ITEMS FOR AND ABOUT THE FARMER

GRAIN SHOOTING UP OATS TWO INCHES

Interesting Letter Regarding Crop Conditions in Gorrie and District.

FALL WHEAT FAILURE

Three Parts Has to Be Plowed Under in That Vicinity.

Gorrie, May 30.—Seeding has been rather late this season due to the cold and late spring but it is practically all in now excepting the roots; of course it is early enough for them yet. Potatoes and corn are going in the ground now. I have been planting potatoes this afternoon. The chief work at the present time is hauling out the manure for the potatoes and corn and the roots, and then it has to be plowed under and harrowed. The grain has made wonderful progress this last day or two, oats are about two inches high, clover and grass seed are showing also. Fall wheat has been a failure around here Three-parts has been plowed under and fresh seed been sown in its place, but I think the farmers know what is expected of them. It is the horse-breeding time now. The stud horses are all traveling round, such fine big horses, too, for breeding.

You ask me what my work consists of. I get up about 6 o'clock, go out to the barn, feed horses and pigs, and then start to milk (we are milking six cows at present), then separate the milk, keeping the cream for butter; skim milk we give to the calves. It is breakfast time then, generally 7.30. Rest of day is filled in in many ways; last week we were clearing a field of stones, some being so large that we had to use a team of horses and a logging chain to pull them out of the ground. Supper time at 6 o'clock, then feeding and milking again finishes the day. The work is different as time goes on. The young cattle are out to the pasture now; only the cows and horses kept in at present.

Help is very scarce. Some of the farmers are wondering how they are going to take the crop off now it is seeded. Everything seems all right so far. It is surprising to see how many farmers drive their motor cars.—I remain yours sincerely, Fred R. Toplis.

WHAT ABOUT THE FARMERS?

The Hon. Bonar Law addressed a large gathering of members of the British House of Commons with the annual budget speech on the financial affairs of the government. This year the increased amount of tax money is to be taken from all large companies, firms or individuals engaged in all kinds of trade whose profits were larger than in the year 1914. Just as he closed a lucid speech an honorable member said, "What about the farmers?" "I have consulted and made enquiries concerning the farmers. Anything like a reasonable figure it involves somewhere near 50,000 assessments. If I confine myself to farms of £400 and upwards it would mean 12,000 assessments, and the total amount of yield would be £300,000. I came to the conclusion that with the large system for collection which would be necessary it would mean a loss."

The general opinion in Canada is that in regard to raising tax money the Canadian farmer gets the heavy end of the load. The minister of finance at Ottawa, Sir Thomas White, and Hon. Bonar Law make a memorable pair under trying conditions. They are a credit to the country that gave them birth.

POTATOES FOR AUTOMOBILES.

What the high prices of potatoes and other foodstuffs means to farmers is suggested in the following extract from a letter received by a responsible firm from a commercial traveler in Florida:

The potato farmers in Hastings, Fla., where we are working now from here, are all crazy, as they have made from $10,000 to $100,000 on this year's crop, and the corn will pay all expenses. Imagine a cracker who could not buy bread three months ago giving a cheque for $3100 for a Packard for his barefoot kids to ride around in. Just think of getting 8000 barrels of potatoes from 100 acres at $9 a barrel, and some of them sold for $12.

Here is an instance where high prices paid to the producer, taken from the pockets of the consumer, are not properly valued by the grower.

RECONSTRUCTION COMMITTEE.

A. D. Hall suggests that it is possible to increase British agricultural output by about $120,000,000 a year, and to employ from 80,000 to 100,000 more men in so doing. There could be normally grown nearly 60 per cent. of the wheat consumed, and all the oats, while producing more food for cattle than at present, and an extra two million pounds worth of potatoes. This is important, if true, since, if Great Britain can normally grow two thirds of the wheat she requires, and can intensify the yield per acre from 32 to 40 bushels, as Professor Biffen, an expert adviser of the committee, says can be done, by the use of artificial fertilizers, then with the 30 per cent. of home consumption normally obtained from India and the Dominion, the empire should be self-supporting in the most vital of all foods. Great changes are foreshadowed in the agricultural lands of the British Isles. The deer forests of Scotland and the game preserves in England and Ireland, will come under cultivation to produce wheat and potatoes. No land that would be serviceable to raise crops will be permitted to remain unworked; should the owner or tenant be obstinate after the government official's warning, he will enter upon the land to bring it into proper cultivation.

CITY CUTS PRICES.

Special to The Toronto World.

Chatham, June 2.—Between six and seven hundred pounds of butter at 36 cents a pound, were sold to the citizens of Chatham yesterday evening and today by the civic purchasing board. Early this morning the market price was 45 cents a pound, but towards noon it was reduced to 38 cents. A considerable quantity of flour and potatoes were also disposed of by the board to the ratepayers at cost.

FARMERS GRATEFUL FOR HELP RECEIVED

Mutual Appreciation of Experience Expressed in Letters From Farmer and Volunteer.

Appreciation is a quality of the farmer, and, that he is not unwilling to express his good opinions at the right time may be seen by reading the letters below. The tractor and the hired man are both mentioned favorably, while the men behind the war production club must feel that their efforts have not so far been in vain when reading letters such as the samples reproduced. As will be seen, these letters reflect the experinces of both the volunteer hired man and the farmer. One of the most far-reaching results of this voluntary farm labor movement, which is approved by the Ontario department of agriculture and the Toronto Board of Trade, will undoubtedly be a greater mutual appreciation of the other's point of view on the part of the city man as well as the farmer.

Wexford, Ont., May 2, 1917.

Mr. E. F. Trimble,
93½ Yonge street, Toronto.

Dear Mr. Trimble: I arrived here safely and I am now taking the chance to write you and thank you for the position which you secured for me. The night I came Mr. —— and I carried my trunk for a half mile, by way of the railway tracks. The people here are very nice, as far as I can see and expect.

I get up at 5 in the morning and work in the stables feeding stock, after which I have breakfast, then I take the milk three-quarters of a mile to the town line and come back and work in the fields till noon. After dinner I work in the fields till 5.30, do some chores, have supper at 6.30 and then plump and hit the hay. We are not finished our seeding yet, but very near. Yours truly, Donald M. Ross.

Brampton, April 30, 1917.

Mr. G. T. Pepall, Toronto.

Dear Sir,—I am taking the liberty of writing you to enquire if you could possibly arrange to extend my leave until say Wednesday, May 9.

I hope I am not asking too much. By Saturday of this week, if the weather continues favorable, we shall have finished completely the seeding of about 60 acres, which the farmer considers will be good work indeed. He asked me to remain until Saturday, which I shall do if you can grant me the extra leave; otherwise I shall have to leave here Friday morning in order that I may be fit to report at the export department on Monday. The farmer has been very good to me and I should like to enable him to finish seeding this week.—Yours truly, B. P. Lake.

Inglewood, April 29, 1917.

Mr. J. C. Watterman, Toronto, Ont.

Dear Sir,—With your kind permission I take great pleasure in writing you this letter to let you know that I arrived here safe and sound and feeling rather fine and getting along nicely.

My present position I now have a week in, and sort of like it, and I must say that Mr. —— is a nice man to work for, and I am getting the very best of treatment. Of course, when a person does as he is requested he cannot help but get good treatment in return.

We have long hours, of course—from 5.30 a.m. till 8 p.m., but it is to be expected at this period of the season. I am glad to say that thru our hard work we shall be finished seeding in another week, and I expect to be back in Toronto at the end of my three weeks.—I remain, your obedient servant, Jos. Thivingle. P.S.—Best regards to all the boys at the store.

To Whom it May Concern:

This is to certify that Chas. Mayne assisted me with seeding for two weeks, season of 1917. I tender my sincere thanks to the officers of the War Production Club for their efforts in sending me such efficient help in this time of need. Thanking you again, I remain

(Sgd.) Garnet Hamilton,
Streetsville P. O., R.R. No. 2, Ont.
Streetsville, May 5th, 1917.

Nashville, April 30, 1917.

Mr. Trimble,

Sir: The man which you sent me (Mr. Hern) gave me good satisfaction. He helped me all thru with my seeding. I would like for you to try and get me a good experienced young man for six months if possible as I am in need of help.

Thanking you very much for what you have done for me.

Yours truly,
Jas W. Nattress, Nashville.

Newton Brook, May 21, 1917.

Mr. E. F. Trimble, Toronto.

Dear Sir: Allow me to thank you and also the members of the War Production Club for the very great assistance that their tractor has rendered to me. Thru meeting with an accident, I was unable to get my place seeded, now we have got everything in nicely, and also I beg to make special mention of the untiring efforts of your Mr. Moffatt to assist the work along and also of Mr. Greig and his staff of the Massey Harris Co.

I think that the tractors are going to overcome the labor shortage to a very great extent and after harvest I shall try and get your tractor for the fall plowing again. I beg to return my sincere thanks and I remain,

Yours truly,
Alex Watson.

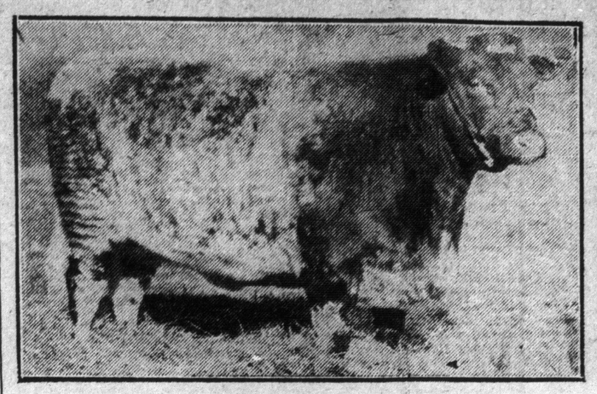
THE CALGARY LIVE STOCK MARKET.

The market for steers for the week ending May 26 at Calgary was decidedly weaker, hardly any cattle selling at over 10c. The live stock department of the Alberta Farmers' Co-operative Co. sold one car of 18 steers for Mr. Chipperley at Olds for $10.25, this being the highest price paid on the Calgary market this week. Best butcher steers are lower at from $9.25 to $9.75, extra good cows up to 9c; stocker cattle slow and draggy.

The hog market opened strong at last week's prices. We sold all our hogs at $15.95. On Thursday, in sympathy with the eastern markets, the market dropped to $15.40. No fat sheep on the market this week.

The commission firm of Wade & Jack bought eight cars of hogs for the Wm. Davies Co., and six cars for Matthews, Blackwell & Co., Montreal. We do not look for hog prices to advance much now, as we are getting pretty fair runs of hogs.

ONTARIO SHORTHORN CATTLE TOP THE LIST



COUNTESS 16TH

BURNBRAE SULTAN

These Shorthorns were bred in Canada and are owned by an Ontario breeder, Gordon Auld of Guelph. Countess 16th was grand champion on the fall fair show routes, both in eastern and western Canada, last year and was second prize female at the Chicago show. Burnbrae Sultan was first prize bull at Chicago and was grand champion in eastern and western Canada. Together they are worthy examples of how Ontario breeders are setting the pace.

LABOR-SAVING DEVICES NECESSARY TO FARMERS

Hand and Power Machinery Designed to Help Farmers Should Be Thoroly Investigated.

"Good morning! Yes, my husband is at the farm near Mulock's Corners. You can take the Metropolitan car and he will drive you over in his motor." I was just turning to go when a dull buzzing noise attracted our attention and the good lady of the house said, "There comes a flying machine." And looking up I beheld this new wonder of civilization traveling towards us way up in the bright clear sky of Wednesday afternoon. This steady, swift moving, graceful humming bird approached the city at a great height, then turned gradually and made off in a northwesterly direction, and soon was lost to sight in the distant heavens.

At the moment, of course, we know the aeroplane as the advance agent of destruction. Indeed, it is the very eye of the army and navy, the artillery being blind without these winged messengers able, as they are, to see beyond the gaze of the unaided human eye.

But what of the future? Is it not but a few short years since the world first heard of the possibility of flying in a machine actually heavier than the air? Not a great effort is needed to turn our thought to the great opportunity that is already standing with open arms waiting till these wasps are transformed into busy bees and the resumption of peace reminds us of the fact that the flying machine, as the cream separator, milking machine, tractor and motor car, has come to help humanity in very truth to rise above its limitations, and that its nature is to be not that of the hawk, but rather of the pigeon; its chief use to be not the carrying of bombs, but rather to be a natural means of better communication between people living apart.

Service the Necessity.

The lesson all are learning is how to give and how to receive the greatest amount of help, and people are finding out that those who make themselves more accessible to their neighbors are generally the ones who have the more advanced ideas and who are the owners of the greatest labor-saving devices. Just stop to think of your friends who own an automobile, a tractor, a milking machine, a water supply system, an electric light plant or other such advance agent of better and more successful farming, and you will probably admit that he is a good neighbor who both makes himself known to others and has a ready welcome for the visitor, more especially if the visitor be interested in his new milking machine or his other valued possessions.

Very shortly we will have an article on the milking machine, and we cannot too strongly urge upon our readers the desirability of visiting any nearby farms where such a machine may be installed, and of course this applies to all other advanced inventions whose favorable performances are not so generally known as the automobile, the binder, the threshing machine and other labor-saving machines which are still in process of improvement, even as is the flying machine. And will anyone care to state that the time will never come when the journey to Mulock's Corners will be made by air rather than by the electric car?

TORONTO MAN ENLISTS.

Special to The Toronto World.

Chatham, June 2.—George Albert Stinson, Toronto, beat his way on a freight train to Chatham yesterday to enlist. He has been acctepted for the overseas company of the 25th Regiment at St. Thomas. Stinson told the recruiting officer that his father was opposed to him joining up. His two brothers are serving at the front.

Write Us Your Views.

Letters on questions of interest to Ontario farmers, such as experiences with labor-saving machinery, reports on the condition of stock and crops, with photographs of your animals; also letters dealing with the distribution problem as applied to Ontario, will be welcomed by The World. The farmers' own views on questions of vital import are always worth reading, and will be considered valuable news items by the farm editor.

Farmers are also invited to send suggestions on topics which they would like discussed. And when we say farmers we include the women folk, of course, who can always be counted upon for inspiration. You can help us make The World the farmers' daily paper. This is your opportunity to help meet a need.

BRITISH FOOD CONTROLLER'S STRONG ARM.

At Old Street police court, London, Messrs. Gingell, Son and Foskett, hay and corn dealers, were charged for selling hay, straw, and forage at higher prices than allowed by government regulation. The defence was that the sales were on a contract before the regulations were made. The summonses in all totaled 14. In all, the penalties, with costs, amounted to £183, 13s.

Another firm that has been in business 180 years, answered five summonses for similar offences. In this case the military authority did not ask for a heavy penalty or costs, as every penny of the overcharge had been refunded. The overcharges were only £3, 3s, 4. They were fined £15 on the five charges. No costs were allowed.

For selling potatoes at more than the fixed maximum price Susan Kerminsky, green grocer, was at the Thames police court, London, fined £5.

Avie Morris, at the Cable street police court, was fined £10 for retailing bread which had not been baked at least 12 hours.

Louis Heritage was summoned to the Bromley police court for wasting four pounds of bread which was found in her dustbin. Inspector Burton went to see the defendant, who said, "I put it in the dustbin on Sunday. I was going to make a bread pudding but found it was mildewed. I could not even give it to the poor ducks." When the summons was delivered, she said, "Pooh, I can do as I like. It is not stolen! It is bread I paid for." George Barnes, the dustman, said the bread was not mildewed. About two months previous he had spoken to her about the amount of fat and bread found in the bin. The bench said they must regard the matter as a serious one. She would have to pay a fine of £5 or two months in jail.

When the Canadian food controller is in command he should select persons who will be diligent to see that all the demands of the new department are to be obeyed or suffer the consequences.

GERMAN GREEN CROP TO BE CONFISCATED.

Addressing a large meeting at Neustadt, Dr. G. Heem, member of the centre party in the reichstag, said that a new and heavy restriction for the farming class was imminent and that he personally was the author of it.

This summer, at the moment when the first ears are ripening, the entire coming bread-grain crop will be compulsorily confiscated. Only from a quarter to a third of the crop will be left to the farmers, everything will be organized on military lines. Farmers will receive their maximum price, plus the early threshing bonus of two marks per zentrice. Owing to the bad grain harvest of last year, this year's supplies are short. From August 16, next, the new harvest will be available, owing to the early threshing.

On the farm of Henry Morgan, the Montreal merchant, near Ste. Anne de Bellevue, Quebec, who has offered the opportunity of witnessing the performance of this Avery tractor to the students of Macdonald College.

SOME OF THE LIVE STOCK MARKETS IN ONTARIO.

The lowering of the prices paid for live hogs during the past week has stood in the way of any records being obtained for the sale of one or more hogs on the local markets. However, there is room and incentive to other farmers when a choice bunch of hogs are recorded, they are a credit to the feeder, the live stock buyer, and the butcher, an da toothsome relish to the consumer.

That it pays to raise the right kind was made plain last week, when Andrew Lamont, 10th con. Grey, sold a couple of 3-year-old steers, the best of which brought him $178 and the other $154. Samuel Walker was the buyer. By way of illustration, Mr. Lamont disposed of two similar steers five years ago, when he took about $200 as against $332 last week, within $22 for one he got for the two; Mr. Lamont is a good farmer.

F. W. Hobbs and son, Pickering, shipped 21 head of cattle which realized nearly $800. Who is better off than the farmer?

A. Beckwick, a Lanark County farmer, realized close to $2,200 a few days ago for a her dof young cattle, most of them only 18 months old.

M. Thompson of Chesley, a leading live stock dealer, issued cheques to the amount of $32,586 one day recently for cattle delivered at Chesley.

Andrew Baechler, Tavistock, shipped a carload of cattle to Toronto last Saturday.

Six cars of cattle were shipped from the yards at Chatsworth on Saturday, H. W. Norton shipped three cars, R. McBrien two cars, and James Dowd one car. Two cars were shipped on the Tuesday by McConvey and Denlon.

At the Saturday market D. Henderson purchased a heifer which went wild and resisted all efforts made to take her to the slaughter house; on the Monday it was found necessary to shoot her.

Col. McEwan of London purchased from Henry Young, Hullett Township, at a good figure, his purebred Angus bull, "Maplewood Corrin." This animal is a product from Alex. McEwing's herd.

John M. Quinn of Lanark, cattle buyer, has made an assignment to W. H. Stafford.

Sheep-raising must be a good paying business when Harry Carter, Waldemar, is able to report three sheep with an increase of four lambs each.

A number of fine looking horses were purchased at Minden last Wednesday for army service, British and French standards of inspection.

A carload of horses was shipped by W. A. Lawry, Brussels, to Cobalt last week. Ben Edwards accompanied the car.

A Toronto buyer picked up a lot of horses in the district of Bolton last week.

Ten thousand sheep have been purchased by the New York supply committee, which will be sold to farmers at cost, in an effort to revive the sheep-growing industry in the State of New York. The sale will commence early in June.

PUT A LIMIT ON PROFITS.

What the United States must do is fix a fair and even a liberal profit for manufacturers. Beyond that no producer should be permitted to go, and the indications are that he will not be so permitted. It would be folly multiplied by reckless waste for the country to saddle upon all the people the burden of paying outrageous prices for articles needed in war in order that very few might reap large profits. Our country has indulged in its industrial "champagne jag," and it is now time to sober up. Unheard-of profits have been made during the last two years—made out of the belligerents in Europe and out of private individual consumers here in America. Now, with the United States itself at war, there must come as one of the very first strokes of conflict a firm government grip upon the price of all commodities. We have already fixed it upon the tatal saleable product of our second largest industry, the railroads, so that others cannot complain of like treatment.—The Philadelphia Ledger.

The above article was printed April 16. It was applicable then; it is even more so now. Leading business men in one of the largest combines on earth called upon Secretary Houston, proposing to him that the United States Government fix prices thru the council of national defence. More than a month has elapsed. All the foodstuffs that they deal in or make, almost without exception, are more costly to the consumer. At the time The World made known how the wool merchants of the New England States sought to obtain contracts for wool from the United States Government at prices much above the normal price, but they failed. There are some well-trained, conscientious men at Washington. There are a number of other large, carefully equipped manufacturing, mercantile and commercial concerns that will have to act straightforwardly or they will be swamped. In a lesser degree somewhat similar tactics have been in evidence in Canada.

CROP REPORTS ARE FAVORABLE

Thomas Findley Gives The World a Summary of Conditions.

For the following detailed crop reports from various sections of Ontario and Canada The World is indebted to Thomas Findley, president and general manager of the Massey-Harris Co., Limited:

It would be difficult to cover the crop conditions of Ontario by any general statement. Our reports indicate that fall wheat is a fair crop about London and Walkerton, but small in acreage; that it is not much better than half a crop in territories tributary to Chatham, Windsor, St. Thomas, Brantford, Collingwood, Belleville, Peterboro, Barrie and Owen Sound.

Reports from all districts would indicate that spring wheat has gone in in good shape and is doing well in nearly all parts of the province.

It is too early to speak of the corn crop with any confidence, but the general impression seems to be that there will be a good acreage sown.

Clover and timothy are a fair crop in territories tributary to Chatham, Windsor, London, Walkerton, Toronto and Brockville, and a poor crop about St. Thomas, Brantford, Belleville, Peterboro, Barrie, Collingwood and Owen Sound.

Seeding has been carried on much more satisfactorily than last year, when excessive rain kept the farmers for the most part off the land until late in May.

Our reports from the Province of Quebec are generally favorable.

In western Canada our earlier reports were quite discouraging, the expectation being that the late spring would prevent anything like as large an acreage being sown as was expected, and also that coarse grains would be largely sown where it had been intended to sow wheat. However, the west was blessed with exceptionally fine weather during the first part of May, with the result that the acreage sown is more nearly what was expected, and while the seed was put in late, good growing weather would largely offset this handicap.

I think it would be safe to say, from our reports, that, so far as southwestern Saskatchewan and southern Alberta are concerned, the prospects there are better than the average.

In northern Saskatchewan our reports indicate about an equal acreage sown to last year, but probably 10 per cent. less in wheat.

The western conditions might be summed up by saying that, considering the unfavorable weather conditions to the end of April, the present situation is better than might have been expected.

BRANTFORD MARKETS.

Special to The Toronto World.

Brantford, June 2.—Butter has dropped from one to two cents a pound, the prevailing price today being 43 cents. Rhubarb, green onions, lettuce and all other green stuff was in abundance and commanded the same prices as those of last week. There were live chickens on the market this morning, which sold readily at $1.25 to $1.50. A fair quantity of potatoes was offered at the same price as last Saturday. The price of wheat is $2.25 a bushel on the local market today. This is another drop of 25 cents from the price of last week. Flour is selling wholesale at $13 a barrel. Despite this there has been no reduction in the price of bread.

PLOWING COSTS WITH TRACTORS

Agricultural Station Completes Interesting Trial Under Farm Conditions.

FIFTEEN-ACRE TEST

Results Obtained Will Answer Many Questions on Important Matter.

Note:—Readers can insert the cost in their district of kerosene, and thus estimate the cost of plowing their own field. As soon as similar experiments carried out in Ontario are brought to its attention, The World will gladly publish the results for the benefit of readers.

The Agricultural Engineering Division of the Iowa Experimental Station, at Ames, has completed an interesting trial with a standard small-tractor plowing outfit, the results of which will answer a great many questions that the station has been called upon to consider.

The object of the experiment was to determine, under actual farm conditions, the amount of fuel and time required to plow an acre with a small farm-tractor outfit, and to study the quality of the work that was done.

E. M. Mervine, associate professor in the department, had direct charge of the trial. He chose a ten-twenty tractor of the four-cylinder, kerosene-burning type, and a three-bottom engine gang plow for the test.

The land plowed was cornstalk stubble, classed as black loam and approximately level. The field was rectangular in shape and contained about fifteen acres. Thus the outfit was placed under rather unfavorable conditions as regards size of field, since the average field on most farms is twice as large. Lands were made with the furrows running the width of the field and starting at the edge of headlands about fifty feet wide. The outfit was operated by a student.

The area plowed was accurately measured, and the time required to plow each furrow and make each turn was recorded to the nearest second; also close account was kept of the amount of fuel used. Kerosene was used during the entire test after the motor had warmed up on the start. Baume tests were made each day, and a heavier grade of kerosene was used the second day to note the difference in action, if any, of the tractor motor and the amount of fuel used.

With kerosene costing eight cents a gallon, the average fuel cost during the test was eighteen and three-tenths cents an acre. The kerosene used during the latter part of the test was forty-one degrees Baume test, the lowest grade of kerosene obtainable, and there was no appreciable difference in the operation of the motor. One and eight-tenths gallons of fuel were burned per hour at a cost of fourteen and four-tenths cents.

It required one hour and seventeen minutes to plow an acre, at the rate of .784 acres an hour. The furrows being short, about one-fifth of the time was spent in turning at the ends.

As determined by the dynamometer, the tractive horsepower delivered was 10.06, or it averaged a trifle more than the rated horsepower of the machine. The mean draft registered was 1677 pounds—maximum 1840, minimum 1475. The horsepower developed at two and a quarter miles an hour was 10.06, 11.04 and 8.85 respectively.

The depth of plowing was constant thruout the test and was estimated to be six inches. A point in favor of the three-bottom plow with fourteen-inch shares was found to be that it cuts the width between corn rows each time across the field. It was observed that approximately fifty feet is a convenient width to allow for the headland, as then the operator can easily turn into the furrow straight.

A summary of the results of the tractor trial follows:

Net amount of land plowed during test, 8.14 acres; net time of plowing, including turning at ends, 10 hours 24 minutes; kerosene burned per acre, 2.29 gallons; kerosene burned per ten-hour day, 17.95 gallons; average time required to plow an acre, 1 hour 17 minute; acres plowed per hour, .784; length of furrow, 33 rods; rate of travel of outfit, 2.25 miles per hour; average time for turning at one end, 38 seconds; average time for making three furrows, 2 minutes 45 seconds; percentage of time spent in turning at ends, 18.6 per cent.; average depth of plowing, 6 inches; mean draft registered by dynamometer, 1677 pounds; mean draft per plow bottom, 14-inch, 559 pounds; average drawbar horsepower developed, 10.06 horsepower.