



A WINTER MORNING ON A SASKATCHEWAN FARM.

## PROGRESSIVE FARMING IN SASKATCHEWAN

How many of us stop to consider the changes that are gradually taking place in the cultural methods in Saskatchewan? The other day I was on a farm and was looking at an old iron-mold-board plough that had come all the way from Scotland, one of the first used in this country. It had turned many acres in the Red River Valley before it had been brought west and had been in use till twenty-five years ago. From this old plough to our self-lift gangs is a long way and a vast improvement; it only illustrates the advances that have been made all along the line in an evolution of cultural methods and machinery that is revolutionising agriculture in the West, making it possible to produce at one quarter the cost that we could twenty-five years ago. What accounts more for this than anything else is the methods and machinery now employed in preparing the land for the crop.

We remember when the first settlers came here, mostly from Ontario, their plan was to break the sod, spring and fall plough, harrow it in the spring just before seeding, sow the grain broadcast, either by hand or with a seeder that scattered the seed over the surface of the ground, and then as much as possible was covered by harrowing. By this method some of the grain would not be covered at all, some would be too deep and it very often was unevenly sown. Usually two horses were used and most of the machinery was made for that number. The usual result was a light crop and, in a very dry year, little or no crop at all. This particularly applied to Saskatchewan, where on the prairie, which was the older settled parts of the province, the rainfall is much less than it is further east. Since then however, the average crop has been much increased on breaking, and almost if not doubled by a system of fallowing on the older land. This is done in different ways by different farmers, but the one principal governs all: to destroy as many weeds as possible, make a good seed bed, one that will conserve the largest amount of moisture and that will continue to do so while the crop is growing.

The up-to-date farmer now usually uses from four to six horses except on wagons. He breaks his new land at whatever season of the year he can, in many cases using a steam or gasoline engine, the largest hauling nine or ten ploughs, running night and day and breaking fifty acres in the twenty-four hours or hauling from twelve to fifteen stubble ploughs and ploughing sixty to seventy-five acres of old land. After breaking, the land is disced and harrowed, often by the engine, and if the breaking is done early in the season so that the sod is thoroughly rotted, a crop of wheat is usually grown, otherwise a crop

of flax. After either of these for a second crop, oats are generally ploughed in with a narrow furrow plough about three or four inches deep and the ground well harrowed. If the season is favorable a good crop will result, but if it happens to be unusually dry, and it is seen there is not going to be a paying crop the field is ploughed six or seven inches deep and kept cultivated for fallow.

Fallow has been the key of successful farming in Saskatchewan in the past. It is done in different ways by different farmers in different districts. One will disc his land as soon as he can, then plough once about seven inches deep and then keep the surface harrowed or cultivated; another will allow the weeds to get a start then plough once and cultivate but the majority plough twice, the first time three or four inches deep immediately after seeding. This is then well harrowed. By this time the weeds will have a good start on what was first ploughed. It is again ploughed about seven inches deep, then harrowed and cultivated till germination ceases. To obtain best results the ploughing should be finished not later than the 15th of July, and where only one ploughing is done, sooner than this. By this system one third of the land is in fallow all the time.

The land is seeded almost entirely by drill seeders of different makes to suit different soils, four horses and a man seeding from fifteen to twenty-five acres per day. Two crops are always taken off fallow, for the second the stubble is burned off and the surface fined with a cultivator or disc and the grain drilled in.

There is now much more attention paid to the selection of seed than formerly. It used to be that so long as the seed looked good it was considered sufficient, and in many cases farmers would sell their best wheat and buy cheaper seed that had been slightly damaged by frost or otherwise. The up-to-date farmer recognises that like produces like, and there is as much sense in trying to grow a first-class crop of wheat off seed that has been producing fifteen to twenty bushels per acre as there is in trying to raise a prize draft horse off a shaganappi pony. He not only gets the best seed he can in appearance, but sees that it is from seed that for years has been producing from thirty to forty bushels per acre. Where the land is properly prepared and the best seed sown, an average of thirty bushels per acre should be received for a number of years where one does not have the misfortune to be damaged by hail.

On many farms that have come to my notice this has been exceeded for the last six years,

and where one is not growing this there must be something wrong with the method of cultivation.

The cutting is done with a binder from six to twelve feet wide, using from three to six horses. The one cutting a swath of eight feet is the one coming most into general use. With four horses this will cut from fifteen to twenty acres per day.

I first saw a threshing machine working in this country at Selkirk. Two oxen and a treadmill supplied the power. Wheat that had been cut by a sickle was being threshed. One man fed the machine, another prepared the sheaves for him, another kept the straw away. The wheat and chaff went out together, a man shoveled it into a fanning mill while "Laughing Johnny," who afterwards entertained curbstone audiences, supplied the power to turn the mill. The machine of to-day, most generally in use, threshes from fifteen hundred to two thousand bushels of wheat per day, stacks the straw and cleans the grain ready for market. I watched one of the largest size work this fall. The engineer besides running his engine looked after the separator. There was a fireman, a man to draw water, two spike pitchers and eleven teams hauling the sheaves to the machine, and they were threshing at the rate of thirty-five hundred bushels per day. This party supplied all the men and teams, boarded them and charged seven cents per bushel for threshing.

Very little stacking is done on the large farms. Portable granaries are used. These are moved to that part of the field that will necessitate the shortest haul for the sheaves, the threshing machine is set alongside and threshes till the granary is full, then moves on to the next.

The following figures give an approximate cost of producing wheat on a half-section, or larger of 28 cents per bushel.

### FIRST CROP ON FALLOW.

|                           |      |
|---------------------------|------|
| Plowing land shallow      | 1.00 |
| Harrowing twice           | 25   |
| Plowing deep              | 2.00 |
| Harrowing twice           | 25   |
| Cultivating twice         | 50   |
| Seed wheat                | 1.00 |
| Formaldehyde and applying | 03   |
| Seeding                   | 33   |
| Cutting                   | 28   |
| Twine                     | 30   |
| Stooking                  | 25   |
| Threshing                 | 2.10 |