

WITNESSESS

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United States Patent Office.

JOHN DEERE, OF MOLINE, ILLINOIS.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 46,454, dated February 21, 1865.

To all whom it may concern:

Be it known that I, JOHN DEERE, of Moline, Rock Island county, State of Illinois, have invented an Improvement in Landside and Share Plates for Plows; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of the landside of my improved plow. Fig. 2 shows the opposite side of Fig. 1. Fig. 3 is a side elevation, showing the inside of the landside-plate and standard attached to it. Fig. 4 is a perspective view of Fig. 3. Fig. 5 is a bottom view of the plow. Fig. 6 is a perspective view of the plowshare.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to improvements in plows which have their share-plates, moldboards, and landside-plates formed separately and afterward bolted together.

The object of my invention is to provide for securing the standard of a plow to the inside surface of the mold-board in a firmer and more durable manner than hitherto, and at the same time to provide for readily detaching these parts at pleasure, as will be hereinafter described.

Another object of my invention is to provide for securing together the landside, moldboard, and share, so that in the event of any one of these parts wearing out or breaking they may be replaced by other parts of a similar form and construction, as will be hereinafter described.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

In the accompanying drawings, A represents the landside-plate, which is constructed with an overlapping pointed portion, a, an elevated guard, b, and a narrow heel-piece, c, as shown in the enlarged views, Figs. 3, 4, and 5. In forming this plate A, I provide for attaching to it the standard B, share C, and mold board D, all of which may be constructed essentially in the usual manner, so far as their form is concerned. This is done in the following man-

ner: The ear 5 is cast with the landside and located at the forward edge, and at or near the upper end of the elevated portion or guard b. This ear or lug is perforated to receive the bolt which secures the mold-board to it, and it is arranged or inclined in such manner as to allow the mold-board to fit snugly upon it when the latter is secured in its place on the landside. This ear 5 serves as the upper support and bearing for the mold-board, which latter is further secured by means of a lug which is cast on the inside of the share-plate C, as will

be hereinafter explained.

Three lugs or projections, 33 3 3, are cast on the inside surface of the landside A, and arranged as shown in Figs. 3 and 4. These three lugs are intended to serve as supports and stays for the lower part of the standard B. The lowermost lug, 3^{*}, supports this standard, and the two lugs against which the vertical edges of the standard abut serve as guides for adjusting it in place, and also stays for relieving the two fastening-bolts e e from undue strain in a longitudinal direction. If desirable, another lug, 3', may be cast on the plate A, as shown in Fig. 4, just below the upper lug, 3. While these lugs 3 3 3 serve to relieve the strain from the fastening-bolts ee of the standard B, they also serve the important purpose of guides for determining the proper position for fastening the standard to its plate. The ear5alsoserves a similar purpose for the moldboard. Thus it will be seen that in a single solid piece or casting I provide for giving great strength to the standard, and for holding it rigidly in place, so that it cannot be displaced without actual breakage. Another advantage which I obtain by this single casting A is that the standard is protected for a considerable distance above its lower end by the elevated portion or guard b, and hence dirt is prevented to a great extent from falling through into the furrow. Besides this a smooth polished surface is presented to the earth, which prevents it from sticking to the landside and obstructing the movement of the plow through the soil.

The share C is constructed cast with the usual vertical landside-point and share-plate, which are adapted to fit the lower edge of the mold-board and to receive the overlapping portion a, so that a smooth uniform surface will be presented to the sod when the plow is finished and the parts secured together. This share is cast with a lug, g, projecting from its upper edge, and from the bottom or inner surface, as shown in Figs. 5 and 6, a bolt passes through the mold-board and through the lug g, and receives a nut on the inner side, which nut and bolt secure the lower and forward part of the mold-board to the share, the latter being again secured by a bolt through the lapping portion of the landside and a horizontal brace, E. (Shown in Fig. 5.)

The upper forked ends of the standard B are adapted for receiving the plow-beam, and also for receiving fastenings for securing this standard to the beam. The bolt fastenings used to secure the several parts of the plow together pass from the outside inward, and thus the nuts will not offer any obstruction to the free passage of the plow through the earth.

What I claim as my invention, and desire to

secure by Letters Patent, is—

1. The construction of the landside A with the solid lugs 3 3 3 and the perforated ear 5, substantially as and for the purpose set forth. 2. The lug 3×, cast on the landside, substan-

tially as and for the purpose set forth.

3. The guide and fastening-ear 5, in combination with the movable standard, substantially as and for the purpose set forth.

4. The combination of the landside, standard, and mold-board by means and in the

manner substantially as described.

5. The construction of the share C with the perforated ear g, substantially as and for the purpose set forth.

JOHN DEERE.

Witnesses: T. CHADWICK, ALBERT F. VINTON.