The Modern Farm Horse

averaged about one minute in each case or in other words about seven minutes would be added to the time of plowing to obtain the total time for the work. The amount of fuel used varied from one and three quarter gallons per acre

at the Winnipeg Industrial exhibition the competition amongst the makers will be once more stirred to fever heat and there is no doubt that the tests will be followed. with the keenest interest by the western farmers who are preparing to invest capital in the modern farm-horse. Several new types of machines will be taking part in this year's test including a number specially designed to meet the require-



KEROSENE TYPE OF ENGINE AT WORK WITH TEN BOTTOMS

with the 15 horsepower engine to three gallons per acre for the heavier types. There was, however, one exception in the heavier class where the fuel consumption averaged less per acre than in the case of the smallest machine, this being the machine shown seventh on the list of gasoline tractors, the total fuel consumption of which for nearly nine acres was only a little over nine gallons.

Engines Using Gasoline

No. of	Rated	No. of	Acre-	Time	
	H. Pr.		age.	H.	M.
1	15	4	2.47	2.	24
4	20	4	3.98	3.	10
4	36	3	3.18	3.	15
2	50		4.89	4.	88
	20	6	5.86	3.	24
4	25	6	6.05	4.	13
4	30-60	8	8.66	3.	15
4	40	8-10	9.49	4	17

Engines Using Kerosene

No. of Rated Cylind. H.Pr.			Acre-	Time	
				H.	M.
1	15	3	1.91	2.	19
1	80	4-6	3.11	2.	52
1	15	4-5	3.61	2.	57
2	40	10	6.03	2.	12
4	30	6	6.00	3.	12
4	40	8	8.16	3.	38
2	30	8-10	7.49	3.	12
-		7.00	The state of the s		

The study of the above statistics will prove of interest as showing what can be accomplished by the use of a good tractor in place of the horse teams. With a season that is wet when the farmer wants to begin his plowing, the loss of a few days does not entail the same hardship that would be felt if the horses were depended upon to do the work, as were depended upon to do the work, as the tractor can be kept working at night as well as day if a good strong headight is used and by this means the lost time can be rapidly regained and the land prepared for the seeding without practi-cally any lost time.

Demand in the West

A recent census of the outfits in use in the three provinces of Manitoba, Alberta and Saskatchewan shows a total of close to 9,000 machines already in service and some idea of the vast extent to which the movement has grown can be gained from the fact that if the average price of a tractor is placed at \$2,800, which is

ments of the smaller farmers who are be-coming a big factor in the tractor question.

Our Prize Homesteaders

It is regrettable that my allotted It is regrettable that my allotted space prevents my giving a detailed account of how my stock of cattle have increased, also results of dairying. Also had space permitted I would have been glad to have given an account of provisions for the poultry, but I am afraid I shall be exceeding my limit already. In conclusion let me give a word of advice to beginners. Don't begin by putting up expensive buildings if your capital is limited. Fine buildings will not bring either a good team or a fine bunch of cattle, but the latter will build

not bring either a good team or a fine bunch of cattle, but the latter will build your house for you.

Don't be afraid of work; hard work

will not kill, but worry will.

Don't put all of your eggs in one basket; get into mixed farming. I am convinced that for this district at any rate that the man who does not get into ixed farming will have to get out of

the country.

Don't be afraid to milk a few cows. Now there are so many creameries in operation dairying is simplified and the monthly or bi-monthly cheques come in

Don't fail to raise enough stock to utilize all the by-products of your farm; cattle for straw, hogs for surplus milk,

Don't leave your stock entirely in the hands of hired help. Keep a vigi-lant eye on them yourself. I find if I look after my stock in winter they will

return the compliment and look after my bank account in summer.

And last, but not least, don't forget to join the U.F.A. The only salvation for the farmer is to unite with his fellows. United we stand, and will have the power to dictate to both politician and merchant, but divided we not only fall, but continue the lawful prey of every grafter. Keep posted. Always have your G.G.G. at your side, read carefully, digest slowly and act promptly.

HUBBY'S STRATEGY

"I was in an awkward predicament yesterday morning," said a husband to



FOUR-CYLINDER GAS TRACTOR WITH SELF-STARTING APPARATUS.

a most conservative figure, the total capital invested reaches the enormous sum of \$25,200,000. What it will eventually grow to is a matter of the wildest conjecture as manufacturers are flooded with orders and find it impossible at the present time to keep page with the depresent time to keep pace with the de-

With the coming of the motor contest

"How was that?"

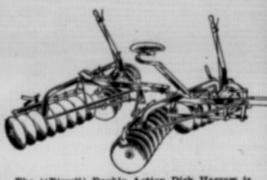
"Why, I came home late, and my wife heard me and said, 'John, what time is it?' and I said, 'Only twelve, my dear,' and just then that cuekoo clock of ours

"'What did you do?"
"Why, I just had to stand there and cuckoo nine times more."

THE "BISSELL"

Double Action Disk

Work your ground twice with one operation with the Bissell Double Action Disk Harrow. One Harrow is In-Throw, the other Out-Throw, which mables you to give swo cuts full width, 8 ft., in one-half the time. Is handled nicely with six horses.



The "Bissell' Double Action Disk Harrow is suitable for horse or engine power. By group-ing four, six or more harrows together you can do double action work on a large scale. Write Department O for further information

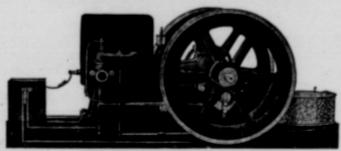
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WITTE JUNIOR

The Faultless Engine with The Unequalled Guarantee



Witte Junior, 2, 4, 6, 8 and 11 H.P. Sizes

If that kind of an engine interests you, we have a booklet which fully describes the Witte Junior Gas and Gasoline Engine.

Meantime, we mention a few points which tell how and why we are able to sell this engine on a FIVE-YEAR GUARANTEE.

CYLINDERS.—There are no interior cylinder packings, no head to take off, no joints to leak or to require packing. The cylinder on the Witte Junior is like a bucket at the bottom of a tank of water. (See booklet.)

VALVES.—Inside valves sometimes break and slip down inside. This wrecks the engine. They are also liable to wear on the side of the stem. This causes leaks and the engine needs a new head. All valves on the Witte Junior are outside the cylinder, in vertical pockets. (See booklet.)

GOVERNOR.—Permits of very close regulation. Works with a rapid movement and powerful gravity leverage. Latch is equally balanced between governor and trip, extremely sensitive, and cuts out or gives fuel in exact proportion to load. Governor can be easily adjusted for change in speed. This connection will last and operate efficiently for a lifetime. (See booklet.)

WORKING PARTS.—All made with extra strength. Only 29 principal parts. (See booklet.) The Witte Junior is the result of over 27 years' experience in gasoline engine building. Our booklet gives valuable information to intending purchasers. A post card brings you a copy

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H. P. HANSEN, Manager

WINNIPEG, Manitoba



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This is the machine you have been reading fect separation of wild oats from wheat, barley and rye for seed. We will demonstrate these Separators at

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