

John Deere and America's Character

Those who labor in the earth are the chosen people of God," Thomas Jefferson wrote in his *Notes on the State of Virginia*. "Corruption of morals in the mass of cultivators is a phenomenon of which no age nor nation has furnished an example." People who do not farm for themselves are dependent upon those who do, and that kind of dependence "begets subservience and venality, suffocates the germ of virtue, and prepares fit tools for the designs of ambition."

A farmer himself, Jefferson bent his Enlightenment mind to solving the problems of agriculture. He kept careful records of the weather and the success of his farming techniques, and developed impressive schemes for crop rotation. In the 1790s, he designed a plow which he claimed was "mathematically demonstrated to be perfect." Jefferson's plow, with its "moldboard of least resistance," won him wide praise—and a gold medal from a French agricultural society.

But the plows that Jefferson used in Virginia couldn't work everywhere. As the young nation expanded westward, the varied conditions of the vast American continent proved a challenge for the farm tools employed so productively in the East. By the 1830s, farmers in the new West were struggling against tough prairie clay, which tended to clump and stick to the wood and iron plows then in use. This made plowing tremendously difficult and frustratingly slow: every few steps, sticky clods would have to be scraped from the plow.

Enter John Deere. Born exactly two centuries ago, on February 7, 1804, Deere was a skilled blacksmith who headed west after he fell on hard times in his native Vermont. He set up shop in Illinois in 1837 and was immediately confronted with the soil problem gripping that part of the country. He set about improving the design of the plow, and using a discarded saw blade he fashioned a curved plow that scoured the dirt off itself.

By the end of 1838, Deere had sold three of his new plows, then ten more in 1839, and forty more in 1840. Soon he was selling thousands. His inventiveness was matched by a head for management and excellent entrepreneurial instincts. He pioneered a new way of doing business: Instead of manufacturing just as many plows as he had orders for, as was the practice in the day, Deere built large numbers of excess plows ready for sale. As Americans kept pushing further west, John Deere's plows went with them.

Today, the company John Deere established is of course best known for its green and yellow tractors and other big farm machines. But fewer of us are familiar with farm equipment today than ever before. The efficiencies of modern agriculture are such that the United States now has less than half the number of farms it had a century ago, even though the country's population has nearly quadrupled. It is ironic that the very success of the science and technology of farming—the engines, pesticides, genetics, and satellites of modern agriculture—has made possible a society completely unlike the pastoral vision of that Virginia scientist-planter who thought of farmers as "the chosen people of God."