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The Evolution of Corn Cropping Machinery

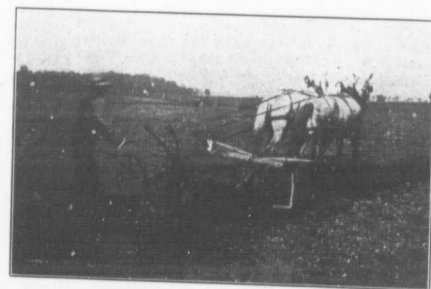
How Machinery is Eliminating Manual Labor in Corn Crop Management

J. H. Grisdale

CORN growing in Canada goes back many years. The profitable production of this crop, possibly even more markedly than in the case of any other farm crop, has always meant much labor. If the more thoroughly every operation is performed the more striking the crop returns, is true of most crops, it is doubly true of this one. The difficulties surrounding its profitable production in the way of the large amount of labor necessary to ensure a good return from the area under crop have, however, effectively attracted the inventive genius of not a few able men if we may judge by the progress that has been made in such implements as corn planters, corn cultivators, corn harvesters, corn huskers, corn shellers and mowers and shredders. The result is that corn growing to-day is as child's play when contrasted with the strenuous job it was some 30 or 40 years ago.

The writer has been actively interested in the corn crop for 35 years or over. Recently while thinking of those days in the later seventies when as a small boy on a Quebec farm I trudged behind a team and an eight-foot harrow, slowly getting the land into shape for corn planting, I was struck by this great difference between now and then in so far as implements used in corn growing are concerned.

The accompanying photos attempt in some measure to make that difference clear. The handling of the land from start to finish was slow and laborious in those days, a third of a century ago. It would also have been expensive had not wages



Two Days Work into One, and that easily

In the above scene, from a photograph taken on the farm of Mr. Geo. Birse, Huron Co., Ont., we have illustrated the whole trend of modern farm machinery development. The aim of the double-furrow plow is to economize on human labor. That too is the aim of all our best modern farm machinery. He who sees the light and follows it need have no difficulty in making the hired man earn his wage.

Through clay hub deep in the old tumbrel cart the manure was carted from the pile to all parts of the field and laboriously spread either from the cart or from the small piles dumped at well-judged intervals. One's arm and hand remember yet the heave and twist that ripped the forkful of shining "muck" from the steaming mass and sent it whirling and disintegrated to lie ready for the oncoming plow.

The little Canadian horses hitched to the one furrow cast-iron plow (as commonly used in that district) managed to do good work, and to do it fairly quickly, everything considered. The same team on an eight-foot harrow made but sorry headway against tough soil or hard clay, but perseverance finally won out. The rigging of the land with the double mould-board plow into drills three feet apart and the running of the old wooden marker across the same were the final operations before the planting by hand and hoe, or hand and foot as was often the case.

Cultivation was done with the old single walking cultivator. Harvesting saw the trusty sickle brought into operation and the corn set up to dry out in shock before being stored away on the top of the mow or in settling lofts, later to be fed long and dry to the hungry cattle.

Conditions to-day are different. Men demand \$2.00 a day instead of 50 cents as was paid near Montreal at that time. Horses have improved in size at least and implements are greatly changed. The manure spreader as it rolls across

the field, with its small catarract of fertility following, lessens labor and increases manurial values by thorough disintegration. The two-furrow plow with three good horses turns three acres a day. Using the heavy land roller or, better still, the packer, immediately after plowing, then pulverizing with the four-horse double cutaway disc and the 24-foot smoothing harrow makes a much better job at a good deal less than half the cost for manual labor than in days gone by in spite of higher wages. Rolling the land, then planting with the 20-inch marker seed drill or the regular corn planter on the flat saves time, conserves moisture and helps keep down weeds. Harrowing as the green points shoot up and then using the two-row cultivator every week or so till the corn stands three or four feet high helps keep down the cost of cleaning and encourages the corn to grow. The hoe is still needed, but to a very limited extent only. The one-horse walking cultivator also still has a place and, if at all possible, should be kept moving up and down the rows long after the stalks rise above the horse's head.

The cutting of the corn, binding into sheaves and shocking,—all of them at one time heavy manual labor jobs—are now done by machinery for the most part. The corn harvester capable of cutting from five to eight acres a day not only cuts and binds, but greatly facilitates loading. The curing of corn in the shock, an expensive and

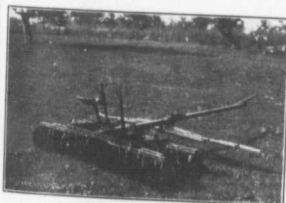


Corn Planting at Its Best

Large areas of corn are planted quickly and easily with the double-row corn planter here illustrated. The machine may be regulated to plant in either drills or hills. Any who have ever used this implement would not care to go back to any of the old-time methods of corn planting.

—Photo by an editor of Farm and Dairy.

uncertain method of preserving the crop, has given place to the silo, where practically every last pound of digestible matter is perfectly con-



Finds Favor Wherever Tried

The double cutaway harrow here illustrated is one of the few owned in Canada. Mr. H. R. Nixon, Brant Co., Ont., is now using it for the first time. This implement is highly recommended by Mr. J. H. Grisdale who tells of it in an article adjoining.

—Photo by an editor of Farm and Dairy.

then ruled so low as to make it profitable (while at the same time necessary) to do so much by hand or to expend so much man labor to produce the crop.