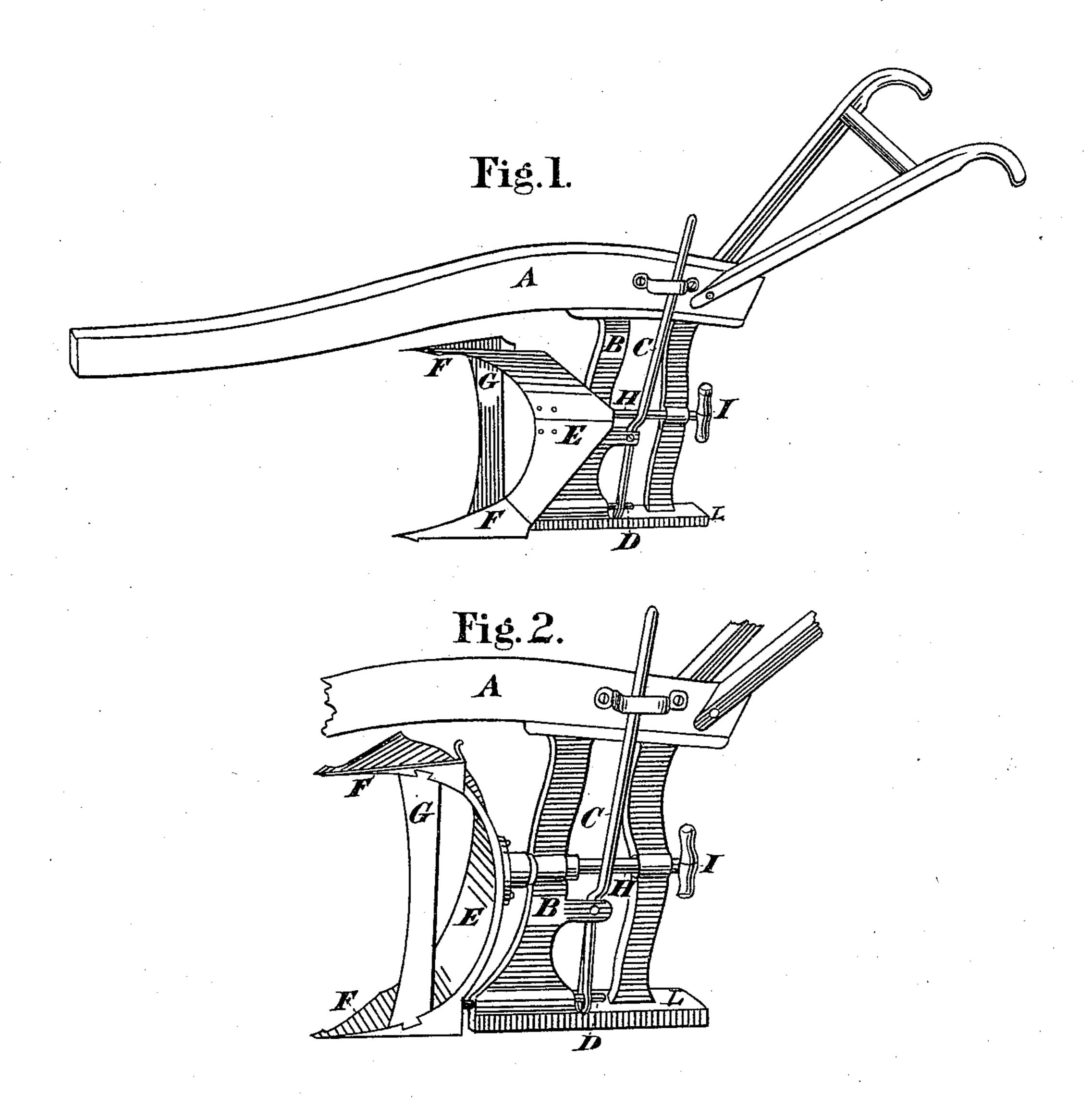
## J. HARTMANN. REVERSIBLE PLOWS.

No. 180,713.

Patented Aug. 8, 1876.



WITNESSES.

Frank Pardon. Charles Swetner INVENTOR

Julius Hartmenn by J. G. Hewith attorney.

## UNITED STATES PATENT OFFICE.

JULIUS HARTMANN, OF LOUISVILLE, KENTUCKY, ASSIGNOR OF TWO-FIFTHS HIS RIGHT TO ANTON LAUER, OF SAME PLACE.

## IMPROVEMENT IN REVERSIBLE PLOWS.

Specification forming part of Letters Patent No. 180,713, dated August 8, 1876; application filed December 1, 1875.

To all whom it may concern:

Be it known that I, Julius Hartmann, of the city of Louisville, in the county of Jefferson and State of Kentucky, have invented a certain new and useful Improvement in Reversible Plows; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of the plow, showing its general construction. Fig. 2 is a view of the land-side of the standard-frame, showing the mechanism for operating the mold-board.

Similar letters of reference indicate corre-

sponding parts of the drawings.

This my invention relates to a new improvement in reversible plows, but more especially to the peculiar construction of the mold-board, and general arrangement of the mechanism by which it is operated; the object of which is to provide a plow that will be cheap, durable, and easily operated, and, at the same time, one that can be so changed, without material loss of time, as to enable the operator to use it alternately back and forth on the same side of the land without passing around it, as becomes necessary where the stationary mold-board is used.

This invention will be more fully illustrated in detail in perspective views, Figs. 1 and 2 of the drawing, in which A is the plow-frame, all of which is made similar to those now in common use. B is the standard-frame, which is made of cast-iron or other metal, and in form as shown in the drawings. This frame B extends downwardly to a level with the base of the share, and is formed with a bed or plate, L, that constitutes the land-side of the plow. C is the lever for operating the lock-pin that holds the mold-board when set. D is the lock-pin, which is made to slide in a boss cast on the heel or land-side of the standard-frame in such a manner as to enable the end to enter

a hole in the thick part of the share, to hold it firmly in position, but susceptible of being changed to the other side and reset again at the end of each furrow, which is done by means of the lever C at the side of the beam for that purpose, which lever may be kept in its place, when set, by a spring-catch on the beam. E is the revolving mold-board, which is made of sheet metal, bent in the form of a half-circle, with the ends beveled in such a manner as to give it the required backward slope to cause it to turn the furrow without dragging. F F are the share-points, all of which are made of steel or other metal, and attached to the mold-board similar to those now in use, except that they are made heavy at the heel, in order to receive the end of the locking-pin, by which they are held in position. G is the colter or cutter in front, which is made of steel, and secured between the points of the mold-board, as shown in the drawing. H is the spindle of the mold-board, which is made to work in bearings in the standard-frame B, with the mold-board secured firmly to the end by means of rivets through it and the flanges on the boss of the spindle, by which it is held in position, so as to be easily turned to either side, to answer as a right or left handed plow, that is susceptible of being locked in either position, or changed at the pleasure of the operator. A handle, I, is provided on the outer end of spindle H, for use in reversing the share, by which means this operation will be greatly facilitated.

Having thus fully described the nature and object of this my invention, therefore what I claim as new, and desire to secure by Letters

Patent in the reversible plow, is—
The standard or frame B, having the landside L formed therewith, in combination with
the reversible share or mold-board E F G, the
reversing-spindle, and the share-locking mechanism, substantially as shown and described.

Witnesses: JULIUS HARTMANN. FRANK PARDON,

CHARLES SWETNER.