How Dairy Farmers Have Solved Their Power Problems

Farm Tractor Experience—Hydro-Electric Harnessed—A Plea for the Old Fashioned Windmill

All Round Tractor Usefulness We Use Ours From Seedtime to Harvest H. Keith Revell, Huron Co., Ont.

ARLY in the summer I made some compari-E sons in Farm and Dairy between tractor labor and horse labor. Since then we have used our tractor on many jobs. We did all our plowing and seed-bed preparation successfully. Had the spring been more favorable, we would have been more successful. If any farmer has many wet or soft spots in his fields at seeding time, he will be wise to tile those spots before trying to work them with a tractor. A tractor can dig itself into a hole in about five seconds,

from which it may take two hours' hard work

with a shovel and fence rails to get out of. However, after the operator has dug a few holes he can generally manage to avoid many such occurrences.

We cut and raked our hay with the horses, but used the tractor for loading, hauling and unloading. For this work we found the machine much more satisfactory than horses. We have two threshing floors in the centre of our barn. We pulled the load of hay in on one floor turned around and drove out the other, then coupled to the end of the rope. The work of unloading was carried on much better .nd quicker than when we used horses on the rone.

We cut some grain, but ander our conditions prefer the horses. If we had two binders then the tractor would be better. With one binder we found the speed too slow. We were able to cut our corners as squarely as if horses

were used and got around the corners just about as quickly. We have also used the machine on the buzzsaw, grain grinder and threshing machine successfully.

The operating cost is a big consideration. If the machine is used on all possible occasions of hauling and belt work, then, other factors being favorable, the cost of work will be as cheap, if not cheaper than horsepower. Of the other factors to be considered, the chief of all, is the intelligence displayed in handling the machine. It must be remembered that the modern lightweight tractor is a much more complicated machine than a wagon or a hay rake, and consequently requires greater care in handling.

Farming With an 8-16 It Does Everything But Haul the Seed Drill A. M. Zoeller, Waterloo Co., Ont.

E purchased our tractor in the fall of 1915. Few Ontario farmers will forget the harvest of that year. It rained incessantly and we never had such hard work to get in our crops. Our farm of 300 acres is a heavy clay

loam. When the harvest was finally completed, the horses were almost worn out and we had a great deal of fall plowing still ahead of us. How were we to get it done? We decided that it would have to be by a tractor if at all, and finally we purchased an 8-16 kerosene tractor, that is, one developing eight horse power on the draw bar and 16 on the belt.

We did all of ou plowing that fall with the tractor. Incidentally we discovered that the selection of implements is quite as important as the selection of the tractor itself. We made our first mistake when we bought a plow with 14-inch bottoms. This is the style of plow which is used in the tractor farming districts in the Western States, but it is in no way suitable to our heavier soils. We could get no satisfaction from it at all.



There are few Field Operations to Which the Light Tractor Cannot be Successfully Harnessed. There are two relia Operations which will be the property of the state of the state

We are now using 10-inch bottoms and they are just right. Our tractor will draw a gang plow with three bottoms, but in real hard work, we use just two plows. Under favorable conditions we have plewed as much as eight acres a day.

We used our tractor through 1916, gradually adapting it to more and more uses as we became familiar with it. Last spring, we used the tractor altogether in putting in our crops with the single exception of seeding; we did have the horses on the seed drill. Our tractor drew one of the large-sized double disc harrows. It handled without difficulty a four-horse cultivator with a drag harrow behind. In the summer we used it on an eight-foot binder. As we become more familiar with tractor hitches, the usefulness of the machine will increase accordingly.

The tractor also is our source of belt power. We have four silos on the farm. We have our own blower, our own threshing machine and our own chopping mill. The tractor runs them all and does it well. We have had no great expense or trouble with it and it has worked practically as well this year as the first year we got it. On our 300-acre farm we are able to get along with two teams less since we started to farm with an 8-16.

Cooperative Power Ownership The Solution of the General Difficulty

L. K. Shaw, Welland Co., Ont.

POWER is needed on every farm of any size. sufficient to meet all of the requirements of the modern farm, is always prolibitively high. The problem will be solved, I telieve, cooperatively. A few days ago I was visiting with some old friends over in Halton county. I first stopped with a lad I had gone to school with, and who is now running a 150-acre stock form. His corn was still standing in the field and it had been frozen again and again. He had been unable to secure either a corn binder or the services of the local

sile filling outfit. He was at the mercy of the itinerant thresher who also owned a cutting box and corn binder. Grain crops were especially heavy this year, threshing is more profitable than silo filling; therefore he was at the mercy of the man who owned the machines. The result is that he will put in badly frozen corn and the quality of his ensilage will be decreased accordingly.

On the way home I dropped in on another friend, who also lives in Halton Co. I found that this friend was one of the syndicate of five farmers who owned a 20 h.p. steam engine, a grain separator and a grinder and complete silo filling outfit. Each of these men had an equal share in this equipment. Their plan was to hire a man to operate the machine from farm to farm. Each of the stockholders paid the regular rate for the use of the power and equipment, but they got first prefer-

ence in threshing their grain and filling their silo. As a result the silos had all been filled here before the corn was badly frosted, and the threshing was done at the most advantageous time. Once the stockholders were through with the equipment the paid operator took the machinery along to fill other folks siles and thresh their grain at the same rate per day as was paid by the stockholders. At the end of the season expenses were subtracted from receipts, a certain amount of the profits laid aside to replace the machinery when it wears out and the balance divided as dividends on stock.

The tractor is coming ahead nowadays. The investment in a tractor is too great, I believe, for the 100-acre farm, and yet the day is not far distant when we 100-acre farmers will have to have the use of the tractor or fall behind in the race. Why not the cooperative ownership of farm tractors? Why could not four or five farmers purchase a tractor and along with it a threshing machine, grain grinder and enallage blower. The small farmer would then have all the advantages of power farming and would be able to produce as economically as the big farmer who can purchase all of this equipment for himself.

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