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Editorial.

RENEW! RENEW! RENEW!

A large number of subscriptions to the FARMER are now falling due. We hope our friends will not neglect to RENEW PROMPTLY, and thus prevent their papers from being discontinued. It only takes ONE DOLLAR. We have no Agent travelling this summer, so it will be necessary to forward the amount of subscription direct to this office. Register your letters and they will be at our risk. Please attend to the matter at once friends.

AGRICULTURAL REPORTS.

As our Province is from year to year entirely destitute of statistical information in regard to Agriculture, and will probably continue to be so, if left to the action of the local authorities, would it not be wise in the Dominion Government to set about this work with as little delay as possible.

It is unnecessary to advance arguments to show the need of such information so far as this Dominion is concerned, because it stands in relation to such things in precisely the same as any other country does, and it is well known that Canada is pretty nearly the exception to the general rule which governs nations in this respect. The different countries of Europe, the United States, and even the most prominent States of the Union, have for years past, considered Agricultural Reports, Returns, and Statistics of inestimable value. The United States, England, France, Germany, and some other countries, think it a wise policy to expend large sums in accumulating facts and figures in relation to the Agricultural and Stock productions, as well as to be able to lay before farming communities the result of such investigations and experiments as may be of the greatest advantage to the stock-breeder and those who till the soil.

Among those who go to make up the Dominion Cabinet, we have a Minister of Agriculture, so called, the last of whose duties appears to be to report upon Agriculture. Any person taking up the voluminous Report that annually issues from the Agricultural Department, would naturally expect to find much of interest in relation to Agriculture, and he would be surprised, on opening the book, to find that almost every other subject imaginable is treated in detail, while the whole report on Agriculture itself is compressed in two or three pages at the most.

We have no wish to find fault with the present Minister or those who preceded him in office. This unsatisfactory state of things is the result of a system which probably was borrowed from Ontario or Quebec, where some one having professionally charge of the Agricultural interests, was expected to report upon matters and things generally, and nothing in particular.

What seems to be needed is, that the Agricultural Bureau should be a separate and distinct concern, untrammelled by the patent office, excise, customs, and a host of other matters. In short it should be purely and simply an Agricultural Department, whose business it should be to report upon the Agricultural condition of every part and parcel of the Dominion, and point out the ways and means, by which a more satisfactory development of the resources of the country may be secured. If these and many things associated with this great interest were properly looked after, the Minister of Agriculture would find but little time to devote to other matters, and the people of the Dominion would have some knowledge of the Agricultural resources of the country in which they live.

FRUIT TREES.

A correspondent in the *Maine Farmer* states that Mr. J. F. Burton, of Biddeford, had twelve acres of land so rocky and broken, that nothing but hard-hacks and juniper ever grew upon it. He cleared and burnt off the growth, and put fruit trees wherever he could find soil enough. This was seven years ago; and now, it is said, a better growth of trees cannot be found in Maine.

We refer to the above fact to show how the most unpromising piece of land may be turned to good account. There are many farms that have rocky and broken patches upon them, covered with a useless herbage, which, with some trouble, might be turned to good account, if the example quoted was followed. Apple trees grow well in such places.

Tree and Nursery Agents.

The *American Agriculturist* gives a warning note respecting these individuals. It says: "If we say that these men, as a class, are swindlers and to be shunned, we do injustice to the few honest men engaged in the business. Some excellent concerns send out agents, but for every one of these there are in the field a dozen irresponsible agents."

Perhaps it is unnecessary to call attention to the matter, as the experience of many farmers will deter them from purchasing fruit trees at haphazard, or from parties who cannot give a satisfactory account of themselves; but with all the cautions that have been given, some one is every year made the dupe of unprincipled men. It has frequently happened that orders were taken by one individual, and the trees forwarded by another, who professed to know nothing beyond the fact that he is engaged to deliver them. Of course he can answer no questions, and supposes that the trees are precisely according to directions. If anything is wrong, the other man is to blame, and he is the most innocent creature alive. The best way is for two or three farmers to club together and send an order for such trees as they require to a good honest nurseryman. They will be forwarded in good condition, and may be relied upon.

THE CROPS.

A correspondent writes from Point de Bute, Westmoreland, that "hay is a little below last year, but a fair crop. Grain is looking well. The blight has appeared among the potatoes, but not to any very great extent. We are having a splendid harvest season."

At Havelock, King's County, a correspondent writes: "Crops of all kinds are looking well. Buckwheat and oats are good. The hay crop has not been an average. Not more than two-thirds of the quantity there was last year."

Correspondence.

For the Colonial Farmer. RURAL TOPICS.

THE ROTTING OF CELERY.

Sometimes celery prematurely rots, which is generally owing to its rank growth just before it is put into the trenches in the fall. Another cause of rotting is dryness of the ground when it is lifted to put into the trenches, and a continued drowth three or four weeks after it is put in, which prevents it from starting roots. The rotting may be prevented by leaving some earth attached to the roots when the celery is dug up, setting the plants immediately in the trench, packing the earth firmly around the roots; and if the ground is dry apply a little water.

FRUIT TREES, VINES, &c.

Those persons who contemplate purchasing fruit trees, grape vines, &c., the coming fall, should begin to look around for reliable dealers to purchase from. Send to different nurserymen for their catalogues, and when your mind is made up as to what you want, send in your order early, and insist that what you order be sent or nothing, as some nurserymen say in their catalogues, "I reserved the right, when out of the varieties ordered, to substitute other good sorts," or something to that effect, which is sheer fraud in most cases, because the "other good sorts" may be good for nothing. Beware of nursery agents, or those who call themselves agents, as there is no safety in ordering stock from such men, unless you know them to be honorable. I think it is best to order all the nursery stock you want in the fall; and if you prefer setting it in the spring (and the spring is the best for small stock) heel it in, and it will keep over winter safer than if set out; and in the spring you may not receive it till a month after the time you ought to have it. I will give ample rules for "heeling in" and setting trees, &c., in a future article.

STRAWBERRY PLANTS.

It is not advisable to set strawberry plants later than the first week in September; but you will find plenty of dealers in plants to tell you that they may be set as late as October; but it is your money they want, and to lengthen out the season of delivery. A dealer in strawberry plants says, "when set in October, one-third of a crop will be produced the next season." He ought to have said, "the plants will be but slightly rooted, many will be thrown out by the frosts of winter; and the crop of fruit the first season will be worth but little or nothing." When not set as early as I state they should be, wait till spring in all cases.

PROPAGATING BLACK CAP RASPBERRIES.

All the black cap varieties of raspberries are propagated by burying the tips of the canes in August, or early in September, but in August is best. Dig a little hole with the corner of a hoe, about two inches deep, place the end of a cane in it, cover it, put your foot upon it to press the earth firmly upon it, and the work is done. In the spring they will be ready to take up, finely rooted, leaving two or three inches of the wood to each. Plantations of other varieties that are propagated by suckers can be made either in the fall or the spring; but the only advantage in fall setting is, that the work is done at a season when you are less hurried with work than you are in the spring; but, as I said before, the spring of the year is best for setting small nursery stock, as it is liable to be heaved up by the frost in many soils, and much injured or killed.

KILLING CABBAGE WORMS.

The following remedy for the cabbage worm is probably as represented: "The fluid I have used for killing worms, and with much effect, saved my cabbages, is simply rain water heated to 130°, with a small handful of salt to every gallon of water, and applied with a sprinkling pot, after sundown, in hot, fair weather, and at any hour of the day when cool and cloudy. Pour on while you can count twelve, rapidly, then stop, and if the worms in sight are not all killed and swept down 'peel mell out' of the cabbage, repeat the application. Wash out the cabbage often, with water slightly salted and heated to only 120°. But 130° is the lowest temperature at which water will kill worms, and also the highest degree that can be safely used, and that only as above described. Cabbages will bear a dash of water at 134°, and even higher, but not a continuous stream."

PASTURE LANDS.

When pasture lands are put in good condition, on being seeded to grass, they will continue to afford good pasture for a very long time. An English writer, describing a pasture in England that produced excellent grass, says: "This pasture had been in grass, without any plowing, since 1832—two hundred years, and perhaps longer—and had not run down, but was so rich that the grass grew very heavy. Many nettles also grew among the grass, and to cause their destruction I mowed and made hay in the alternate years, cutting three tens of hay per acre and mowing the first week in June; and this alternate mowing and grazing did not injure the set of grass, but improved it, although no returns were made in measure, excepting by wintering part of our flock of breeding ewes upon it."

FENCES.

In some places fences are entirely dispensed with; but it is not right, because the pasturing of stock has to be dispensed with also. Go to Vineland, N. J., and see the cows tethered with ropes to a few square rods of trodden-down grass, and you will be satisfied to "let well enough alone." But the question is, what kind of fences should farmers make? At the West they are compelled to grow hedges, because timber is scarce; and in other sections of the country the post and rail, the Virginia worm, or the board fence is made; and of all fences I claim that a board fence is the cheapest, neatest and the best that farmers can make. Hemlock boards four inches wide and sixteen feet long, two posts to a length, make a good fence. Four boards high will cost for materials from 50 to 60 cents per rod, according to the locality; and if a farmer has hemlock, oak, chestnut or other timber on his farm, from which the posts-boards can be sawed, and the fence also of durable wood, he should never see an "splitting rail," as President Lincoln once did for a living, even if the business is thus made honorable and fashionable. A good post and rail fence, however, is not to be despised, but a worm fence is a nuisance in these days of progress.

THE WILSON STRAWBERRY.

At an exhibition of strawberries in Detroit, the question came up: "Is any variety of strawberry superior to the Wilson for market purposes?" The general reply was, that if it is to be sent to small cities and towns, where there is not much wealth and taste, it is the best variety; but if it is to be sent where people will pay double the price of the Wilsons, for the larger varieties, then such varieties as the Triomphe de Gand, Jucunda, Seneca Chief, and other fine sorts are more profitable. An extensive strawberry grower said he could produce 100 bushels of Triomphe de Gand strawberries on an acre as easily as he could 200 bushels of Wilson, and the former averaged 20 to 25 cents

per quart, while his Wilsons averaged only 12¢. When the cost of boxes, picking and shipping is taken into the account, the balance is greatly in favor of the larger berries. In New Jersey and some other places, Boyden's No. 30 and his Green Prolific are much grown for market. Charles Downing is also a fine variety.

Miscellaneous.

A RUSSIAN FABLE.

One day a farmer in his field Was sowing oats for autumn yield. A young horse watched him on his way, And gave at once a scornful neigh. "How foolish man is!" this colt thought; "Here in the very act he's caught "Of throwing oats upon the ground; Could any rasher waste be found?" "Give me that heap, and I would show What oats are good for—I know. "Or even give them to the crows, They have more sense than this act shows! "Or heard them carefully away, Man may want oats some future day!" Well, time passed on. The autumn grain Was garnered from the field again. The farmer gathered oats tenfold, And gave the horse all he could hold. Are we not sometimes like this colt? We send a criticising bolt "Against higher powers. We call waste What is but wisdom, viewed in haste. We mock the providence that sends Its aims through darkness to kind ends.

PERUVIAN GUANO.

The deposits of guano, which were discovered in the islands of the Pacific Ocean, contiguous and belonging to Peru, over 30 years ago, are now all but exhausted. Recently, however, large deposits have been discovered upon the mainland of South America, which promise to furnish large supplies for years to come. Unfortunately these newer deposits have been found to be of inferior quality to those first discovered, and much dissatisfaction and great complaint have been the consequence. The consumption of guano has been of late much less than it would have been had the quality remained as at first, and the Peruvian Government and their agents have taken great pains to improve the character of their present product, and to regain the confidence of farmers. To this end, the guano was submitted to a process called "rectification." This consisted in treating it with sulphuric acid, by which the ammonia became fixed, or non-volatile, as a sulphate of ammonia, and the phosphoric acid was rendered much more largely soluble in water than it was before, being brought into the condition of that contained in the best superphosphates. The "rectified" guano contained on the average 10 per cent. of ammonia and 15 per cent. of soluble phosphoric acid. This being in fertilizing properties, considerably below the old value of guano, the price was reduced in proportion, so that farmers should pay the same price as before for the ammonia and phosphoric acid the guano contained, this being really the principal constituents of value to them. This innovation, which was first introduced into England, Germany and France, has been for some time in practice here with the best results, and the consumption of guano has recently kept pace with the increased confidence of farmers in it. But something else remained to be done to put the sale and use of guano upon a perfectly satisfactory basis. This was that the different qualities should be guaranteed, and that each different quality should be sold at a price that would be equivalent to its actual fertilizing value. The agents of the Peruvian Government in the United States, have now met this requirement by adopting the following method of preparing, assorting, analyzing, and disposing of the guano. As the crude guano on its arrival here unavoidably contains some lumps and stones, it is now crushed, screened, and all foreign matters removed. Each separate cargo is sampled and analyzed, and the different qualities assorted, and as it is bagged, the actual constituents are marked plainly upon the bags. The quality thus ascertained by actual chemical tests is guaranteed to be exactly what it is represented to be upon the bags. The prices are fixed, according to the guaranteed quality, at the following rates per pound of the different constituents, viz: for ammonia, 17¢. per lb.; for soluble phosphoric acid, 10¢ per lb.; for reverting phosphoric acid, 8¢ per lb.; for insoluble phosphoric acid 2¢ per lb.; and for potassa, 7¢. per lb. By "reverted" is meant phosphoric acid that has been soluble in water, and which now is not soluble, but which becomes soluble very easily when mixed with the soil; it is therefore only of very little less value than

perfectly soluble phosphoric acid. The prices stamped upon the bags are the retail prices in all the ports of the Atlantic States; at interior towns the freight thither will of course be paid by the purchaser. This manner of treating and offering guano removes the objections to its use, which have hitherto existed, and places it honestly, as it ought to come, before the consumer. The variable qualities which arrive enable the farmer to procure an article exactly suited to his needs, either one rich in ammonia, or one rich in phosphoric acid. He can select what he wants, paying its exact value, while previously, he had just what happened to come to hand, and paid for a poor article precisely what his neighbor paid for the best. Lest fraud might be committed by unprincipled dealers, the twine with which the bags are sewn, is fastened at each end with a leaden seal, so that detection must follow any tampering with the bags. We have always considered Peruvian guano as the most effective of the artificial fertilizers, and have been better satisfied with it than with any other, when used for general, and not special purposes. As a complete fertilizer, naturally combined in very effective proportions, it is of the highest value, and as a help to, or a substitute for, farm-yard manure, or a stimulant to falling crops, it has uses for which no other special fertilizer can be substituted. The manner in which it is now put upon the market will doubtless increase its consumption and bring it into use with many who have previously feared to touch it.

Horseshoes and Shoeing.

The following excellent advice on the above subject lately appeared in *Forest and Stream*: "On an average horses require shoeing once a month. The length of time a shoe will wear depends much on the kind of service a horse is doing, and on the kind of road he is daily travelling. A team horse in heavy draught does not wear out as many shoes as one used in a hack; quick motion grinds shoes down more rapidly than slow use. Some pavement is harder on shoes than an ordinary road, while the friction on a gravelly road wears them away rapidly. Wooden pavement is but little saving to the horse and tear of shoes, for the grit and dust which becomes impacted in the interstices of the wooden blocks grind away shoes like the friction of an enemy wheel. The hind shoes wear out first, and there is more strain and friction on them than on the fore shoes. It is impossible and improper for a horse to wear shoes more than six weeks for the growth of the foot shortens the shoe, as well as changes the shape otherwise. The neglect will cause the shoe to encroach upon the soft textures of the foot and cause lameness. The greatest amount of custom to the blacksmith comes from the teamsters, expressmen, and livermen. Omnibus and railroad companies have their own forges and do their own shoeing. The process of making a horseshoe is familiar to every school boy, who has often lingered at the smithy door and listened to the wheezing of the anvil, and when the foot is pared, wondered that it did not bleed. Again, he has seen the strong-armed workman pluck the piece of glowing metal from the bright fire, and with the hammer give it repeated blows, and give it shape by curling it over the anvil point. Heating again and again, the iron he pounds maliciously, causing the hissing sparks to fly in all directions, until at length a shoe is formed complete. This tedious process is superseded by machinery, and now like a doughnut, a shoe is cut out of a sheet of steel, shaped, creased, and punched precisely as if done by hand. More shoes can be made by machinery in one day than the blacksmith can make by a forge in a week, and equally as good, too, in all respects. The matter of horse-shoeing is of great interest to the owners of horse-flesh, for every one has an idea how the shoe should be shaped and fitted to enable the horse to travel to his notion. If he overreaches, interferes, or stumbles, the blacksmith is held responsible. It is true a skilful mechanic can do much to remedy these evils. There are but a few practical mechanics who have sufficiently studied the foot of the horse. It is not enough to know the anatomy of the foot, and where to insert a nail not to cause pain, but the foot should be studied in the state of nature before the mechanism of man has by artificial appliances distorted it. The shape of the hoof of the wild horse, or of one who has never been shod, should be taken as a model. The foot is then properly balanced, neither too

long nor too broad, but it has adjusted itself to nature, and the muscles and tendons are not strained by travel. Confinement and unskilful shoeing change the anatomical relations of the foot, and the best judgment of the mechanic is often taxed to correct the growing deformity—from unskilful shoeing. When a reasoning, skilful mechanic is found the horse is safe in his hands, for he only preserves the normal shape of the hoof, and adjusts the shoe to protect it.

The frog in the hoof of the horse is placed there for a particular purpose, and should not be cut by the shoer. If this is allowed, contraction and lameness will follow. The shape and weight of the shoe should be accommodated to the purpose for which they are designed. The track horse requires a shoe lighter and without corks, while the draught horse must have a heavy, broad shoe with corks, to enable him to obtain foothold and travel with the least possible strain. The sporting horse should be shod lightly, with a swell at the heel and toe; the best nails should be selected, and care used in clinching, for the casting of the shoes during the chase is of great inconvenience, and might throw the horse and jeopardize the limbs and life of the rider.

Buckwheat for Orchards.

For some reason, buckwheat, which is not much of a crop in itself, is found to be just the thing for growing in orchards. The dense shade afforded by the plant, keeps the ground light and friable, and this tendency is further increased by plowing under the green buckwheat at least once a year. If the orchard is old, it is as well not to try to grow the grain, but keep a succession of growths through the year, to be turned under when in blossom.

Buckwheat is usually cheap, and needs only half a bushel per acre for seed. If allowed to ripen a crop occasionally, what is accidentally scattered will furnish sufficient seeding. This is the cheapest mode of keeping large orchards in good condition, as the grand requisite is to keep the soil loose. Clover injures the growth of young trees, and it takes two years to get a crop ready to plow under. A new advantage of buckwheat is, that, when rightly managed, it becomes an aid in fighting the codling moth. If the trees are kept smooth and no chance for a lodgment of the worm on the trunk, many will hide in the stalks of the buckwheat. Pleading the ground before winter sets in destroys the enemy, as it winters in the pupa state, and cannot live in contact with moist earth. Where all the loose stuff, weeds and rubbish are plowed under just before freezing, thousands of the codling moths are destroyed, thus greatly lessening the evil the following season. This has been practically tested by apple growers of the Grand Traverse, Michigan, who find buckwheat the best crop to keep their orchards in good condition.—*N. Y. Times*.

How to Manage Cuttings.

In reply to a correspondent, the *Floral Cabinet* gives the following directions in regard to the making and managing of plant cuttings:— "In selecting a cutting, a great deal depends upon a judicious choice; if the slip is too young and full of fresh sap, it will fade away from too much evaporation; if it is too old—hard and woody—it will take a great while to strike root. You must take a cutting that is perfectly ripened and is from a vigorous shoot, yet a little hardened at the base. It is also essential to have a bud or joint at or near the end of the cutting, as all roots strike from it, and the nearer it is to the base, the greater your chance of success. Plant your cuttings in common red pots, filled half full of rich loam and two inches of sand on top (scouring sand will do, but not sea sand); wet this thoroughly, and put the cuttings close around the edge of the pot, for if the bud or joint comes in contact with the surface of the pot, it seems to strike root more quickly. Pull off the lower leaves before you plant the cutting. Press the wet sand tightly about the tiny stem, for a great deal depends upon the close contact of the sand with the stem. When the cuttings are firmly planted, cover them with a glass shade if possible, as it will greatly promote the growth of the plant. Moisture, light and heat are the three essentials to plant life; without them no cutting will start. Shade for two or three days from the sunlight, but don't let the sand become dry; then give all the sun you can obtain, keep up a good supply of moisture, and you can hardly fail to root most of your cuttings.

Shorthorns not Suited for all Places.

Dr. E. D. Moss, of St. Louis, an editor of acknowledged ability, thus expresses his opinion on the shorthorn mania in Colman's *Rural World*:

While the shorthorn fancy has put money into the pockets of wealthy breeders, its effects have been disastrous or unsatisfactory in too many instances. Farmers like to be in the fashion; they are naturally ambitious to improve their cattle by means of the magnificent shorthorns so much admired by every one; they take in the fashionable idea that they must have big cattle. If they inquire, "What improved breed of cattle shall I get?" the chances are that they will be told, "Get the shorthorns by all means; there is nothing like them." In some cases the advice is good; in more it is bad. If the object is to raise cattle for any other purpose than beef, the shorthorns are not the best. If the farmer is not willing or prepared to give the high feeding and careful attention to which they have been accustomed, they will dwindle, and he would do better to take cattle better fitted for shifting for themselves. If he lives up a hilly or mountainous region, he will have indifferent or bad success with shorthorns in nine cases out of ten. Elm, sycamore, cottonwood and black walnut trees grow to magnificent proportion on rich bottom lands—their natural home; they are not natural to lean, hilly soils, and cannot be made to attain the same perfection in them. It is so with the shorthorns; to undertake to breed and rear these mammoth-framed cattle on poor soils and steep hillsides, is to attempt what is contrary to nature and the fitness of things, and making an exertion which nature will not endure. Yet it is done yearly, and will probably continue to be done until bitter experience teaches them better.

Are Potatoes Poisonous.

In the *Housekeeper's Manual*, by Mrs. Stew and Mrs. Beecher, the following paragraph appears:—The potato, nutritive and harmless as it appears, belongs to a family suspected of very dangerous traits. It is a family connection of the nightshade and other ill-reputed gentry, and sometimes shows strange proclivities to evil, now breaking out apotropically, as in the noted potato rot, and now covertly in various evil affections. For this reason scientific directions bid us beware of the water in which potatoes are boiled, in which it appears the evil principle is drawn off; and they caution us not to shred them into steams without previously suffering the slices to lie for an hour or so in salt and water.

What next is to be put under the ban and its use forbidden. Those wisecracks, vegetarians, forbid the use of animal food, in toto, not content with the old prohibition of pork, which allowed man to eat other flesh. Another class would interdict the growing of barley, because from it are brewed malt liquors said by them to be death-dealing beverages. In corn is contained the principle of alcohol, awaiting the distilling process. How many headaches, how much nervousness and even hysteria have been asserted to be breaking in a chest of tea we know not, but alarmists have pronounced them to be there. 'Tis true rot has affected the potato, nor has its virulence wholly ceased, but has not wheat, the staff of life, been scourged by rust, blight, mildew and its properties as a healthy food seriously affected, as well as its yield decreased? We select the wheat as the most valuable of our breadstuffs, but every plant designed for the use of man is liable to disease. The potato, it is true, belongs to the same family as the nightshade. Solanum comprehends many varieties, one at least poisonous, but it does not necessarily follow that the potato is unfit for human food. The element that in the nightshade makes it poisonous may not exist in the potato, or, if it does, its injurious property may be neutralized by other elements so as to render it innocuous. But the best proof of the potato not being poisonous is that it has been used as an article of human food in the Old World and the New since its first introduction into Britain in the time of Queen Elizabeth—in some places the principal food, and in no instances with fatal effects. It has been cooked in a greater variety of modes than almost any article of food, and there has never been an authenticated case of its proving deleterious to the human constitution. But we are told to "beware of the water in which potatoes are boiled." We have not, we confess, had any knowledge of potato soup, but whether injurious to the health or not, it would hardly be very agreeable to the palate, though it might be little worse than the water in which some other vegetables are boiled.

COMPOSTING IN FALL AND WINTER.

Change the ordinary plan of pitching your stable manure promiscuously out of doors. Give the composting and stralering method at least one fair trial during the coming fall and winter, and you will be surprised at the result. Have you a vacant shed or outhouse on the premises? If so use it for the purpose of storage; if not, erect something of the kind, however cheap and temporary. A common board or slab roof, resting upon bare posts, is better than no shelter at all. Early in the fall, before you begin housing your cattle, cart a few cords of good dry loam or muck into some place convenient and handy to your stables. If muck cannot be got, use any other absorbent, straw, leaves, even sawdust, sooner than nothing. Lay a wheelbarrow load or two of this absorbent every day in the trenches behind your cows and horses, and in cleaning out your stables, night and morning, wheel earth and all out under the storing shed. Continue this during the winter, sprinkling the heap occasionally with plaster of Paris to retain its ammonia, and in spring you will have ready for fields a fertilizing material worth fifty per cent. more than the best ordinary barnyard manure. When straw alone is used as an absorbent, and no doubt it is most extensively employed, just take the trouble of running it through the cutter beforehand, and you will thus not only lessen the difficulty of subsequent handling, but materially aid in its incorporation with the animal waste. In applying this compost to the fields, it is to be treated in the ordinary way, that is, spread broadcast over the surface and ploughed under, if on the green sward; or thoroughly harrowed in, if on the inverted sod. The principal gain effected by composting is the preservation of the liquid excrements, which by the usual method are almost, if not altogether, lost; and when both science and experience alike prove these to be of more enriching value than the solid, surely it is to the farmer's interest to do all he can to conserve them and enjoy the profits accruing from their application.—*Canadian Farmer*.

How to Conquer "Suckers."

A lady cultivator has at last solved this perplexing problem (at least so far as one species of "suckers" are concerned) and we give the account of her experiment as reported in the *Country Gentleman*: "It is now well known that pruning trees in winter or early in spring tends to promote vigorous growth, and that pruning in summer tends to retard it. Hence the great superiority of the practice of cutting down trees in summer if we wish to avoid the growth of suckers from the stump or roots. An intelligent lady, whose grounds we have often visited, has just been trying a few experiments. A number of common locust trees were to be removed, and a part were cut off in winter, and the rest during the summer season. The latter have sent up a few feeble suckers; the former at least twenty times as many strong ones. She has succeeded, however, in preventing entirely the growth of suckers, both at the stump and at a distance from it, by placing a large quantity of common salt on the stump as soon as the tree is cut. It has proved completely effectual. If delayed till the suckers have started, it does no good."

British agriculture is almost perfection. Taking the farmers of Great Britain as our instructors, we may derive some valuable hints from their experience. Of the fifty millions of acres under cultivation in the United Kingdom of Great Britain, less than twelve millions of acres are devoted to "white crops" or cereals, while over twenty-six millions of acres are kept in permanent pasturage; six millions of acres under clover and rotation grasses, and six millions of acres devoted to turnips and other vegetables. England, Wales, Scotland and Ireland have about two and three-fourths millions of horses, ten millions of cattle, and over thirty millions of sheep. Repetition of white or grain crops is not permitted. Instead of the old process of restored or resting land by keeping it fallow every fourth year, which is equivalent to the permanent withdrawal of one-quarter of the tillable land from cultivation, the turnip crop, with its broad leaves that shield the soil from the rays of sun, and with its nutritious roots, that are fed before ripening, to cattle and sheep, is resorted to as the most effectual method of benefiting both land and stock, as biennial plants derive their chief nourishment from the air, and do not exhaust the soil if used before they ripen.—*Pen and Pencil*.