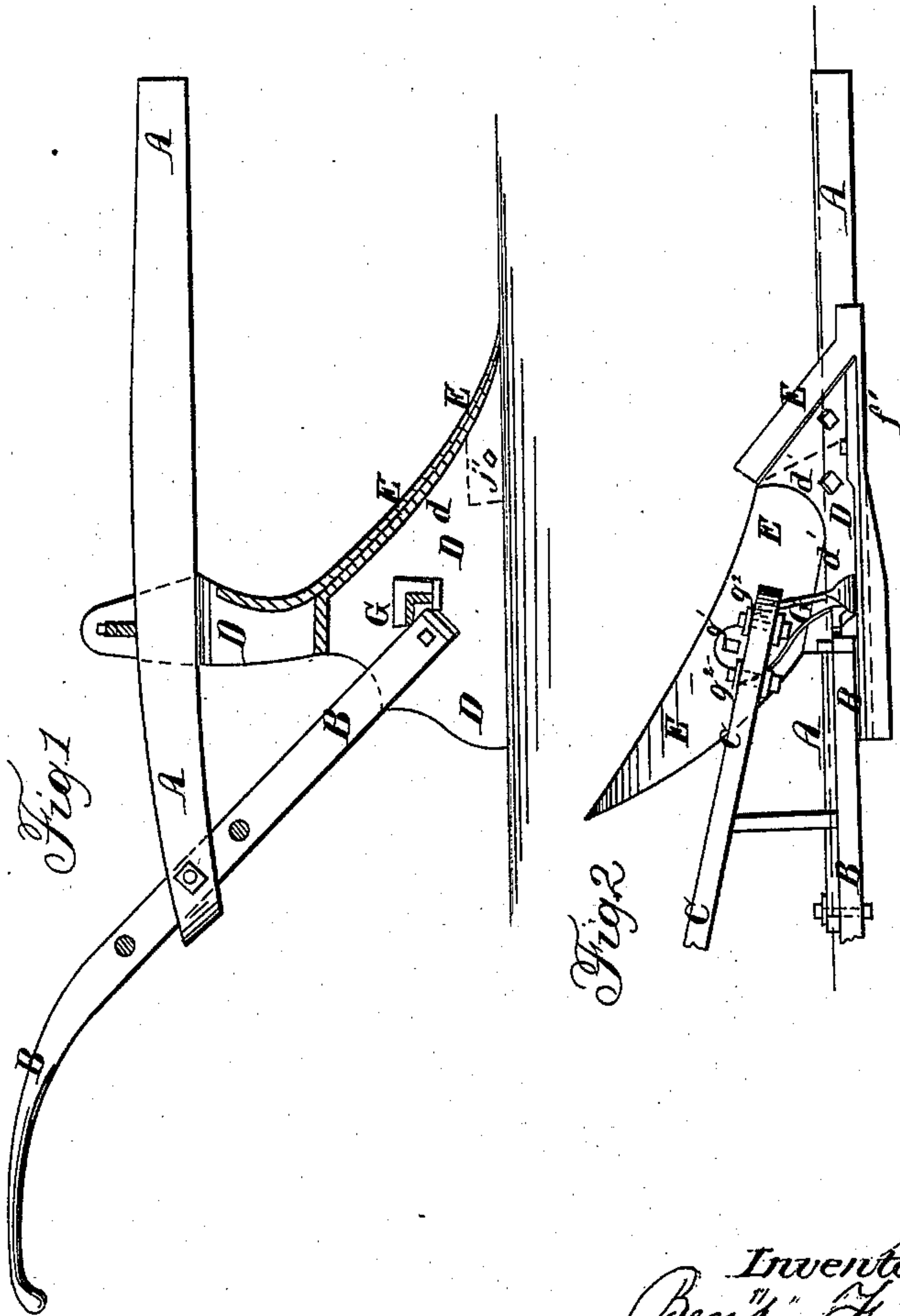


B. F. AVERY.

Plow.

No 66,774.

Patented July 16, 1867



Witnesses:
J. A. Service
Wm. T. Trewin

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United States Patent Office.

BENJAMIN F. AVERY, OF LOUISVILLE, KENTUCKY.

Letters Patent No. 66,774, dated July 16, 1867.

IMPROVEMENT IN PLOUGHS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN.

Be it known that I, BENJAMIN F. AVERY, of Louisville, in the county of Jefferson, and State of Kentucky, have invented a new and useful Improvement in Ploughs; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those 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 vertical section of my improved plough taken through the line *x x*, fig. 2.

Figure 2 is a bottom view of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to improve the construction of wrought-iron, steel, and cast-iron ploughs so as to make them simpler in construction and more efficient in use; and it consists in the cast standard skeleton passing up through the beam, and to which the wrought-iron or steel mould-board and point are attached, in the construction of the wrought-iron or steel point and in the manner in which it is attached to the skeleton, and in the construction of the brace-bar and in the manner in which it is connected with the mould-board, land-side, and handles of the plough; the whole being constructed and arranged as hereinafter more fully described.

A is the beam, and B and C are the handles of the plough, about the construction of which parts there is nothing new. D is the standard skeleton, which passes up through a mortise in the beam A, to which it is secured with a key, as shown in fig. 1. The standard D is cast with a flange or plate, *d'*, upon its mould-board side, which furnishes seats for the mould-board and point, and to which they are secured. The lower part of the land-side is grooved for the reception of a removable piece, which, when worn, may be removed and replaced with a new one. E is the mould-board, which I prefer to make of such a shape and curve as to adapt the plough for general use in different kinds of soil, and which is secured to its seat upon the flange or plate *d'* of the skeleton standard D by bolts and nuts, the heads of the bolts being countersunk in the mould-board. F is the point, which is made with an arm, *f'*, fitting into a groove in the lower and forward part of the land-side of the skeleton standard D, as shown in fig. 2, and in dotted lines in fig. 1. The point F is secured to its seat by bolts and nuts in the manner hereinbefore described. G is a brace-bar, the mould-board end of which is formed with a lug, *g*¹, by which it is bolted to the mould-board E, and with two lugs *g*², to which the lower end of the mould-board handle C is attached. The bar G is also formed with flanges upon its upper and lower edges, which strengthen it, and at the same time form a firm resting-place for the forward edge of the said handle C. The other end of the brace-bar G enters a socket or groove cast upon the land-side of the skeleton D, in which it is secured by the lower end of the handle B, which is bolted to the said land-side, as shown in fig. 1, with its lower end resting upon a rest cast upon the said land-side and against the end of the bar G. It should be observed that by the use of the cast skeleton D, with standard passing through the beam, and the lugs *g*² upon the brace-bar G, similar to the standard and ears or lugs upon my cast plough patented January 8, 1856, and October 25, 1859, I can use the same stock upon both, and as I make the stocks by machinery the operation is thus simplified and the expense lessened.

I claim as new, and desire to secure by Letters Patent—

1. The cast standard skeleton D, constructed substantially in the manner herein shown and described and for the purpose set forth.
2. The point F and arm *f'*, constructed and attached to the skeleton D, substantially in the manner herein shown and described.
3. The brace-bar G, constructed with lugs *g*¹ and *g*², and secured to the mould-board E, handle C, and land-side of the skeleton D, substantially in the manner herein shown and described and for the purpose set forth.

BENJ. F. AVERY.

Witnesses:

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