



BARRINGTON STREET, HALIFAX—LOOKING NORTH.

From Sickles to Binders.

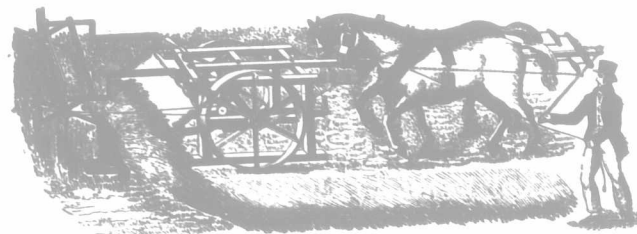
It is not likely that the sickle was the first implement used in cutting down grain, but it is going far enough back to begin with. It was used from time immemorial, by all the great nations of antiquity. Egyptians, Jews, Babylonians and Chinese used the sickle in their harvest fields, and from sculpture and paintings we learn its shape was much the same as the reaping-hook of the present day, occasionally used in cutting down corn. In the report of the Northumberland (Eng.) Board of Agriculture for 1798, the secretary writes: "Most of the grain is cut with sickles, by women, seven of whom, with a man to bind after them, generally reap two acres per day. Oats and barley are sometimes mown, but are more generally reaped, according to the practice in Scotland."

Homer, celebrating in song the Siege of Troy, 1194 B. C., speaks of the well-to-do farmer as having fields

"Crowded with corn in which the reapers toiled
Each with a sharp-toothed sickle in his hand."

The first historical mention we have of the sickle is in Deut. XVI. 9: "From such time as thou beginnest to put the sickle to the corn." Here it is spoken of as a well-known implement, brought from Egypt, or reaching back to the days of Abraham. An improvement was made on the sickle by the Hainault scythe, imported into England from Belgium. This was a blade 2 feet 3 inches long, with a handle 14 inches long. Held in the right hand, and encircling the grain with the left, aided by a crooked stick, a smart blow would bring around enough to make a sheaf. A good hand could take down half an acre a day, and the price ranged from \$2.50 to \$4.50 per acre.

Pliny, A. D. 70, describes the first mechanical reaping machine we have any account of. He says: "In the extensive fields in the lowlands of Gaul, vans of large size with projecting teeth on the edge are driven on two wheels through the standing corn by an ox yoked in a reverse position. In this manner the ears are torn off and fall into the van." The conception in the con-

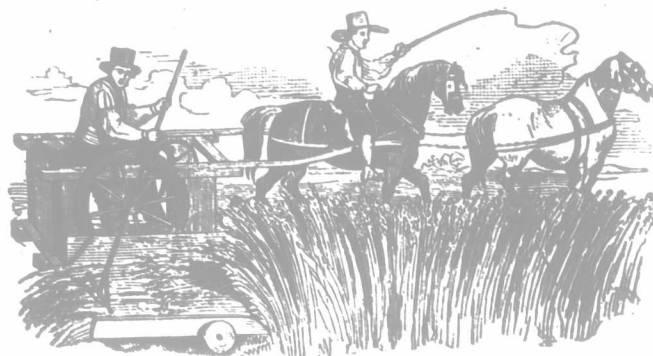


BELL MACHINE, 1823.

struction of this rude Gallic machine seems to be continued in the Deering Header of the present day, driven by four horses, accompanied by a van into which the heads of the grain are received as they are elevated from the reaper. But the first reaping invention of any historical importance in recent times was made in 1785, by Capel Loft, and was immediately improved on, and in 1812, the Dalkeith Farmers' Club, to stimulate genius, offered a premium for the best serviceable reaping machine. The prize was taken by Mr. Smith, of Deanstow, but another was brought out in 1815. The names of several inventors occur about this time, among whom may be mentioned Mr. Mann, of Wigtonshire; Mr. Ogle, of Remington, Eng., and Mr. Scott, of Ormiston.

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In 1822, a self-reaper was invented by Mr. Samuelson, of Banbury, Eng., and is reported to have been capable of cutting 14 acres per day. This machine was the first to have a tilter. It had four rakes that could be set to throw off the sheaf. The driver walked or rode on one of the horses. Similar to this was the invention of Mr. Hussey, of a manual delivery reaper, patented in 1833. This was followed in 1834 by the McCormick mechanical delivery reaper, laying the grain off in swaths like the Bell machine, but neater and by means of a sort of Archimedean screws. Both the Hussey and McCormick machines became very popular. In the Hussey, the sheaves had to be lifted before the next round could be cut. This was a drawback. In the Mc-



HUSSEY MACHINE 1833

Cormick, the whole field could be cut without waiting till the swaths were bound.

A great interest was awakened in reaping grain by machinery, at the World's Fair of 1851. The two most popular American reapers, the McCormick and Hussey, were sent over to England for exhibition and trial. After being thoroughly examined in Hyde Park, they were tested under the auspices of the Royal Agricultural Society of England, on crops of grain in different parts of the country. At the close, the preference and Exhibition medal were given to the McCormick, but Mr. Hussey was not satisfied, and at a subsequent trial by the Cleveland Agricultural Society, the decision was given in favor of the Hussey reaper. Garrett-Crosskill and all leading implement makers adopted Husseys, and great numbers of them were turned out. In the meantime the Bell reaper had been greatly improved and those manufactured by Crosskill were chiefly used and continued till superseded by others of superior working.

At the Paris Exposition of 1855, models of all the best French, American and English machines were tested in the grain fields of Trappes. Many claimed the prize, but the officials awarded the medal to McCormick, of Chicago, and the first-class silver medal to J. H. Manny, of Freeport, Illinois. The Emperor Napoleon was so highly pleased with the McCormick machine that he purchased it.

In the same year, Seymour & Morgan's single reaper (hand rake) was introduced into Canada and did good work on smooth ground. At the Provincial Exhibition in Kingston in 1856, it



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