

“John Lane and the First Steel Plow.” *Lockport Free Press*. “Old Canal Days” Special, 15 June 1978.

### John Lane and the first steel plow

*This is the second of several articles on the history of the Lockport area by John Lamb. Lamb is a professor of history at Lewis University and is active in the Will County Historical Society and the Lockport Historical Preservation Council.*

In Northern Illinois in the late 1820s and early 1830s there was an increasing number of settlers arriving from the East. The talk of constructing a canal from Chicago westward and the reports of the rich prairie soil brought them swarming in via the Great Lakes and the overland route. The hopes were rich in 1830, for in that year Chicago and Ottawa were laid out by the Illinois and Michigan Canal Commissioners and the promise of this area seemed evident to everyone.

Not so in the 1820s; in 1823 Major Long of the U.S. Army reported after a trip through Chicago...

The appearance of the country near Chicago has but few features upon which the eye of the traveler can swell with pleasure. There is too much uniformity in the scenery; the extensive water prospect is a waste unchecked by islands, and the fatiguing monotony of the land scenery, which affords no relief to the sight, as it consists merely of a plain in which but patches of thin and scrubby woods are observed scattered here and there."

Beauty is in the eye of the beholder, or perhaps the scenery

improved as you got further away from Chicago, because by 1834 the view had improved immeasurably. In that year a Chicago paper quotes the following report of a traveler going to Lockport..."As we advance down the Des Plaines in a southerly direction the country gradually becomes undulating and

accurate sketch we can draw of it.

Between this ideal and the reality of agricultural exploitation lay some problems. First of all, breaking prairie soil for its first cultivation required certain techniques not followed in the East. The mat of prairie grasses had to be turned over by the plow in such a way that they lay flat



One of Lockport's most noteworthy pioneers was John Lane, the inventor of the steel plow. The only monument to Lane is this marker on the site of his farm on 7<sup>th</sup> Street east of Farrell Road.

[Staff photo by Rick Etheridge]

rolling, dryer, better adopted to immediate cultivation and presents the finest advantages to the farmer. To describe a prairie country to those who have never seen one, so as to give an accurate idea of its features, is almost impossible.

It is so unlike any other country in its scenery, that those who have never seen it can form no just conception of its character and beauty, from the most

upon each other. This was done so that the furrow would retain moisture and not the rich native vegetation. It would take a full year after the prairie was first plowed before a full crop could be raised.

The other problem, and the more serious one, lay paradoxically in the richness of the soil itself. Prairie loam was so rich and deep that the type of plow made of cast iron or wrought iron then used

would not clear. In other words the soil would stick to the surface of the plow, and frequent stops would have to be made so it could be scraped off by a wooden paddle. A writer in the *Prairie Farmer* observed, "...a cast iron plow will no more clear itself in most of our prairie soils than the edge of a chestnut rail drawn edge-wise."

In 1833 a 41-year old New Englander named John Lane would arrive on the Illinois prairie, and he was the person who was to solve this difficulty by inventing the steel plow. Lane arrived in Homer Township and settled on a farm located on the northeast corner of Farrell Road and 7<sup>th</sup> St. He came with his second wife and two children of his deceased wife.

As soon as he arrived he began to attack the problem of building a steel plow. The two major problems were the insufficient quantity of tempered plate steel, and the problem of working steel plate into the curved shape necessary for an efficient plow moldboard. Lane appears to have been assisted only by Levi Hartwell and observed by his young son, John Lane, Jr.

There was no plate steel manufactured in this country at that time, and none available made to order. Lane acquired an old saw blade from a mill on the Des Plaines River west of Lockport. He was to be hampered by this shortage of steel for at least 10 years before the product was manufactured in Pittsburgh. The second problem was shaping the steel. It was difficult to work the steel into a curved shape because

of its tendency to crack. Lane solved this problem by cutting the saw blade into strips, and then welding the strips to a thin piece of softer iron. The plow could then be hammered into the desired shape. The result was ground and polished until it was ready to do the job. The wooden parts of the plow, the handle and the beam, were made by John Griswold of Lockport. The result was found after testing to clear itself of the prairie soil, or to "scour."

John Lane Sr. never patented his important invention. He sold the results of his first experiments to a local farmer named Comstock Hanford, and continued to make plows on demand. His idea which he first produced in 1834 or 1835 was soon taken up by other blacksmiths on the Northern plains. Some of the names associated with early steel plows were J. T. Gifford of Elgin, Ashel Pierce of Chicago, and of course, John Deere, who in 1837 at Grand Detour used the same process that Lane had used two or three years before.

But as one of these pioneer plow makers, J. T. Gifford, observed in 1846, "The first steel moldboard, I believe, was made by Mr. Lane."

Lane was never a manufacturer of plows, but rather a blacksmith making plows on demand as the farmers wanted them.

This is how Lane operated. Indeed, all of the early ingenious blacksmiths did not sell ready made items, but made plows and other implements according to individual specifications. A letter in 1843 to Lane from Isaac Hardy

of LaSalle bears this out. Hardy was a brother-in-law of the I&M Canal Engineer William Gooding and owner of the first boat to navigate the canal from LaSalle to Chicago. He was interested in obtaining a plow to win the plowing contest at the Ottawa Fair. Hardy was a great promoter, and he was probably interested in helping to improve the quality of agriculture implements. Hardy was very specific in his



John Lane, Inventor of the Steel Plow

instructions.

In fact Lane's plow that Hardy operated came in second at the Ottawa fair of 1843.

Lane's operation continued to be small, although it was reported that in 1854 he sent 200 plows to California via Cape Horn. In 1850 he had three employees and produced 50 plows, bringing in \$600. He also did other work totaling \$1,400.

His son, John Lane, Jr., after a dispute with his stepmother, left the parental homestead in 1843 to

set up a forge in Lockport. He made plows, carriages, and implements. In 1856 he operated something called the Lockport Steam Plow Factory. But it is probable that this didn't produce a large number of plows.

In 1850 John Lane Jr. produced 30 plows in his Lockport works. He, unlike his father, was to take out a number of patents on plows, the first in 1857. His most important was a patent on soft center steel plows, to which his father's first steel plow had pointed. John Lane Jr. represents the change from the blacksmith producing plows and other agricultural tools on individual specifications to the large-scale manufacturer who produces a large number of ready made implements.

In 1858 John Lane Jr. would leave Lockport for Chicago, where he formed a factory with some Eastern partners. He was to

make enough to retire at the age of 45.

Of course the most famous plow maker was John Deere who developed a method of producing and selling large numbers of his product, and he was to make a fortune from it. This sort of success brought a degree of undeserved fame, and John Deere is repeatedly called the originator of the steel plow, when in reality he was only the most successful exploiter of the burgeoning market for farm implements.

John Lane, Sr. died in 1857 at the age of 65, leaving a modest estate of \$3,000. Like many before him he had given an invaluable gift to posterity, but because of lack of ability or lack of desire to exploit it, was never to receive the rightful acknowledgment for his accomplishment. After his death Lane was largely ignored. In 1857, Scientific

America in its obituary notice made note of his invaluable contribution.

John Lane Sr., the inventor of the steel plow, died at his residence in Lockport, Ill., on the 5<sup>th</sup> of October after a brief illness. Mr. Lane emigrated to Illinois in 1833 and in that year invented the steel plow, which is now in general use throughout the West.

The value of this invention to the country cannot be estimated. The name John Lane Sr. should ever be remembered as one of the great inventors of the country.

In 1916 the Lockport community got around to paying attention to his contribution by raising \$300 and erecting a marker at the corner of Farrell Road and Seventh St. That marker still stands as the only public monument to Lane's accomplishment.