



One Man and Three Horses Working Against Two Men and Four Horses.

This plowing scene on The Delta, of British Columbia graphically portrays the advantage of the three-horse team and the two-furrow plow. While the three-horse team could not stand the pace continuously against two single teams the advantage in acres plowed per man and per horse would be decidedly with the larger outfit.

## The Tractor in Ontario

### Observations and Deductions by "Mac"

**D**URING the past few months it has been my privilege to visit a number of farms where the tractor is in actual operation under various conditions and at other places I have merely talked with the owners of them regarding the work they are doing. While these machines are sold as tractors the fact that they can be quite profitably used for belt purposes is a point worthy of as much consideration in the buying of a machine as its value for traction purposes. I think that if more emphasis were on this point both by the manufacturers and by the farm press it might set the matter in a clearer light in the minds of a great many people.

As tractors, what should we expect of them? In the first place they are tireless workers, and if in experienced hands are steady workers, but if in the hands of a careless operator, the owner must be prepared for lengthy delays of one sort or another. Difficulties are most commonly met when working in boggy ground. It will do satisfactory work on ground in this condition if run at a fairly high speed and also not pulling too heavy a load, but if run at a slow speed and working almost to full capacity they will dig themselves into a wet hole right up to the axles inside of a distance of a few feet. Here they must be run at a good speed and run light. If the ground is uniformly firm, however, they can be loaded for all they can draw and run as slowly as desired. Slow speed is desirable on account of the present danger of striking the plow or other attached machine against stones and obstructions. When going fast there is more danger of breakage.

Regarding belt work, the tractor's great advantage over the ordinary stationary or portable engine lies in the fact that it can be moved on its own power. It is not necessary to take out a team of horses every time the machine is to be moved a few inches.

While there are many farms upon which a tractor has absolutely no place—very stony farms, farms recently cleared and with the consequent stumps, roots, etc., farms with many poorly drained spots in the fields in which the tractor is likely to be mired, yet there are many other farms on which one would be a very valuable addition to the farm equipment. Farmers sometimes say, "We have to keep horses anyway, so why get a tractor." This is quite so, and a farmer should ever expect a tractor to displace horses on the average farm. Any farmer buying a tractor should buy it with the idea of supplementing horse power rather than displacing it; buy it with the idea of doing work that otherwise would not be done; to crop fields which otherwise would be allowed to run to unsuitable pasture; to get fall plowing done up in the short space of time which the average farmer finds to do it in; and lastly, but by no means least, with the idea of having your own power for threshing, soil filling and all other work commonly done by a stationary engine. There is no reason why it should not enable the farmer to do with fewer horses, and it may in many cases, save the expense of buying a portable engine, which would cost as much per horse power as a tractor, if not more.

I have endeavored to find out what is the best size for the average farmer to buy. The general idea seems to be that a 5-10 h.p. is too small. A man

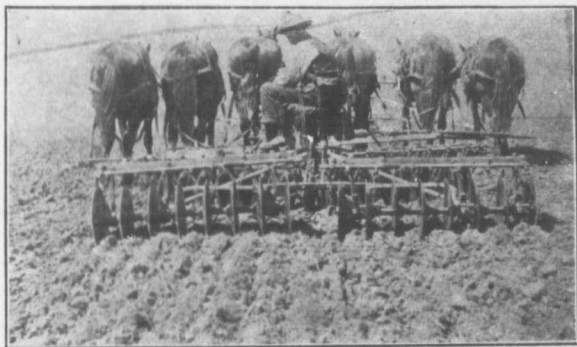
been purchased to fill this need. But there is no work done by the big stationary engine that the tractor will not do equally well or better. When the belt use and traction use are considered together, we may change somewhat our estimate of the first cost.

## Three Horses on 100 Acres

### The Farm is Well Worked Too

J. L. Thompson, Oxford Co., Ont.

**I** ONCE heard a spirited argument between two well known farm management experts as to the number of horses that could be kept with profit on a 100-acre farm. One of these experts considered



"The Way We do it Out West"

The illustration shows a Farm and Dairy reader, Mr. W. M. Sanders, of Alberta, working down his summerfallow with a six-horse team and double disc harrow. The more economical utilization of man power through the greater utilization of horse power is probably better understood and more widely practiced on the western prairies than anywhere else in the world.

three fairly heavy horses to be quite sufficient, while the other placed his minimum at five horses, so that a three-horse and a two-horse team could be worked at the same time. My own opinion is that three good horses are sufficient, and I base my judgment on the experience of several farmers of my acquaintance who are working 100 acres with three horses and doing the work well. One of these three-horse farms is right in the heart of Oxford county, and is recognized as one of the best farms in the district. For purposes of comparison I might mention that right over the line fence is a 90-acre farm worked with four horses and the farm work was not anything like as well done. The explanation is found in the implements used on the two farms.

My hundred-acre farmer has a three-horse team on the go most of the time. Spring and fall plowing, outside of starting the crown and finishing the lands, is done with a double mold board plow cutting sixteen inches. A big disk harrow, a four-section disk

harrow, and occasionally five-section, and a wide working disk seeder make it possible to use three horses to the best of advantage all through the spring seeding. The hired man is the teamster. The proprietor himself sees that the man does ten good hours' work a day in the field and develops his own time in the chores and incidental work, which on most farms, either interferes with seeding or is entirely neglected. One day during the seeding when I called on him he was pruning in the orchard, while the man was finishing up the spring plowing. Right over the fence his neighbor and his neighbor's hired man were likewise finishing up the spring plowing with two single plows; an extra man employed of the job but no extra work done.

This man gained in two days by his system of farming. In the first place he saved the cost and upkeep of one horse. He estimated a few years ago at \$50, but it would be nearer \$100 now. This gain, however, is the smallest one. Because he has more time for incidental work, the dairy cattle are better looked after and the cheese factory cheque is larger. The grain is always tested for smut, the seed corn is tested for vitality and they always have time to get in a first class kitchen garden, and he has what one seldom finds on the dairy farm, a splendid assortment of small fruits well attended to. He tells me that the ownership of just three horses has never been a hindrance in either his crop or harvest, and the work is gotten through just as fast as on any neighboring farm. The horses are good-sized Clydes. Small horses of 1,200 lbs. each could not handle the work.

## The Silo on the Small Farm

### It Doubles Stock Carrying Capacity

By Tom Alfalfa.

**"W**OULD you build a silo on a small farm?" a neighbor once asked me. This neighbor has less than 25 acres of land, and not awfully good land at that. He has been growing half an acre or two of strawberries, two or three acres of potatoes and the feed for three cows. Sometimes his strawberry crop was good and sometimes the late frost killed the bloom. He told me that when the crop was extra good the market was apt to be extra low. The same was true of potatoes. A good crop was accompanied by low prices. "But the cows are always reliable," quoth he. "We can always count on the cream cheque." So he wanted

to increase his herd to six or eight good cows and he could not see any way to do it except through a silo. Could he afford the investment?

Now, I know perfectly well that Warren and I other old high muck-mucks of farm management have a good deal to advise silos on farms so small as this one because their surveys show them that farmers with small farms haven't got them. They argue that farmers in the aggregate know what is best for them, and if silos paid on small farms there would be more of them erected. My neighbor and I did a little figuring together, and I advised him to go ahead and build a silo. He immediately got a three and one-half acre of Wisconsin No. 7, and the summer he built a silo. The first year it was built under ground, all cement on the bank side of the barn, the bottom being two feet below the stable floor. On top of this he erected 16-foot staves. The silo was 16 feet in diameter and we estimated that it would hold enough to feed six or eight cows practically the year round with, of course, some pasture in summer.

That fall Mr. Neighbor filled his silo and six feet in addition with the product of his three and one-half acres of corn. Then he bought in six or eight good cows.

After two years use he told me that

**T**HE first time Hartley, Halting in the done service for over ever, masons and erecting a new "farm" On the keys were living most modern farm able old hand the hired help and the old home has in the greater convenience. These conveyed to be appreciated strolled in from warmly dressed.

But, perhaps, Hartley of Mountain and dairy farms most of his attention has been unusually back from Lake Ontario ready for market the Burlington and maturity of the fruit location on "The of Milton. Second is a large orchard, monecy cherries.

are also grown on getting started in of the business is by distributing labor.

A silo has been extended, and it will a false-sided dairy best proof of Mr. modern home use made it possible for

The exterior appearance best gathered from It has solid brick and a big veranda. The large for vegetables, furnished to aid in the is one of the most feature of the first floor entered directly Mr. Hartley find it ing the day to an take men in on b tramp through the a decided advantage the muddy seasons cularly. On the floor are several bedrooms, a three bathroom and in additional attic are in additional bedrooms.

"The house is larger than the new on own family," ed Mr. Hartley. The fruit season, however have a large number of pickers here. A great of these pickers brought from the to Milton each day. I number of our best men have to accompa in our own home had this requirement our business in mind we built our house."

A home such this is not built without careful planning in vance. The Hartley home has been talked over details many months before rough sketches embodied in an architect. Mrs. Hartley's brother the way-for "dropping" up in a form that was understandable to the masons and carpenters. The contract was the to a local man, who his work well, as a finished both inside and out testifies, and as

(Continued on page 30.)