Page 6

nearly all run in an oil tight case and the cylinder oil used lubricates nearly all the rest of the working parts of the engine. I like my plow very much. It is the Case auto lift with cast iron break pin. I have plowed nearly 300 acres and broke 60 acres of timothy sod in very stony soil and have not broken anything yet except about a dozen or two of pins.

As for the engine it is as near perfect in my estimation as a gas engine could be made. I have used it for 125 days or more and have yet to buy my first repair for it. It is easy to start in almost any weather and will run day in and day out without a kick. If I were suggesting any improvement at all I would have it built just as it is with a little more power, say a 15-30 instead of 12-25

I find that in tough grain one man could feed it down if he liked, but when it is dry he can pitch as fast as he likes. In plowing it could also stand a little more power to handle the four plows on high speed, especially on rolling ground.

We used the engine for grading our lane which is about half a mile long and found it much steadier and better than horses. I find it very handy and convenient around the farm in the winter for crushing and sawing wood, cutting feed, etc., in fact I think it is much ahead of the average portable engine for this work, as it will move itself to an inch any time and does not need to be fastened down

We have not had any experience at any other work on the land except plowing. But in my opinion the plowing is half the work of cultivation and if the engine does the plowing the horse outfits on the average farm can easily take care of the surface work.

In summing up my experience, I would say that the 12-25 or 15-30 tractor is the most practicable machine on the market. In threshing I claim that an engine smaller than this is not strong enough to take a full day's work out of the men and teams necessary to run them and a bigger outfit is too big to pay on a farm of less than two or three sections of land.

For plowing one man can just as easily handle a tractor that will pull four plows as one that will only pull two or three, and the extra weight is not sufficient to cause any injury from packing the soil.

As for the place of the tractor on the western farm I can truly say that they have earned a place. For my own part I would not consider the proposition of farming a section of land in Manitoba without one. I consider that on a farm

of that size a small tractor with a thresher and plow is almost a necessity, and certainly a great asset

> I am, your truly, F. A. Sirett.

A Lot of Work in Two Bad Seasons

Munson, Alta., January 3, 1917.

Gentlemen-Replying to your circular letter of the 27th inst asking for data re gas tractor, we beg to inform you as follows: We are the owners of a 25-45 Sawyer-Massey gas tractor. We poor weather this last fall we were unable to make use of the float but expect to use it in the spring work

In the following description of operations carried out by this tractor, we will ask you to bear in mind the unusual character of the soil in this district. This is known as a (turtle-back) country, the formation resembling closely the back of a turtle, hence the name. The soil is a heavy black gumbo and is probably, of all soils, least suited to the use of tractors. We believe the soil conditions at Moose Jaw, Regina and Indian



THE CANADIAN THRESHERMAN AND FARMER

Even the Pup Gazes in Admiration at the fine Work

assume that you are thoroughly familiar with this type so will give no further details. We have used this tractor for breaking, plowing, engine discing and threshing. The plows consist of a six-bottom Cockshutt engine gang with breaker bottoms. The

engine disks consist of two ten foot Emerson -Brantingham disks provided with pans for weights.

For threshing we use a 32-50 Sawyer - Massey "Daisy" separ -In addiator. tion to this equipment we intend to use, behind the disks, a four section float having a total length of twentytwo feet and a width of iour feet. The float is

of the saw tooth pattern, being made of two by eight dimension, and a harrow hitch is used to connect the sections to a two by ten evener, twenty feet long. This sectional float is an innovation in this district, but we believe it will be more effective than a rigid float of this length. Owing to the

Head, approximate those of our district.

To give you some idea of the power required in breaking, would say that it is customary to use six horses, weighing from twelve to fourteen hundred, on a fourteen inch sulky plow. This

means from fifty to sixty per cent more power than the usual prairie loam. In addition to this the shaking caused by the 'turtle - back formation is excessively hard on the working parts of the engine and shortens the life of the same materially. The unusually

high speed of this tractor also counts against it as it is a't times impossible to let it run at its nor-

mal gait with a resulting loss of power. Another very undesirable feature of the soil is its "sticky" nature. It is customary to use rods in place of a mould board in breaking and rotary plows are used for "backsetting". We use mould board plows but have great difficulty in

Abril. 17

keeping them clean as they will not scour when the ground is at all wet.

In spite of all these draw-backs this tractor is a wonderful wet weather engine and has a local reputation for being "wet footed". The great power for its weight (it only weighs 16,500) and the large bearing surface of the road which enables it to keep its footing where nearly all other types will cut through the soil and mire themselves in.

In breaking we use from four to five bottoms, depending on the surface conformation, and break to a depth of from five to six inches. In back setting we usually pull six plows, at a depth of six or seven inches, and, when conditions are favorable, also drag a set of harrows behind the plows. In a few places where the soil is somewhat lighter and contains a certain amount of grit, we can pull six plows in breaking.

There is a strip of land of this nature along the river banks we fixed the two disks, which we usually weight with about 1000 lbs. each, are a load, though where the land is level we can add the harrows to the train. Re fuel consumption: breaking will use from 4 to 5 gals. of gasoline per acre in the heavy soil and 3 to 31/2 in the light soil. In backsetting it requires 21/2 to 31/2 gals.

The amount of lubricating oil required varies largely for some unknown reason, and runs from 2 to 4 gals a day of say twelve running hours. We are making changes in the oil overflows next spring which, we hope will reduce this amount considerably. In engine disking a gal. of gasoline per acre is usually sufficient.

We find ten acres a day to be a good day's work, though in the lighter soil, last summer, we broke 61 acres in three days and a half. The high speed of the engine (it will make two rounds per hour) compensating for the small number of plows pulled. In engine disking we usually cover about fifty acres in ten hours.

0

a

s

a

n

d

w

fi

fc

· pl

CI

d

di

pl

er

d

et

de

h fc

In our threshing operations we find that the separator is not large enough for the engine, it being usual to couple a 32-56 "Great West" separator to this size of tractor. We are contemplating a change for next season. As a threshing engine the tractor is very satisfactory, the four cylinder giving a steady motion and the motor governs closely. We are not in a position to give close estimates of fuel consumption in threshing as the length of the days vary greatly.

At the beginning of the run we used about thirty gals. of gasoline a day, this being in October and the days growing short, say eleven working hours. After "freeze up" we find that the con-



A Business-like Proceeding