

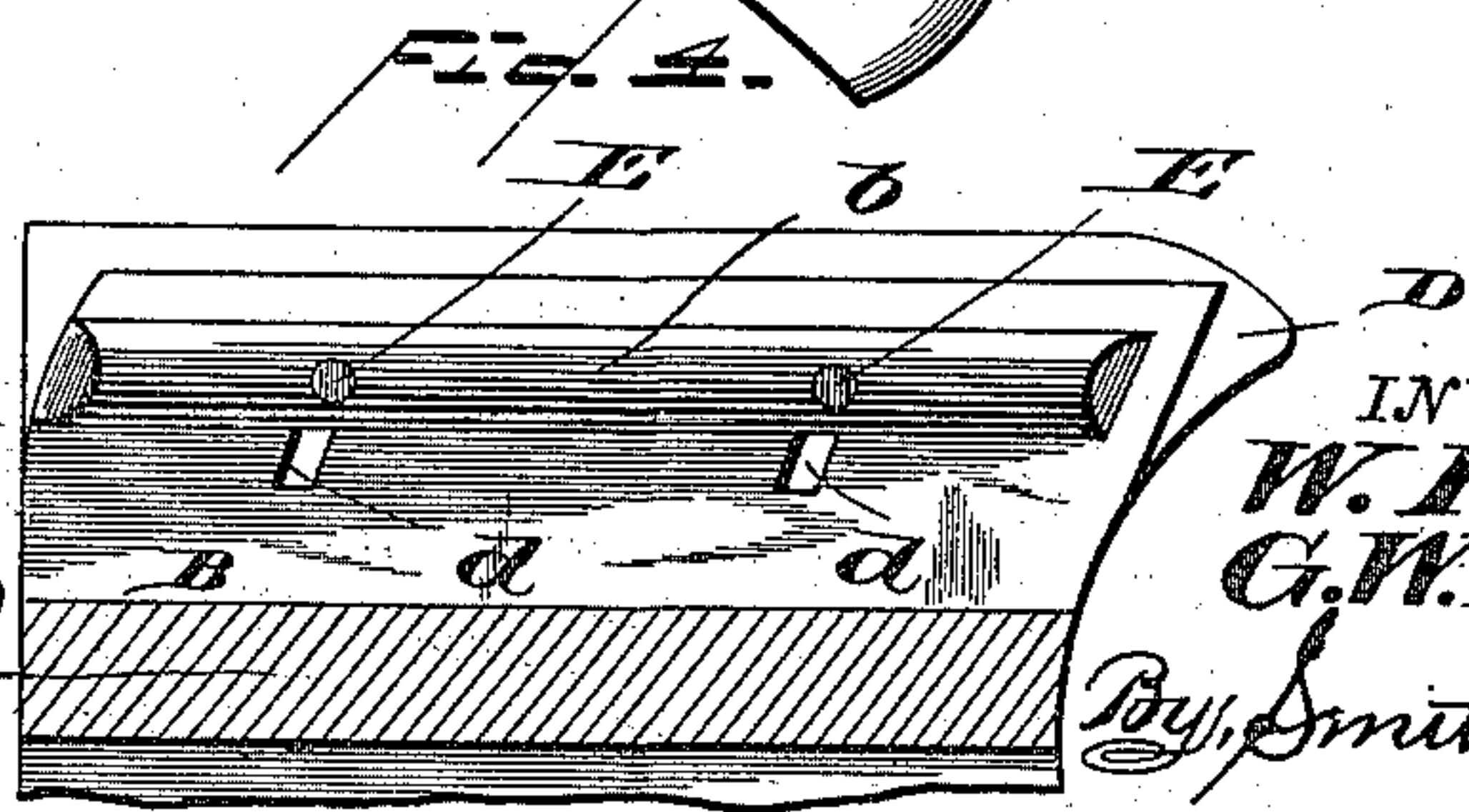
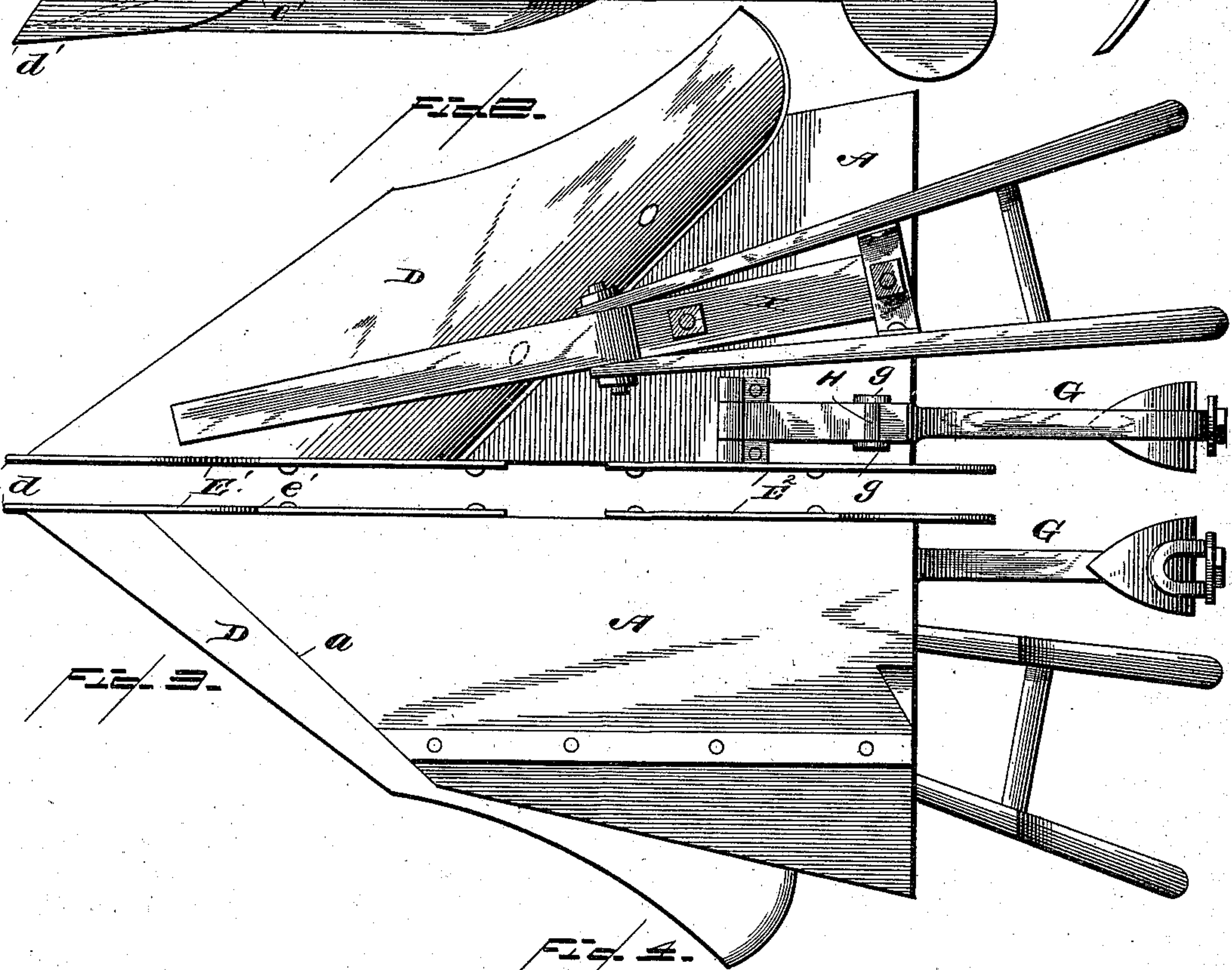
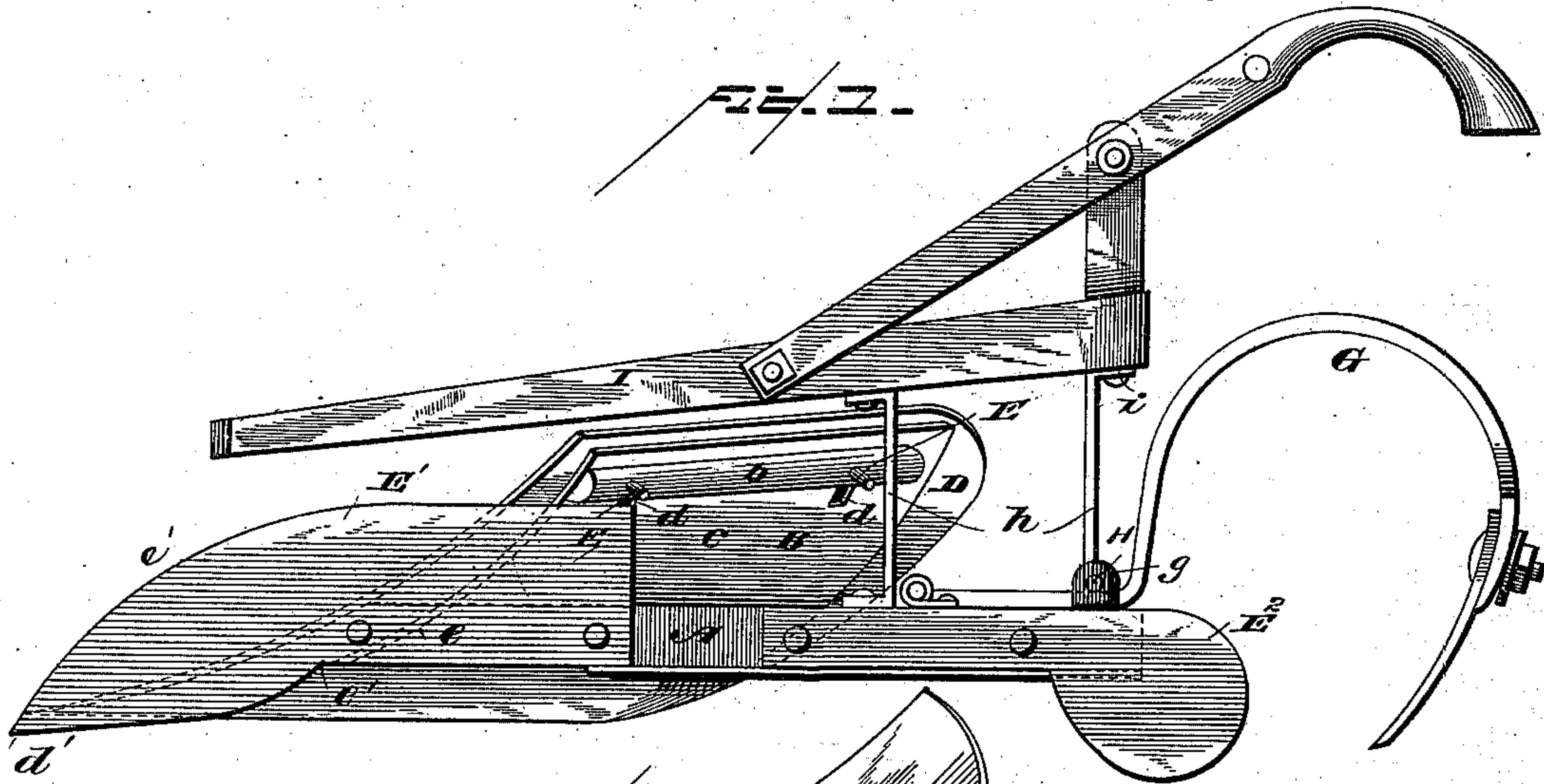
(No Model.)

W. H. IRWIN & G. W. HAIRGROVE.

COTTON CULTIVATOR.

No. 382,162.

Patented May 1, 1888.



WITNESSES.

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UNITED STATES PATENT OFFICE.

WILLIAM H. IRWIN AND GEORGE W. HAIRGROVE, OF WILDERVILLE, TEXAS.

COTTON-CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 382,162, dated May 1, 1888.

Application filed November 10, 1887. Serial No. 254,855. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. IRWIN and GEORGE W. HAIRGROVE, citizens of the United States, residing at Wilderville, in the county of Falls and State of Texas, have invented certain new and useful Improvements in Cotton-Cultivators; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to cotton cultivators, and the improvements will be fully understood from the following description and claims when taken in connection with the annexed drawings, in which—

Figure 1 is a side view of the cultivator constructed according to our improvements. Fig. 2 is a plan view of the same. Fig. 3 is an inverted plan view, and Fig. 4 is a sectional detail view.

Referring by letter to the said drawings, A indicates the base, which is of a substantially rectangular form, having its forward wall cut away diagonally, as shown at *a*, and beveled, as indicated at *e*, to receive the mold-board, as will be presently explained. Along this bevel *e*, on the upper side of the base A, is secured an angular plate, B, the vertical branch *c* of which is designed to assume an angle of about forty-five degrees, being in about the same plane as the bevel *e*, and forms a continuation thereof to seat the mold-board D. This branch *c* is provided with a plurality of vertically-disposed elongated slots, *d*, which are designed to receive screws or bolts E, secured to the said mold-board D. These bolts, after passing through the slots in the branch *c*, are secured to a strip, *b*, of suitable material, on the opposite side thereof, in such a manner that the same may be loosened and tightened to adjust the blade or mold-board, when desired.

The mold-board D is concavo-convex and is secured to the vertical branch of the angular plate with its lower edge extending a sufficient distance below the lower edge of the base A and its inner lateral inclined edge lying on a plane with the landside of the said base. On the landside edge of the base A are arranged two cutters, E' and E². The forward cutter,

E', as in Fig. 1 of the drawings, has its lower edge straight for the greater portion of its length, and its forward lower edge is carried downwardly and forwardly to a point, as at *d'*, and is thence curved upwardly and rearwardly from this point, as shown at *e'*. This downwardly-carried portion *d'* extends beneath the base to the edge of the blade or mold-board, where their points meet in an acute angle, and the rearwardly-curved portion *e* extends a sufficient distance above the said blade, as shown. The rear cutter, E², is also secured to the landside of the base A and has its rear end curved downwardly in rear of the said base to about the same horizontal plane as the point of the forward cutter.

G indicates a cultivator, which may be of any ordinary construction, having the forward end of its standard straight and hinged to the upper rear side of the base, as shown. The rear end of this straight portion passes between two standards, *g g*, which are perforated transversely to receive a break-pin, H. This pin is designed to bear upon the standard of the cultivator, as shown, and normally hold the same to work in the soil; but should the point of the cultivator encounter an obstruction, which might result in damage to any of the parts, the said pin would break and allow the tooth to rise and free itself from the obstruction. This cultivator travels close to the inner side of the rear cutter, E², and is designed to cultivate the earth after it has been gone over by the said cutter.

I indicates the draft-beam, which is suitably supported and braced upon the base by the standards *h* and angular braces *i*, and is also provided with handles, as shown.

It will be observed that the blade B is adjustable and that the same may be effected by manipulating the threaded bolts which pass through the said wing and into the strip on the rear side thereof.

Having described our invention, what we claim is—

1. The combination, with the base constructed as described, of the slotted plate secured thereto, the strip on the rear side of the said plate, the blade having apertures and threaded bolts for adjusting the said blade, and the front

and rear cutters or scrapers on the landside, substantially as specified.

2. The combination, with a cotton-cultivator and the base thereof, as described, of the cut-
5 ters or scrapers on the landside, one secured to the forward and one to the rear edges and extending below the bottom thereof, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

WM. H. IRWIN.
G. W. HAIRGROVE.

Witnesses:

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