FARM.

Pasture or Soiling—Which Shall it Be?

BY G. C. CASTON.

I was much interested in an article in the ADVOCATE of September 1st, page 344, by F. J. S., dealing with the above subject. I am not going to dispute his figures, except to say that 20 cents per lb. is a rather high estimate of the price of butter during the summer months. He should put the price a little lower than that in comparing the value of the product with the cost of the feed. However, F. J. S. is evidently a wide-awake fellow, and I believe, judging from my own limited experience, that he has struck the right idea, and that the sooner farmers take hold of it the better. This plan of soiling overcomes two great obstacles in the way of the dairy farmer, viz.: The severe summer drouths, which seem to be more frequent now than formerly; and it appears also the best way to deal with that serious pest—the horn-fly. I tried the kerosene emulsion on my cows for the flies, but with only partial success. I made it according to the formula usually recommended, except that I used whale oil soap instead of the common sort, and also added a little carbolic acid to the emulsion. The cows were sponged over with this every two days, but after all it proved only a partial preventative. When the hair got dry the flies settled on them as thickly as ever, but did not apparently bite them so much as when no emulsion was applied. I then tried keeping them in the stable through the day, and letting them out on pasture at night, feeding them a little green corn twice during the day. By darkening the windows and arranging for a circulation of fresh air, the animals were comfortable and entirely free from annoyance from the flies. In this way I was able to keep up the flow of milk, which would certainly have fallen off greatly had the cows been left out in the heat to fight flies all day. Our old pastures are principally June grass, which, in its season, is one of the most nutritious grasses that grows in this country. The proof of this lies in the fact that stock prefer it to all others; but it is only at its best during about two months, say from the middle of May to the middle of July. After this the principle dependence is upon the after grass, or second growth clover on the meadows. But in a season of severe drouth like the present (and we have more or less drouth almost every year at this time), there is no second growth, except in the case of freshly seeded or first cut of clover, and even this has made very little growth this year. Then, cows feeding on second growth clover alone will not produce the best quality of butter. Add to this the heat and constant worrying of the animals by flies, and we have a strong argument in favor of the plan of F. J. S. Providence has endowed the farmers of Ontario with a valuable asset in the ability of our soil and climate to produce immense crops of corn (the great sun-plant, as Prof. Robertson calls it), and many are slow to appreciate it; but it does not require a prophet to see that this will be the principal food of the future for summer as well as winter, and that more dependence will be placed on this and less on pasture, and that the change will be a profitable one for the farmer there is no reason to doubt. The plan I propose to pursue myself, is to sow a patch of vetches mixed with oats, early in spring, and as the horn-fly does not make its appearance as early as the common fly, this stuff will be ready for feed as soon as it is necessary to stable the cows during the day, and will keep them supplied till the corn is fit to use. Then, there is another advantage that F. J. S. probably forgot to mention, viz., the manure. The droppings of animals while on pasture may be said to be almost entirely lost; but cattle kept in during the day, if kept well bedded with straw (of which there is usually a quantity left over from winter), will make a lot of valuable manure during the summer months. If this cannot be used at once as it is made, a little gypsum scattered about under the animals will keep down the odors and keep the manure in good shape by fixing the ammonia.

Speaking of the horn-fly reminds me of another insect pest—the sheep-tick, and as the way I rid my own sheep of them may interest and probably benefit some reader of the ADVOCATE, I may as well relate it here. I have a small flock of Leicester sheep, and last fall I got two ewe lambs from a neighbor in exchange for a ram lamb; these I found, on examination, to be alive with ticks. I had not time just then to attend to them, and later on I found the rest badly affected. I had a quantity of sheep dip on hand, but as the weather was cold, I did not wish to use it. I decided to try insect powder, as I had found it the most efficacious of anything I ever used for lice on the poultry, with which I had been obliged to wage a constant warfare. I applied it by laying the sheep on their sides and parting the wool every few inches, and dusting it in with an old pepper box. Next day I left home for a couple of weeks, and on my return, I asked the man who attended them, "what about our experiment?" He said he would give me a dollar for every tick I could find on them. The cure was complete, for even at shearing time there was not one to be found on them. It is not more expensive, and is much easier applied than any of the other remedies.

The Russian Thistle.

The appearance of the Russian thistle in Ontario justifies our extended reference to this weed again. The loss it has occasioned the farmers in those parts of the north-western United States where it has been established is so alarming that no pains should be spared to keep it out of districts where it has not yet made itself at home. "Prevention is easier than cure," is almost universally true of the ills that threaten us. The motto is applicable with ten-fold force to a weed that possesses such extraordinary resources for the distribution of its species as the Russian thistle. In an official U. S. report, Mr. L. H. Dewey says that "very few cultivated plants, intentionally introduced and intentionally disseminated, have a record for rapidity of distribution equal to this weed."

It was found by Mr. J. Dearness, I. P. S., London, Ont., growing along the outer edge of the ballasting on the Grand Trunk Railway in Tilbury Township. He pulled up all the plants he saw except one left for a botanical specimen to be collected at a stage of more matured fruit. No doubt the seed had been brought to the place where it was dropped either sticking to a car which had caught it while drifting, or in litter used in the stock cars. At the date of collection, 17th of August, the weeds were bushy, thickly branched, plants about so large as might be nicely covered by the ordinary form of a half-bushel measure. They were well out in flower, but the spines were still so soft that they could be freely handled without the slightest discomfort. Forming his opinion from what he saw of it, Mr. Dearness says it is a plant that can be easily held in check, if recognized by the farmer in the first year or two of its introduction. It is a comparatively succulent plant, and looks as though it would be injured by slight frost; it is quite conspicuous and easily recognizable from the description and engravings that have appeared in the FARMER'S ADVOCATE, and in the Bulletins distributed from Ottawa and Washington. Notwithstanding that it has a strong tap root, it is easily pulled up, and, unlike some other weeds, such as mustard and purslane, that can lie on their side on the ground and ripen seed that has once set, this weed, if pulled before 1st September, will give no further trouble. It must be pulled, not cut, for it branches so near the ground that cutting would be liable to leave many of the lower branches to ripen seed.

The Russian thistle is an annual, coming each year from the seed. It grows from a single, small, light-colored root, less than half an inch in diameter and 6 to 12 inches long, to a height of 6 inches to 3 feet, branching profusely, and, when not crowded, forms a dense, bush-like plant 2 to 6 feet in diameter, and one-half to two-thirds as high. When young it is a very innocent-looking plant, tender and juicy throughout, with small, narrow, downy, green leaves. When the dry weather comes in August, this innocent disguise disappears, the tender, downy leaves wither and fall, and the plant increases rapidly in size, sending out hard, stiff branches Instead of leaves, these branches bear, at intervals of half an inch or less, three sharp spines, which harden but do not grow dull as the plant increases in age and ugliness. The spines are one-fourth to one-half inch long. At the base of each cluster of spines is a papery flower, about one-eighth of an inch in diameter. If this be taken out and carefully pulled to pieces, a small, pulpy, green body coiled up and appearing like a minute green snail shell will be found. This is the seed. As it ripens it becomes hard and of a rather dull gray color. At the earliest frosts the plants change in color from dark green to crimson or almost magenta, especially on the more exposed parts. When the ground becomes frozen and the November winds blow, the small root is broken or loosened and pulled out. The dense yet light growth and circular or hemispherical form of the plant fits it most perfectly to be carried by the wind. It goes rolling across the country at racing speed, scattering seeds at every bound, and stopping only at fences or when the wind goes down, or when torn to pieces.

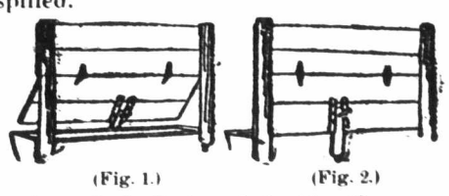
The Russian thistle, although rather pretty when reddened in the fall, and useful for forage when young, is always a weed. It will take possession of a field to the exclusion of everything else, and it draws from the land a large amount of nourishment that might otherwise go to make useful plants. In these respects it merely partakes of the properties of all weeds, except that it spreads and multiplies more rapidly, and hence takes more space and more nourishment.

We should like to inform every farmer in the land, and especially those residing along the through lines of railway, as to the nature and appearance of this weed, and to alarm him into watchfulness of any new-comer of suspicious resemblance to it. Any specimen sent to the ADVOCATE office, or to Mr. Fletcher, Experimental Farm, Ottawa, will be reported upon at once to the sender.

"My choice of soil for roses, carnations, violets, chrysanthemums, etc., would be two inches from the top of an old rich pasture, inclined to a heavy loam, and where the land is low enough to catch the deposits from the continual washings, but not low enough to be sour and wet; this should be cut in the spring as early as the land is dry, and laid up, with good cow manure of the previous season, in thin layers, in the proportion of four parts soil to one part of manure; if the soil be very rich naturally, less manure will answer, and if very poor, a larger quantity should be used." [R. Simpson, before the Society of American Florists.

Swinging Front to Pig Pen.

The simple device shown in the accompaying illustration will be appreciated by anyone who has fed pigs and been annoyed by their getting into the trough while it was being cleaned out or filled, and then, after they are driven away, rushing back and getting their feet in the trough just in time to have the swill poured all over their heads and much of it spilled.



(Fig. 1.) (Fig. 2.)

The trough is fastened inside the pen. Two boards are hinged so as to swing in over the trough. In the middle of each board is a strip fixed to slide up and down. A heavy pin in the upper end of this strip act as a convenient handle. This strip drops down on the outside of the bottom board of the pen and holds the swinging portion firmly in place. When the pigs are to be fed the slide is drawn up, and with the foot the hinged boards are pressed inward, the strip dropping down behind the trough, leaving the whole length of the trough clear, which can then be swept out and the swill poured in. The hogs are on the other side of the boards, and can do nothing but wait. In Fig. 1 the trough is shown as closed against the pigs: in Fig. 2, free to their access.—Orange Judd Farmer.

Probably a still better plan than the foregoing is to have the whole front swing. Use a 2x4 inch scantling for the top and bottom pieces, nailing the boards thereto vertically instead of horizontally, as shown in the sketch. Bore an inch and a-half or two inch hole (vertically) a few inches below top of the posts. Cut a round shoulder or tenon on the ends of the top cross-piece and insert in the holes. The whole will swing readily. With a bolt in the centre, fasten a wooden lever, three or four feet long say, just about midway between the two hinges shown in the engraving. The end of this lever holds the front back of the trough when it is being filled with feed and will drop down and keep the front in position so that it will not swing back against the heads of the pigs while feeding

To prevent the pigs pushing through into the feeding alley, by crowding against the swinging front, put a small peg in the side of each post.

Well Pleased with Cement Concrete.

BY GEO. P. BROWN.

In reading your valuable journal I found an editorial giving some points as regards concrete walls, cisterns, etc. Thinking it might be of service to my countrymen, I give my practice in building; I have nothing to add to your description of material. The gravel requires to be free from clay, as, mix it as you may, the clay will never get any harder than any other clay when dry, and if it happens to come in contact with the stone before the cement is coated over it, it will not adhere, as the clay prevents it. I mix with a machine by horse-power, and find it very satisfactory and also thorough, and from my experience I think the success of all concrete work depends much on the quickness the material, when wet, is placed in the position where it is intended to stay. I put in as many stones as the concrete will cover, allowing them to come within two or three inches of outside, but always with the sharpest point outside; no face stone with face out. I secure the corners, as you describe, with planks nailed together and securely fastened, thereby preventing any moving or changing of the plank of wall shell. I have put in floors in hog pens, and also troughs, and find them wearing well. I have used a great quantity of Queenston cement, and find it very even in strength, and also cheap.

Soiling—Information Called For.

A Western Ontario reader writes us as follows:—"In your issue, 1st inst., page 344, article—'Which shall it be?' I desire some information.

"Last November, I purchased a hundred acre farm, three miles from here; it's clay loam, not stiff, and suitable for stock. Though living in the city all my life, I want to see if farming won't pay, conducted on business principles. This present season my crops were: 17 acres wheat, 10 acres oats, 10 acres barley, 12 acres pasture or grass, 25 acres hay, 3 acres turnips, 2 acres potatoes, 5 acres corn. Total—84 acres. Next season I purpose putting in 10 acres wheat, 15 acres oats, 10 acres peas, 15 acres corn (Dent), 5 acres sweet ensilage corn, 3 acres turnips, 3 acres mangolds, 23 acres hay and pasture. Total—84 acres. I have 8 milch cows and 30 pigs now. Next year, I want to keep 10 cows and as many pigs or more. I have been sending the milk to the cheese factory, and got nothing back. That won't do, as you have nothing for the pigs and calves. What I would like to know is: Will it not take more feed than I can raise to stall feed my cows, practically, the year round? What would you feed them during July, August, September and October? This is a period when the new crops are maturing. Your figures look well on paper, and perhaps practical when conditions are equal. I would like your ideas as to daily rations the year round.

"Your valued paper comes to me regularly, and I must say, you are entitled to a good deal of credit."