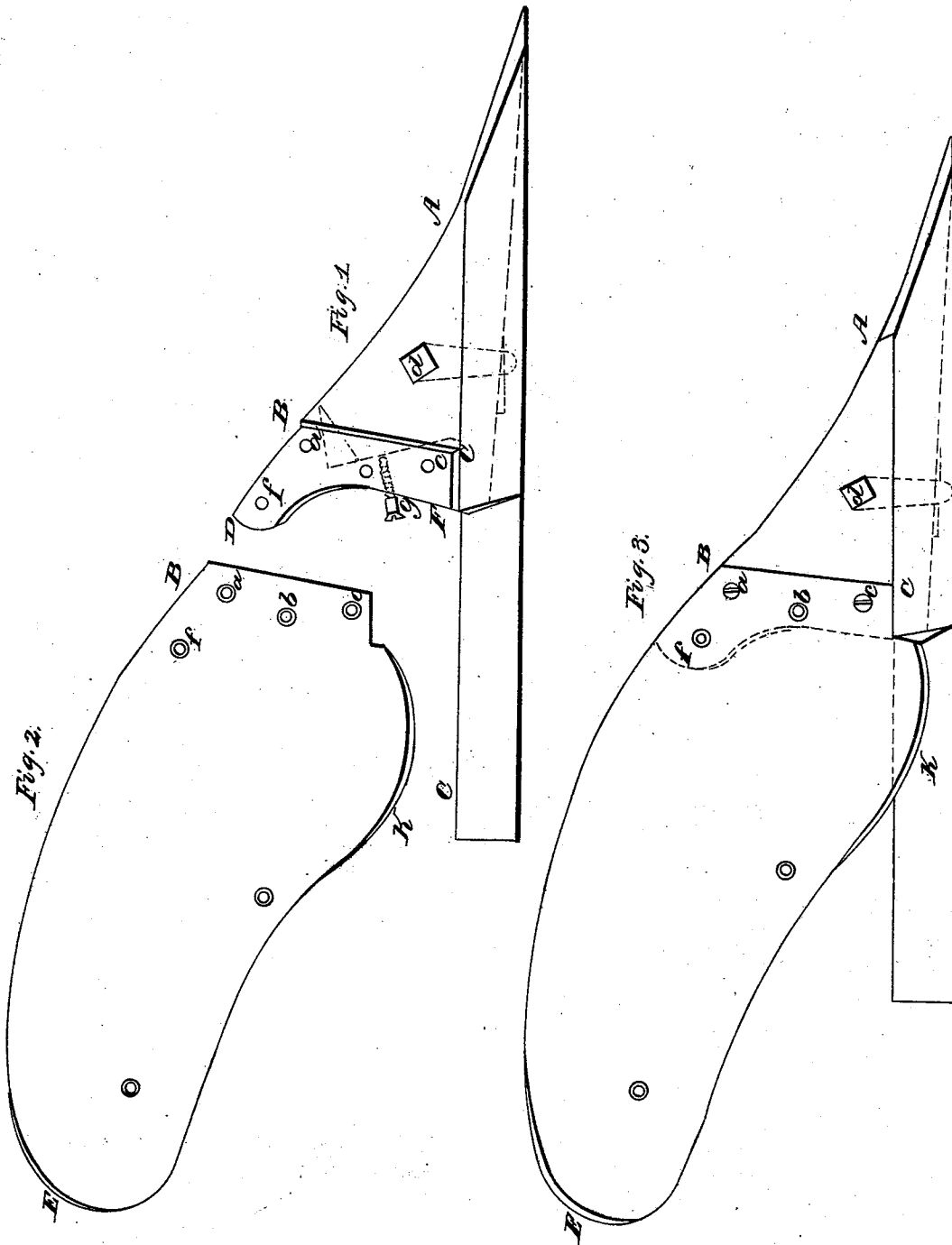


A. & S. PEACOCK.

Plow.

No. 13,228.

Patented July 10, 1855.



UNITED STATES PATENT OFFICE.

A. PEACOCK AND S. PEACOCK, OF CINCINNATI, OHIO.

IMPROVEMENT IN ATTACHING CAST POINTS TO STEEL MOLD-BOARDS OF PLOWS.

Specification forming part of Letters Patent No. 13,228, dated July 10, 1855.

To all whom it may concern:

Be it known that we, ADONIJAH PEACOCK and SIMEON PEACOCK, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Manufacturing Mold-Boards for Plows; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and the letters of reference marked thereon.

Our invention consists in forming a mold-board for plows partly of cast metal and partly of steel, having a solid cast-metal point placed in front, with a chilled surface to take the hardest of the wear, and the back part of steel, which admits of the highest polish.

Figure 1 is a surface view of the solid cast-metal point. Fig. 2 is a view of that part of the mold-board which is steel. Fig. 3 is a view of the mold-board when completed.

The following is a more particular description.

A B C, Fig. 1, is the surface of a solid cast-iron point for a plow mold-board, similar in principle to the point of a cast-iron mold-board patented by David Peacock, of New Jersey, in 1807, and in common use by ourselves and others to the present time. From B to C the surface falls, forming a shoulder or recess deep enough to admit the thickness of the steel mold-board. From the recess at B C a sheet or flange of cast metal extends back to D and F, being attached to and a part of the solid cast-metal point above described. The thickness of this extension of cast metal is generally about half an inch, more or less, as strength is required, and to it the steel part of the mold-board B C K E, Fig. 2, is either screwed, riveted, or bolted on at *a* and *c*, fitting into the recess at B C and forming an even surface with the cast-metal point A B C, Fig. 1. Holes are then made through both the steel and cast-iron at *b* and *f*, Fig. 3, for the purpose of riveting or bolting the mold-board when completed to the standard or sheth. The other bolts and screws for fastening the share and mold-board together, and the mold-board and standard together, &c., are similar to those long used in what is called the "Peacock plow." The mold-board now only needs grinding and polishing and it is ready for use.

This solid-pointed cast-iron and steel mold-board can as readily be attached to a cast or wrought iron standard as to one of wood.

The above-described mold-board differs materially from those in common use. Cast-iron mold-boards have been most commonly used for a series of years past and of various constructions; but as the whole surface is of cast-iron, and the friction being lighter on the back part of the mold-board than in front, it has been found that they generally load up with any adhesive soil, such as is commonly found in the Western States. The wrought-iron mold-board has been tried as a substitute for the cast, in adhesive soil, and found to do better, but it is objected to on the ground of wearing out too soon. The steel mold-board has been found to be decidedly the best metal for adhesive soil that has yet been used, because it bears the highest polish and therefore keeps a cleaner surface while in use; but there is one universal complaint against it also, because it, like the wrought-iron, wears out at and near the point or front end of the mold-board in a very short time. The reason of its wearing out so soon in front is easily understood when it is known that the steel plates are all rolled out of one thickness in every part, and generally thin, to save expense. Of course this simple thickness extends down to the point or front end, and here it must be remembered that the friction is perhaps four times as great as it is farther back. It must then soon wear through and be laid aside. No method has yet been adopted for thickening the steel plates at and near the front end except the welding of a small piece along the upper edge of the mold-board near the point, which is considerable trouble, and is but a very partial remedy for the difficulty when done, because the severity of the friction is across the whole point and extends several inches up from the extreme point. Cast-iron or any other metal placed under the steel that forms the wearing-surface is of no other use than to hold the steel in its place. So soon as the top piece is worn through your strength and scouring-surface both end at one and the same time.

Our invention is a complete remedy for the objections above named. First, the point of our mold-board, being of solid cast metal and of sufficient size, cannot easily be worn out.

Then the surface of the cast point is chilled, and will wear longer on that account, and will also admit of a higher polish, and as the cast-metal surface of our point is but a small part of the entire surface of the mold-board, and is placed in front where the friction is greatest, there can be no danger of this small cast point loading up with adhesive soil. The steel part of our mold-board is the principal part of the whole surface, and being placed back of the solid point it is screened from the most severe part of the friction and occupies that part which is most likely to load up with adhesive soil. A mold-board made in this way has all the advantages of a point that will wear the longest and of a general surface that is susceptible of the highest polish, and can be made nearly as cheap as any other.

We claim nothing new in the form of the solid cast-metal point which we use except the recess or shoulder at B C, Fig. 1, for the purpose of attaching the steel part of the mold-board to the cast point, the balance of the point being similar in principle to the point of a cast mold-board in common use with all its bolts and screws.

We claim nothing new in the steel mold-board which we use except cutting the point off at B C, Fig. 2, which is generally done at a distance of from six to eight inches from A, Fig. 1, for the purpose of attaching to the cast point at B C.

What we claim as our improvement in the manufacture of mold-boards for plows, and desire to secure by Letters Patent, is—

The use of a solid cast-metal point, as above described, in connection with steel or other wrought-metal mold-boards for plows, when united therewith as described in the above specification, or in any way equivalent thereto, so as to form of the two parts a mold-board the greater part of whose surface is steel or other wrought metal and the point or front part of solid cast metal, as a wearing-point.

ADONIJAH PEACOCK.
SIMEON PEACOCK.

Witnesses:

JAMES BIRNEY,
MARTIN BENSON.