

The Family Heritage Series

A weekly discussion of Americanist truths and traditions for those "heirs of all the ages" who will have to preserve that most important inheritance of all — freedom.
Produced by the Movement To Restore Decency.



Volume II

Lesson Ninety

Cyrus H. McCormick

LESSON IDEA

To show the importance of Cyrus H. McCormick's invention of the mechanical reaper, and how it benefitted mankind.

PREPARATION

Using an almanac or encyclopedia, collect statistics comparing the production of a grain such as wheat, in various nations. Think of reasons why there are differences in production in these lands.

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ANYPONE WHO HAS ever stood on the side of a hill on a sunny day and watched the wind blow through a field of ripened wheat should realize how dependent man is on the rich soil of earth. Of the many grains produced today, wheat has been used as a basic food during fifty centuries of recorded history. The Egyptians were reaping wheat three thousand years before the birth of Christ.

Egypt and other ancient civilizations developed out of the reaping of grains. Once men stopped living as nomads and began tilling the soil, it became possible for towns to spring up, for barter to take place, and still later for men to specialize in producing various products. Through agriculture came civilization. Without men farming the land, producing enough food for their families it was impossible for civilizations to develop. Once men were able to harvest and hunt more than enough food for survival, a few could turn their creative talents to other pursuits.

But tilling the soil, irrigating it, harvesting the crops — these chores were back-breaking and time-consuming. To aid in cutting through the top soil, men invented the plow. The first ones were made of wood. And in ancient times slaves often were used to pull the plow through the field while another man guided it along. Later oxen were used to pull it, but still the work was slow and inefficient. To harvest the crops, men made sickles or two-handed scythes to cut down the stalks. It may seem unbelievable, but both the plow and the scythe remained essentially unchanged for five thousand years.

It was not until the middle of the 19th century that two clever Americans invented improvements in the way men were plowing and reaping grains. In 1837 John Deere invented a steel plow which was shaped in a way that kept muddy soil from clinging to it. Cyrus Hall McCormick had already, in 1831, invented the mechanical reaper — a device which made the sickle and scythe obsolete, except in the most backward countries of the world. McCormick's success story is an important one for us to understand.

WHEN THE REVOLUTIONARY War exploded across the thirteen colonies, young Robert McCormick was on the front lines. After independence was won, he settled in a peaceful valley in Virginia, where he farmed and raised a family. Robert McCormick was very successful. In time, he owned four farms, two gristmills, two sawmills; a smelting

furnace, a distillery, and a blacksmith shop. He was also a scholarly man, a student of world affairs and astronomy. His wife was adept at the basic household tasks — spinning, knitting, and weaving, canning and preserving, cooking and making bread with flour made from wheat grown on the farm.

The elder McCormick was also an inventor of sorts. He spent fifteen years, on and off, trying to invent an efficient mechanical reaper. He finally abandoned the project, but his interest was passed on to his son Cyrus, who was born in 1809. It was this young boy's enthusiasm and will-to-win that finally resulted in the invention of one of the most important mechanical devices of that time.

YOUNG CYRUS McCormick realized there were two basic problems which needed to be solved: The reaper had to cut grain quickly and easily. And, it had to handle the grain carefully after it was cut. His father's reaper cut the grain all right, but then flung it into a tangled mess. As he studied his father's experimental model, Cyrus recognized that a different type of cutting blade was needed, as well as some mechanism that would push the stalks into the blades.

He finally settled on the idea of a *reciprocating* system. It actually consisted of two blades, one on top of the other. Each had zig-zagged edges. One blade was held stationary, but the one beneath it moved rapidly back and forth to cut off whatever reached it. (The electric hairclipper barbers use is based upon the same principle.)

To keep the wheat upright while it was being cut, Cyrus built metal fingers, extending beyond the blades, to hold the stalks. What about the stalks once they had been cut? Cyrus mounted a paddle-wheel on the reaper which automatically pushed the

stalks onto a platform. A helper walking alongside the machine raked the stalks to the ground, where they could be bundled later.

Such a device sounds simple to us. And so it was, but no one had ever thought of it before. The basic principle of the machine McCormick invented some 150 years ago is still in use on modern air-conditioned combines. He had succeeded where others had failed.

But now another problem arose. What was he to do with his invention? First he decided to give an exhibition to a group of interested farmers near the neighboring village of Steele's Tavern, Virginia. With his reaper he cut six acres of oats in one afternoon — a feat that normally would have required six men with scythes or 24 men with sickles. The following year he gave another exhibition near Lexington. One hundred skeptical men were on hand to watch — and to jeer. Just as McCormick started pulling his reaper through the wheat field, he was stopped by the owner, who was worried that his crop would be destroyed.

The dejected inventor had no choice but to take his reaper back home. As he prepared to leave, another farmer stepped forward and said, "I'll give you a fair chance, young man. That field of wheat on the other side of the fence belongs to me. Pull down the fence and cross over." That afternoon he reaped another six acres. His formerly hostile audience was so excited that it marched into town with him to put his reaper on display in the town square.

WHERE WOULD HE GO from here? McCormick needed money to promote his invention; he needed metal to build more models; and, he needed time to construct them. He decided to continue farming, hoping to save enough money to open up a reaper factory. When his farming proved unsuccessful, he went into business with his father, operating an iron ore foundry. It too failed.

By 1839 Cyrus McCormick was as broke as he had been in 1831. What do you think you would have done in his position? [*Encourage discussion.*] He didn't give up. He gave another public exhibition to a group of farmers in 1839, but no one ordered a reaper. A year later, however, several buyers finally appeared. With their orders in hand, McCormick was on his way to success. He sold seven machines in

FOR SERIOUS STUDENTS

For an interesting study, determine for yourself why India's millions are always starving, regardless of how many million tons of wheat we give them, or how much money in American foreign aid is sent there. What part, if any, does the Hindu religion play in keeping millions in poverty and despair? Is it possible to raise such a nation to our standards if its leaders prefer socialist economics to sound agricultural methods?

1842, twenty-nine in 1843, and fifty in 1844. His farm was soon converted to a bustling factory.

As his business expanded, McCormick realized that Virginia was not the ideal location for a reaper factory – especially with the difficulties involved in shipping such large machines out west. So one day he put \$300 into his belt and set out to learn for himself the needs of the midwestern farmers, and the opportunities for him in the Plains States. After seeing the vast prairies, he returned to Virginia determined to expand his business. His first decision, however, proved to be an error. He sold licenses to other firms in the West to build reapers. But some manufacturers decided to make their own “improvements” on the reapers; others built them from cheap materials to save money; and worse still, all of the reapers were different from McCormick’s model. Many farmers were outraged to receive a “McCormick” reaper so inferior to the one advertised.

McCormick wisely decided to stop issuing licenses and to control the manufacture of the reapers himself. But he still knew that he could not stay in Virginia. He decided to build a factory in some community along the Great Lakes, to take advantage of the central location. After searching for what he believed would be an ideal place for his factory, he chose a small town on the shores of Lake Michigan. It was inhabited by only 10,000 persons and had been plagued in recent years by mud, dust, floods, droughts, cholera, debt, and panics. With the exception of one block of wooden pavement, no streets were paved. There were no railroads, no telegraph, no gas lines, and no sewer system.

That was Chicago in 1847. No one saw much hope for this desolate little mudhole, squatting beside a lake, but McCormick saw beyond the dingy unpainted shanties and the muddy streets. He was sure Chicago would become a booming city; he planned to be one of its leading citizens.

This is exactly what happened. McCormick bought a factory in Chicago and immediately made plans to build 500 reapers for the harvest of 1848. Fortunately, he had acquired a partner in his venture, William Butler Ogden, the first mayor of the city and a man of wealth and prestige. The fact that Ogden thought the McCormick Reaper a worthwhile investment helped McCormick become established in Chicago.

In addition to his mechanical abilities, Mc-

Cormick was a genius in salesmanship. As early as 1842 he had thought of giving a written guarantee to each customer who purchased a reaper. In addition, for a reaper costing \$120, the customer had to pay only \$30 down and the balance over six months. His time-payment plan was unique for farm equipment. Moreover, if a customer was dissatisfied with the reaper after using it for a month, he could return it for a full refund. McCormick’s revolutionary plan caught on rapidly and proved to be a guaranteed money-maker.

By 1850 he was a well-to-do businessman, secure and content. His reapers were harvesting crops in three thousand wheat fields across the nation. Now he turned his eyes toward Europe. Would the Continent accept his reaper? He decided to give it a try.

McCormick’s opportunity to display his reaper to the elite of Europe came in 1851 at the London Exposition. While other nations displayed rich collections of art, tapestries, jewels, silks, and marble, America’s display was drab but practical. The Americans were more interested in showing Europe such things as Borden’s Meat Biscuit, St. John’s Soap, and something called the McCormick Reaper. Some Europeans contemptuously referred to the reaper as “a cross between an Astley Chariot, a wheelbarrow, and a flying-machine.”

But not every European was disdainful. John J. Mechi, a British inventor whose hobby was scientific farming, immediately noticed the reaper and asked McCormick to give him a demonstration of it on his farm outside of London. On July 24th, a crowd of 200 farmers and dignitaries gathered in Mechi’s field to watch the reaper. It worked perfectly. John Mechi told the crowd after the demonstration: “This is a triumph for the American Reaper. It has done its work completely; and the day will come when this machine will cut all the grain in England. Now let us, as Englishmen, show our appreciation by giving three hearty English cheers.”

Thanks in large part to that successful demonstration, McCormick’s Reaper won first prize at the Exposition. The *London Times* editorialized: “The reaping machine from the United States is the most valuable contribution from abroad, to the stock of our previous knowledge, that we have yet discovered. It is worth the whole cost of the Exposition.”

In 1884, when McCormick died, more than 500,000 reapers were in use in Europe, the United

