until the fruit is gathered, because it would adhere to the bunches and injure their sale. Would not advise the use of paris green generally, as hellebore is nearly as effectual.—[Prof S. J. Maynard, Mass.]

Liquid Air for Cold Storage is to be made at Los Angeles, Cal. There are 11,000 refrigerator cars run out of that city with fruit, each one of which requires 10,000 lbs ice for cooling, and which occupies one-sixth of the carrying capacity for storage. Liquid air, with its wonderful refrigerative power, will be used instead, and can be stored below the floor of the car between the wheels, so that the whole space in the car will be available for the goods shipped. It is claimed the cost of the liquid air will be only one-half that of ice. The trial of the system will be watched with great interest.

Marketing Apples—If I grew Ben Davis I should seek the general market, whereas if I grew Jonathan, Spitzenburg, McIntosh Red, Graevestein Newtown Pippin, or others equally as good, I should seek the first-class hotels, restaurants and families. Taking one barrel, they will surely want more. [G. T. Powell, Columbia Co., N. Y.]

No commercial orchardist should cultivate more than six or eight varieties of apples.

face will be flush with the sides and ends. The cover is to be nailed on to these pieces with 1/2 in wire nails driven through and clinched, so that when the cover is put on it will show the contents 1/2 in on each side. This space will also give all the ventilation required. If desirable to show the fruit more or have more ventilation, use four slats 1/2 in thick and 1 in wide instead of a close cover; nail on so as to leave all spaces the same width. These boxes may be piled 10 high and do not give us baskets in handling.—[S. H. Mitchell, Perth Co., Ont.]

The Turnip Aphis appears about Aug 1. When thinning the crop you can see where the aphis has been at work. For the fly, use a solution of whale-oil soap, 1 lb in 8 gals water, or a kerosene emulsion. Much good can also be done when thinning. Whenever a colony of aphids are found, cut out the infested plants, pull a little earth over them and with the foot press down the soil, thus killing the insect.—[Dr James Fletcher, Ont Exper Farm.]

The Beet Army Worm appears in Aug and Sept. Paris green, London purple or white arsenic, applied dry or in solution, will destroy the caterpillars. Small beets pestered with caterpillars should be dusted before sunrise with a mixture of one part by weight of paris green or London purple with 20 parts common flour. Make a cheesecloth sack 5 inches in diameter and 10 in deep, fill with the mixture and walk along a row of plants, shaking the sack over them. For large beets, use a spray pump, 1 lb green or purple to 100 gals water, with 2 lbs fresh lime for each pound of poison.

The Common Squash Bug or stink bug can be destroyed only by hand-picking, destroying the eggs and by trapping. Bugs may be trapped by placing about at intervals on the ground boards, shingles, bark, or similar material, to which the insects will be attracted for shelter. Here they should be looked for and destroyed every morning during the early season.

A large portion of the subsistence of the family may and should be derived from the fruit and vegetable garden.

Never sacrifice health and convenience to ornamentation and display.

Trees and Shrubs.

FORESTRY ASSOCIATION WORK.

Modern forestry is not a barrier to the harvesting of the timber crop. Its cry is not "woodman, spare that tree." It provides for the cutting and economical utilization of mature timber, but it furthermore provides that the crop shall be so cut that the young growth shall not be injured, and that a sufficient number of old seed-bearing trees shall be left in suitable locations to insure a reproduction of the most valuable species.

The Massachusetts forestry association was organized to give practical assistance for the improvement of woodlands and adornment of streets and country roadsides. The forestry association does not necessarily desire to see the woodland area increased, but it does want to see the character of the existing woodlands improved.

The total direct and immediate loss by woodland fires in 45 cities and towns in 1889 amounted to fully \$87,000. By far the best piece of legal machinery for guarding against forest fires is found in Chapter 254, acts of 1897. This act must be adopted by a town before it becomes operative.

The loss of \$87,000 by forest fires in one year is not all. While light fires, running in the dead and fallen leaves, do little injury to old oaks and other thick, rough-barked trees, such fires do kill quantities of valuable white pine seedlings every year.

The lecture committee worked all through the spring, summer and autumn of 1899 with notebook and camera, securing data from various sections of the state on good and bad forestry and the condition of the roadside growth.

A good deal of work is also being done in the interest of roadside trees. The new tree warden law, which has just gone into effect this year, was introduced into the legislature by the association, and the organization is now endeavoring in every possible way to assist the wardens in the discharge of their duties.

NATURE'S RARE GIFT.

No country possesses so many beautiful woody plants as the United States. They are generally found growing where they thrive best, and any desirable kinds found growing by the roadside that can be made to produce a

proper form of growth should be preserved and improved. The laws passed by some states for the protection of shade trees, where town or city authorities may mark such trees and shrubs as it is desirable to have preserved, and making it a criminal offense to destroy those thus marked, are steps in the right direction and should be adopted in every state.

There is nothing which adds so much to the comfort of the travelling public as well-shaded trees, and a comparatively short time is required for our most rapid-growing trees to reach the size to afford considerable shade. Whether we live to enjoy or see others enjoy their beauty and shade or not, we are certain that if properly planted in suitable soil more than one generation will be benefited by them.

Pruning Flowering Shrubs—During the growing season many early flowering shrubs had better be let alone, as trimming would destroy the natural grace and beauty of the plant. Spiraea thunbergii and Herberis thunbergii are so graceful in their nature that I should not want to interfere with their growth.

When to Cut Post Timber—E. H. B. Johnson Co. Ia: There is great difference of opinion as to the best time for cutting timber in regard to its durability. Much depends upon the treatment timber receives after it is cut.

New Potatoes are becoming plentiful in all markets and when attractive sell well. Choice old stock is in fair favor at about recent prices.

The John M. Smyth Co of Chicago, write us that they do not employ agents in the state, neither do they employ agents anywhere. They do not sell merchandise from wagons in exchange for butter and eggs, but operate entirely upon a catalog cash basis.

Plants and Flowers.

ABOUT ROSE PESTS.

Roses are not difficult to grow and they have few insect enemies. A single bush, especially if it be the Madame Plantier, that prince of white hardy roses, will annoy its possessor quite as much as a dozen varieties standing together.

Very soon after leaves begin to grow, the center and base of certain leaves will show spots of white. Turning up the leaf, the little white aphid will be seen and if not destroyed at once the beauty and vigor of the bush soon will be. His position indicates that all preventatives and remedies must be applied from below.

For that clumsy, dun-colored beetle called rose bug, there is no sure remedy, but hand picking, which must be done in the cool of the morning, and the successful rose grower will see to it that no bug escapes.

Mildew on the leaves of roses may be prevented entirely or in great measure by the immediate application of flour of sulphur. A powdered tobacco and sulphur can be bought in the market and dusted over the foliage of roses when wet.

Liquid Fertilizer during this growing season will be very helpful to most flowering plants. Place poultry, sheep or

cow manure in any old vessel, fill with water, let stand a couple of days and then apply around the plants. For a 12-qt pail, use in the proportion of 2 qts manure to 10 of water.

The Aster Bug will soon be with us. As soon as plants begin to bud, dust them lightly with slug sbdt. Whenever the insecticide is washed off, repeat the dusting.—[W. F. Gale, Hampton Co, Mass.

The Spirit with which we enter into horticultural work is a sure index as to just how much pleasure we get out of it. Every garden requires an enormous amount of care, to be at its best, during July and Aug. Cultivation must be constant, watering frequent and the use of insecticides and fungicides of weekly occurrence.

The Hybrid Pink strawberry-blackberry is one of the greatest of all fruit novelties. A new berry of surpassing merit that flourishes well in the driest as well as the coldest and most forbidding localities. The fruit is of large size, of the most delicate glowing pink and very deliciously flavored.

The Sample Strawberry is one of the finest looking varieties yet disseminated. The plant is exceptionally large and vigorous in every way, leaves, stems, flower buds and runners. Berries are of large size, prolific and richly colored.

A NUMBER OF SPECIAL OFFERS.

We give herewith a brief description of some of our best and most attractive premiums. A full description of these premiums, which are exceptionally good value and which we offer upon remarkably liberal terms, as stated below, will be found in our Illustrated Premium List.

Three Great Books, Atlas of the World, containing 24 colored maps, Comprehensive Dictionary, 50,000 words, and Semantics at Saratoga, the funniest book of the century. With Farm and Home, one year. \$3.00

Chambers' Encyclopedia, a standard reference work, containing 70 pages, 100 illustrations, 2,500 articles. With Farm and Home, one year. \$3.00

Unexpected Trouble, an exact reproduction in color of a wonderful \$2.00 oil painting. With Farm and Home, one year. \$3.00

Cyclopedia of Useful Information, a most valuable work of 8 volumes, with 700 pages and 200 illustrations. With Farm and Home, one year. \$3.00

Six Initial Tokens, of and engraved with any initial. With Farm and Home, one year. \$3.00

Wood's Natural History, contains 600 pages, treating on over 1,200 topics, and 600 illustrations, 170 in color. With Farm and Home, one year. \$3.00

Profits in Poultry, contains 200 pages and 100 illustrations, including colored plates. With Farm and Home, one year. \$3.00

Gleason's Horse Book, contains 416 pages and 173 illustrations and formerly sold for \$2.00. With Farm and Home one year. \$3.00

Geat's Pocket Knife, contains two blades and fully guaranteed. With Farm and Home, one year. \$3.00

Olympic Watch, an accurate and reliable pocket watch, and one you can depend upon to satisfy as Derry and on his ship. With Farm and Home, one year. \$3.00

WE WILL SEND FREE The Three Great Books, Profits in Poultry, or Unexpected Trouble as a Premium to any person sending us one new subscriber to Farm and Home or any one of the remaining premiums except the Olympic watch for two new subscribers at the club rate of \$5 cents per year, the watch being given for four new subscribers. Postage paid by us in each case.

FARM AND HOME, Springfield, Mass., or Chicago, Ill.

Young America.

ANTICIPATION.



We can hardly wait till Wednesday. And are saving every dime. We intend to buy a cannon And to have a splendid time

We will shoot with giant crackers. And you bet we'll make a noise. We will shout and raise the echoes. For we're patriotic boys.

There's no holiday that's grander Than our Independence day. And you'll find we'll celebrate it In the good old-fashioned way.

MARGARET LEE.



FROM OUR YOUNG AMERICANS.

History Is Best—I work in the summer and go to school in winter. I like history the best of all my studies, although I like them all. I also like to read novels. I have Dr Talmage's From Manger to Throne, and a history of Spain and Cuba and I like to read them very much. I am 13 years of age, am five feet six inches tall and weigh 150 pounds.—[Rosa Stamper, Kentucky.]

A Treat—Yes, Sweet Seventeen. I have read Uncle Tom's Cabin, and I think it just fine. Although I have Scottish Chiefs, I have never read it yet, but I am going to, just because you said "those who have never read it have missed a treat." I like entertainments, and I am awfully fond of reciting. Can any of the girls or boys tell me where I can get a "real good" recitation book?—[Young Canada.]

Orphans' Home—My father and mother are dead, and my sister also, so you see that I have not got a sister to play with like some of you. As I stood beside the grave and saw the men let her down, tears came into my eyes. I thought of the past, but I could recall it. So, friends, be kind to mother, for you will never find one that will take the place of her. I am 17 years old. I have been at the orphans' home four years. There are not many girls here. I am left-handed. There are many of those left-handed fellows around, are there not? And I cannot see but what they are as good as anybody, are they not? All the left-handers will agree with me, won't you? [Albert G. Miller, Michigan.]

His Will Interest Many. W. Parkhurst, the Boston publisher, says that if any one afflicted with rheumatism in any form, or neuralgia, will send their address to him at Box 1501, Boston, Mass. he will direct them to a perfect cure. He has nothing to sell or give, only tells you how he was cured. Hundreds have tested it with success.—[Adv.]

Grand Old Sierras—Eflie Ereno, I envy you of your good time while you were camping upon the mountains. Among the grand old Sierra Nevada is the grandest place in the United States, and many a happy day I spent roaming over their wild rugged slides. In my dreams sometimes I fancy I am back in old California, standing on some wild, lonely spot of the Sierras, and around me are the mighty walls of granite towering toward the sky. In fancy I halloo, and the sound of my voice echoes and re-echoes until I fancy I am in some grand cathedral listening to an echo of some beautiful strain of music.—[California Boy (Seventeen).]

Plow Girl—I am a girl 13 years old and live in the country. My mamma is a subscriber to your paper and I can hardly wait till it comes. I just love to work out of doors. I plowed last fall with three horses. I think if a boy 12 years old can't handle a team, he isn't worth much. My papa is not at home. He comes home about every three months. Uncle Tom's Cabin is my favorite book.—[Bluebird, Kansas.]

A Broken Arm—I have been to school four years. I like to take the cows to the pasture about half a mile away. I was riding on a horse one rainy night, and it threw me off and broke my arm. A man came along and brought me home. I got 25c for the starving people in India. Everybody ought to give money.—[Mabel More (Eleven), Kansas.]

Chats—I, too, read Ben Hur last year's summer vacation, and 36 other books besides. The summer before I read 41, but practice more on my violin this summer.—[Pansy, New York.]

How many of the girls like cooking? I do not, and am not ashamed to say that when the need comes I can help my brothers out in the field.—[Alice, North Dakota.]

I am very fond of reading. My favorite books are Camp Fires of the Revolution, Beyond the Mississippi, Achievements of Stanley, John Halifax, David Harum and Our War with Spain, [New York Boy (Thirteen).]

I am only a country girl who likes to read better than to eat. I read everything I find, novels excepted. I have been reading the works of Washington Irving. I like all of his works

but the legends. We have a violin, guitar and organ, but I do not like to play.—[Estelle, Missouri.]

I love the woods and flowers. My father is a fruit grower. I have three brothers; only one lives at home now. He rides a bicycle. We live just a little ways from the lake.—[Rosebud (Fifteen), Michigan.]

My ambition and love is to be an actor, and when I read F. H. Morse's letter, I thought I would like to correspond with him. I like him, am 16 years old.—[F. M. B., Iowa.]

Stock Raiser Last fall I worked on the onion marsh, topping onions, and earned some money. I took the money and bought a pig for \$1.25 and sold it this spring for \$13. My papa put \$11 in the bank. I expect to buy sheep with it this fall. I now have two lambs and one chicken

I go to school in the winter and work in the summer.—[Johnny W. Holdeman, Indiana.]

Fine Cakes—My favorite study is Latin. I have to study in the evening, but when I have spare time I make fancy work or practice on the piano. I would like to become a musician and think I shall some day. How many of the readers like to bake cakes? I do, but I do not have good luck baking them, so I get my sister to bake them for me, for she can bake fine ones.—[Just Fifteen, Nebraska.]

"April Fool Ben"—I have a cat with a kitten born on April Fools' day, and so we call him "April Fool Ben," but he is the smartest fool you ever saw. He eats with a spoon if I hold it. I swing him to sleep in a little hammock, and put him to bed with my doll. I live in Florida and I am eating (May 29) ripe peaches, sweet corn, potatoes, beans, onions and cabbage and everything that is good. I am nine years old. [Maude Merryweather.]

Ho Found It—One day sister and I were sketching and she drew a picture of our teacher, and I wrote beneath it these words:

"We are happy little children, And we love our pleasant school. We love our gentle teacher, And obey his twelve-inch rule"

I threw it in the waste basket, but he found it. My, wasn't he mad! He made us both stand on the floor. Think of that! He just taught the winter term and I am teaching the spring term. I am glad to say my scholars do not bo-



OUR PRISON PLACE.

Johnny Jones goes to the attic when he's been awful bad. A closet 'neath the stairs is where they punish Tommy Schad. They stand Rob White in a corner; to bed goes Jamie Hard. But Dick an' me are sent to the umbrella in the yard. It's awful, it's just awful, for the neighbors come an' stare. An' sizzle, an' they say things just as scornful as they dare.

There's not a mamma anywhere in all the Thirteenth ward. That keeps a prison place like the umbrella in the yard. The very toughest thing in life's to be two little boys. Waose mamma's head is splitting and who cannot make a noise. It's just whisper an' go thipce an' be upon your guard. Or it's the awful, shameful, old umbrella in the yard. ISRAEL GORAN CURTIS.

have the way his did. This is my first term of teaching, and I enjoy it very much. Toots, my motto is, "Do right and help others all you can." Are any of the Councilors interested in politics, pulmistry, botany, history or astronomy? If they are, couldn't we have a talk on these subjects? I am interested in all of them and read all I can get on those subjects. We are going to have an exhibition the last day of school, and I am preparing an essay for it. The subject is, "To the starr through difficulties." [Goldenhair.]



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The Magic of the Violin---II.



OLE BULL.

Given a willing child, what next? A willing family is a great advantage...

Before beginning lessons, it should be ascertained whether the child has what has been termed "an ear for music."

It is a question which is more trying to a teacher, a defective ear or a defective sense of rhythm.

A fairly accurate ear and a normal sense of rhythm being assured, what next? Just what is needed in the study of other instruments—patience and perseverance.

The child who is highly strung is liable to periods of passionate despair when the violin proves elaborate and effort seems vain.

tolse, and, while the placid plodder draws steadily toward the goal, the poor, enthusiastic, excitable hare, after his brilliant burst of speed, sinks back into inaction and sloth.

Not that the child should be arbitrarily subjected to long periods of practice, when he should be enjoying the freedom that his years and rapid growth demand.

"A continual drooping wears away the stone," and "Step by step one goes a long way," are good mottoes to adopt at the outset.

The child with a weak back and jangling nerves, and these are such handicapped little mortals—should leave the violin alone.

OLE BULL AND CAMILLA URSO.

Olaus Bull, or Ole Bull, a violinist of striking personality and wide attainment, was born in Berger, Norway, Feb. 2, 1810.

Camilla Urso, whose portrait appeared in F & H of June 15, was born in Nantes, France, in 1842.

Sunshine and Shadow.

PLEASURES.

[Written for Farm and Home.]

I love the sunshine better than the storm; I was not made for dark and dreary days.

A little cottage and a fireplace warm, These are enough to waken songs of praise.

I love the glories of this fleeting life, Its pleasure and its joy too sweet to last.

And shall not find high heaven is less rife

With bliss, because of these when all is past. LALLA MITCHELL.

WE TWO.

We two make home of any place we go; We two find joy in any kind of weather.

Or if the earth is clothed in bloom or snow,

If summer days invite, or bleak winds blow.

What matters it, if we two are together? We two, we two, we make our world, our weather.

We two make banquets of the plainest fare, In every cup we find the thrill of pleasure.

We hide with wreaths the furrowed brow of care.

And win to smiles the set lips of despair.

For us life always moves with lifting measure;

We two, we two, we make our joy, our pleasure.

We two find youth renewed with every dawn;

Each day holds something of an unknown glory.

We want no thought on grief or pleasure gone.

Tricked out like home time leads us on and on.

And thence upon his harp new song or story.

We two, we two, we find the paths of glory.

We two make heaven here on this little earth.

We do not need to wait for realms eternal;

We know the use of tears, know sorrow's worth.

And pain for us is always love's rebirth.

Our paths lead closely by the paths supernatural.

We two, we two, we live in love eternal [Ella Wheeler Wilcox in the Century.

THE NAMELESS SAINTS.

What was his name? I do not know his name.

I only know he heard God's voice and came.

Brought all he loved across the sea To live and work for God—and me!

Filled the ungracious oak, with horrid toll

Dragged from the soil

The thick gnarled roots and stubborn rock;

With plenty filled the haggard mountain side,

And when his work was done, without memorial died.

No blaring trumpet sounded out his fame; He lived, he died—I do not know his name.

No form of bronze and no memorial stones Show me the place where lie his moldering bones.

Only a cheerful city stands, BUILT by his hardened hands;

Only ten thousand homes, Where every day

The cheerful play Of love and hope and courage comes;

These are his monuments and these alone— There is no form of bronze and no memorial stone.

And I?

Is there some desert or some boundless sea

Where thou, great God of angels, wilt send me?

Some oak for me to rend, some sod for me to break,

Some handful of thy corn to take And scatter far afield.

'Till it in turn shall yield Its hundredfold

Of grains of gold— To feed the happy children of my God?—

Show me the desert, Father, or the sea, Is it thine enterprise? Great God, send me!

And though this body lie where ocean rolls,

Father, count me among all faithful souls!

[Edward Everett Hale.

I can stand any society. All that I want to know is that a man is a human being—that is enough for me; he can't be any worse.—[Mark Twain.

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I have discovered a positive cure for all female diseases and the piles. It never fails to cure the piles from any cause...

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A GLIMPSE OF PORTO RICO.

I first caught a glimpse of San Juan one rainy dismal day early in November. Land had been sighted hours before, and it was a disappointment that the fog so impeded our view.

The antiquity of San Juan is unquestionably its most impressive feature, and the majority of the buildings appear to be built of yellow, grimy stone.

Built at one side of a narrow street, a street scarcely twice the width of the sidewalks of Boston, upon a street filled with other buildings almost identical in structure, its facilities for ventilation in this tropical climate may be guessed at.

In the dining room is where the so-called American ideas are introduced. The tables are in exact imitation of the San Juan Y M C A restaurant.

Santurce is the American colony of San Juan. Situated three miles from the city, upon the beautiful bay, the ocean breezes make the location cool and comfortable.

To return to the city: The two main streets, Calle de Fortaleza and Calle de San Francisco, are exceedingly narrow.

This effectually prevents the introduction of electric cars, but public coaches drawn sometimes by a horse, a mule and a native pony take their places at the regulation 5-cent fare.

This is in no way an exceptional case, nor is it an exaggerated one. This feature of the lowest class—blacks or peons—living together upon the ground floor, with really good families above them, is hard for Americans to understand.

Like all other "new countries," San Juan, as the chief city, is overrun with speculators, many of them already disappointed and cursing the fate that brought them here.

And by faith you can see it afar. For an office lies over the way—"The rest won't bear repeating. Someone has said that the nights are what make Porto Rico a place to live in.

AMONG OURSELVES.

Cats, Not Boys—I noticed on the first page of the June 1 issue an article, "Good-bye to the birds." I am much interested in their protection.

Even a Dog—Why is it I find so many "dog hearts" in the Council? Do they try to cultivate happiness? The more you yell upon your troubles, the larger they grow.

a brother. But I feel my loss is their gain, and have cast all trouble away and am light-hearted again.

Silence Is Sin—There are times when silence is golden; there are times when silence is sin. We ought to speak out our heart's gladness, and it would be far sweeter service if we would speak only of the pleasant things.

Silly Things—I am a telegraph operator also and want to ask Teddy not to judge the young lady too severely.

TRYING TO DO BETTER. This world we live in, it is strange. The people in it, too. They never seem to be satisfied.

Now if you have a little farm. A pig, a horse, a cow. Your wife can be the dairymaid and you can take the plow.

The Secret—There is work for us all in this world, whether married or single. Take up the duty that lies nearest you.

Be Careful—I think kissing is all right among mature boys and girls, if it is meant right.

Respect the Farmer—When will the cheap story papers and magazines stop publishing their silly and slurring stories about the farmer and farmers' sons and daughters using quaint language.

The Jolly Girl. Often changes to the jaded woman. "I can't see what's come over Mary; she used to be such a jolly girl." Remark of a young woman visiting a school-mate.

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Farm and Home Council.

some upstart glandering the farmer, but each papers are of short life. They too their little horn and then pass out the little end. No farmer should subscribe for papers of this kind. They mug you that they must respect the farm or their supplies will be cut off. They remind me of the fellow who goes to the fair and makes fun of all the horses. He is always a fellow who is not able to own one of his own.—[Farmer's Son.]

War vs Farming—Hardtack, pork and beans are out of the question for a while, as I was a soldier in the United States army for six years and three months and served during the Spanish and American wars (1898) in Cuba, taking part in engagements for the reduction of Santiago, Cuba, July 1, 2, 10 and 11, 1898. I was discharged at Havana, March 27, 1899. This is my first year of farming, and I find the life quite different from soldiering.—[Oklahoma Bachelor.]

Hypnotism—I am a young teacher just teaching my first term of school. My favorite prose writer is O. W. Holmes, my favorite poet W. C. Bryant. While not believing in "administering justice" in the form of a rod on any and all occasions, I think there are times when it is quite necessary. I believe the principle governing in the schoolroom is, and ought to be, hypnotism or animal magnetism. Teachers should love their pupils, and it is a very nice thing for the pupils to love their teacher, but unless it is a case of "love at first sight," a teacher is apt to have a disorderly school before the pupils' love is gained. But by animal magnetism the teacher's presence and authority are felt by the pupils from the first, and

they learn to love, fear and respect their teacher, unconscious of the cause. It is not necessary for the teacher to tell the pupil whether he has been naughty or good, he seems to "feel" it even better than it could be told.—[Professor.]

Books vs Matrimony—Why don't the Councilors who are having so much trouble in their love affairs try the old recipe, "An ounce of prevention is worth a pound of cure?" I am 25 and intend to be a bachelor as long as I live. Henrietta, you express my views exactly in regard to matrimony. You seem to have some sense, if you are a woman. I have seen enough of love and lovers, and married life in others, to convince me that marriage is but another name for misery. Give me the company of good books, not the cheap, trashy, sentimental kind, and I will be content with no other company except that of my bachelor friends.—[Woman Hater.]

Serve Warm—I have been married over a year, yes, 15 months, and never fail to kiss wife in the morning when going to work and at night always find her watching for me and ready to meet me with a kiss. You all can say kissing is not right, but I'll stick to this rule. A kiss is something made of nothing, but isn't good when cold.—[Happy Hubby.]

Freedom—I am engaged to marry one whom I love and think I always will under all circumstances. We expected to marry last December, but when I went there, she wished me to wait until this coming July. Now she has changed her mind again and says next December. She can give me no possible reason, only her mother objects to our marriage, but will give no

reason to me. Now don't you think I have done my part, and will be doing right if I cancel our engagement and give her her freedom, or do you think I will be doing her an injustice and ought to wait longer and give her the benefit of all my doubts?—[Bad Boy.]

A Cure—At the request of Grace, and for the benefit of others, I will send a tonic for the cure of love, for I also realize that that disease has a strong hold on the minds of some of the Councilors. "Take 12 oz dislike, 1 lb resolution, 1 1/2 gr common sense, 2 oz experience, a large sprig of time, 1 qt the cooling water of consideration, set them over a gentle fire of love, sweeten with the sugar of forgetfulness, skim with the spoon of melancholy, put it in the bottom of your heart, cork with the cork of a clear conscience and there let it remain, and you will find ease and be restored to your senses again?" The above prescription may be filled by the apothecary of the house of Understanding, next to Reason, on Prudent street, in the village of Contentment.—[D. Zantipy Kaloric.]

Somewhere—Well, Teddy, you surprise me. How on earth did you manage to stick to telegraphy long enough to make an operator? When a girl gives me the "slip" that way, I simply say, "Good-by, Sal," and rustle around for a fresh one. If a girl doesn't care enough for me to stick by me in preference to the "homely fellow," the sooner she finds someone she does like, the better. But never mind—keep up your present kind of "faith in girls." You might find one that is different from the one you are judging

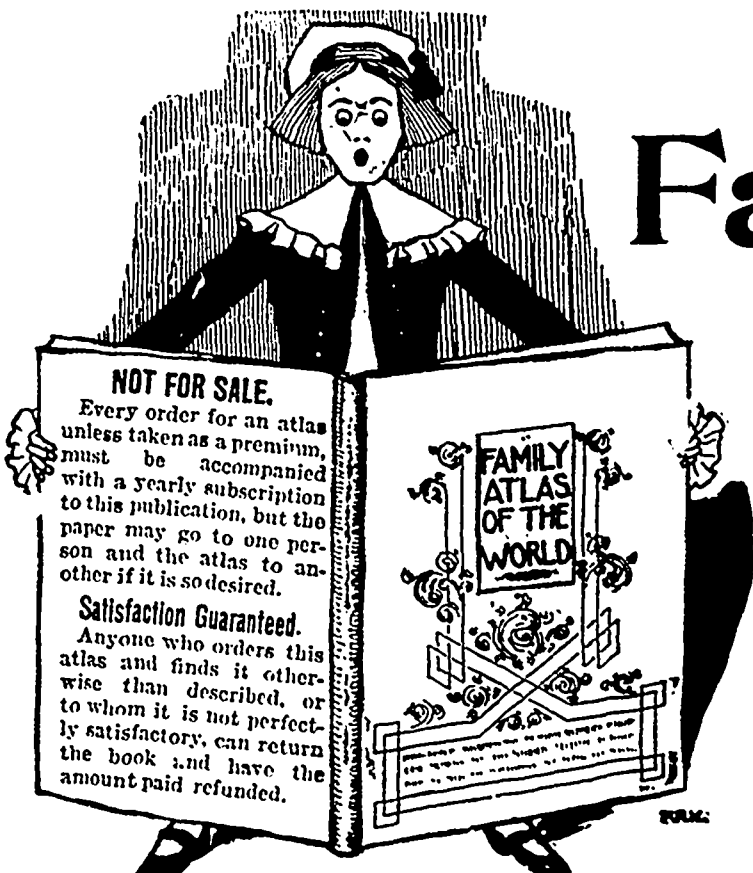
all the rest by, and she might be just the one I'm hunting for myself. The world is full of good, true girls, and somewhere is one that is waiting for me and I shall find her yet, even if I get fooled by a dozen or two of the kind I don't want, first. You know Longfellow says:

"No one is so accursed by fate,
No one so utterly desolate,
But some heart, though unknown,
Responds unto his own."
[Wyopa.]

Inquiring Friends—W. B. T., the tin and wire "artificial flowers" for use in graveyards can be obtained of any florist and often in hardware stores.—R. H. R., send 25c to Harper Brothers, New York, for a little book on games that contains golf and basket ball.—Mrs M. E. P., there's a knitted oakleaf pattern in the May 15 issue.—N. L. C., we explained how to make dry yeast cakes in March 1, '99, issue; potato yeast, April 1 last; homemade hop yeast, Feb 15 last.—N. W. P., Sept 1, '99, contained several cucumber pickle recipes.—Please tell E. R. to use spirits of turpentine for the poison oak. Two or three applications will cure the worst cases. Thus writes E. A. H.—J. G., some Bohemian publishers (of papers) are editors of Denni Hlasatel also Amerikan, Chicago; and Daily Listy, New York.

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Employed while others sleep,
What few would wish to give away,
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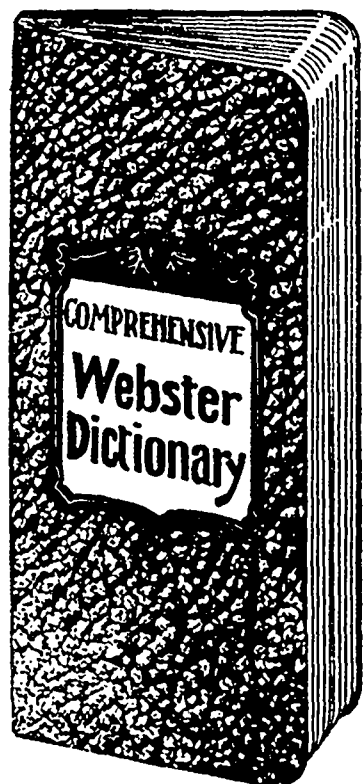
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216	Clover Scarf Pin.	237	Emerald Ring.				
219	lover's Knot Scarf Pin.	690	Turquoise Ring.				
220	Wishbone Scarf Pin.	647	Three Stone Rings.				
222	Horseshoe Scarf Pin.	692	Brilliant Ring.				
223	Butterfly Scarf Pin.	609	Plain Band Ring.				
226	Pansy Scarf Pin.	687	Cluster Ring.				
263	Silver Pencil.	24	Double Stone Ring.				
264	Pearl Handled Penholder.	133	Berry Spoon.				
115	Fountain Pen.	250	Ladies' Fancy Scissors.				
214	Santa Claus Souvenir Spoon.	251	Genuine Horsehide Razor Strop.				
259	Pair of Side Combs.	34	Ivory Handled Penknife.				
626	Garnet Ring.	162	Cent's Pocket Knife.				
197	Carbuncle Ring.	613	Phlow Shams.				
231	Brilliant Ring.	178	Empire Stamping Outfit.				
285	Flat Chased Ring.	528	Silk Remnants.				
695	Plain Band Ring.	172	Scientific Kite.				
256	Chased Band Ring.	165	Metalaphone.				
140	Sugar Shell.	105	New Concert Harmonica.				
147	Silver Plated Butter Knife.	458	Tool Holder and Twenty Tools.				
202	Boys' Knife.	215	Hand Drill and Drills.				
472	Combination Microscope.	187	Ladies' Ornamented Pocketbook.				
78	Reading Glass.	235	Gent's Morocco Wallet.				
177	American Stamping Outfit.						
110	Everybody's Printer.						
208	Parlor Croquet Set.						
242	Bull's Eye Lantern.						
99	Clark's London Flute.						
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479	Family Soldering Set.						
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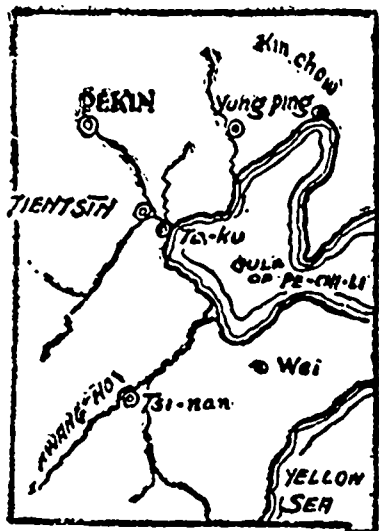
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Around the Globe.

WAR IN CHINA.

The sudden transformation of both China into a raging mob of anti-foreign butchers startled the world the middle of June. Attacks upon the foreign legations in Peking, the murder of a Japanese minister, the wholesale massacre of native Christians, and the firing upon European war-ships by the forts at Taku, followed one another in rapid succession and the nations had to assemble war vessels and troops with all speed. The Chinese government defied the world by cutting off the telegraphic communications of the foreign commanders at Taku with their home governments. Even Russia and Japan, which had been at deadly odds, ceased their services to the powers for



common cause to restore order, and the offer was gladly accepted. Japan to dispatch about 20,000 troops and Russia at least 4000. The policy of the United States was to keep out of international complications if possible. Admiral Kempff was provided with a good fleet at Taku and given large authority to protect American lives and interests. He could, in his discretion, go so far as to side with China against the European powers if he believed that those powers were plotting to divide the flowery kingdom among themselves and to ignore American rights. His fleet consisted of the cruiser Newark, the war-ship Oregon, and the gunboats Helena, Nashville, Yorktown, Castine and Monocacy. The Concord also was ordered to Taku. The 9th Infantry was ordered to China from Manila, and a transport bound for Manila was stopped on the Japanese coast and sent to China instead.

THE REPUBLICAN PLATFORM.

The renomination of President McKinley at Philadelphia was unanimous, occurring amid enthusiasm, and Gov. Theodore Roosevelt of New York received a unanimous nomination for vice-president, though he had held out against the plan almost to the end. He, too, met with an ovation.

The principal planks of the platform deal with the Philippines and trusts. As to trusts, the platform condemns "all conspiracies and combinations intended to restrict business, to create monopolies, to limit production, or to control prices, and we favor such legislation as will effectively restrain and prevent all such abuses, protect and promote competition and secure the rights of producers, laborers and all who are engaged in industry and commerce."

The platform deals with the Philippines and Cuba as follows: "In accepting by the treaty of Paris the just responsibility of our victories in the Spanish war the president and the senate won the undoubted approval of the American people. No other course was possible than to destroy Spain's sovereignty throughout the West Indies and in the Philippine Islands. That course created our responsibility before the world, and with the unorganized population whom our intervention had freed from Spain, to provide for the maintenance of law and order and for the establishment of good government for the performance of international obligations, our authority could

not be less than our responsibility, and wherever sovereign rights were extended it became the high duty of the government to maintain its authority, to put down armed insurrection and to confer the blessings of liberty and civilization upon all the rescued peoples. The largest measure of self-government consistent with their welfare and our duties shall be secured to them by law. To Cuba independence and self-government were assured in the same voice by which war was declared, and to the latter this thing shall be performed."

The platform calls for "a more effective restriction of the immigration," for the protection of free labor against contract labor, and an effective system of labor insurance, and extends liberal pension laws, condemning all acts of state governments to avoid the purpose of the 15th amendment to the federal constitution, favors the extension of rural free delivery, would have the control of the distribution of water for irrigation in the hands of the states and territories, recommends the early admission to statehood of New Mexico, Arizona and Oklahoma; favors an isthmian canal, owned, controlled and protected by the federal government; favors a federal department of commerce and industries, with a reorganized and improved consular service under its direction, commends the open-door policy in China. It indorses the administration of President McKinley without reserve.

Porto Rico Again—With respect to foreign countries, Porto Rico is a part of the United States, but a foreign country with respect to the United States. This is the gist of an opinion handed down by Judge Townsend of the United States circuit court, in one of the tariff cases. Goods entering the island from foreign countries are subject to United States tariff duties. Our government, according to Judge Townsend, can govern Porto Rico without subjecting it to the burden of national taxation, and the status of the inhabitants will remain unchanged until congress shall determine it. Porto Rico is thus regarded as a colony. In the opinion of another circuit judge, Lochren, expressed a few weeks ago, the constitution was extended over Porto Rico at the moment of the signing of the treaty of Paris, and the island became a part of the United States. The United States supreme court has yet to pass on these cases.

The New Navy—A large increase in the navy is made by the naval appropriation bill. Besides authorizing two battleships, three armored cruisers, three protected cruisers and five submarine torpedo boats, the bill enables the secretary of the navy to proceed with the construction of the vessels authorized in 1898 and 1899, by providing means for buying armor plate, for which these various vessels have been waiting on account of restrictions as to price. The ships immediately affected by the armor plate agreement are the battleships Maine, Ohio and Missouri, authorized May 4, 1898, and delayed because armor could not be purchased. In 1899 congress authorized the construction of three more battleships, the Georgia, Pennsylvania and New Jersey, and three armored cruisers, West Virginia, Nebraska and California, and these vessels also will be built soon.

Cuba's municipal elections, which were to determine in greater or less degree the island's fitness for self-government, were quiet and orderly and so intelligently conducted that Gen Wood sent word: "All reports indicate satisfaction."

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