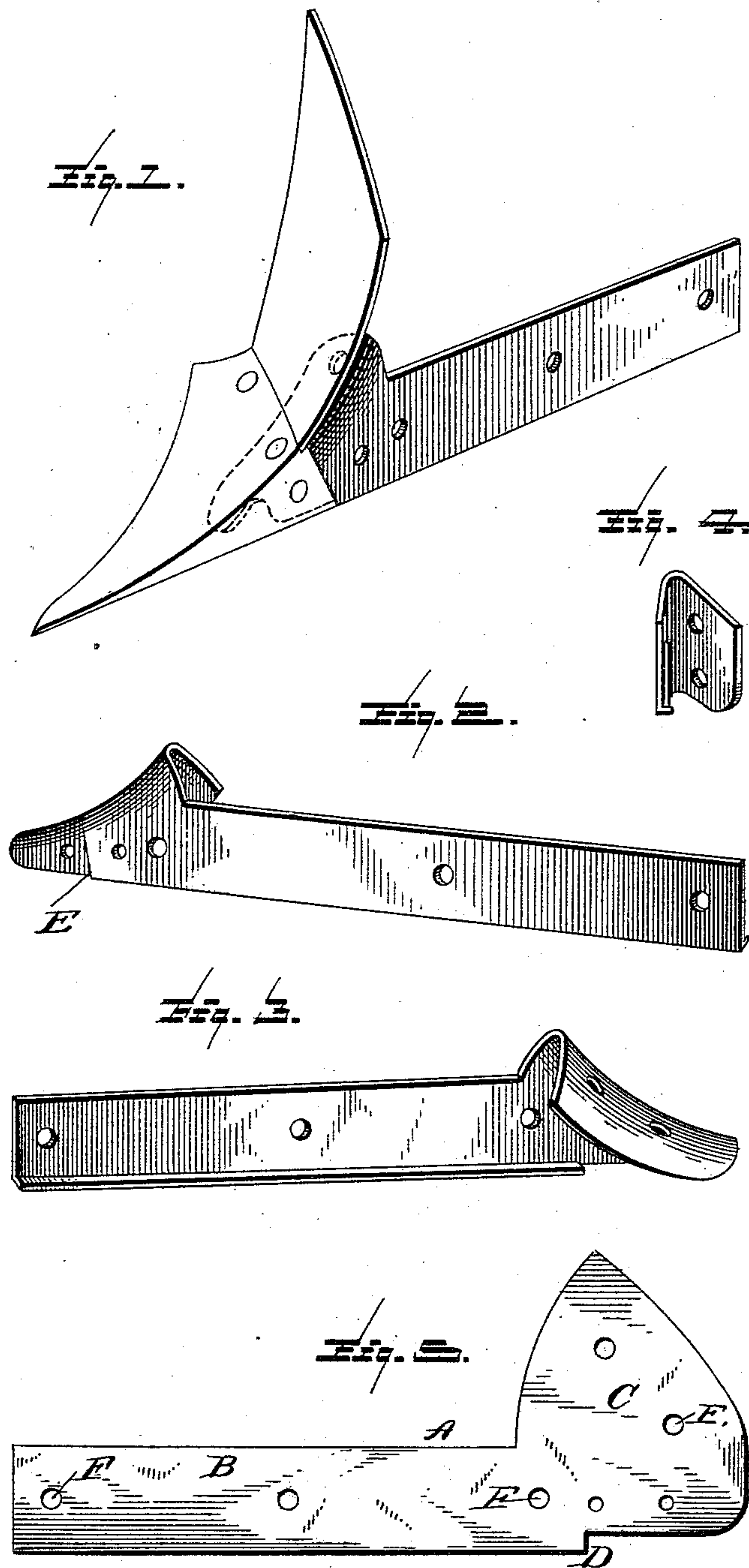


(No Model.)

A. F. MOLITOR.
PLOW.

No. 424,492.

Patented Apr. 1, 1890.



WITNESSES:

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ARON FRED MOLITOR, OF LANSING, MICHIGAN, ASSIGNOR TO E. BEMENT & SONS, OF SAME PLACE.

PLOW.

SPECIFICATION forming part of Letters Patent No. 424,492, dated April 1, 1890.

Application filed December 28, 1889. Serial No. 335,198. (No model.)

To all whom it may concern:

Be it known that I, ARON FRED MOLITOR, a citizen of the United States, residing at Lansing, county of Ingham, State of Michigan, have invented certain new and useful Improvements in Plows, of which the following is a clear and exact specification.

My invention relates to improvements in plow irons or frogs, and has special reference to devices of the type shown in Letters Patent No. 152,240, granted to Gilpin Moore, June 23, 1874.

The invention consists in certain novel features of construction hereinafter described and claimed, whereby the cost of the frog is greatly reduced and its strength and durability increased.

In the accompanying drawings, Figure 1 is a perspective view of a plow provided with my improved device. Figs. 2 and 3 are perspective views of the frog detached, looking at opposite sides of the same. Fig. 4 is a rear elevation of the frog. Fig. 5 is a plan view of the blank.

Like letters of reference indicate like parts in all the figures of the drawings.

In carrying out my invention I provide a blank A, of suitably-prepared steel or other metal, having the elongated portion or bar B, adapted to form a landside, and the triangular portion C, projecting from the front end of said bar and to one side of the same. One edge of the elongated portion or bar of the blank projects slightly beyond the adjacent edge of the triangular portion, as shown at D, and its front edge merges gradually into the surface of the triangular portion, thereby forming the shoulder E. Suitable openings or bolt-holes F are formed in the blank through both portions of the same for the passage of the securing-bolts.

In practice the triangular portion of the blank is doubled upon itself along its central line, thereby forming an inverted V or U shaped frog, to which the mold-board and share or plow-point are secured. The bend of the frog is formed upon a slight curve, so that the device will have the proper conformation to give the mold-board and share the desired inclination, and the rear end of the share rests against the shoulder E, so that it is enabled to withstand the rearward strain

put upon it. The projecting edge D of the bar is bent inward horizontally, thereby forming a flange or base by which a firm support is furnished the landside, and it is enabled to run more steadily and easily in the ground and upon which the lower end of the standard rests.

It will be observed that in my device the entire frog and landside are formed at one operation instead of being formed separately and then secured together, so that the device can be manufactured very rapidly and cheaply. Furthermore, when the frog is formed integral with the landside, the strength of the device is considerably increased, for the reason that the strain is distributed over the entire device evenly, whereas, on the other hand, unless the joint is very carefully and expensively constructed, the frogs composed of two parts concentrate the strain at the joint and are soon broken and rendered useless. It will be further noticed that my device provides a flange upon which the lower end of the plow-standard rests, and the said standard can consequently be more effectually bolted to the landside, so that the plow will run more steadily when in use. By merging the shoulder E gradually into the surface of the frog I am enabled to make a more perfect and closer joint between the mold-board and other parts of the plow, so that the dirt will be prevented from accumulating between the frog and the share and interfering with the successful operation of the plow.

Having thus described my invention, what I claim is—

The improved plow-iron herein described and shown, consisting of the landside provided on its inner side at its lower edge with an inwardly-projecting horizontal flange and having a number of transverse openings, and the substantially V-shaped frog formed integral with the front end of the landside, the said front end of the landside being arranged slightly beyond the outer surface of the frog, forming a shoulder therewith and gradually emerging toward its top into the said surface of the frog, as set forth.

A. FRED MOLITOR.

Witnesses:

L. M. GLEASON,
FRANK PUGH.