

Borun & McClean.

Shovel Plow.

N^o 19,125.

Patented Jan. 19, 1858.

Fig. 1.

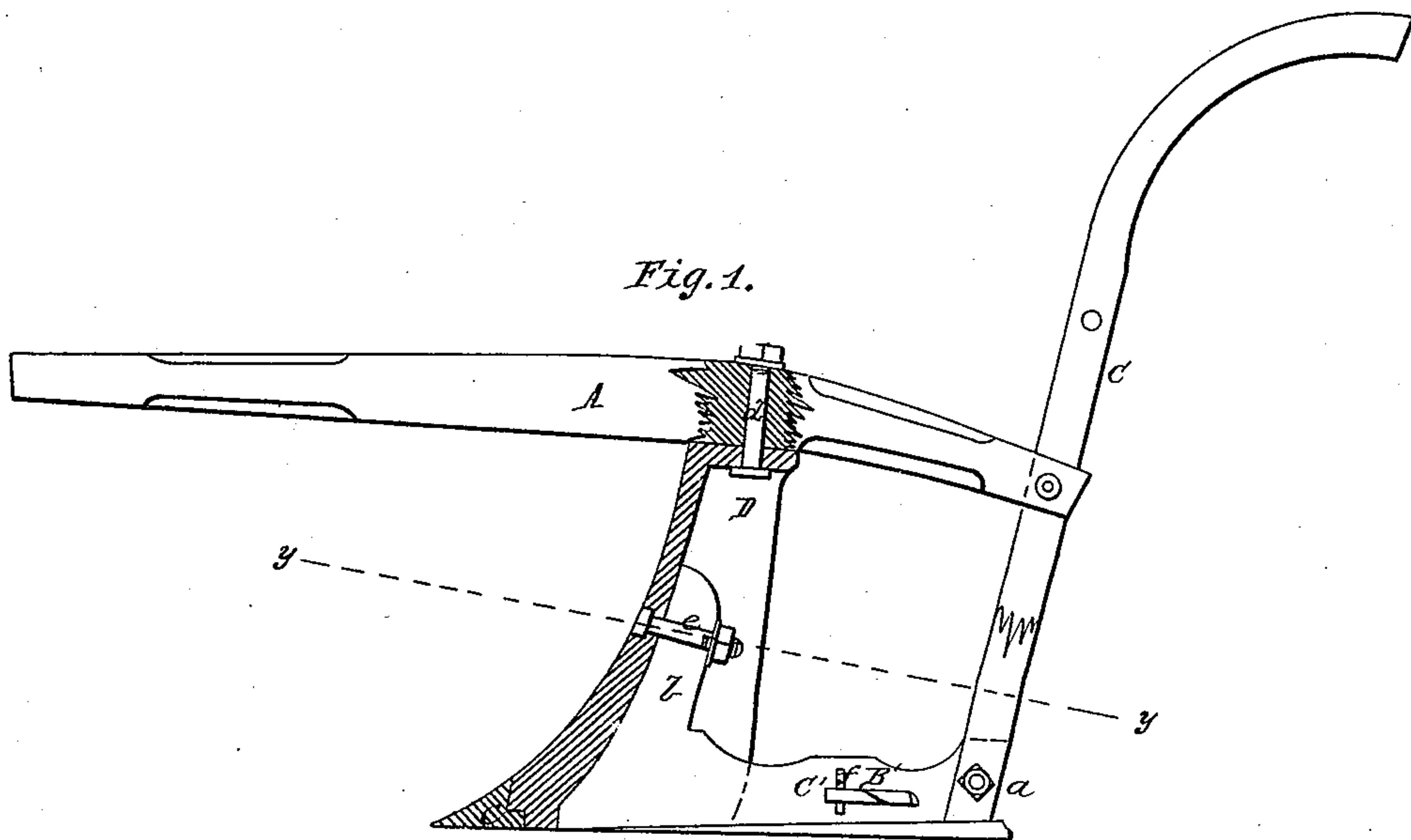
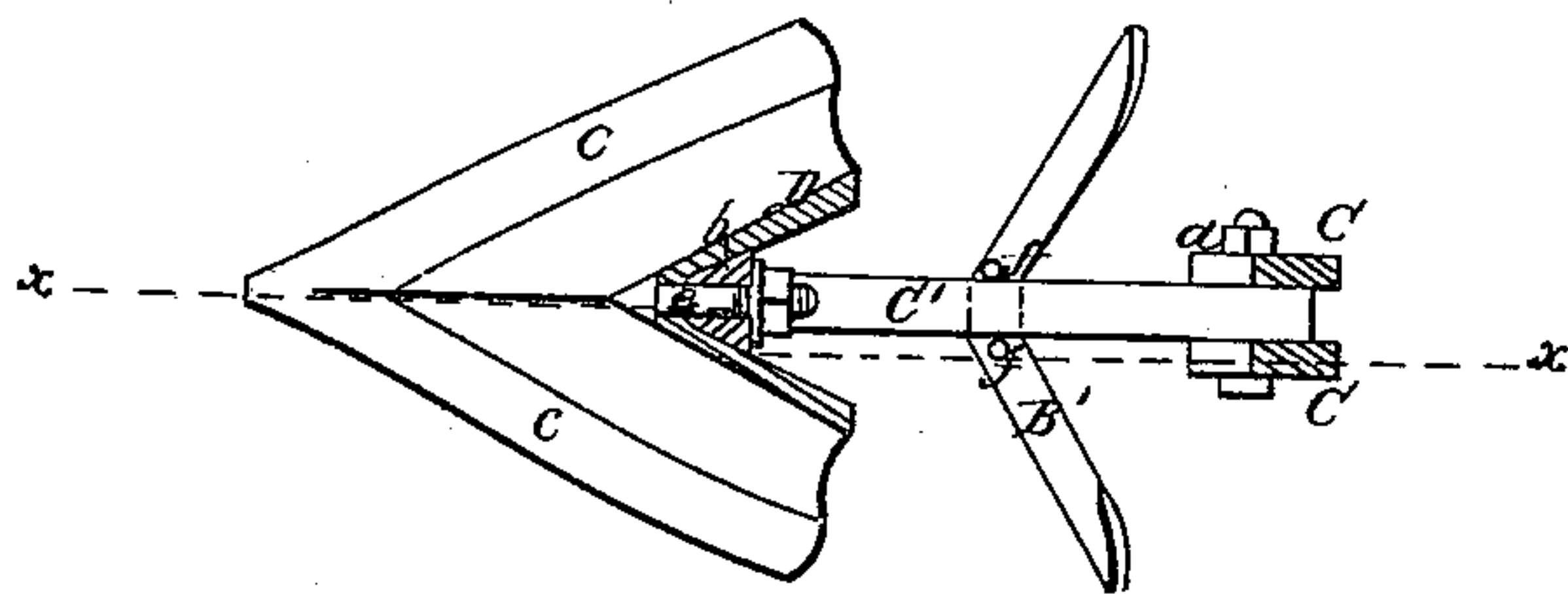


Fig. 2.



UNITED STATES PATENT OFFICE.

SAML. R. BORUM AND WM. McCLEAN, OF NORFOLK, VIRGINIA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 19,125, dated January 19, 1858.

To all whom it may concern:

Be it known that we, SAML. R. BORUM and WILLIAM McCLEAN, of Norfolk, in the county of Norfolk and State of Virginia, have invented a new and useful Improvement in the Construction of Double-Mold-Board Plows; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section of our improvement, taken in the line *x x*, Fig. 2. Fig. 2 is also a section of the same, taken on the plane of the bolt which connects the standard with landside, as indicated by the line *y y*, Fig. 1.

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

This invention consists in the peculiar formation and combination of the mold-board and the standard, as hereinafter set forth.

To enable those skilled in the art to fully understand and construct our invention, we will proceed to describe it.

A represents the beam of the plow, the back end of which is bolted to handles C, the lower ends of the two handles extending downward to the back end of the landside, and being secured thereto by a bolt, *a*. The upper ends of the handles C are of the usual curved form, as plainly shown in Fig. 1. The landside C' is constructed of cast-iron, and its front end has an upright bar or projection, *b*, formed on it, the bar and landside being cast in one piece. The front side of the projection *b* is rounded transversely and curved longitudinally.

D represents a standard, which transversely is of V form. This standard gradually expands from its upper to its lower end, so as to form mold-boards, and shares *e* are attached to the lower ends of the mold-boards—one to each. The standard is constructed of cast-iron, and its upper end is secured to the beam A by a bolt, *d*, as plainly shown in Fig. 1.

The upright bar or projection *b* corresponds in form with the internal angle of the standard, as shown clearly in Fig. 2, and the bar or projection is fitted snugly within it, and the projection is firmly secured to the standard by a screw-bolt, *e*, as shown in both figures.

By having the standard constructed as shown, and the landside provided with the bar or projection *b* fitted in the angle of the stand-

ard, and the standard and bar bolted together, as shown, a very strong and durable implement is obtained.

The difficulty attending the use of plows of this description is that they are not durable. The shares are liable to break, and the mold-boards often become loose, and the implement soon rendered worthless in consequence of the difficulty of properly supporting the parts. By our improvement this difficulty is obviated. The bar *b* affords a firm support for the standard and mold-boards. A wing or pulverizer, B', passes transversely through the landside C', and is secured therein by means of pins *f*. (See more particularly Fig. 2.)

A patent was formerly granted to F. E. Richardson for a double-mold-board plow in which a ring or band was used for connecting the landside with the standard. These implements, however, are not durable. The mold-boards frequently break, and the implement generally is not so strong and durable as the one herein described. In our improvement the landside C' is cast in a separate piece from the standard D, and the said standard serves also the purpose of a mold-board. This method possesses very evident advantages, in regard to economy, over the plan of casting the landside and mold-board in one piece. In the latter case, if the farmer breaks the landside, the mold-board is also rendered useless and must be replaced.

We do not claim the invention of double mold-boards, for we know they are old; but to the best of our knowledge and belief it is new to make the standard transversely of V-shaped form, gradually expanding from the upper to the lower part, the said peculiarly-shaped standard being combined with the horn or projection *b* of the landside C', in the manner herein set forth. Therefore

What we claim as our invention, and desire to secure by Letters Patent, is—

The arrangement of the peculiarly-formed V-shaped standard D with the horn or projection *b* of the landside C' and its wings B', as herein shown and described.

SAML. R. BORUM.
WM. McCLEAN.

Witnesses:

A. B. McCLEAN,
THOS. P. WARREN.