



FARM AND GARDEN

of the Government farms we find 20,000 district samples of milk tested to establish one fact—namely, that when a cow has reached her maximum percentage of solids in the milk she produces, an increase of richness in the rations she is fed on does not yield an increase in the total quantity of milk she produces.

Coal Ashes as Manure.
Chemical analysis shows that there is very little of value in coal ashes. Yet the fact that they are porous makes them an excellent mulch for fruit trees, and if they are spread thickly on the grass, by destroying that they save the soil beneath from loss of moisture and fertility, and have thus practically the same effect as manure. Some remarkable growths of squashes, pumpkins and tomatoes have been made on heaps of coal ashes where the seeds of those plants had been scattered. But in every case there was some wood ashes among the coal ashes, or else the coal ash pile had been for months the convenient receptacle for every kind of refuse from the house, most of which contained considerable of the elements that make fertile soil.

An Earth Scraper.
This is a valuable implement on the farm. If perfect under-drainage has not been secured, the surface channels should not be lost sight of. On every farm there are slight depressions or basins, which might be easily emptied by lowering the rim at some point by removal of the dirt to the lowest places. It will be a surprise to those not having tried it to apply a scraper in a judicious manner to such places to see the results. Water should not be permitted to stand upon the soil during any portion of the year. It is very injurious to land. In fact, an excess of saturation is more damaging than drought. Water destroys fertility as well as crops, while dryness preserves the richness of the land. If vegetation does suffer for lack of moisture.



Wire Fence Reel.

Foot Rot in Sheep.
The natural habitat of the sheep is on high and often rocky lands. By contact with rocks and stones the hoofs of sheep are naturally pruned. When they are kept on low, wet ground the hoof grows long, and being very little sensitive it is easily softened until it begins to rot. There can be no doubt that this is caused by some germ, by rubbing the hoof with blue vitriol, which is one of the best germ killers, will destroy it. But the germ seems to be indigenous to all wet lands where sheep are kept, and it is the worst affliction with which sheep can be afflicted. When it once gets into a flock it can be carried to land that is high and dry, and will propagate there.

Protection for Horses.
It is undeniable that horses at work on cold, blustering winter days suffer severely from the chilling temperature, especially where they are compelled to pause every little while after severe effort. Fit a shoulder blanket to the work horse, like that shown in the cut. The forward part of a worn-out stable blanket can often be utilized, or a shoulder blanket can be made from old carpeting. This will protect the vital organs, and will in no way interfere with the harness. It is in the interest of humanity and may also save a valuable horse from sickness.—New England Farmer.



Cultivation of Oats.
At Cornell University oats were sown broadcast in the usual manner, the yield per acre being thirty-seven bushels. On another plot the oats were drilled in fifteen inches apart, the hand-wheel hoe being used to work between the rows. This may appear to some as giving a large share of labor in that manner, but as the yield on the drilled and worked plot was sixty-one bushels per acre the method is worthy of attention. A man with a wheel hoe can go over a large piece of ground in a day, and it is possible that the method will pay.

Horse Talk.
When loaded let the team stop often to get their breath. It pays. Better go twice than overload the team. This overloading is a fruitful cause for unsoundness. Be especially careful in loading the colts—a little lack of judgment has ruined many a fine horse. If you find you have too much load for the colt, throw part of it off before he is discouraged. Let his muscles become used to work by slow degrees. Drive colts only short distances first, not far enough to tire them in the least. Increase the distance a little every day, and you will insure a prompt, free driver. If you have a man in your employ who is timid and nervous, keep him away from the colts. It requires a level-headed, cool, courageous man to handle colts successfully. Inspire the confidence of colts by kindness and firmness every time you go near them, and the education will be easily and successfully accomplished.

Horticultural Notes.
Make quality rather than quantity the principal aim. Having the orchard properly trimmed keeps the trees bearing well. Annual pruning largely avoids the necessity for removing large limbs. Fruit trees or plants will not take care of themselves. They must be helped. In setting out a tree, save some of the top soil, especially to put around the roots.—Rural World.

Experiment Farms.
In each section of Canada Government experiment farms have been established as centers of education and object lessons to the surrounding farmers. Here tests are made under the best scientific conditions, and the result applied for the betterment of the methods of the average farmer. Thus at one

Just inside the open end of the barrel by means of an S-shaped wire, but is not quite so convenient. In removing wire, one end is stapled to the barrel and then it is a simple matter to push the contrivance before you. In this way the wire is not dragged through the dirt and so does not gather much litter. If it is a temporary fence, it is frequently necessary to move it but a short distance and then it can be pushed all the way, but if the removal is to a greater distance, the rod can be taken out and the barrel with its coil of wire lifted into a wagon.—Orange Judd Farmer.

Small Farms Pay.
Small farms can be made to pay if properly utilized. One farmer in New York State who has but twenty-five acres keeps two horses, one cow, and raises two pigs each year, growing all the food required to support his family and stock, making poultry and eggs his specialties. He devoted most of his time to poultry, claiming that it was less work than hauling milk to the railroad station in the winter, and that eggs bring good prices every year. The result was that he made a fair profit, while farmers with large farms claimed to have made nothing. When farmers decide that poultry can be made a leading object on farms, and not given up to women and children, they will have a source of income better than many others and for every month in the year.

Milking Stool.
I have used a milking stool made and illustrated on the plan described below for six years, says Lyman Parmelee, in Farm and Home. The seat board (a) is of two-inch plank, nine inches wide, 14 inches long. The stool board (b) is two inches thick, nine inches broad and long, cut round. A three-eighths inch bolt (c) is put through the middle, the head sunk, the nut left off, so the seat will revolve. The seat is 11 inches high. A hoop (e) is fastened with staples on the upright board (d) to hold the bucket so it will be 11 inches from the floor to its upper rim. I use a two-gallon tin pail. A heavy wire is used for a hoop. The



CONVENIENT MILKING STOOL.

piece d is two by four and six inches long fastened to the underside of the seat. Variation in Ensilage. It is too commonly supposed that ensilage made from fodder corn must be uniform in its nutritive value. This is by no means the fact. The ensilage put up the last few years is much better than that which was made at first, when a large quantity rather than quality was what was mainly sought for. All corn ensilage requires that some supplementary food be given with it, for corn is not a well-balanced ration. But some corn ensilage requires more of other food as its supplement. It is possible to ensilage corn when it has reached the earing stage, cutting up the ear with the stalk. This is worth twice or thrice as much for the same bulk as corn fodder sown or drilled too thickly to allow it to form ears, and cut as soon as it got into tassel.

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WEEKLY MARKET LETTER.

Trade Conditions in the Leading Cities of the World.
Wheat traders last week struggled with all kinds of foreign news, but the market remained in the same old rut, only that it became narrower. Commission men who have recently traveled all through the West and Northwest say that speculation everywhere is light. The farmers have paid off their mortgages with the money received from their crops, and the \$200,000,000 extra that Leiter helped them to get by advancing grain values has brought about a readjustment of affairs in the West.

During the early days of last week the foreign news was bearing, prices in Liverpool and on the continent declining steadily under the pressure of Argentine offerings. Friday there was a change in sentiment abroad, cables generally reporting reduced Argentine offerings and advanced prices. An estimate has been made that Argentina will only have 13,000,000 bushels to ship to the United Kingdom; 7,000,000 bushels of its surplus will go to Brazil, and the balance to other countries. This estimate does not make the surplus over 25,000,000 bushels. There are other good estimates of 46,000,000 bushels. Should Argentina have 46,000,000 to export, it will make a material difference in prices, provided the present crop prospects are everywhere maintained. In case it is only 25,000,000 bushels there will be less wheat to come in contact with arrivals from California and depress the foreign markets. Speculators are looking to the foreign situation to lead the bull movement. They want to see exports continue heavy, and the foreign buying good. The latter has not been up to expectations of late, but there is every prospect of its continuing good throughout January. One drawback to active cash transactions at the seaboard is the steady advance in cash premiums over May. Speculators who are very friendly to the bull side take a different view of the situation. They are inclined to ignore the foreign conditions as the real leader, and are looking to the Northwest. They believe that stocks in millers' hands in Minnesota and the Dakotas are the lightest in years. Farmers' deliveries are small and country elevators stocks are not over 5,000,000 bushels. Bulls have predicted a falling off in arrivals there since December 1, but the reduction has not been fully realized, the receipts exceeding last year's.

Portland Market.
Wheat—Walla Walla, 74@75c; Valley and Bluestem, 77@78c per bushel. Four—Best grades, \$3.75; graham, \$3.30; superfine, \$2.25 per barrel. Oats—Choice white, 35@36c; choice gray, 33@34c per bushel. Barley—Feed barley, \$19@20; brewing, \$20 per ton. Millstuffs—Bran, \$18 per ton; middlings, \$22; shorts, \$19. Hay—Timothy, \$12.50; clover, \$10@11; California wheat, \$10; do oat, \$11; Oregon wild hay, \$9@10 per ton. Eggs—18@20c per dozen. Butter—Fancy creamery, 55@60c; fair to good, 45@50c; dairy, 40@50c per lb. Cheese—Oregon, 13@14c; Young America, 12@13c; California, 9@10c per pound. Poultry—Chickens, mixed, \$2.75@3.00 per dozen; hens, \$3.00@3.50; geese, \$5.50@6.00; ducks, \$4.50@5.00 per dozen; turkeys, live, 10@11c per pound. Potatoes—Oregon Burbanks, 45@50c per sack; sweets, \$1.75@2 per cental. Onions—Oregon, \$1.75@2.25 per sack. Hops—4@16c per pound for new crop; 1899 crop, 4@6c. Wool—Valley, 14@16c per pound; Eastern Oregon, 7@8c; mohair, 20@22c per pound. Mutton—Gross, best sheep, wethers and ewes, \$3.50; dressed mutton, 6@6.50; spring lambs, 5@5.50 per pound. Hogs—Gross, choice heavy, \$4.00; light and feeders, \$3.00@4.00; dressed, \$4.50@5.00 per 100 pounds. Beef—Gross, top steers, \$2.75@3.00; cows, \$2.50; dressed beef, 4@5c per pound. Veal—Large, 4 1/2@5c; small, 5 1/2@6c per pound.

Seattle Market.
Butter—Fancy native creamery, brick, 30c; ranch, 16@18c. Cheese—Native Washington, 13c; California, 9 1/2c. Eggs—Fresh ranch, 20c. Poultry—Chickens, live, per pound, hens, 11c; spring chickens, \$2.50@3.00; ducks, \$4.00@5.00. Wheat—Feed wheat, \$3.25 per ton. Oats—Choice, per ton, \$19@20. Corn—Whole, \$23; cracked, per ton, \$23; feed meal, \$23 per ton. Barley—Rolled or ground, per ton, \$23; whole, \$22. Hay—Fugot sound, new, per ton, \$11.00; Eastern Washington timothy, \$16@17; alfalfa, \$12. Fresh Meats—Choice dressed beef, steers, 7c; cows, 6 1/2c; mutton sheep, 8c; pork, 6c; veal, small, 7c. Fresh Fish—Halibut, 5@6c; salmon, 3c; salmon trout, 10c; founders and sole, 3@4c; ling cod, 4@5c; rock cod, 5c; smelt, 2 1/2@4c. Fresh Fruit—Apples, 40@90c per bc.; pears, 25@75c per box; oranges, n. els., \$2.25@2.50 per box.

San Francisco Market.
Novada 11@13c; Oregon, 12@13c; Northern 7@8c per pound. Hops—12 1/2@16c per pound. Millstuffs—Middlings, \$23@24; California bran, \$18.50@19.50 per ton. Onions—New red, 70@80c; do new silverskin, \$3.25@2.50 per cental. Eggs—Store, 20@22c; ranch, 23@25c; Eastern, 15@19c; duck, 16c per dozen. Cheese—Fancy mild, new, 11 1/2c; fair to good, 7@8c per pound.

GOLD BY THE TON.

That's the Way They Speak of It in Dawson City.
In a personal letter, received in Portland from William J. Jones, press correspondent in Dawson City, he says, among other things: "The stories of the great yield of gold published in the United States have not been exaggerated in the least. The mind is unable to grasp the real situation, and appreciate the sights that are so common here to every-day life. In Dawson City today, ready for shipment, are between four and five tons of gold. Can you realize that such a thing is possible, or at all probable? Just consider, too, that all that is about one-third of the year's output. Men handle gold as you would a plug of tobacco. At the saloon bars, the stores, restaurants or other places of business, the mines throw up their sacks, and casually turn their backs, never stopping to see if they are accorded proper weight. Would you think of handing your purse over to a Portland barkeeper and allowing him to take out the change? "In many of the cabins along the gulches where I have visited I have seen shelves loaded down with all kinds of cans filled with gold. In one cabin on Eldorado creek there are five coal-oil cans full of the yellow metal, weighing nearly 1,200 pounds. "The Canadians are exercising the laws leniently, and to the satisfaction of the Americans, and generally speaking, the camp is orderly and very quiet, considering the vast amount of money in circulation, and the number of hard characters in the country."

Some Notes on Alaska.
There are two telephone lines between Dyea and Lindemann. T. R. Noedham has just started the Stickeen River Journal at Fort Wrangel. The weather is so moderate at Juneau that the people are not wearing overcoats. It is estimated that the carrying capacity of Portland and Puget sound steamers foots up 10,000 passengers per month. The lumber famine continues at Dyea and Skagway, and prices rule \$5 to \$50. The dealers promise a supply in a few days. Good weather for building continues. Colonel E. O. Lamphere and M. P. Gilbert, of Chicago, capitalists, have purchased a gang of Greek miners seven gold quartz claims in Southeastern Alaska for \$120,000. A large force of men and teams are getting out and delivering piles for the Nowell wharf at Dyea. This wharf will probably be the first of the three wharves under construction to be completed.

An ordinary shack—if there were lumber to build it with—in Skagway will rent for \$50 to \$60 a month. A squatter's right on a lot not far from the central district brought an offer of \$700 to a Portlander. It was refused. Archie Sheep and W. Stewart, of Dawson, presented to the famous "Slim" Birch—a testimonial of regard—a nugget two inches in diameter. It is worth \$200. Slim's convict number in San Quentin will be engraved on it and it will adorn his neck.

J. M. Fowler's townsite scheme at Lake Lindermann, by which he hoped to plat out all the available land and tax everybody \$2 who put a tent on it, has been knocked in the head by the Canadian government, which has reserved this particular land for the use of the public to put up tents and store their goods there without charge. J. Kay, of San Francisco, who took a cargo of lumber to Skagway on the Noyo, says so great is the demand for lumber that they can hardly wait until it is unloaded. Mr. Kay says that but a small per cent of the hundreds of people arriving at Dyea and Skagway, intent on pushing on to Dawson, have any conception of the difficulties before them. He predicts that congestion on the trails will be greater than last season.

A company, of which J. J. McKay, the Yakon freighter and the man who made the quickest trip ever made from Dawson to Dyea during the winter, is the head, has been organized at Tacoma to run an express between that city and Dawson. The company will operate steamers on the lakes, and from the White Horse rapids to Dawson, using dog and horse trains in packing from Dyea. It is estimated that the trip from Tacoma to Dawson will be made in 18 days in the summer and 25 days in the winter. The company will attempt to secure mail contracts. At present mail is scattered all along the trail, and McKay asserts that he is the only man who ever succeeded in delivering mail on the Yukon during the winter.

Collector of Customs J. W. Ivey is receiving a good deal of praise for his vigorous policy in enforcing the laws regarding the liquor traffic. As long as the laws are in effect they will be enforced. His vigilance in seizing contraband stuff is attracting general attention. The liquor men are growling because he shipped away 20 tons of the stuff on the Elder. The new administration is making warm times in the North, and, as a natural result, the collector is cordially disliked by the Juneau smuggling ring.

About every party of miners now fitting out for Alaska takes along a net or seine, which is set at night in some eddy through a hole in the ice, and seldom fails to catch fish enough for breakfast. After the ice is gone, there is no trouble in catching fish in any stream flowing into the Yukon. A report has reached Portland that one Sullivan formerly a fisherman at Yaquina, who went to Alaska last spring, engaged in the fishing business at Dawson, and, with the limited plant at his command, made \$7,000 last summer.

ONE-WHIZ.

At every motion of his body or limbs he said "Gee-whiz." If he raised his arm or crooked his elbow, or when he got up or sat down or bent over; if he bent his knee or turned his head, he said "Gee-whiz." Gee-whiz was his way of expressing vexation and trouble, and he had his peck of it. Thousands do as he had done and have bushels of it. He simply did a very foolish thing. He took off his coat at the wrong time and in the wrong place. The time was when he was overladen and the place just where a cold draft struck him. He woke in the morning with soreness and stiffness from head to foot. If he had thought him of the right thing to do, as though he did, he would have gotten a bottle of St. Jacobs Oil and rubbed it over his body. Use it on going to bed and you'll wake up, open your eyes and say, "Gee-whiz!" The soreness and stiffness are gone.

Representatives of the Methodist church are in session at Washington for the purpose of effecting a union of the M. E. church North and South.

HAWAII AND JAPAN.
Dispatches from Washington state that there are about to be important developments in the Hawaiian Islands. The government of the Hawaiian Islands has been notified that it is that the disturbance of the stomach caused by simple indigestion will develop into chronic dyspepsia unless checked at the start. The most stomachic is Hostetter's Stomach Bitters, which promptly rectifies gastric trouble and does away with irregularity of the bowels and liver.

Germany's proportion of suicides is larger than that of any other European country. A Ser being swindled by all others, send a stamp for particulars of King Solomon's Treasure, the ONLY treasure of money strength. MAMON CHEMICAL CO., P. O. Box 187, Philadelphia, Pa.

A captive bee striving to escape has been made to record as many as 15,500 wing strokes per minute.

AN OPEN LETTER TO MOTHERS.
We are asserting in the courts our right to the exclusive use of the word "CASTORIA," and "FITCHER'S CASTORIA," as our Trade Mark. I, Dr. Samuel Fitcher, of Hyannis, Massachusetts, was the originator of "FITCHER'S CASTORIA," the same that has borne and does now bear the fac-simile signature of CHAS. H. FLETCHER on every wrapper. This is the original "FITCHER'S CASTORIA" which has been used in the homes of the mothers of America for over thirty years. Look carefully at the wrapper and see that it is the kind you have always bought, and has the signature of CHAS. H. FLETCHER on the wrapper. No one has authority from me to use my name except The Centaur Company of which Chas. H. Fletcher is President, March 8, 1897. SAMUEL FITCHER, M.D.

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All Eastern Syrup, so-called, usually very light colored and of heavy body, is made from glucose. "Ferry's Fig Syrup" is made from Sugar Cane and is strictly pure. It is for sale in all States, and in Canada only. Manufactured by the PACIFIC COAST SYRUP CO. All genuine "Ferry's Fig Syrup" have the manufacturer's name lithographed on every can. STATE OF OHIO, CITY OF TOLEDO, ss. FRANK J. CHENEY makes oath that he is the senior partner of the firm of F. J. CHENEY & Co., doing business in the City of Toledo, County and State aforesaid, and that the said firm will pay the sum of ONE HUNDRED DOLLARS for each and every case of CATARRH that cannot be cured by the use of HALL'S CATARRH CURE. FRANK J. CHENEY, Notary Public. Sworn to before me and subscribed in my presence, this 6th day of December, A. D. 1896. A. W. GLEASON, Notary Public. Hall's Catarrh Cure is taken internally, and acts directly on the blood and mucous surfaces of the system. Send for testimonials, free. F. J. CHENEY & CO., Toledo, O. Sold by druggists, 75c. Hall's Family Pills are the best.

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Women suffering from any form of female weakness are invited to promptly communicate with Mrs. Pinkham, at Lynn, Mass. All letters are received, opened, read, and answered by women only. A woman can freely talk of her private illness to a woman. Thus has been established the eternal confidence between Mrs. Pinkham and the women of America which has never been broken. Out of the vast volume of experience which she has to draw from, it is more than possible that she has gained the very knowledge that will help your case. She asks nothing in return except your good will, and her advice has relieved thousands. Surely any woman, rich or poor, is very foolish if she does not take advantage of this generous offer of assistance.

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