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United States Patent Office.

JOSHUA GIBBS, OF CANTON, OHIO.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 11,523, dated August 15, 1854.

To all whom it may concern:

Be it known that I, Joshua Gibbs, of Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Plows; and I do hereby declare that the same are described and represented in the following specification and drawings.

To enable others skilled in the art to make and use my improvements, I will proceed to describe their construction and use, referring to the drawings, in which the same letters indicate like parts in each of the figures.

Figure 1 is an elevation of my improved plow, showing the working side of the moldboard. Fig. 2 is the representation of the interior of a cylinder from which the moldboard was made; Fig. 5, a section of said cylinder; Fig. 3, the mold-board as seen when looking at the forward end; Fig. 4, the land-side and parts connected to it.

The beam, handles, colter, and share may be made in the form represented or such other form as may be desirable, and fitted and fastened together in the usual manner or otherwise.

The working-surface of the mold-board A consists of about one-fourth of the interior surface of a hollow cylinder, one end of which is represented in Fig. 2 and a section of the interior in Fig. 5. If the plow is intended to turn a furrow six inches wide, a mold-board made from a cylinder with about a twelveinch bore is desirable; but if it is to turn a furrow twelve inches wide the mold-board should be made from a cylinder with a bore of about two feet, as these plows have been found to work best when they turn a furrow about as wide as the radius of the bore of the cylinder from which the mold-board was made. It has been found by experience that these plows work best when the length of the mold-board is from once and a half to twice the diameter of the bore of the cylinder from which the mold-board is made, and the form of its exterior edges about the same as the one represented in the drawings. The mold-board may be fastened to the other parts of the plow as may be convenient or desirable, taking into consideration the material from which it is made. The share B is fitted to the lower edge of the mold-board, and its point is fitted to a recess in the heel of the colter C.

It has been found that when the top of the landside was made parallel with the bottom, and a wooden standard fitted to it with a

shoulder fitted against the top edge of the landside, the shoulder upon the wooden standard is soon worn off as the wood wears away, so as to leave the plow defective and liable to get loose and shackling. To remedy this defect and improve the plow in this respect, I make the top of the landside D, opposite the wooden standard E, at an angle about as represented in the drawings—that is, higher toward the forward end of the plow, so that the iron landside shall protect the shoulder of the wooden standard E and prevent it from being worn off, so as to preserve a shoulder upon the standard E as long as there is any of the iron of the angle F remains upon the landside to press against it, when the false colter or bolt G is screwed up to hold the posts together.

I contemplate that slight variations may be made in the improvements described without departing from the merits or principles of said

improvements.

The following advantages are gained by making the mold-board as above described: First, the plow draws easier; second, it raises the furrow from the point and share more gradually, naturally, and easily, turns and lays the furrows more uniform, smooth, and even than any other mold-board, and leaves the trench wider in proportion to the width of the plow. consequently the rear of the plow need not be set so wide as when a different mold-board is used; third, it breaks the sward or furrow far less than any other; fourth, the mold-board, being more arched, is stiffer and stronger than others of the same size and weight; fifth, is making an angle on the landside to protect the shoulder upon the wooden standard.

What I claim as my invention, and desire to secure by Letters Patent in the above-described

plow, is—

Making the working-surface of the moldboard in the form of a section of the interior surface of a hollow cylinder, the center or axis of said cylinder being parallel, or nearly parallel, horizontally to the base of the mold-board or bottom of the plow, substantially as described.

In testimony whereof I have hereunto signed my name before two witnesses.

JOSHUA GIBBS.

Witnesses:

N. B. NORTHROP, J. DENNIS, Jr.