

tor, a self-feeder with a 33x48 straw blower, and all other attachments, including a straw cutter. This is a large outfit, and we have a fixed charge of \$5 a day for maintenance. It requires \$5 to \$6 worth of electric energy to thresh for a day, making our total cost per day \$11.50. The regulation charge for steam engines in the neighborhood is \$7 a day and this without considering fuel, the drawing of water and danger to the buildings. Separators cost \$10 a day additional. So our electric equipment costs us \$11.50 a day to thresh against \$17 with the old steam engine equipment, and so that we must add fuel and water. I used to have a steam engine myself, but it yet in fact, and anyone who wants it can have it cheap.

#### Electric Power More Uniform

"We can do more threshing with electricity in a day than we ever could with steam," affirmed Mr. Hallman. "The power is much more uniform, there is much less vibration on the belts and separator, and they wear much longer."

Speaking of other equipment, Mr. Hallman said, "We have an 11-inch plate chopper that grinds 60 bushels an hour. Power costs just three-quarters of a cent a bushel. We have no fixed charge on the chopper, but of course the \$1 a day on the motor must be charged against the chopping. Previously it has cost me an average of \$50 to \$60 a year for chopping alone when I was drawing the grain to the mill. Last year I chopped an equal quantity at a charge of \$10 for electricity and \$3 for the motor."

"We saw our own wood on the same basis. The saw cost us \$50 and this is the main expense. You would hardly believe it did I tell you how little electricity it takes to run a good capacity saw. One dollar a day will pay the bill, and you could hardly get up steam in an engine for a similar amount."

"And silo filling," we suggested.

"Yes, we have our own silo filling outfit, too," continued Mr. Hallman. "We own it on the same basis as our other equipment. It has a

big blizzard bench that will take in sheaves two and three at a time. It takes about the same power to run the cutting box as the threshing separator, about \$5.50 a day."

#### The Capital Investment

We then figured the capital investment of this syndicate of seven as follows:

Motor and transformer .....	\$300
Grain separator .....	600
Grain chopper .....	60
Ensilage blower .....	160
Circular saw .....	50

Total .....

\$1320  
This represents an investment per man of \$900. Of course there are a few incidental investments. Mr. Hallman summed up the merits of Hydro power, when he said: "I have not more than \$300 invested in motor and lights. Lots of farmers will invest more money in a gasoline engine for power alone."

(Concluded on page 22)

## Marketing Farm Produce with an Automobile

The Experience of Marshall Haines, Halton Co., Ont., as told to an Editor of Farm and Dairy.

WE follow general farming with an automobile. We have other equipment, but none of it is more valued than our Ford car. It has practically solved the problem of getting our produce to market expeditiously. Some of our principal products are cream, tomatoes and potatoes; the bulk of all of these leave the farm on our automobile.

"The country in this section of Halton county is rough and hilly, and we cannot get away from our farm in any direction without climbing a couple of steep hills and travelling over rough roads of cut stone. Even under these conditions our car has given excellent service for two seasons, and promises to do equally well for several seasons to come.

"During the fall of 1914 we marketed over 56,000 quarts of fruit with our car. On an average we carried 65 eleven-quart baskets of tomatoes to the load, and have carried as high as 72 baskets. A basket of tomatoes, as we pack them, weighs 19 pounds, and the car, therefore, carried at a maximum 1,368 pounds of fruit, in addition to the driver. We grow several acres of early potatoes, and these, too, go to market in our Ford.

#### Market 17 Miles Away

"The market to which we patronize most largely is the city of Guelph. Guelph is just 17 miles from our farm, and there is very little level road between here and there. We average three trips a day, however, during the shipping season, and on some days made four trips. Before we purchased our car, one trip was considered a good day's work for a team.

"Our cream is shipped to Toronto, our shipping station, Campbellville, being three and one-half miles away. The tri-weekly trip to the station requires so little time that it does not seem to interfere at all with the forenoon's work. Did we have to depend on the horses, three half-days a week would be spoiled. If one counts his time as worth anything, the cream shipper who owns a car is way ahead on the game. We have heard the objection raised to this method of transporting cream that one is apt to get stalled on the road and not get to the station as soon as the train. We have never had such an experience.

"Another use that we have made of the car is in bringing empty baskets from the factory. Last season we laid a few boards across the car body,



Mr. Haines Finds Many Utility Uses for His Auto.

drove a half-dozen nails to keep them in place, went to Burlington, and came back with over 300 eleven-quart baskets in one load. The load, we need hardly say, was about the size of a nice jg of hay.

#### Carries Chop to the Mill

"Taking chop to the mill is usually considered work for a big wagon and team of horses. If we run out unexpectedly, our car will run a thousand pounds of chop to the mill and back in a very short time. We have carried as much as 1,300 pounds.

"These are the utility uses of the car on our farm. They pay for the car. We get the pleasure that it affords for nothing. We bought a new buggy just before the car. That was over two years ago. It has not been used three times since, outside of funerals. Driving a horse and buggy seems like a waste of time, and they have gone out of commission for business and pleasure driving.

"We find that our car is also largely putting the railroads out of commission, so far as we are concerned. Travelling is cheaper by auto, and we can arrange the time tables to suit ourselves. Last summer we started from Wingham with our tank full of gasoline. We ran the 70 miles to Guelph with five passengers, and when we stopped there for gasoline, a little less than two gallons refilled the tank. We had travelled 35 miles per gallon of gasoline.

"Last fall we went to the Toronto Exhibition. We left home shortly after seven o'clock. We

were on the Fair Grounds shortly after 10, or before the train people had got there. There were six of us in the car. We stayed until after the fireworks, and were back home before one o'clock, again ahead of the train people. This trip was not made under the best of conditions, as there had been heavy rains, and part of the journey was over heavy clay roads.

"We have had no experience with heavy cars, but believe that the light car is the car for country roads. We have driven our Ford 17,000 miles, and so far it has never refused to go. We are now using the second set of tyres and two extras. The present set look good for this season at least. I have a brother-in-law with a car that has run 26,000 miles, and he says it is good for that much more. Our combined experience is that the expense of motoring is not prohibitive.

"Of course, we economize where possible. For instance, we have added a manifold which feeds more air to the engine when it gets warm and saves much gasoline.

"Yes we certainly would be lost without our car."

#### Farm Horses without Shoes

THE blacksmith bill is a serious item when the aggregate expenses for the year are considered. A few months ago we had a talk with a Huron county farmer who had cut his blacksmith bills in two. Here is his experience as he told it:

"A few years ago we started to keep farm accounts and it did not take long for us to decide that the blacksmith was getting too much of our profits. Along in November one year when I had added up the smith's bills for the year, I went right out to the barn and ripped the shoes off of four horses, and left only one team shod, the team that we used for driving, and for all road work. Next spring we decided to see how barefooted horses would work on the farm. The two teams without shoes went through the season's work without any damage to themselves, and we have never had them shod since.

"Of course," this Huron farmer added, "unshod horses are never taken on the road. We keep one team shod and that team does all the road work."