

FARMERS' CORNER

Feed for Profit.

Feeding animals only to keep them over winter is not profitable. Every animal should be so fed as to make a gain. It is a loss of time to feed in winter simply to hold an animal over until it can be turned on the pasture. There is no reason why the farmer should sacrifice the winter months. Warm quarters and proper food should make animals gain and stay in winter.

Feed Digestible Foods.

It is possible to give an animal an abundance of food and yet not supply its wants. It is the amount of digestible matter in foods that fixes their value. When hogs have a desire for coal, charcoal, rotten wood, etc., the indications point to a possible lack of something required, which may be the mineral elements, especially lime. The feeding of wood ashes or ground bone would no doubt satisfy the desires of the animals. The food should also be improved by the use of bran and ground oats.

Slipping Plants.

In taking slips from plants for rooting many persons take off the young branches from the sides and base of the stock, forcing it to expend all its energies in sending out new growth from the top, and the result is a "scraggy" plant. Try taking your slips from the very top of the plant, saving all sprouts at the base and ends of the old stalk, and you will be surprised to find what nice bushy plants you will have in a short time. Geraniums, coleus, begonias and pelargoniums are benefited by such pruning. Long branches of wandering jew may be put into a bottle of water and held behind a picture so that the vines will twine about it, making a pretty decoration while the roots are forming and the little branches are starting out along the stem.—The Epitologist.

Orchard Grass.

Those who have sown orchard grass on with clover on land adapted to its growth have usually been well satisfied with it, as the two are fit to cut out the same time, or much nearer together than either of them with timothy. They also should have the seed sown at the same time, that is, as early in the spring as the ground can be made fit. As its name indicates it sows well in the orchard or anywhere the shade, and it likes a rich, sandy soil, deep and moist. On such soils starts early in the spring and grows rapidly, thus it makes a good grass for a permanent pasture, but when the ground is strong enough it is more valuable for hay, as its rapid growth enables one to get two or three crops a year. It needs to be sowed thickly, say three bushels when sown alone, or two bushels with 15 pounds clover seed per acre when they are sown together, as if sown thin it makes a coarse straw, that is rather dry, especially if not cut quite thickly enough. It needs considerable manure, but if cured as we would cure timothy by sweating in the hay, it is a hay that is much relished by horses. Some sow the clover and orchard grass and add about five pounds of white clover seed to the mixture, mix together well, and cutting the hay one or two years as a pasture of it. This is a very good way, especially if the field is one of the blue grass and red top will grow in naturally.

Winter Washing of Fruit Trees.

The winter season offers the fruit grower his opportunity for wreaking vengeance on the insect enemies which such ineluctable havoc with the trees in the summer months. The operations are practically at his mercy in dead season, for they cannot flee and the deadly poison he may with impunity apply for their destruction, and the owners of orchards care to exercise their powers of quelling infestation at the proper time and in the proper way then can largely diminish and not entirely remove the risk of injurious insect attacks. The board of culture has prepared and is circulating free of charge a leaflet dealing with this subject which is deserving of thoughtful attention.

It is well known the insects hibernating in the broken bark of the trees, the course of treatment proposed is the washing of the trees with caustic alkali wash, the use of which has been found effectual in removing the decaying bark under which the insects shelter, and at the same time destroying the eggs of noxious insects. The directions given for the preparation of the wash are: First dissolve one pound of commercial caustic soda in water; then one pound of potassium permanganate in water. When both have been dissolved mix the two well together; then add three-quarters of an ounce of agricultural treacle, stir well, and add sufficient water to make up to one gallon. The best time to apply is about the middle of February, when the eggs are in a more susceptible condition and the trees still safe from injury.—London Post.

Trained Buttermen Needed.

Attention requiring more attention the part of buttermen is that quality in their creameries. As nature is so essential to making butter of the best flavor, it would be that it would not be necessary to mention it, but the fact that

it is one of the things which the buttermaker most commonly neglects. As very few of the buttermakers through out the country are graduates of our dairy schools, there are not many of them who understand the influences that affect the flavor of butter. They have learned buttermaking in a mechanical way and go through the process according to rule, but if anything should occur to interfere with the working of these general rules they find themselves at sea. There is nothing more difficult to understand than the production of flavor in butter, but in most of our dairy schools the principles of producing it are taught in such a way as to place it almost completely under the control of the buttermaker. The buttermaker finds it hard, unless he has studied his work at a school where principles are taught to adjust himself to conditions and consequently some of the bad butter which is produced is traceable to his lack of information as to the best method of treatment. We would naturally expect, from the fact that few of our buttermakers are graduates of dairy schools, that considerable difficulty is experienced in testing the milk. Every well equipped creamery at this time has a Babcock milk test, and its operation is one of the important features of the factory. If a buttermaker is incompetent in this direction he is sure to have lots of trouble, as it is quite common for farmers to become skeptical about their test even if it is accurate. We have had inquiries come to us along this line asking where an official test should be obtained, as the patron did not think that his factory was giving him a fair test. It may be said here that the dairy commissioner makes such tests and the creamery departments of the various experiment stations are also willing to make tests of this kind. This is work, however, which should be acceptably performed by the buttermaker, and the fact that there is so much trouble over it simply indicates that more of our buttermakers should be graduates of dairy schools.—Wisconsin Farmer.

Growing Trees to Withstand Drouth.

It has long been noticed how much better deep rooted trees and growing plants stand a drouth than those which are shallow rooted. The tendency to root in any particular way is largely an inherited characteristic in the various varieties of trees or plants, but partly a matter over which man has some control. There are conditions in which moisture is so frequently supplied by rain, or where the water from below comes so near the surface of the ground that it is impossible and unnecessary to try to make the trees root deep. There are no fruit trees so far as I know, and but a few kinds of nut-bearing trees, which do well if their roots extend to a perpetual water strata. But on ordinary soils, and under usual conditions, trees may be so pruned and trained that they will send their roots deep down, and the deeper rooted the trees become the healthier, the longer lived and the more productive they will average.

The trees from the same nursery, on the same kind of soil, if planted in California, will stand a drouth which would kill its fellow planted in New Jersey, with its ordinary root system. This fact leads me to inquire if there is not some way by which trees may be induced to root more deeply. The chief cause of the difference is that in California the soil about the orchard trees is kept well cultivated, and each wet season the ground is deeply plowed, thus all the surface roots and rootlets are cut off. The moisture during the growing months is supplied by a deep furrow system of irrigation, so the water is sent well down into the ground and the roots have no need to come to the surface for water. Indeed the top soil is kept so well cultivated that there is always a dry layer of earth of several inches in thickness, which prevents the radiation of moisture.

From experiments which have been made in the east it is possible to force the roots to go deeper than were nature left alone, and always, so far as I have investigated, has the experiment been attended with satisfactory results. If the main roots of a young nursery tree are pruned square across a number of small rootlets immediately start near the point of amputation, and their growth is usually at right angles to the root from which they originate. Now if in place of a square cut, a fresh very oblique cut be made the tendency is for a single main sprout to grow, and in the same direction with the root from which it started. It is evident if this rule holds true, that a deeper rooted tree can be obtained by pruning the tap root or roots in this manner. The side roots should be similarly pruned and the oblique face of the cut turned downward. Then if in addition to the proper initial root pruning, the orchard be plowed and cultivated, if not as frequently as is the custom in California, at least once in a while, so as to cut off the surface feeders, then the tree will depend more and more upon its deep roots. It would not be well to allow too long an interval to elapse between these root prunings for the removing of a considerable quantity would be a severe shock to the tree. Better do it often.

Deep rooted trees do not respond as quickly to fertilizers, but on the other hand they do not make known a want as quickly. There are always a sufficient number of small roots to take in the food or water, and the fact that there are none of these upon which the tree largely depends will be a guarantee that year in and year out the deep root system is best. The experiment is well worth trying.—Charles E. Richards, in American Agriculturist.

Congress's Clock-Ticks.

A curious fact concerning the clock in the hall of the House of Representatives came to light during the summer. The cleaners tackled this clock, supposing it to be of some ordinary hard wood and cast iron, bedded under varnish. It looked ordinary enough, anyhow. The cleaners scratched and jabbed and scrubbed till nearly an inch thick of varnish had been removed, when it was found that the clock is incased in bronze. Beautiful bronze, too. About the face is a wealth of fruit, oak leaves and acorns. The chief beauty of the clock, however, is the eagle standing with spread wings on the top of the case, and the bronze figure of an American Indian and a hunter, which support it on each side. These are real works of art, standing about three feet high, the Indian in war bonnet and scalp shirt, leans upon his bow, and the hunter is in buckskin suit, with his gun in his hand, while both seem looking down on the House below.

There is no record whatever of the purchase of the clock, but it was in its place when the hall was first occupied by the House of Representatives, so the "oldest inhabitant" says. The clock has been "gold leafed" instead of varnished, and the bronze figures are all restored to their original state, and the whole now presents a pleasing appearance.—Washington Star.

A Phosphorescent Ocean.

A milky opalescence, permeating the entire sea for immense distances bounded only by the horizon, is a somewhat rare phenomenon. It appears quite suddenly, lasts perhaps for several hours, or passes away as rapidly as it came; and this without apparent cause. At midnight we had the singular whiteness enveloping the sea, while the more brilliant kinds of phosphorescence shone in the midst of flashing green, yellow, or bluish lights, as the case might be—a gorgeous nocturnal display. During these hours my surface trawl-net drifted astern of the ship. The water was alive with countless myriads of little gelatinous sacs measuring one-sixth of an inch in length, delicate tubulate organisms which required the aid of a microscope to reveal their perfect structure. A few specimens placed in an empty meat tin in a darkened cabin could be seen, indeed, with the naked eyes, careering noddily around in the salt water, each one glowing with that peculiar opalescent light which saturated the entire sea for so many miles. It was a small species of salpa, nearly related to a much larger kind on the side of which the late Professor Moseley wrote his name with his finger, the signature being visible on the dead body throughout the night, glowing with the brightest phosphorescent light.—The Cornhill.

A Drill Hole 4800 Feet Deep.

The drill hole on the Turf Club grounds, near Johannesburg, which is nearly two miles from the outcrop of the main reef, struck the main reef at 4800 feet, or within twenty-five feet of the depth at which it was expected formation would be struck. A curious feature in connection with the sinking of this bore hole was the fact that the rods were left in the hole for twenty months while hostilities were going on. The details of the work when it was renewed are best given in the following quotation from the report of the engineers, which is as follows: "Having completed all our preparations, we started to withdraw the rods on Sunday morning, May 26, at 9.10 a. m. The full pressure of steam at our disposal was applied, and as the rods took the strain it was a moment of great anxiety to the onlookers, and we held our breath in suspense, as it was seen the rods had not moved an inch. The next moment, however, to our great relief and delight, they gradually and evenly slipped outward, and so continued to lift, without a hitch throughout the day, so that at knocking-off time we had pulled 1850 feet. Work was resumed at daylight on the following Monday morning, and we are happy to inform you that by 10 a. m. on that day all the rods were safely out of the hole."—Mines and Minerals.

Expensive Chicken Potpie.

Eating \$50 worth of chicken potpie at one meal is an extravagant way of living, especially for a resident of West Manayunk, where millionaires are scarce articles. A few years ago there lived at Pencoyd a young man who was just making his start in the world, but has since become one of the moneyed men of the country. In his early career he became very fond of game chickens and invested \$50 in a gamecock of the choicest fighting strain. He turned the cock loose with a lot of common hens and in his idle hours enjoyed many battles with birds owned by neighbors. He came home from a business trip one day and enjoyed a chicken dinner prepared by his wife that he had eaten for many days. "Nice chicken," he remarked. "Yes," replied the wife, "I got James to kill a couple of old roosters down at the barn." He finished his meal, took a stroll out to the barn and found his pet had disappeared, and that he had eaten a \$50 potpie.—Philadelphia Record.

Man's Chance in Life.

One of the biggest life insurance companies recently figured out the chances of living, and naturally went into the spirit of the thing on lines the reverse of the sentimental. The experts simply took 100,000 human beings and figured out a percentage, just as if the 100,000 humans were chalk on a blackboard. Acting on the understanding that the 100,000 are considered at the age of ten years, each will have 48.7 more years to live. Of course some will die before collecting their life inheritance, but the 48.7 represents the average. As a matter of carefully ascertained fact there will be 749 deaths among the 100,000 before the eleventh year is reached. This leaves 99,251 survivors, with a chance of 48.1 more years in the land of the living. But 746 of these will die before becoming twelve-year-olds.

How London Grows.

Last year 26,000 new houses were built in London. Probably they are now filled by 130,000 people, the population of a large borough. This is the way London grows every year.—Liverpool Courier.

ANOTHER GRAND REPORT FROM HIS MAJESTY'S DOCKYARD, AT PORTSMOUTH, ENGLAND.

Where Upwards of 10,000 Men Are Constantly Employed.

Sometimes the Portsmouth Times and Naval Gazette published a most thrilling and remarkable experience of the wife of Mr. Frederick Payne, himself connected with the Portsmouth Dockyard for many years. The report produced a great sensation, not only in Portsmouth, but throughout the country, being considered of sufficient importance for reproduction and editorial comment by the leading Metropolitan and Provincial Press of England, as showing the marvelous powers which St. Jacobs Oil possesses as a cure for Rheumatism, its application having effected a perfect cure in the case of Mrs. Payne, after having been a helpless cripple and given up by several physicians.

We have now further evidence of its intrinsic value as a Pain Conqueror. Our readers will do well to follow the intelligent and highly interesting details as given in Mrs. Rabbets' own words:

To the Proprietors, St. Jacobs Oil: Gentlemen—My husband, who is a shipwright in His Majesty's Dockyard, met with an accident to his ankle and leg, spraining both so badly that his leg turned black from his knee to his toes. The Dr. said it would be months before he could put his foot to the ground, and it was doubtful whether he would ever get proper use of his leg again.

A few days after the accident I had a book left at the door telling about St. Jacobs Oil, so I procured a bottle from the chemist, Mr. Arthur Creswell, 379 Commercial Road. I began to use St. Jacobs Oil, and you may guess my surprise, when, in about another week from that date, my husband could not only stand, but could even walk about, and in three weeks from the time I first used the Oil my husband was back at work, and everybody talking about his wonderful recovery. This is not all. Seeing what St. Jacobs Oil could do gave me faith in your Vogeler's Curative Compound, also favorably mentioned in the book left at my house. I determined to try the compound on my little girl, who was suffering from a dreadful skin disease, the treatment of which has cost me large sums of money in going from one doctor to another with her all to no purpose.

She has taken two bottles of Vogeler's Curative Compound, and one would hardly take her for the same child, her skin has got such a nice healthy color after the sallow look she has always had.

I shall never cease to be thankful for the immense benefit we have derived from these two great remedies of yours. I think it a duty to recommend these medicines now I have proved their value.

(Signed) ELIZABETH S. RABBETS, 53 Grafton Street, Mile End, Landport, Portsmouth, England.

A liberal free sample of Vogeler's Compound will be sent by addressing St. Jacobs Oil Ltd., Baltimore.

The above honest, straightforward statement of Mrs. Rabbets' evidence is stronger and far more convincing than pages of paid advertisements, which, though in themselves attractive, yet lack that convincing proof which Mrs. Rabbets' description of her own experience supplies. St. Jacobs Oil has a larger sale throughout the world than that of all other remedies for outward application combined, and this can only be accounted for from the fact of its superiority over all others.

Fees of the Patent Office.

Patent Office fees must be paid in advance, and are as follows: On filing each original application for a patent, \$15; on issuing each original patent, \$20; in design cases, for three years and six months, \$10; for seven years, \$15; for fourteen years, \$30; on filing each caveat, \$10; on every application for the reissue of a patent, \$30; on filing each disclaimer, \$10; for certified copies of patents and other papers in manuscript, ten cents per each hundred words; for certified copies of printed patents; eighty-five cents; for recording every assignment, agreement, power of attorney or other paper of 300 words or under, \$1; of over 300 words and under 1000 words, \$2; of over 1000 words, \$3; for copies of drawings, the reasonable cost of making them.—New York News.

Supersensitive.

The man who offered himself for vivisection has aroused so much hostile comment by his action that he feels all cut up about it.—Boston Globe.

Last year nearly 450 miles of the Anglo-Egyptian Railway were built, and another 700 miles will be undertaken on the Upper Nile this year.

Best For the Bowels.

No matter what ails you, headache to a cancer, you will never get well until your bowels are put right. CASABERT'S help nature, cure you without a gripe or pain, produce easy natural movements, cost you just 10 cents to start getting your health back. CASABERT'S Candy Cathartic, the genuine, put up in metal boxes, every tablet has C. C. stamped on it. Beware of imitations.

It is proposed to increase the strength of the Belgian army to 150,000 men.



Mrs. L. A. Harris, a Prominent Member of a Chicago Woman's Political Club, tells how Ovarian Troubles may be Cured without a Surgical Operation. She says:

"Doctors have a perfect craze for operations. The minute there is any trouble, nothing but an operation will do them; one hundred dollars and costs, and included in the costs are pain, and agony, and often death.

"I suffered for eight years with ovarian troubles; spent hundreds of dollars for relief, until two doctors agreed that an operation was my only chance of life. My sister had been using Lydia E. Pinkham's Vegetable Compound for her troubles, and been cured, and she strongly urged me to let the doctors go and try the Compound. I did so as a last resort; used it faithfully with the Sanative Wash for five months, and was rejoiced to find that my troubles were over and my health restored. If women would only try Lydia E. Pinkham's Vegetable Compound first, fewer surgical operations would occur."—MRS. L. A. HARRIS, 278 East 81st St., Chicago, Ill.

\$5000 FORFEIT IF THE ABOVE LETTER IS NOT GENUINE.

When women are troubled with irregular, suppressed or painful menstruation, weakness, leucorrhoea, displacement or ulceration of the womb, that bearing-down feeling, inflammation of the ovaries, backache, bloating (or flatulence), general debility, indigestion, and nervous prostration, or are beset with such symptoms as dizziness, faintness, lassitude, excitability, irritability, nervousness, sleeplessness, melancholy, "all-gone" and "want-to-be-left-alone" feelings, blues, and hopelessness, they should remember there is one tried and true remedy. Lydia E. Pinkham's Vegetable Compound at once removes such troubles.

The Hon. Geo. Starr Writes Capsicum Vaseline

No. 3 VAN NESS PLACE, NEW YORK. DR. RADWAY—With the year before I had frequent and severe attacks of sciatica, sometimes extending from the lumbar regions to my ankle, and at times to both lower limbs. During the time I have been afflicted I have tried almost all the remedies recommended by wise men and books, hoping to find relief, but all proved to be failures. I have tried various kinds of baths, in manipulations, outward application of liniments, too hot or wrong to mention, and prescribed some of the most eminent physicians, all of which failed to give me relief. Last September, at the urgent request of a friend (who had been afflicted as myself) I was induced to try your remedy. I was then suffering especially with one of my old tumors. To my surprise and delight the first application gave me ease, after bathing and rubbing the parts affected, leaving the limbs in a warm glow, created by the Relief. In a short time the pain passed entirely away. Although I have since tried other articles, I still adhere to a chemist of wealth, I know how to cure myself, and I am quite free of the situation. DRADWAY'S READY RELIEF is my friend, I never travel without a bottle in my valise. Yours truly, GEO. STARR, Emigrant Commissioner.

ADWAYS READY RELIEF Sold by all Druggists. RADWAY & CO., 55 Elm Street, NEW YORK.

PISO'S CURE FOR CURE WHERE ALL ELSE FAILS. Best Cough Syrup. Tastes Good. Use in time. Sold by druggists. CONSUMPTION.

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SALZER'S SEEDS

BROMUS INERMIS
The greatest grass of the century. We are the introducers and the only large growers of same for seed in America. We are headquarters. Our homes yield 5 tons of hay and 100 bushels of pasture per acre. It will grow wherever soil is found. It is an agricultural wonder. Every farmer ought to plant it. It is a money maker. Try it for 1902. Catalogue free.

SPLETZ
The great cereal, producing from 80 to 100 bushels of grain and 4 tons of hay, as good as timothy, per acre. We are the introducers.

TRIPLE INCOME CORN
How would 250 bushels per acre suit you at the present price of corn? Well, Salzer's corn will produce this for you in 1902. Catalogue free.

Fodder Plants, Grasses and Clover
We have the largest array of fodder plants found in our catalogue in America. We have the finest varieties, the biggest yields and the sweetest crops. Our Giant Lucerne Clover produces a crop of 15 bushels in 10 weeks after seeding. Our First Quality Alfalfa per acre, our Testate is good for 80 tons of green fodder; our Thousand Headed Kale and Dwarf Victoria Rape make sheep and swine and cattle growing at a pound possible. We warrant our grass mixtures to furnish 100 bushels of hay on every acre where planted. (Over 2,000,000 pounds sold the past few years.)

VEGETABLE SEEDS
We are the largest growers. Choice onion seed at 10¢ per lb. and up. We have a tremendous stock of fine vegetable seeds, such as earliest peas, sweet corn, radishes, beans and many other money making vegetables. Our seeds are money makers, the kind the market gardener and farmer wants.

For 10¢—Worth \$10.
Our great catalogue with a large number of rare farm seed samples is mailed to you upon receipt of but 10¢ in stamps. These seeds are positively worth \$10 to a acre.

JOHN A. SALZER SEED CO., La Crosse, Wis.

ALABASTINE

Alabastine, the only durable wall coating, takes the place of scaling kaolin, paper and paint for walls. It can be used on plaster, brick, wood or canvas.

Alabastine can be used over paint or paper; paint or paper can be used over Alabastine. Buy only in five pound packages, properly labeled; take no substitute.

Many ailments, particularly throat and lung troubles, are attributable to unsatisfactory wall coverings. Alabastine has the endorsement of physicians and sanitarians.

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