

E. Ward,

Flour.

No. 94,367.

Patented Aug. 31. 1869.

Fig. 1

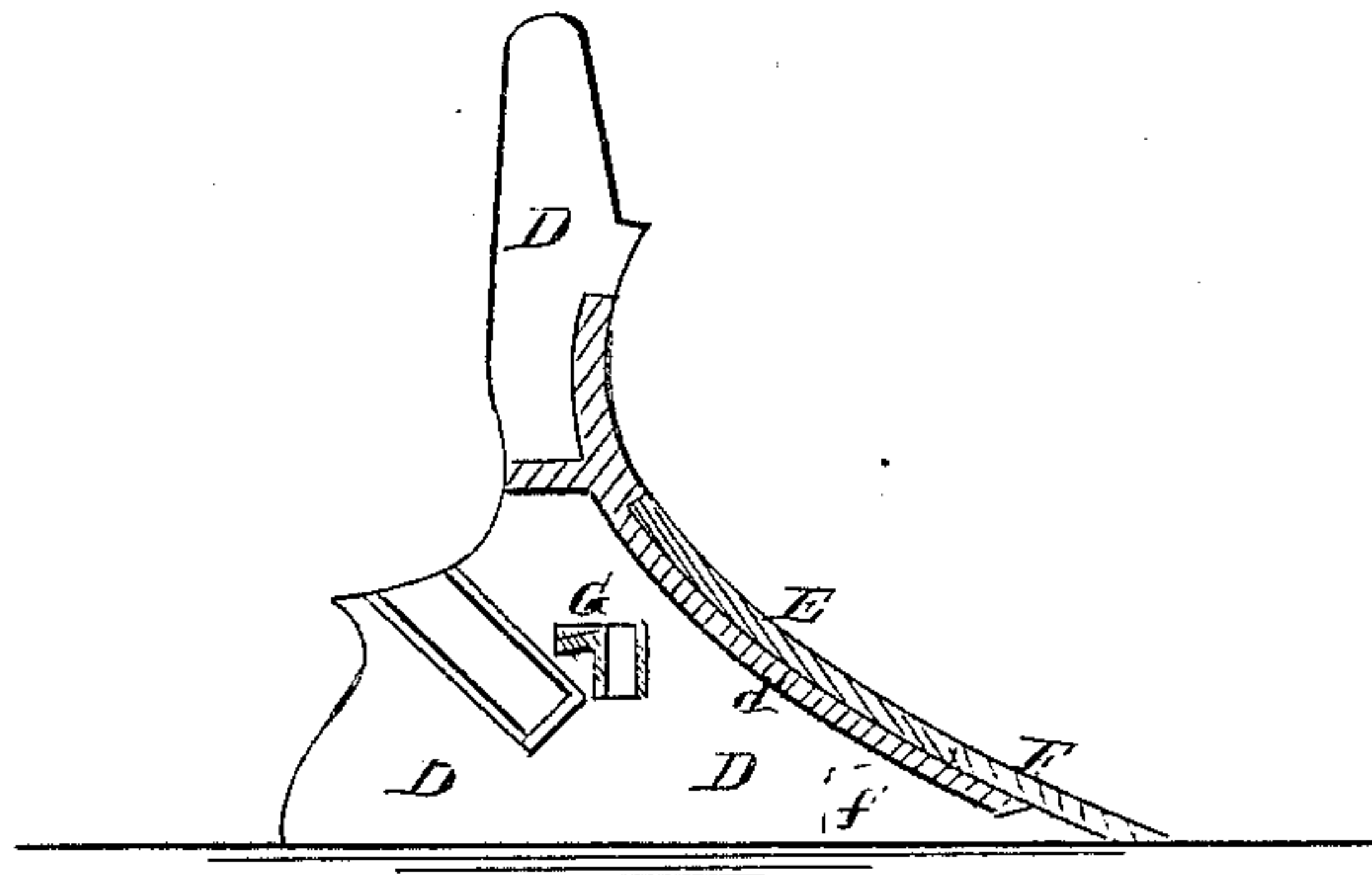
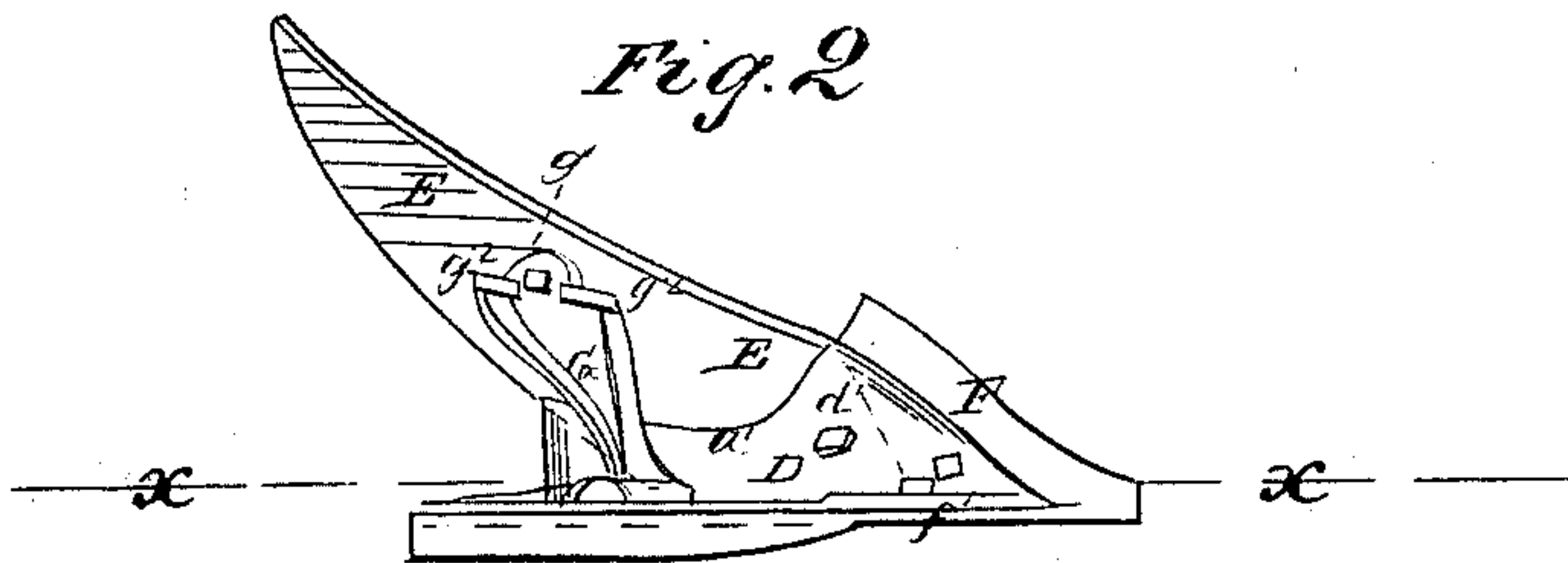


Fig. 2



Witnesses:

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UNITED STATES PATENT OFFICE.

EDWARD WIARD, OF LOUISVILLE, KENTUCKY, ASSIGNOR TO B. F. AVERY,
OF SAME PLACE.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **91,367**, dated August 31, 1869.

To all whom it may concern:

Be it known that I, EDWARD WIARD, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Improvement in 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 vertical section of my improved plow, taken through the line *x x*, Fig. 2. Fig. 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 plows, 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 mold-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 mold-board and landside of the plow, the whole being constructed and arranged as hereinafter more fully described.

D is the standard-skeleton, which passes up through a mortise in the plow-beam, to which it is secured with a key in the ordinary manner. The standard D is cast with a flange or plate, *d'*, upon its mold-board side, which furnishes seats for the mold-board and point, and to which they are secured. The lower part of the landside is grooved for the reception of a removable piece, which, when worn, may be removed and replaced with a new one.

E is the mold-board, which I prefer to make of such a shape and curve as to adapt the plow for general use in different kinds of soils, 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 mold-board.

F is the point, which is made with an arm, *f'*, fitting into a groove in the lower and for-

ward part of the landside 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 mold-board end of which is formed with a lug, *g'*, by which it is bolted to the mold-board E, and with two lugs, *g²*, to which the lower end of the mold-board handle 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 mold-board handle. The other end of the brace-bar G enters a socket or groove cast upon the landside of the skeleton D, in which it is secured by the lower end of the landside-handle, which is bolted to the said landside with its lower end resting upon a rest cast upon the landside 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 *g²* upon the brace-bar G, similar to the standard and ears or lugs upon the cast plow patented by B. F. Avery January 8, 1856, and October 25, 1859, the same stock can be used upon both; and as the stocks are made by machinery the operation is simplified and the expense lessened.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

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'* *g²*, and secured to the mold-board E and landside of the skeleton D substantially in the manner herein shown and described, and for the purpose set forth.

The above specification of my invention signed by me this 10th day of May, 1869.

EDWARD WIARD.

Witnesses:

SAM. J. LOOK,

JNO. C. COONLEY.