at a good sale, or at one of our national or county shows. Here the beginner has an excellent chance for comparison, and can learn what a really good animal is and what it is worth. If many of our young men would spend a little more time in the cattle, sheep and swine departments of our shows, and a little less at the race track, they might learn how to purchase breeding stock a little more intelligently, and when they sell their stock might the better understand why the butcher only gives them about half as much per pound as he gives their neighbor who is up with the times.

Maryland Pig Feeding Tests.

Among the conclusions derived from a number of experiments carried out at the Maryland Experiment Station, the following are of interest:

1. It was found that with some rations the gains on pigs could be produced as low as 2½ cents per pound.

2. In all the tests where properly-compounded rations were used pork was produced at a profit when the pigs were not allowed to become too old.

3. The cost of producing a pound of pork increases with the age of a pig.

4. The aim should be to produce from 150 to 200 lb. pigs at six to seven months old for the greatest profit.

5. Skim milk was found to have a feeding value for pigs equal to fully double the price charged at most of the creameries of the State.

6. Separator skim milk at ½ cent per gallon, and linseed and gluten meals at $15 per ton, have about the same value for balancing rations for pig feed.

7. Gluten meal was found to be more economical for balancing rations for pigs than linseed meal.

8. Sweet potato strings, cow pea pasture, when properly used, produced pork economically.

Horses for the War.

During the first four months of this year the British War Office have shipped to South Africa as remounts, in addition to horses and mules sent with troops, 27,041 horses and 17,143 mules. Between the 1st and 25th of May they expected to embark another 7,500 horses and 4,500 mules, and they had 7,300 horses and 2,000 mules on order, for which no date of embarkation had yet been fixed; so that the total of remounts bought since the beginning of the year was about 42,000 horses and about 23,000 mules.

FARM.

How to Interest Boys in Farm Work.

BY F. C. SEARS, NOVA SCOTIA SCHOOL OF HORTICULTURE.

I would suggest that in all the fruit-growing districts the farmers should allow their sons to each choose one tree in the orchard, the fruit from which they shall be allowed to have for their very own, to dispose of as they see fit and spend the proceeds as they like. And let the boys choose the trees for themselves, don't give them some old seedling tree which seldom bears fruit, and then such as is only fit for cider, and poor cider at that. Allow the boys to take full charge of this tree and perform all the operations necessary, pruning, spraying and cultivating it, and you will find that you can give them a stronger liking for orcharding than by any other method you can adopt. I am so firmly convinced that this is a fact that I want to do what little I can to help test it; therefore, if any Nova Scotia boy who secures a tree in this manner wishes further information as to the best treatment of it in any way, and will write to me, I will endeavor to give him the desired information or to secure it for him. And those farmers who do not live within any of our fruit districts I would urge to go and do as near "likewise" as they can. Give the boys *something* for their own and encourage them to do the best they can to make it a profitable venture.

I am inclined to fear that there has been in the past too much of that form of encouragement which consists in giving the boy a pig which becomes his father's hog. Let every father make an attempt this year to give his sons more encouragement, both financial and otherwise, and I believe that the result can but be for the best interests of this fair Province of ours, the finest bit of country that the sun shines on to-day.

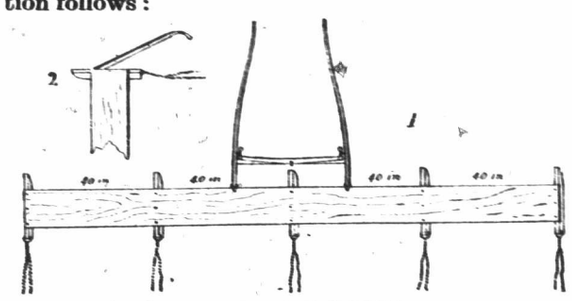
Dangers in Pasturing Sorghum.

In our issue of April 16th, 1900, a favorable reference was made to the value of sorghum in an article under the heading "Various Forage Crops for Summer Pasture." Our directions were based upon experiments conducted at the Nebraska Experiment Station, where extensive investigations with forage crops have been conducted. Another side of the question now comes to light and points out that in pasturing sorghum great care must be taken to avoid loss of stock. Last year a few herds in that State lost heavily, but the immediate cause of the trouble has not yet been ascertained. Many symptoms of the afflicted cattle tend to sustain the opinion that the sorghum plant in some stages of growth contains some virulent poison. Careful analyses have failed to discover the presence of toxic substances. The fact remains, however, that there is an element of danger in using sorghum for pasture, and that considerable care should be taken in feeding it. With this, as with all very succulent fodders, cattle should never be turned on to it even for a short time while they are hungry.

Corn Markers.

To the Editor FARMER'S ADVOCATE:

Some years ago I sent you a drawing of a marker that any man can make in a half hour, at a cost of about 25 cents, and it has been in use for six years. The following is a rough sketch, and the description follows:



A CHEAP CORN MARKER.

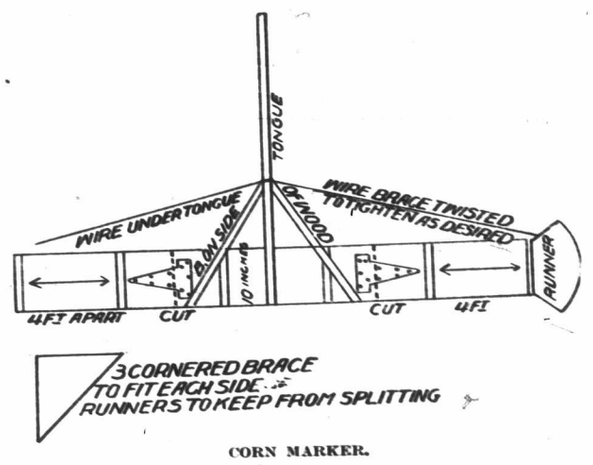
Take an inch board 8 inches wide, as long as required for 3 feet between marks, 12 or 15 feet long; 2x4 scanling, 18 in. long, rounded like a sleigh runner in front, and nailed on the under side of the board, rear end 2 in. projection from board. Buggy shafts fastened with wire through two holes for each shaft. Cow chains fastened at the end of each marker. This is a necessity, as frequently owing to furrows and any unevenness the markers fail to mark. Fasten an old plow handle at each end to guide the machine. With a boy to lead the horse, run the end marker in the last mark made. Should the horse not go exactly straight, speak to the boy, and in the meantime you can keep it straight with the handle. Arriving at the end, pick the machine up by hand and carry round to start again.

Ont. Co., Ont. JOS. E. GOULD.

Plan of Corn Marker.

To the Editor FARMER'S ADVOCATE:

SIR,—I see in the last issue of the ADVOCATE, a plan of corn marker is wanted. I will try to give plan of one we are using, and which we find works



CORN MARKER.

satisfactorily. The runners are 4 feet apart, and can be put at any distance desired. The rest, I think, will be understood by plan.

Mt. Elgin Institute. WM. WILLSON, Foreman.

Turnip Growing.

For several years past, turnips have been a very uncertain crop in Canada and some parts of the United States, and even in Scotland, where they are hardly ever known to fail. The cause of failure in almost every case has been dry, hot weather for weeks after the seed was sown, the seed failing to come up. It seems born and bred in nearly every farmer to sow his turnips in ridges or drills. This may be all right in a moist climate like Stotland, where, until the last few years, they generally had more rain than they wanted, but in a country like Canada or some parts of the United States, where there is often six or eight weeks of a hot, dry spell, sowing on drills is no good. For the past seven years I had been trying to persuade an old Scotch farmer in Canada to sow his turnips on the flat, and never managed to get him to do it until last summer, although he only succeeded in getting two crops in the seven years, and last year was the driest of the seven, but by sowing them on the flat he had a good crop (about 500 bus. an acre). The seed was sown about the usual time (June 15th). It got no rain for about a month, and did not come up, then it got two thunder showers within a week of each other, when the plants came up well, and the crop held its own until the fall rains came and helped it out. This is the great secret of growing turnips—*sow them on the flat*. It may take a little longer time to thin them, but it saves time making drills. A man with a hand drill and marker can sow ten acres a day, and as straight as drills. In thinning, you can knock out the full breadth of the hoe, leaving little clumps, then select the best plant in each clump and pull the rest by hand. This leaves them about the right distance apart (12 inches), and always insures a good even crop. This little item of selecting the best plant amounts to a great deal in the final result.

J. W.

Grand Rapids, Mich.

Three-horse Tread Power Approved.

The farmer nowadays has a great choice of the kind of power with which to do his work. It has become a perplexing question for him to decide which is the one he should use, and we often find the farmer making a great mistake in his choice in this matter. I would like to offer a suggestion here which may help some to decide. I know that some are situated differently from others, and the same power would not suit everyone. When a farmer is purchasing a power, he wants to consider well what he has to do with it, and get a power that will do all his work; also, to look ahead a little and make sure that the power he is purchasing is going to do all his work for a number of years, remembering that if he is a progressive farmer he is going to have more work to do with his power this year than he had last year, and so on. Steam power would be very suitable for the dairy farmer, as he must have plenty of scalding water, but is almost too expensive for the average farmer. Wind power is a very cheap power after first cost, and is very suitable for the farmer in some ways. I might say it is *the* power for pumping water if you have a tank large enough to hold two or three days' water, and the farmer can cut his straw and grind his grain with it nicely in the stormy days in winter, which is a strong point in its favor, but it has one serious drawback, and that is, no farmer would depend on the wind to cut his corn to fill the silo. You may say, "But I have not got a silo." Well, I would say get one as quickly as you can; you cannot afford to be without one if you keep stock. A great many farmers are talking up the gasoline engine nowadays, and I have no doubt it will fill the bill. One great advantage it has is that it can be started at a minute's notice, and the minute it is stopped there is no more waste of power, but the first cost is high, and it costs you cash every minute it runs. Now, there is a power that is more suitable for the majority of farmers than any of those I have mentioned. And that is the three-horse tread power. I know that a great many farmers detest the name tread power, and I believe the reason of this is that so many farmers have purchased two-horse tread powers because they were a little cheaper. Now, I would say right here, that though the three-horse tread is an excellent power for the farmer, the two-horse tread is only a nuisance to try to cut feed with or crush grain. There is not power enough to give the men work, unless you set it so steep that you nearly kill the horses, and this is why so many are turned against them. You can just do double the work with three horses on a tread that you can with two. All one horse can do is to keep the power and straw cutter moving without doing any work; the second horse does the work when there are two, and the third horse doubles the work when there are three. It will give as steady work as any one wants for two men to cut straw—one man to feed and another to put the straw to him—but it must be on the floor beside the cutting box or he can't keep it going. If there were another horse on one man could not begin to feed straw in one of the largest cutting boxes and keep down the speed. Three horses give all the power needed to run a cutting box, and you can crush grain at a good paying rate, either with roller or plate grinder, and you don't need to elevate your power very steep either. We set ours 2½ inches to the foot, and that is not nearly so steep as you will find some of the two-horse powers set. Now, I want to point out some of the many advantages it has over the sweep power, also some of the advantages it has over some of the other powers, and also a pointer or two on the make of a power you should purchase:

1st. It can be set on the barn floor, not taking up very much room, and therefore can be run in any kind of weather.

2nd. It can be started on the shortest notice, just the time required to take your horses out of the stable with their halters on and tie them to the power in the barn. They will walk right on without any hesitation.

3rd. There is no power easier on your machinery than a tread power; there can be no jerk. Speed rises gradually, and there is no flying off of belts.

4th. You need no driver, the man that attends to the work that is being done feeds to regulate the speed. One man is all that is required in crushing grain.

5th. Almost all the expense in running it is the oil. I consider it is only needful exercise for the majority of farmers' horses in the winter. I believe our horses are the better rather than the worse of it, and they are on it part of two days every week, or perhaps more, in the winter. If we are grinding, we rest them once in a while; if cutting straw we have to rest them every half hour to get straw up beside cutting box.

6th. I am sure there is not a more durable power on the market to-day; as it is easy on machinery, it is easy on itself. It is impossible for the horses to jerk. It is a good power to run a cream separator.

In purchasing one of these powers, make sure you get good length; you can't get one too long. Some horses will work all right on the shortest of them, but occasionally you will find a lengthy animal that will not work on it; perhaps it may be the best horse you have for the tread power. Ours is 11½ feet extreme measurement across logs. Get one with good speed, one that will run your machinery at proper speed when your horses are walking at a moderate pace. Also get one with brake independent of drive wheel, so you can run your belt fore or aft, up or down, as you will find this a very im-