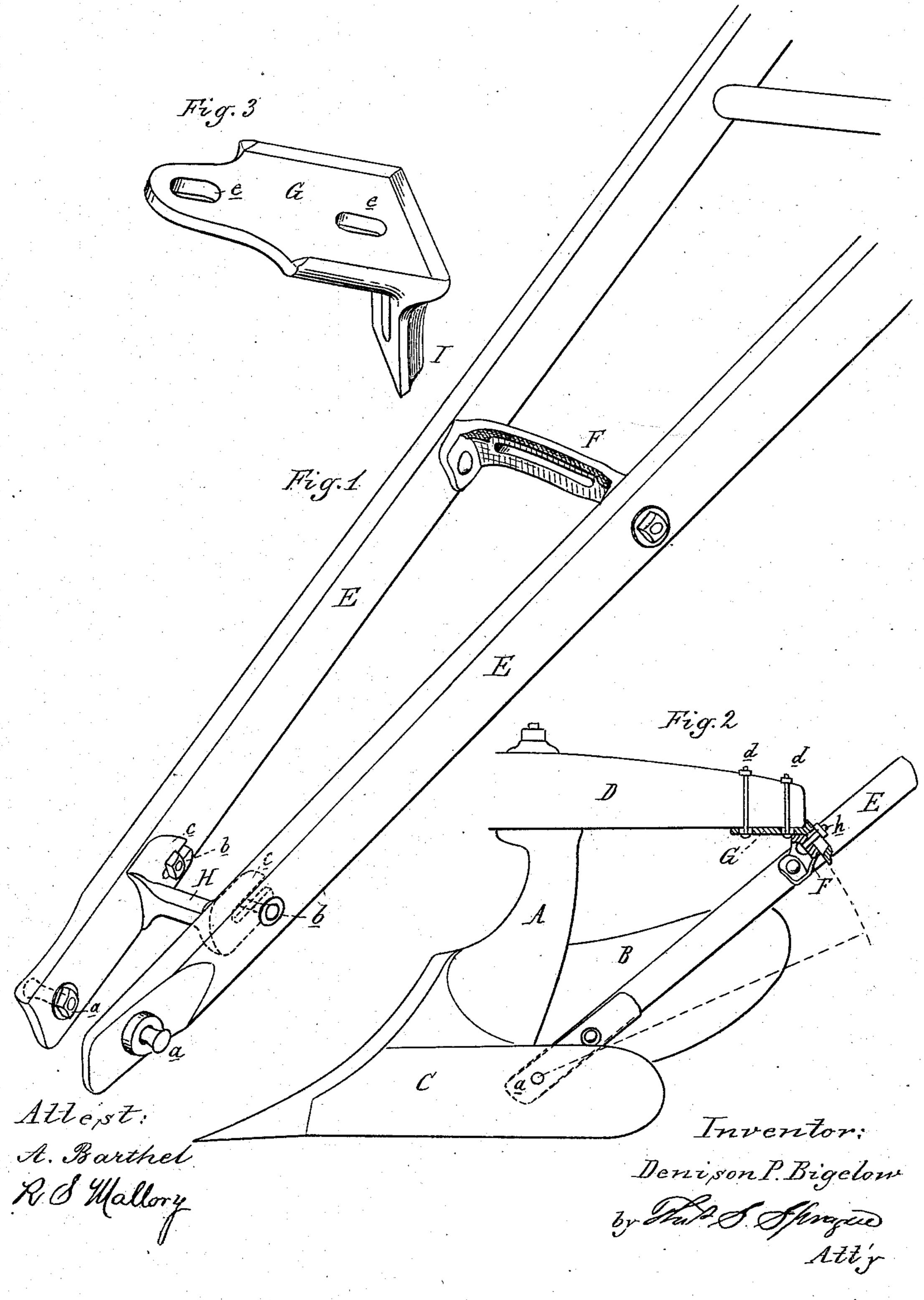
(No Model.)

D. P. BIGELOW.

PLOW.

No. 252,419.

Patented Jan. 17, 1882.



## United States Patent Office.

DENISON P. BIGELOW, OF ALBION, MICHIGAN, ASSIGNOR TO THE GALE MANUFACTURING COMPANY, OF SAME PLACE.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 252,419, dated January 17, 1882.

Application filed July 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, Denison P. Bigelow, of Albion, Calhoun county, Michigan, have invented an Improvement in Plows, of which

5 the following is a specification.

The nature of this invention relates to certain new and useful improvements in the construction of plows and the means of attaching the handles thereto, whereby a vertically-radial adjustment of the handles is secured; and the invention consists in the peculiar construction, arrangement, and various combinations of the parts, all as more fully hereinafter set forth.

Figure 1 is a detached perspective view of the handles of a plow provided with my improvements. Fig. 2 is a sectional elevation, showing my improvements as applied to a plow. Fig. 3 is a perspective of the beam-plate.

In the accompanying drawings, which form a part of this specification, A represents the standard, B the mold-board, C the landside, and D the beam, of a plow, all of the ordinary

construction.

By curving the meeting surfaces of the index F and the tail-iron G on the arc of a circle having its center at the handle-pivots, as above described, and as indicated in Fig. 2 of the drawings, I am enabled to make tight-fitting joints of all the handle-connections, thereby preventing any shaking of the handles, and consequent loosening of the bolts, &c.

The handles E are pivotally secured, near their lower ends, to the mold-board and land35 side by means of the bolts a, or in any other suitable manner. Just above this pivotal point one or more bolts, b, project inwardly from the handles to engage with the slotted ends c of the spreader-iron H, and by means of which the lower ends of the handles may be spread or forced apart by driving down the said iron H, as circumstances may require.

F represents the index, which is secured between the handles at the desired point in

any suitable manner. The rear face of this in-45 dex is convex, or, in other words, is the arc of a circle the center of which is the pivotal point of the handles, and it is longitudinally slotted, as shown.

G represents a tail-iron, which is adjusta-50 bly secured to the rear end of the beam by proper bolts d, which pass through the slots e in the iron G into the beam, as shown. This tail-iron G is provided with a slotted arm, I, which, when the parts are in place, rests upon 55 the convex face of the index F, and to which

it may be secured by a proper bolt, h.

I am aware that it is not new to provide plows with irons by which their handles may be vertically and laterally adjusted, such de- 60 vices being shown in a number of patents; but in all previous attempts to allow of the desired adjustment of the handles the connections have been made loose to allow of said adjustment, whereas in my invention, by curv- 65 ing the meeting surfaces of the irons connecting the handles with the beam on the arc of a circle, as described, I am enabled to make such irons to accurately fit each other, thereby preventing all rattling, shaking, and consequent 70 strain on the various parts.

What I claim as my invention is—

In a plow, and in combination with the handles thereof, pivoted at their lower ends, as described, the tail-iron G, adjustably secured 75 to the rear end of the beam, and provided with a vertical slot, and curved on its outer surface on the arc of a circle drawn from the handle-pivots, and the index F, fastened between the handles and provided with a lateral slot, and 80 having its outer surface curved to correspond with the adjoining surface of the tail-iron, substantially as and for the purpose specified.

DENISON P. BIGELOW.

Witnesses:

ANTHONY B. HUGHES, AUGUSTUS J. GALE.