

W. H. McCUNE.

PLOW.

No. 169,716.

Patented Nov. 9, 1875.

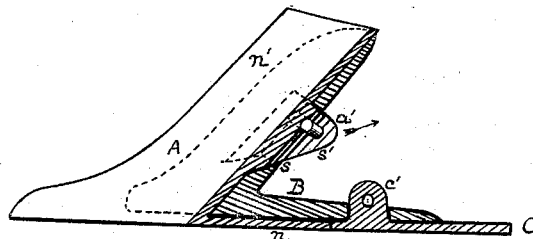
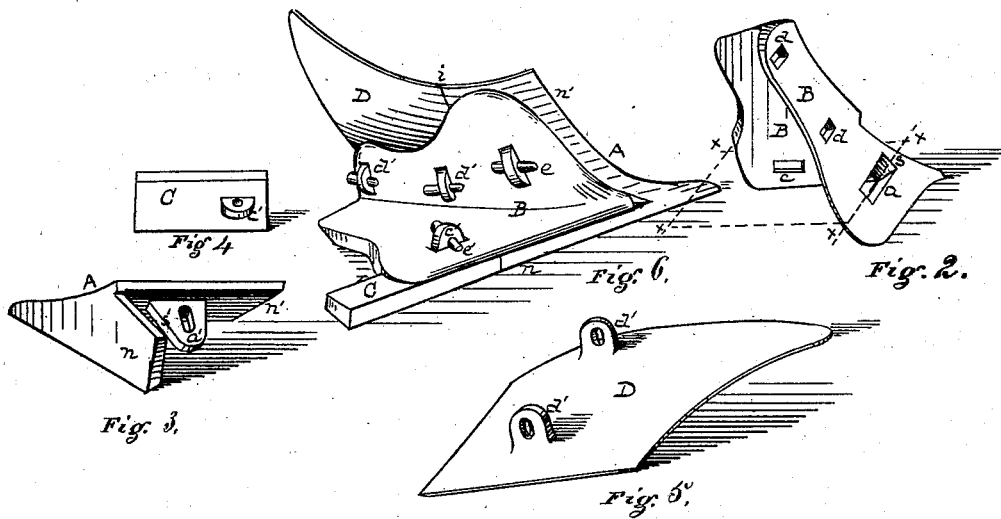


Fig. 1



Witnesses
J. E. Boggs.
Claudius L. Parker.

Inventor: William H. McCune,
By George H. Christy,
his Atty.

UNITED STATES PATENT OFFICE.

WILLIAM H. McCUNE, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO THE
PITTSBURG STEEL CASTING COMPANY, OF SAME PLACE.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **169,716**, dated November 9, 1875; application filed
September 28, 1875.

To all whom it may concern:

Be it known that I, WILLIAM H. McCUNE, of Pittsburg, county of Allegheny, State of Pennsylvania, have invented or discovered a new and useful Improvement in Plows; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which like letters indicate like parts.

Figure 1 is a sectional view through the frog, share, and land-side in the plane indicated by dotted lines *xx*, Fig. 2. Fig. 2 is a perspective view of frog or lower portion of the standard. Fig. 3 is a perspective view of the share. Fig. 4 shows an inside perspective of the land-side. Fig. 5 is a like view of the mold-board, and Fig. 6 illustrates the attachments of all the parts to a common frog.

The ordinary mode of attaching plow-plates to the standard or frog is by the use of bolts and nuts. These are objectionable for various reasons; and the efforts of plow-makers have been directed, among other things, to a better fastening for the plates. I have found that a lug, pin, and slot answer the purpose most perfectly, the bearing-edges of the lug and slot being so shaped as to have not only a holding, but also a guiding, capacity, in bringing the plate to the proper position on the frog or standard.

B represents a frog or the lower end of a standard of any desired form suitable for the attachment thereto of one or more of the plow-plates. As shown, it is an angular metallic casting of sufficient thickness to give the necessary strength, and exteriorly conformed to the interior shape of the plates to be attached thereto. In it I make a slot, *a*, for the attachment of the plow-share A, a slot, *c*, for the attachment of the land-side C, and two or more slots, *d d*, for the attachment of the mold-board D. The plow-share A in its most common form is made of angular shape or with two wings, *n n'*, one of which, *n*, extends back in or near the plane of the land-side, and the other, *n'*, forms a lower extension to the mold-board. These wings straddle the angular point or lower end of the frog B. Now, in order that both wings may fit close to or be firmly seated on the frog, I make the slot *a* with a sloping end *s*, Figs. 1 and 2, and give to the corresponding edge *s'* of the lug *a'*, which is cast

onto the share, a corresponding slope. The angle of these slopes approaches more or less nearly to a parallelism with the plane of the land-side, though it diverges enough from such parallelism to bring the wing *n* well down to its seat. The slope of the slot end *s* acts on the slope *s'* of the lug somewhat like a wedge, though more properly as a guide, to bring both wings well down to their seats on the frog, where they are secured in place by a pin or key, *e*, tightly inserted in a hole or eye in the lug. The land-side C is attached, by a lug, *c'*, inserted through the slot *c* and pin or key *e'*. The rear edge of the lug is, preferably, made slightly sloping, so that, bearing against the rear edge of the slot, it shall force the land-side well forward into position and make a good joint with the rear end of the wing *n* of the share. In like manner the mold-board D is attached, by lugs and pins *d'* and slots *d*, so as to make a good joint, with the adjacent or abutting parts. This fastening, though simple, is believed to be more effective and satisfactory than any yet employed. The bearing of the edges of the lugs against the ends of the slots, or the drawing, by means of sloping edges, of one plate against the edge of another, with or without overlap, as illustrated at *i*, gives a fastening of more than the ordinary security.

The lugs may be welded or otherwise attached, instead of cast, if so preferred.

I do not claim, broadly, the attachment of plow-plates and shares by lug, slot, and pin, but limit my claim to such construction of the said devices as that by the inclined bearing-edges of lug or slot, or both, the plate will be guided or drawn to its seat by an oblique motion, as well as held there on the insertion of the pin.

I claim herein as my invention—

A plow share or plate, A, having perforated lug *a'*, with sloping edge *s'*, in combination with frog or standard B, having slot *a*, with sloping edge *s*, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand.

WILLIAM H. McCUNE.

Witnesses:

JAMES M. CHRISTY,
GEORGE H. CHRISTY.