



The McCormick harvester and twine baler, manufactured in 1881, was the first binder which tied the bundles with twine. After the development of

this machine only minor developments, tending to give greater durability and lighter draft, were added.

The revolution the world welcomed

Global Significance

As much as any other single factor in American History, the invention of the reaper by Cyrus Hall McCormick in 1830 brought the United States from an almost purely agrarian nation to the forefront as the world's greatest industrial power. Until the invention of the reaper, advances in farming methods were so slow as to be almost imperceptible. The farmer was completely at the mercy of the soil and the elements prior to the invention of the reaper. If circumstances caused him to fail to produce, he was confronted with the likely possibility of famine, as time via the earlier primitive tools would not permit him to harvest another crop that year.

Development of Farm Machinery After The Invention Of The Reaper

The introduction of the reaper ushered in an extraordinarily productive era of invention in all lines of farm equipment. Stimulated by the impressive success of McCormick's machine, other inventors attacked the problems of the farmer with equal vigor. During the period between 1830 and 1850, every phase of agriculture underwent rapid development. The steel plow, which made it possible for the first time to turn the rich, sticky soil of the prairies, was introduced to replace the inefficient wood and cast iron implements that had been used for centuries. In 1834, the first threshing machine appeared, doing away with the laborious custom of flailing grain from chaff. Hand sowing of seed started to become obsolete when the grain drill, which permitted rapid, accurate planting, was invented. Harrows and cultivators in vastly improved form were developed to

be eagerly accepted by the pioneers who were opening the American West.

By 1946 the acceptance of the reaper in the great farming areas of the Middle West was complete enough to justify the building of a factory to manufacture reapers in quantity. Cyrus Hall McCormick moved his business to Chicago, the logical shipping center of the new grain territory. His first factory was established on the north bank of the Chicago River near Lake Michigan, becoming one of the first of Chicago's pioneer industries. As his original contracts with outside manufacturers expired, McCormick refused to renew them, preferring, once he had the facilities, to have all his machines built under his personal supervision.

During this period, while McCormick was concentrating on the production of his reaper, he was also developing methods of selling, advertising, and distributing it. Upon the expiration of his original patents, which in spite of litigation were not renewed, he met a sudden increase in competition simply by outselling his rivals and sending his agents throughout the United States to convince farmers in even the more remote sections of the merits of his reaper.

The interests of the farmer were always uppermost in McCormick's mind. Leaving the manufacturing details of his business in the hands of his brothers, he spent most of his time designing and testing improvements on his machine and during the harvest season, studying the reaper in operation. Trips to the harvest areas each year enabled him to keep in close touch with the problems of the farmer and to learn his views on possible improvements. The most popular method of advertising and

selling in those days was to stage contests with competing manufacturers before the farmers themselves. McCormick supervised many of these field trials himself, keeping a watchful eye for weaknesses in the performance of his reaper. Because of his insistence upon the highest possible standards of quality and workmanship, McCormick's machines usually came out ahead in such contests. He had, however, the courage and integrity to recognize flaws in his machines and never hesitated to accept advice he considered sound.

The advent of the Civil War lent tremendous impetus to the development and production of farm machinery by draining more than a million men from the farms of the Middle West and placing an increased demand upon the farmers who remained to produce more food. Largely because of the reaper, the Union was able not only to feed a huge civilian and army population but also to ship large quantities of food to Europe.

Without McCormick's invention, according to a contemporary estimate, half the crops would have been left, standing in the fields for lack of labor to harvest them. Lincoln's secretary of war, Edwin M. Stanton, recognized the Union's debt to the reaper in an address in 1861. 'Without McCormick's invention,' he said. 'I fear the North could not win, and the Union would be dismembered.' The impressive war record of the reaper served to convince even the most hesitant farmers of the advantages of farm machinery. Their reluctance to change to new ideas vanished when they saw a possibility of losing nearly all their crops through a lack of hand labor to harvest them. Final, universal acceptance of

mechanical farming was an end result of war.

Formation Of The International Harvester Company

During the latter part of the nineteenth century, the farm equipment industry, influenced by the rapid expansion of agriculture for which it was so largely responsible, grew into one of the most highly competitive businesses in America.

The two leading manufacturers of harvesting machinery at the turn of the century were McCormick's organization and the Deering Harvester Company, also located in Chicago. This company had been founded in 1869 by William Deering, another pioneer in the development and perfection of agricultural implements. In 1902, the two companies combined with three smaller concerns—the Milwaukee Harvester Company; Warder Bushnell and Glessner Company; and the Plano Manufacturing Company to form the International Harvester Company. The prime reason behind the organization of the new Company were to develop new products, to bring about a more diversified line, and to give more attention to the foreign market. Cyrus H. McCormick, son of the man who had perfected the reaper and head of the McCormick Harvesting Machine Company at that time, became the first president of the International Harvester Company the day after its formation.

The effect of the merger upon foreign trade became apparent almost immediately. Spurred on by new capital, new resources, and a larger organization, the Company's foreign business doubled within five years, and within ten had increase fivefold with the

extension of trade, particularly effective in Great Britain, Western America, and Australia. By 1909, factories had been established in several European countries, and sales outlets had been set up in most of the civilized countries of the world. The International Harvester Company's worldwide character had become firmly established.

Ever sensitive to the needs of the farmer, the directors of the new corporation made plans to incorporate into the International Harvester line implements that would serve every purpose of the farm—many of which had not even been dreamed of a few years before. It was felt too, that a more diversified line of products would remove the seasonal character from the harvesting machine business and provide employment on a year-round basis to the thousands of International Harvester factory employers and dealers. The addition of new products would require production at a plant during the periods it was not ordinarily manufacturing harvesting equipment.

The first step in the development of a complete line was the acquisition of the D.M. Osborne Company at Auburn New York, which manufactured a line of harvesting and tillage implements designed to meet the eastern trade. Because of its location near the eastern seaboard the addition of that plant was also in line with the Company's desire to expand its foreign trade. In 1904, the purchase of the Keystone company, at Rock Falls, Illinois, added an historic line of tillage and having tools. This factory, subsequently sold, became known as Rock Falls Works. About this time the Weber

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