

Look Carefully to the Well.

The following suggestions as to the care of the well, contributed to *Farm Stock and Home* by Prof. Snyder, will perhaps be helpful to some readers of the *FARMER'S ADVOCATE*:

"It scarcely seems necessary to emphasize the importance of a good, wholesome supply of water for household use. Foul water, containing a large amount of dissolved animal and vegetable matter, furnishes a breeding place for all kinds of disease organisms. Typhoid fever and many other germ diseases are generally caused by such water.

"Recognizing the importance of a pure water supply, what can be done to improve our wells? If it is an open well, as is usually the case, look to the drainage. The drainage should be from, and not toward the well. In order to keep out all surface water, the top six or eight feet should be laid up with water-lime. If the soil is sandy a few loads of clay should be used for surfacing. The top of the well should be raised two feet if there is any doubt about the drainage. When well water becomes muddy after a rain it is a sure sign that surface water finds its way into the well. When the drainage has been looked after look to the surroundings of the well. The watering trough should be a little distance from the well. The well platform should be sound. As soon as a board becomes rotten remove it, never nail another on top of it, because rotten wood is a breeding place for germs. The well platform should fit close to the well curbing so as to keep small animals, as rats and gophers, from accidentally getting into it.

"The well should have ventilation. A square box-like ventilator should project through the platform, and this should be covered with a piece of cheese cloth, which should be washed from time to time. The ventilator should be high enough to keep out surface dirt.

"Drinking from the spout of a pump and allowing the waste water to run back into the well should never be tolerated. Neither should the cleaning of rubber boots, covered with stable filth, be allowed on the platform. A little wire fence about the well will keep away trespassers like dogs.

"It is not wise to plant trees in the immediate vicinity of the well, because the roots will find their way into the water and give off waste organic matter, making the water foul and causing it to taste bitter.

"Farm wells are not as bad generally as those in villages and cities, where frequently wells and cesspools are in close proximity. In some cities the introduction of a good sewage system has materially lowered the water in surface wells, showing the close connection between cesspools and wells. It has frequently been observed that the water from sink holes and foul places has a direct communication with the water in wells. This is shown by placing a little lithium, one of the rare elements, into the cesspool or foul place, and then after a few days the spectroscopic will show the presence of the lithium in the well water.

"Look at your well and see if it can not be improved in some way. Is the drainage all right, is the surface water kept out, is the platform sound, is the well properly ventilated, and do all of the persons who use the well understand how important it is that the drippings from boots, etc., should not be allowed to run back into the well, and is the watering trough some little distance from the well? These are all important points to consider, because the health of the whole family may be seriously affected by not giving proper attention to them."

Manitoba's Crop Report for June.

The official crop bulletin for June issued by the Department of Agriculture shows a very gratifying statement of increased area under crop and hopeful outlook for a bountiful harvest. The following comparative statement of the acreage under crop for the last three years is interesting:

Acreage under:	1894.	1895.	1896.	1897.
Wheat.....	1,010,186	1,140,276	999,598	1,290,882
Oats.....	418,686	482,658	442,445	468,141
Barley.....	119,528	153,339	127,885	153,266
Flax.....	30,500	82,668	20,925	20,653
Potatoes.....	13,300	16,716	12,260	13,576
Roots.....	7,880	6,683	6,715	6,130

The total area for 1897 is nearly 2,000,000. The largest increase is, of course, in wheat, which is considerably larger than ever before. There was estimated to be 821,370 bushels of wheat in the farmers' hands at the date of issue of the bulletin. Stock of all kinds is reported to have wintered well, 8,729 beef cattle having been fattened during the winter, and the number of milk cows in the Province is given as 65,205. Creameries and cheese factories began operations about May 1st. There are now 28 creameries and 31 cheese factories. The demand for farm help is well supplied till harvest time, but there is an active demand for domestic servants.

The Army Worm in '97.

Bulletin 133, by M. V. Slingerland, of Cornell University, devoted to the army worm in New York, says, in closing a discussion upon the likelihood of an infestation in 1897: "In short, we believe that the history of the insect and the evident and very effective work of its enemies last year, in New York at least, strongly indicate that the army worm will be a scarce article of diet for the birds in 1897 and for some years to come in most parts of the State."

Cattle Feeding at "Maplebank Farm."

BY AN OCCASIONAL CORRESPONDENT.

"Maplebank" is the very appropriate name of the farm owned by Mr. A. Miller, treasurer of the township of East Zorra, Ont. It is situated about fifteen miles north-east of Woodstock, in the County of Oxford, and comprises some two hundred acres of fine fertile soil, running from one concession through to the next, with parallel line fences. The house, orchard and barns are situated about the center of the farm, and connected with both roads by driveways. With this arrangement one is right in the midst of operations, and it is certainly most convenient for the handling of the season's crops. During the last few years Mr. Miller has devoted his time chiefly to feeding beef cattle, and raising the necessary crops for that purpose. The barns are large, and fitted up with all the latest improvements. The cattle, of which there are some fifty head, are stalled in the basement, along one end of which is built a large root cellar, with doors opening into it at the head of the passageways. At the other end there is a large bin reaching up to the ceiling of the stables, for the purpose of receiving chop from the mill in the barn above. This mill, as well as the straw cutter and turnip cutter, is driven by wind power, which has thus far proved most satisfactory. The cattle are fed hay the first thing in the morning, and then turned out for exercise and water. During the winter the water tank, which is kept filled by wind power, is supplied with a hot air drum to keep the water from freezing—a device that works splendidly. By this means the chill is also taken off the water, which is then, it is claimed, much better for the stock. While the cattle are out the manure is removed from the stables with a stone boat, and the feed distributed ready for their return. This feed, which is given to them three times a day, consists of cut corn and hay, whole roots and a chopped mixture of oats, barley, corn, peas and bran. The chop is fed in the proportion of one pound for each hundred-weight; that is, a beast weighing twelve hundred will receive twelve pounds a day. The cattle are weighed once a month, it being quickly accomplished by having a scale placed in one of the passageways and driving them through. The greatest gain noticed since they were put in on the fifteenth of November last was 350 pounds, and the average gain 230 pounds. The horse stable, driving shed, and implement house are in a separate building facing the driveway, which leads out through a fine orchard of apple trees. Mr. Miller has used the sprayer for some years, and finds it to have been a great benefit to the trees. The farm in general presents a neat and tidy appearance, and is in every way an example of modern farming.

Cost of Growing Turnips.

To the Editor *FARMER'S ADVOCATE*:

SIR,—Many farmers do not grow turnips, because they claim it is too much work for so little return. These men have no experience in feeding turnips or they would not talk as they do. I heard of an "intelligent" man who said he preferred turning his cows out to the creek rather than grow turnips to supply them with water. There are too many men who look on turnips as being of very little value, but experienced feeders, both here and in the Old Country, know that they are indispensable in keeping stock growing and healthy, as well as being an important adjunct in making up a fattening ration.

Turnips may also be fed to milk cows in moderate quantities without having the slightest effect on the milk, but they must be fed immediately after milking, being careful to have all milk removed from the stables before feeding, as I believe the milk takes the flavor more quickly from the air of the stable than from the cow.

The following figures will give an idea of what it costs to grow and harvest five acres of turnips:

Preparing ground (plowing twice, harrowing, etc.)	five days at \$1.75	\$8.75
Drilling, two days at \$1.75		3.50
Seed, and sowing same		4.00
Cultivating twice, two days		2.50
Thinning turnips		8.75
Hoeing, second time		5.00
Harvesting		26.37
		\$58.87

These figures were taken from farm account and were made at the time the work was done.

We harvested 2,000 bushels of turnips, which we count only a fair crop, and which at 5c. a bushel makes \$100, but 600 bushels per acre is not a large crop, and 7c. is a moderate price, which would make the value of the crop \$42 an acre. You will notice that nothing is charged for the manure or hauling same to the field, but as opinions differ in regard to the per cent. chargeable to first crop we left that alone. The cost of hauling manure would be more than balanced by the feed derived from the turnip tops, which were carefully saved and fed to the turnip in pasture or stable as weather permitted. Turnip tops are, I think, as good feed for stock as rape and much cheaper. J. C. H. S.

Lanark Co., Ont.

Happy is the man just now who is loaded with plenty of good cattle. If present prospects in this business are realized, the owner of good cattle will have few cares to trouble him other than those resulting from a prosperous transaction.

Agricultural Nomenclature.

To the Editor *FARMER'S ADVOCATE*:

SIR,—There is probably no vocation in which the things connected with it are called by their wrong names more than in farming. We are constantly hearing men speaking of something that they may own or be doing, and in order to understand them properly it is necessary to question them to get at the facts of the case. Not long ago I was amused on going into a Magistrate's court, where a case of horse stealing was on, to hear a lawyer examining a witness as to the breeding of the horses stolen. It was quite evident that the lawyer knew a good deal more about the subject than the farmer did. Now this should not be, for though I suppose a lawyer should know a little about everything, a farmer should at least know the names of the different breeds of farm animals and also their characteristics, and be able to answer such questions as I heard put, satisfactorily.

On looking for some of the things wrongly called and classified, we find that very few farmers know how to describe their own land. They speak of loam, clay loam and sandy loam, but what is generally meant by loam is not loam but humus, or decayed vegetable matter. A loam is a soil in which there may be little or no humus. It is, properly speaking, an equal mixture of sand and clay, or is land in which neither of these two ingredients is found to exceed the other more than twenty per cent. Where either is found in greater percentage over the other than this the soil becomes a clay loam or sandy loam, as the case may be. When the percentage of either gets so low as ten per cent. the soil is then classed as either sand or clay. A soil may be a loam and be composed, to a great extent, of vegetable matter, but it would then be described as loam containing a large—or small, as the case might be—percentage of humus. Other soils containing humus would be described in the same way. Where the soil is composed of a large percentage of humus and a small amount of sand or clay it is a peaty soil or vegetable mould—not a loam—and when land contains much lime it is a calcareous soil. River flats, sloughs, and other low lands are almost always vegetable moulds, but this mould having been deposited by water they are called alluvial soils. Farmers should at least be able to properly describe their own land, and this they can comparatively seldom do, for most dark colored land is described as loam, which is a mistake.

Another common mistake, and one much more often heard than the one I have already mentioned, because it is a subject most farmers talk much about, is the misuse of the name of one of our breeds of light horses. This seems strange, as most Canadian farmers' sons and young farmers give much thought to their horses; in fact, they give too much thought to them and too little to other branches of the farm, which has a strong tendency towards causing them to degenerate into teamsters instead of farmers. The thought given to their favorites must, however, be ill-directed when they do not know the characteristics of the different breeds of horses, and worse still, even how they are named. The name of the breed I refer to is Blood horse. We hear a very large number of horses spoken of as Blood horses or Bloods; in fact, some farmers seem to know so little about the subject that they would almost call any stallion that they saw a Blood provided he did not carry any "feather," while properly speaking there are very few Blood horses—far too few—and of so-called Blood horses far too many. The Blood horse proper is one of the few breeds of animals that has two names, the other name being the Thoroughbred. This breed is the aristocracy among horses, the best stuff put up in the smallest space, and, as sires, would be one of the most profitable Canadian farmers could use. The horse that is so often called a Blood horse and has no right to the name is the Standard-bred trotter, and horses of that breeding which are not Standard-bred. It seems strange that so many farmers do not understand the difference between the Thoroughbred and the Standard-bred, their characteristics being so different. They might just as well call a Hereford a Shorthorn as call a Standard-bred a Blood horse. As I have already said, there are but few Blood horses in Manitoba, which is to be deplored, as they are not only useful in breeding light horses, but when used on heavier mares of the right sort are likely to beget horses that will bring good prices, but when it comes to mating this class of mares with the so-called Blood horses—animals of trotting blood—all I can say is don't do it. While I am on this subject I must not forget to speak of the improper use of the word "thoroughbred" when applied to the different breeds of pure-bred animals. The word thoroughbred is not correct, it not properly defining the meaning which should be conveyed, while the word pure-bred does so, and thoroughbred is now conceded by all authorities to the English running horse—the Thoroughbred.

The word "hybrid" is another that we often hear wrongly used, and new varieties of grain often have been brought out and called So-and-So's hybrid, when it was not a hybrid at all, but just a cross-bred. Then, again, we hear of hybridizers and hybridizing, when in reality they are cross-breeders and cross-breeding. A cross-bred is a cross of two varieties of the same species; but a hybrid is a cross of two species of the same family. A cross of two varieties of wheat is simply a cross-bred and not a hybrid, as such crosses have sometimes been called. If a variety of wheat and one of barley were crossed the product would be a hy-