

finished my own threshing I was surprised on counting things up that I had grown an average of ten bushels to the acre, which I considered fairly good for spring breaking. That made 3,000 bushels for a starter and I held this until after Christmas when I sold it for \$1.55 a bushel.

I believe in telling every man what he is expected to do as soon as he begins with me and leave it to his honor and the man that is in him to carry out his share of the work. Of course there are some fellows who slink and try to get out of helping to set the machine, etc., but I believe that a good story or joke now and again will help the worst of them out of the rut, but if you can't manage him there is his pay in his hand and another man off the next train will likely fill the bill.

Another thing that will help to keep the men in good trim is a lunch in the afternoon, when they are working hard and long hours. You need not stop the machine at all for this. I never did and you will save time if you keep your machine running steadily for then the men don't take advantage of lunch time for a chat, smoke, etc.

To my brother threshermen I would say that a gasoline or oil engine is a great saving to the operator, as with such an outfit one man can handle both engine and separator, if he gets one of his pitchers to give him a hand for 30 or 40 minutes each morning till the machine is running well and oil cans, cups, etc., are all tended to. In this way I dispensed with a separator man, water hauler, fireman and straw buckler, also one water team. This is something for those who intend buying an outfit to think about.

Another thing that I liked about the rig is that there is no danger from fire. All spring, summer and fall I only used three gallons of cheap oil for cooling purposes and this I consider far in advance of the water cooled engine.

I trust that I have not wandered too far from the subject and that if it may ever please you to let my story into your valuable publication that it may help some struggling brother of mine who is in for the best outfit

Sixth Prize Experience.

By E. H. Morden, Gay View.

I am pleased to enclose herewith pictures of our machines while in operation taken at the wind-up of our last year's run. As I own a partnership in this outfit and did a heavy engineering stunt last fall you will naturally suppose that I should have quite an experience to give, but I am sure that mine will have to take second place when compared with some I have read in the Canadian Thresherman.

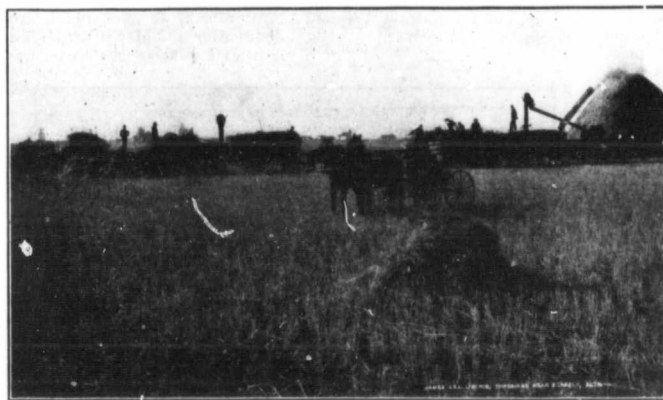
Our outfit is an International Harvester 15 horse, portable engine and a 32 x 40 Belle City separator with hand feed, blower and high bagger.

As our land is a little rough here we did not think it advisable to purchase a traction for plowing purposes. Consequently, my experience in that line amounts to nothing.

My first tussle with a gasoline engine occurred in a small country mill in Ontario some years ago, when gasoline engines were not perfect nor as well understood as at present.

The first was a Northey 3 h.p. Vertical run with a battery, but we did not seem to get very good

We turned the fly wheel until the piston was as far back in the cylinder as the shaft would allow it to go open feed, air, etc. Then we gave it a quick half turn forward. This operation took in and mixed a charge. Now the wheel was reversed to starting point as far as it could be forced back, which gave compression. This was repeated and when as far back as possible on second compression the movable electrode on ignitor was snapped causing a spark and the engine would start.



"Aultman-Taylor" Machinery in Canada, Stavelly, Alta.

satisfaction with this and replaced it with a 10 h.p. Northey Horizontal equipped with both battery and hot tube for ignition. This one did very well until more power was required. Then a 20 h.p. Ideal Horizontal (Brantford make) was installed and was furnished with a large six cell wet battery for ignition. This engine had plenty of power to run the large Champion crusher 11 inch plates and at the same time to operate successfully along with it any one of the following machines with which the mill was equip-

This is not generally thought to be a safe way of starting an engine, but if judgment is used and the wheel released the instant the spark is made there is no danger. Of course this mode applies only to the larger kinds as all small engines turn easily by hand and even the larger ones may now be started quite readily in the same manner as the small relief cam or the regular exhaust cam when thrown into position allows a small portion of the compressed charge to escape; thus causing the entire revolution to be made

for starting it has very little cause to become weakened for a long time and once the spark gets its work in you can be sure of a good strong spark until the fly wheel stops.

Gasoline costs 28c. a gallon in barrels, cylinder oil 90c. a gallon in 5-gallon cans and common machine oil 45c. per gallon in 5-gallon lots. I think, however, that these prices can be lowered somewhat this fall, as we now have a fair estimate of the oil required for a season's work and can buy in large quantities.

One day after having threshed about a week the engine missed an explosion or two, then stopped altogether and there I was with the dead engine to be coaxed back into working humor again.

I first tried the spark on the outside, but it was alright, then the gasoline feed and next the valves. These were perfect. The next move was to take out the ignitor which proved to be the seat of the trouble. I found the point on the stationary electrode had broken off, leaving a rough surface that would not make a spark and as I had no extra one on hand I filed a new surface on the broken one and cleaned the other with emery paper and set the points to a new bearing. Then replaced the ignitor rod so as to cause the points to come well together again and this worked very well until a new point could be procured.

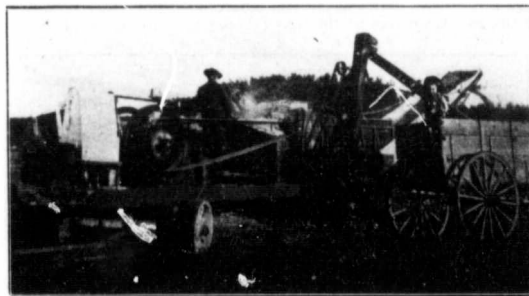
We have no crusher at present but were running an 8 inch plate "Rapid Easy" for a short time in December and judging from the way it handled that we will need either a 10 inch plate or a 12 inch roller crusher to make a paying business of it.

Generally speaking, we found our outfit quite satisfactory and with four stook teams could thresh 600 bushels of wheat or 800 bushels of oats in less than 10 hours and in one instance we were threshing oats at the rate of 100 bushels per hour.

The advantages of having an outfit of this kind are many, as the purchase price and cost of operating is much lower than steam. There is no danger from fire and an inexperienced person can run them with safety.

After having had my threshing done by custom and waiting from three to five weeks after the crop was ready for the machine to come, it looks more like business to me to start the machine just as soon as the grain is fit, to do it just as a person thinks it should be done and aim to put most of the grain in the sack instead of in the straw pile.

I have never handled an engine with more than one cylinder. But if I were buying an engine over 16 h. p. it would be a four-cylinder tractor, as I think it



I.H.C. Stationary Gas Engine being put to good use.

ped: planer, wood lathe, wood saw and large grind stone.

These engines were stationary and water-cooled by gravity method, and were in a good building near a stove, but even then it was sometimes a hard job to get started.

This last engine had a self-starter, but did not seem to work well so was taken off and as the engine was too large to allow one person to give the fly wheel a complete revolution to get compression we used this method.

with very little exertion.

My experience with engines in the East has been a great help to me in operating the one we have at present, although conditions are different with a well housed stationary engine and a portable one that may be working out in so many different temperatures.

Our engine is supplied with a 4-cell dry battery and Motsinger sparker, which in my estimation has everything in the wet battery and hot tube line beat for ignition. As the battery is used only