B. K. EMERSON.

MOLD-BOARD PLOWS.

No. 194,961. Patented Sept. 11, 1877.

Fig. 1.

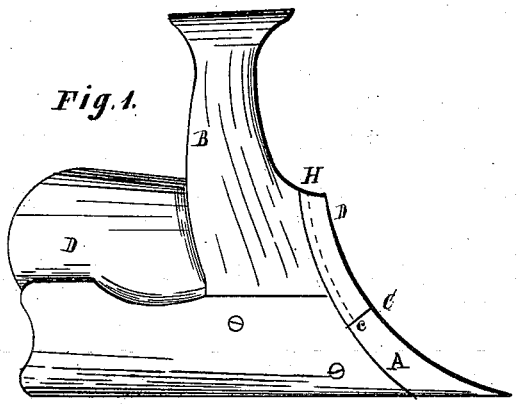


Fig. 2.

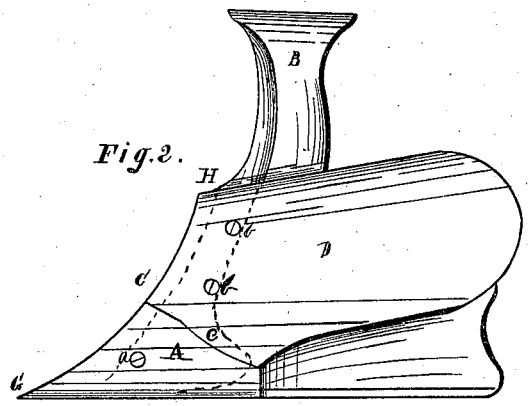


Fig. 3.

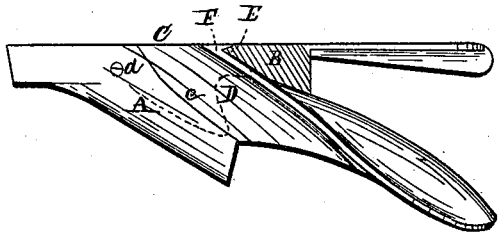
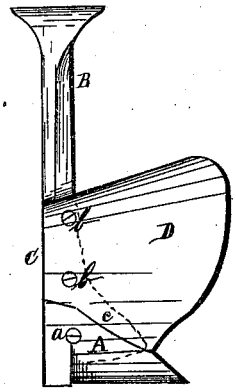


Fig. 4.



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UNITED STATES PATENT OFFICE.

BENJAMIN K. EMERSON, OF SEVILLE, OHIO.

IMPROVEMENT IN MOLD-BOARD PLOWS.

Specification forming part of Letters Patent No. **194,961**, dated September 11, 1877; application filed August 6, 1877.

To all whom it may concern:

Be it known that I, BENJAMIN K. EMERSON, of Seville, in the county of Medina and State of Ohio, have invented a certain new and Improved Plow; and I do hereby declare that the following is a full, clear, and complete description thereof, reference being had to the accompanying drawings, making a part of the same.

Figures 1 and 2 are side views of the plow. Fig. 3 is a plan view. Fig. 4 is a front view.

Like letters of reference refer to like parts in the several views.

The nature of this invention relates to plows; and the essential matter of the invention consists in the construction of the mold-board, and the mode of attaching the same to the standard of the plow, so that the upper front portion of the board may have a projecting colter-like edge, and which shall be strong, and less liable to break than those in ordinary use.

For a more full understanding of the invention, reference will be had to the following detailed description.

In this class of plows now in use the upper portion of the dividing-edge is a continuation of the plowshare, said continuation being an arm or colter, projecting upward from the share along the front edge of the standard, in close proximity to the front edge of the mold-board. Said arm or colter is a part of the share, and is secured to the plow only by the bolts by which the share is attached to the standard. This arm, not being very firmly attached to the standard, is liable to break from the share, rendering the plow useless unless replaced by a new share and arm, which is a matter of no little expense.

To avoid this injury to the plow, and consequent expense, is the purpose of this invention, and which consists in making the share without an arm or colter, as shown at A in the drawings. Said share is secured to the foot of the standard B by a bolt or bolts, *a*, and forms about one-half of the height of the cutting or dividing edge C of the plow.

Above the share is secured to the standard, by bolts *b*, the mold-board D, fitting closely to the edge of the share, as seen at *c*, and conforming to its facial or lifting curve, as will be seen in the drawings.

The front or dividing edge of the mold-board is secured to the projecting edge of the standard as follows: The edge of the standard is made an acute angle, as shown at E, Fig. 3, to which angle is fitted the dividing-edge of the mold-board, by forming on the inner side of the edge a corresponding angle, F.

It will be obvious that by this adaptation of the mold-board to the projecting edge of the standard the two parts will be held together in a dovetailed-like manner, so that the pressure of the earth, while being turned by the mold-board, cannot spring its front or dividing edge away from its connection with the standard, and which cannot be removed therefrom without first removing the bolts *b*.

It will be seen in the drawings that the dividing-edge of the mold-board is in advance of the edge of the standard—that is to say, it projects beyond the standard so far as to reach to the dividing-edge of the share, and with which it conforms in curvature, forming therewith a continuous curve from the point G to H, and projecting forward of that part of the standard above the mold-board, and which said part recedes in a curve from the dividing-edge; whereas that part of the standard embraced by the mold-board projects forward, in order to carry the dividing-edge of the mold-board to the dividing-edge of the share, substantially as shown.

In forming the upper part of the dividing-edge of the plow by means of the projecting edge of the mold-board, and attaching said board to the standard in the manner as above described, said upper dividing-edge is not liable to break, and at the same time is as practically efficient as though forming a part of the lower section or share of the plow.

What I claim as my invention, and desire to secure by Letters Patent, is—

In plows, the mold-board D, having its dividing-edge extending forward of the standard B, in line with the edge of the point or share, and the inner side of the dividing-edge formed at an acute angle to fit the corresponding angle of the standard, for securing the two parts together, in combination with said standard, having its upper front edge, above the mold, curved or receding back, and its lower part embraced by the mold-board extending forward of said curve, substantially as and for the purpose set forth.

BENJAMIN K. EMERSON.

Witnesses:
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