or use a sieve from the fanning mill. On this board or sieve shell each individual seed ear. If for any reason a bad ear has been overlooked in the previous operations, it is caught here and can be discarded. Broken grains, irregular-shaped and other undesirable kernels can be easily removed by hand. When the corn is on the lapboard or sieve, the shape and size of grains can be noted, and the deep-grained ear placed in one box, while the shallow grains are placed in a separate receptacle. It is almost impossible to have the planter drop uniformly the required number of kernels when the deep and shallow kernels are mixed, but when they are graded and the planter plates adjusted the stand of corn can easily be increased twenty to thirty per cent.

G. I. CHRISTIE, B. S. A.
Purdue University Experiment Station, Ind.

THE SPLIT-LOG DRAG COMPETITION.

RULES AND PARTICULARS.

1. Two sets of three cash prizes are offered, one set for Eastern and one for Western Ontario, an imaginary line running due north from Yonge St., Toronto, being the dividing line. The first prize in each case will be $25, second prize $15, and the third prize $10.00.

2. Any subscriber to "The Farmer's Advocate" may enter who will notify us on or before March 27th, 1907, of his willingness to construct a drag, as explained below, and use it at least five times during the summer before October 15th, at his own discretion, on a mile of ungravelled earth road of his own selection, preferably the mile from his gate towards the nearest town. Applicants must give full name, post-office address and railway station or stations.

3. On behalf of the Provincial Government, Mr. A. W. Campbell, Good Roads Commissioner, has agreed to co-operate with us by doing the judging. Each piece of road will be inspected as early as possible in the spring, and again after the conclusion of the trial on October 15th. The awards will be made according to the results evident from the use of the drag. To make a good showing, it may be well to choose a bad rather than a good piece of road, though no limitations are imposed in this respect. Each competitor will be required to keep and present in writing to the judge a statement showing the amount of time spent in dragging his beat and the dates on which it was done. This statement will not be used in making the awards, but is desired for purposes of information, and in some cases for publication.

The results of the competition will be written up and illustrated with halftone engravings in "The Farmer's Advocate."

Send in your name at once. Let us have dozens from every county in the Province. We are offering our time and money in the cause of good roads. Will you help.

Remember, the time for entering the competition closes March 27th. Address your letters, as per rule 2, to "The Farmer's Advocate," London, Ont."

HOW TO MAKE AND USE THE DRAG.

The two halves of a split log, ten to twelve inches thick, are set on edge thirty inches apart, both flat sides to the front. The cross-pieces are wedged in two-inch auger holes bored through the slabs. In other respects the cut is self-explanatory. If working a clay or gumbo road, it is advised to put iron (old wagon tire, or something of that sort) on lower edge of drag at end of six months; for softer soil, at end of twelve months.

The inventor has prepared the following road-dragging "catechism," telling how to make and work the drag:

Would it not be better to plow the road before dragging?

No. Plowing gives a soft foundation. Plowing the middle of the road is a relic of the old dump-scraper days.

What do you do when there are deep ruts in the road?

Drag them. If you drag when the surface is quite loose and soft, you will be surprised how soon the ruts will disappear.

How do you get the dirt to the middle of the road?

By hauling the drag slantwise, with the end that is toward the center of the road a little to the rear of the other end.

But suppose the road is too narrow?

First drag the wheel tracks. After three or four rains or wet spells, plow a shallow furrow just outside the dragged part. Spread this over the road with a drag. Only plow one furrow. You may plow another furrow after the next rain. At each plowing you widen the roadbed two feet.

How many horses do you use?

Two, generally; three if it is just as handy; four when breaking colts—a good solid team in the center, and a colt on each side; two men on the drag, one to drive, the other to control the colts.

How do you drain the road?

If the earth is pushed in the middle of the road continually, the road will drain itself.

Why not make the drag out of plank?

You can, and do good work, but the split log is the best. The plank drag is not so stiff.

Why not make the drag of heavy, sawed timber?

Because drags so made have a tendency to slip over the bumps.

Don't you grade up the road first?

No. The grading is done with the drag, gradually. By so doing, the road is solid all the time, and is built on a solid foundation.

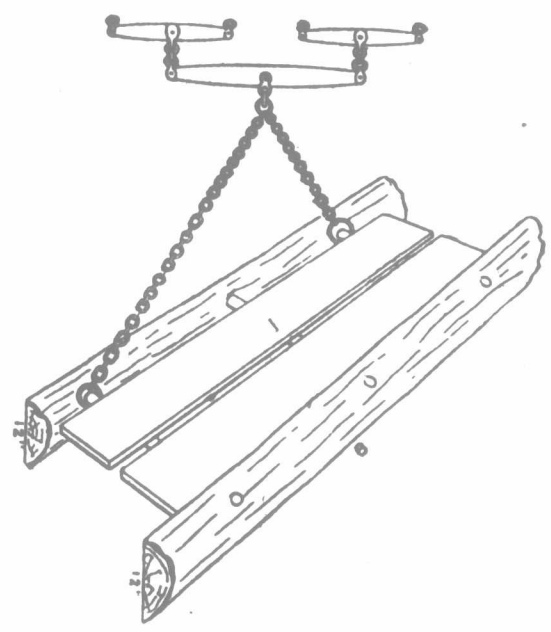
What does it cost to drag a mile of road a year?

The cost is variously estimated at from one to three dollars.

How do. you keep the drag from dodging around sidewise?

By not loading it too heavily. If a drag dodges around the earth you are moving, it is because it is overloaded.

Will the dragged road stand heavy hauling?



Yes and no. A dragged road will stand more heavy hauling than an undragged road, but not so much as a macadamized or well-kept gravel road.

Don't drive too fast. Don't walk; get on the drag and ride. Don't be particular about material; almost any log will do. Don't try to drag with only one piece; use two.

APPLICATION OF STABLE MANURE.

Editor "The Farmer's Advocate":

In a recent editorial you referred to your recent deliverances on the care and application of stable manure through your different correspondents, and suggested that the subject wasn't yet theadbare. With this I quite agree, for in my experience as an Institute worker, I have noticed, both from discussions and observation, that there is great diversity of opinion, as well as practice, in securing the best results.

Some of the leaks are being corrected in saving the liquid parts with the solid through the use of concrete floors and of absorbents. More cut straw and chaff of pea straw, alsike and clover hay, etc., are being used than formerly for this purpose, while much of the long straw is being used in the box-stall management of stock, where large quantities may be used to the best advantage.

To help simplify the work, the manure spreader is being largely used as a labor-saving device. In many parts it cannot be used to advantage during the winter months. Often in the spring, too, work is of such a pressing nature that a great deal of stable manure is left most of the summer to leach and heat in the heaps or farmyard before it is handled with the spreader. There is unquestioned loss in this method. The more careless methods will entail a loss of fully one-half its virtue, as compared with its application when green to the land.

So far as my experience and obseravtion have gone, I still maintain that green manure, applied on a meadow which may be plowed, after the hay is removed or after pasturing it, for fall wheat, or a hoe crop, is one of the best ways. Or it may be applied to fall-plowed lands intended for hoe crops, and worked in with the soil in the spring, or lightly plowed in, at any rate. The only loss of any extent I can see in handling the manure in this way is when it is applied to the surface of ground full of water and frozen hard. A winter rain or spring freshet which would carry the colored water into the drainage system would certainly mean loss, and may easily be avoided. Occasionally we hear farmers who have tried the winter system of application and the spring system of plowing it in after applying it, say that they have had better results from the latter practice. When we come to analyze it, however, it is more a question of climatic or moisture conditions than in the methods of manurial application.

The system of putting the manure out in small dumps is still very common, and has nothing to recommend it. It increases labor, localizes the strength of the liquid part, which in itself should show that there cannot be much waste when spread, if the land around the dump will absorb the strength which is washed out.

I have nothing to say against the system of piling the green manure in heaps on the higher portions of the fields sufficiently large that they will not freeze very much, and then applying in the early spring when there is still sleighing. It means a little extra labor, it is true, but over comes any objection of the deep snow on the fields. Nor have I any objection to handling it in sheds, or in a large pile in yard, where it is prevented from heating and leaching. It is a mistake to try to kill weed seeds in that way, as the loss of nitrogen is too great, as well as in a reduction of humus content, which process of decomposition is better to take place in the soil.

In any case, my experience goes to prove that the nearer stable manure can be kept to the surface, the better are the results, taking one year with another. Apply it as fresh as possible and in limited quantities, and good results are bound to follow.

T. G. RAYNOR.

THE DAIRY.

MILK AT TEN CENTS A QUART.

The possibilities that lie in the direction of producing a superior quality of dairy products for home consumption are illustrated by the Silver Springs Dairy Farm, at Deschenes Station, P. Q., on the Hull Electric Railway, and but a few miles up the Ottawa River from the capital city. While attending the Eastern Ontario Dairymen's Convention, in January, a member of our staff went out to see the farm. They were then milking some 83 Jersey and Jersey-grade cows, retailing about 580 quarts of milk a day in the City of Ottawa, at 10 cents a quart, and refusing orders from would-be customers day after day.

The proprietor, Mr. P. Clarke, was formerly an up-river merchant who had come to Ottawa to live. Inquiring of Prof. Jas. W. Robertson one day where he could get a first-class supply of milk, he was advised to keep a cow. This suggested the possibilities of running a dairy farm to supply a fastidious trade, at extra prices. Prof. Robertson spoke favorably of the idea, which forthwith took root in Mr. Clarke's mind and grew. He went over to the United States three or four years ago, visited some of the best dairy farms and pure-milk-supply firms, picked up all the information he could, and came back to Ottawa determined to sell 10-cent milk. His friends laughed at him. They said he would never get Ottawa people to pay over 6 cents a quart. But his was the faith that bears success. He invested $18,000 in a 200-acre farm, and to this expenditure has since added another $10,000 in buildings and farm improvements, and 152 head of stock. The cows now at the place are fine, deep-bodied animals, with more size and substance than the average of the breed, and give evidence of being generous producers. Three high-class registered bulls are kept, and the whole herd is being selected and bred along producing lines, keeping constitution in mind, as the basis of success.

The proprietor threw his heart into the business in the way in which a business man who takes to farming from choice generally does. He picked up pointers wherever he could get them, subscribed for "The Farmer's Advocate" and other leading farm and dairy papers, corresponded freely with firms manufacturing goods that might be useful in his business, and has spared no pains to produce and deliver first-class, pure milk. He began by charging 6 cents a quart, later increased it to 7 cents, then 8 cents, and last fall the price was raised to 10 cents, and more could be had if demanded; but Mr. Clarke has not everything to his taste yet, and does not consider his milk worth more, although he intends to further perfect his facilities and produce milk worth 12 cents or over.

Ten-cent milk must be good, or customers would refuse to pay the price. Mr. Clarke sees that it is good—not most of the time, but every day in the year. To begin with, it is rich. The extra high percentage of fat is of no particular advantage from a dietetic standpoint, but well-to-do people want milk for the taste of it more than for the sake of its nutriment, and gladly pay an extra price for creamy Jersey milk. The standard is 5 per cent. fat in the milk, and 25 per cent. in the cream. It often runs a little over this guaranteed percentage, but he sees that it never falls short. The milk is kept pure and sweet. Every precaution is observed in the stables, and as fast as drawn the milk is swung down to the dairy, several rods away, in 4-gallon cans sliding on a cable. It is cooled immediately