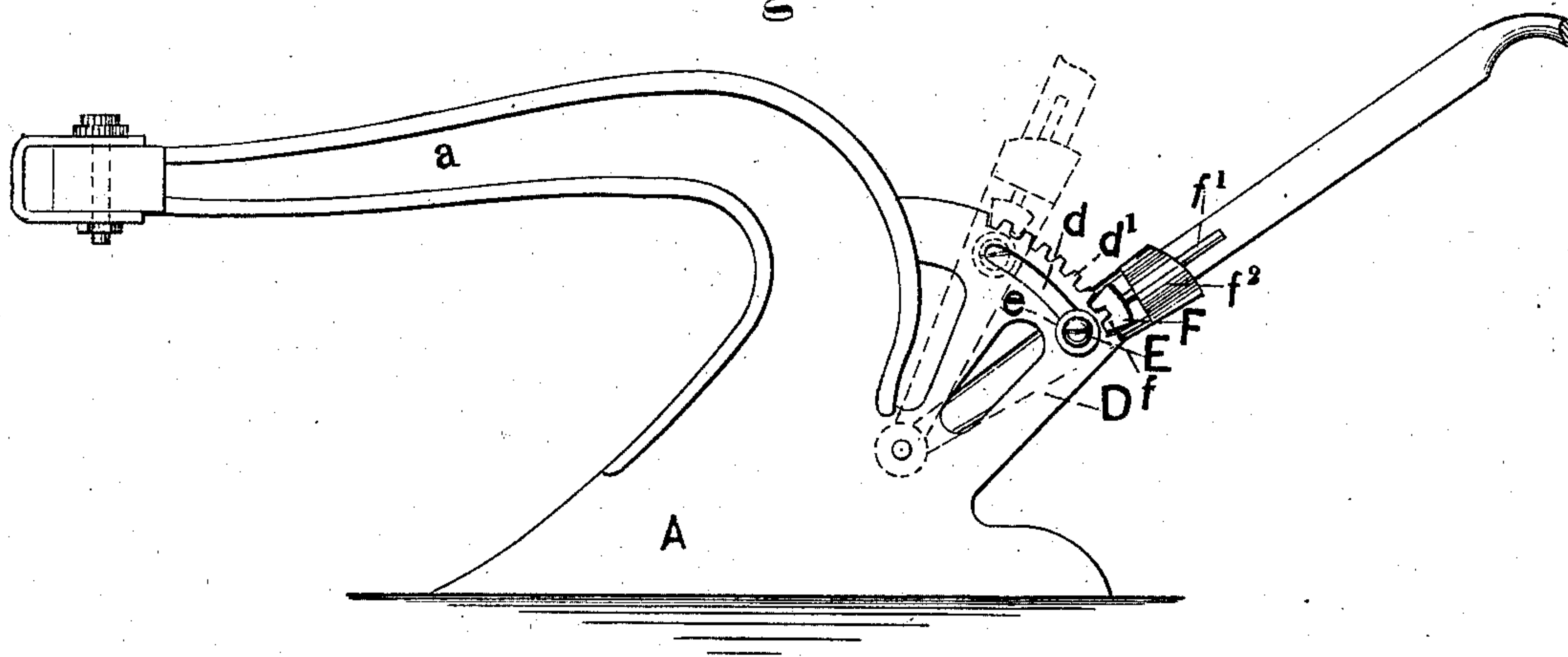


J. H. BURGHARDT.  
Plow.

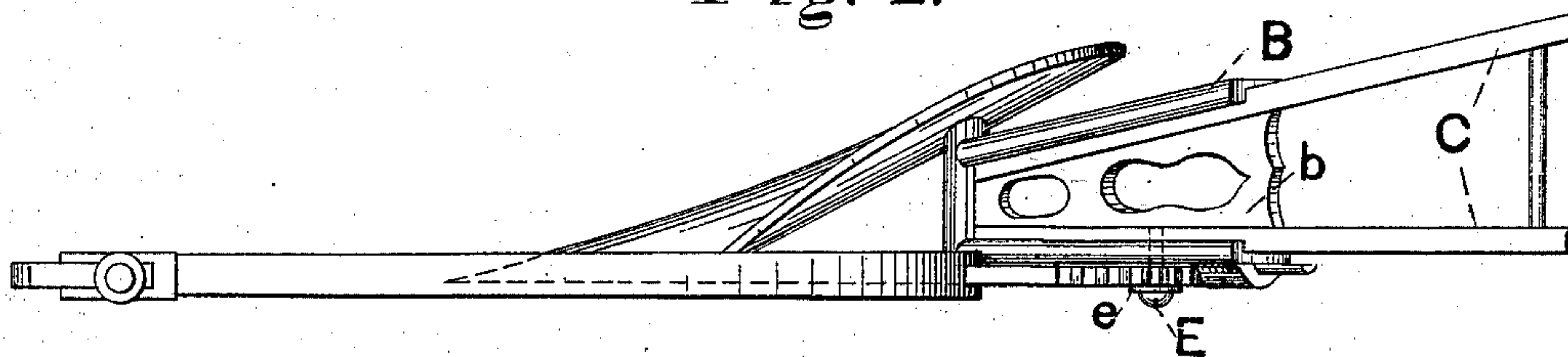
No. 214,487.

Patented April 22, 1879.

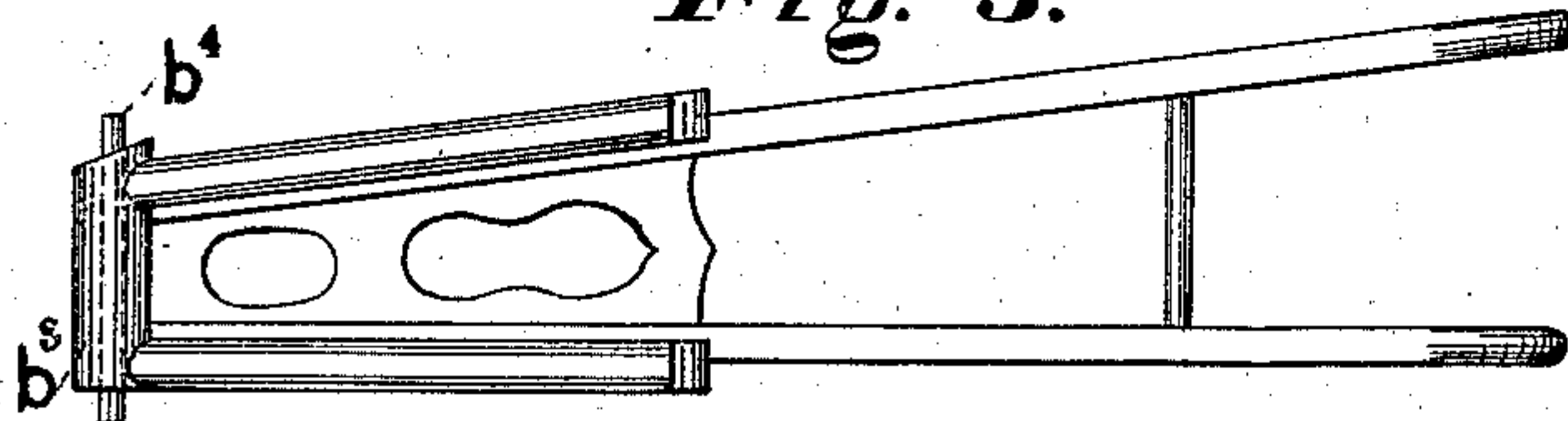
*Fig. 1.*



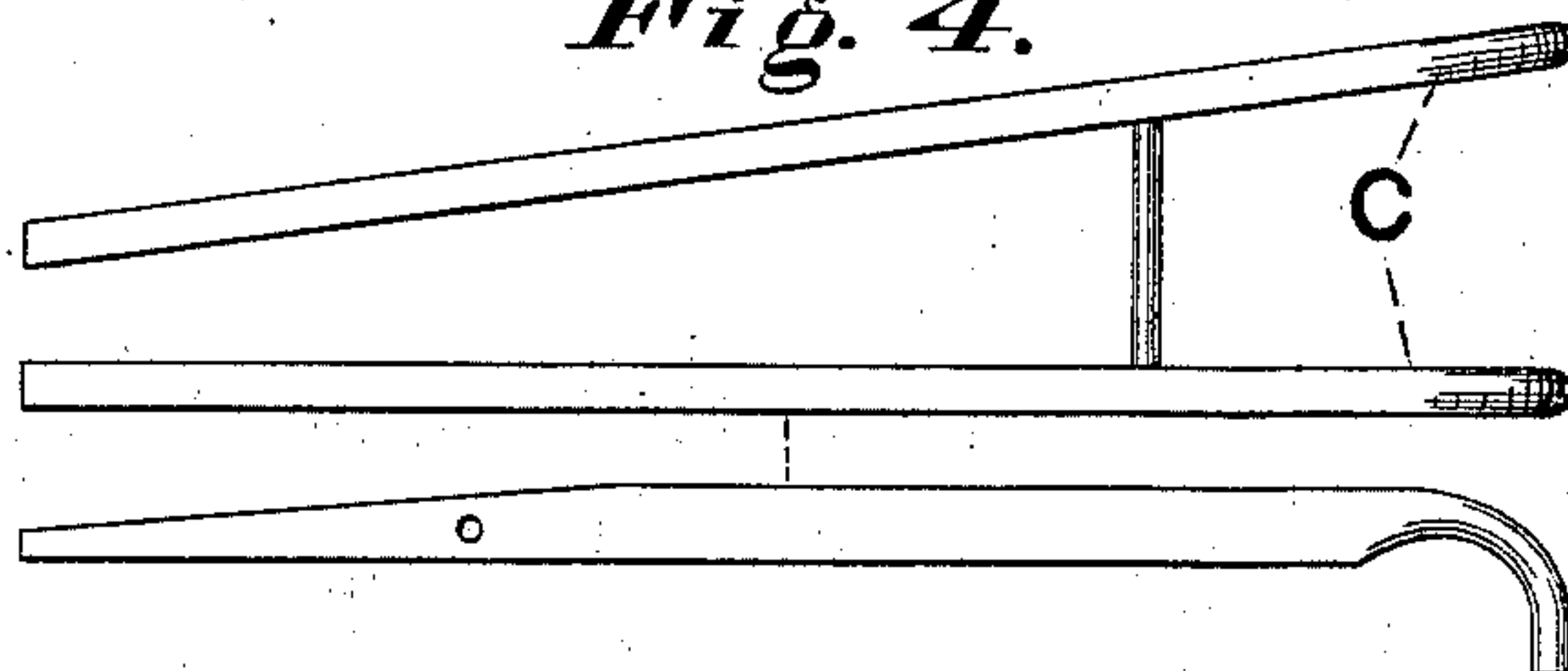
*Fig. 2.*



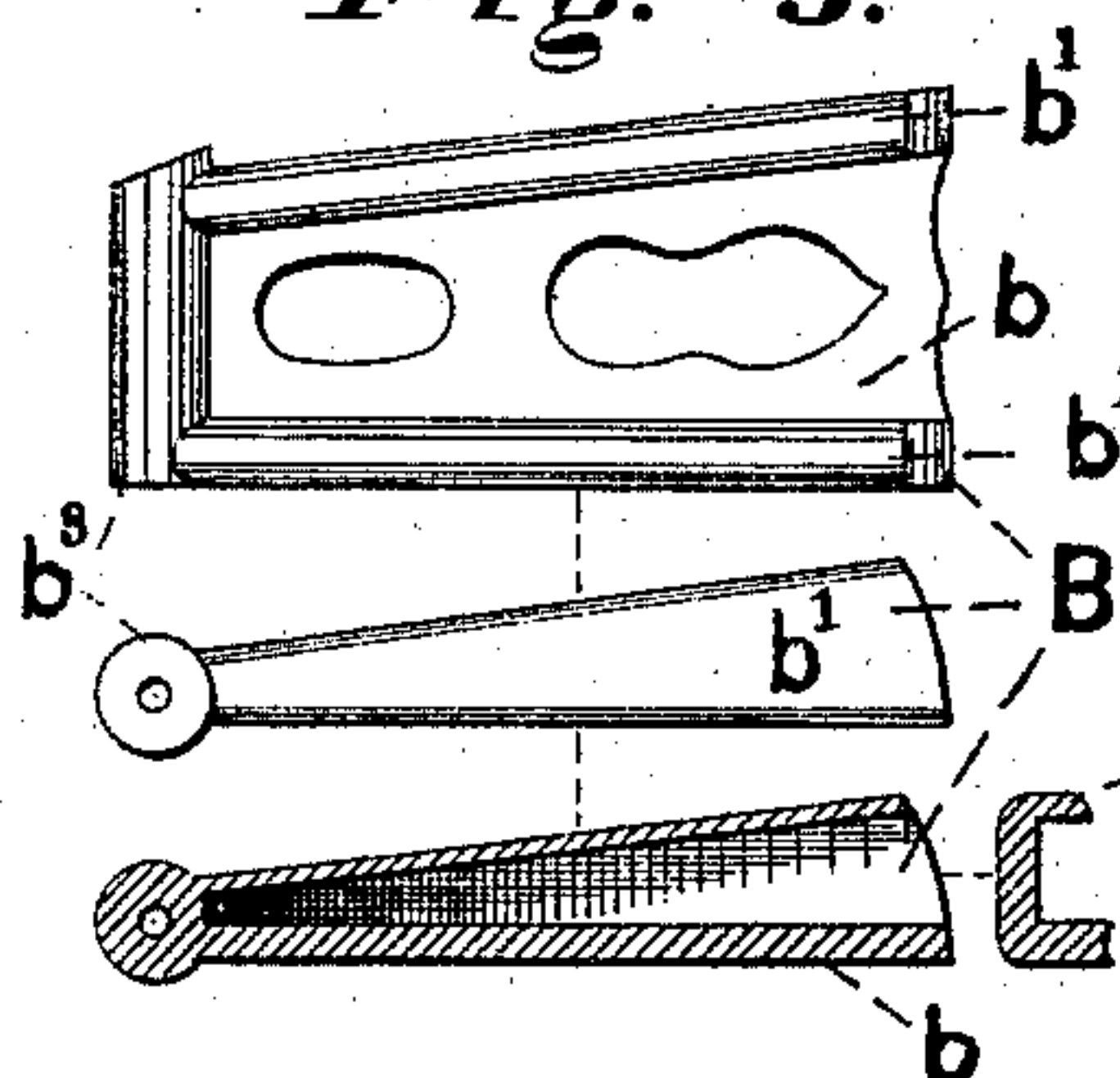
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



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# UNITED STATES PATENT OFFICE.

JOHN H. BURGHARDT, OF STOCKBRIDGE, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND W. A. MILES, OF COPAKE IRON WORKS, NEW YORK.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 214,487, dated April 22, 1879; application filed November 8, 1878.

*To all whom it may concern:*

Be it known that I, JOHN H. BURGHARDT, of Stockbridge, county of Berkshire, State of Massachusetts, have invented new and useful Improvements in Plows; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to that class of plows in which the handles are made adjustable relatively to the plowshare; and consists, mainly, first, in the combination, with the share and handles, of an intermediate metal frame of special construction, by means of which the handles are properly united to the share; and, second, in the combination, with the metal frame, of a guiding-frame upon the share, and devices for locking the same in any desired position.

It consists, further, in certain details of construction, all of which will be fully described hereinafter.

In the accompanying drawings, Figure 1 represents a side elevation of the improved plow; Fig. 2, a plan view of the same; Fig. 3, a plan view of the metal frame and handles detached; Fig. 4, view of the handles reversed from the frame; and Fig. 5, various views of the frame alone.

To enable others skilled in the art to make and use my improvement in plows, I will now proceed to fully describe the same.

A, Fig. 1, represents the share, and *a* the beam, which may be constructed generally in any proper manner.

B, Figs. 2 and 5, represents a metal frame, consisting of the back plate, *b*, having upon its upper face converging side pieces, *b*<sup>1</sup>, Fig. 5, with overhanging flange *b*<sup>2</sup>, by means of which proper recesses are formed for receiving the lower portions of the handles C C, as shown in Fig. 3.

*b*<sup>3</sup>, Figs. 3 and 5, represents a transverse journal or cylinder, provided with a central opening, as shown, which is located at the lower end of the metal frame, and forms a rigid portion of the same, as shown.

*b*<sup>4</sup>, Fig. 3, represents a transverse shaft or

pin, by means of which the metal frame is securely pivoted to the share and mold-board in a proper position between the two, as shown in Fig. 2.

C C, Figs. 2 and 4, represent the handles before referred to, the lower portions of which rest in the recesses of the frame, and are strongly held thereby.

D, Fig. 1, represents a guiding-frame of any proper form, securely attached to the share, which is, essentially, provided with a curved guiding-slot, *d*, and a rack-bar, *d'*, as shown.

E, Figs. 1 and 2, represents a set-screw extending through the slot into the metal frame B, and *e* a washer, by means of which the handle-frame B is united to the guide-frame D.

F, Fig. 1, represents a locking-block provided with teeth *f* and a shank or spindle, *f*<sup>1</sup>, by means of which latter and the guide-block *f*<sup>2</sup> upon the metal frame B it is held in proper position over the rack-bar.

The operation is substantially as follows, (the plow of course is used in the ordinary manner:) When it is desired to adjust the handles relatively to the share, the locking-block F is lifted to disengage its teeth from the rack-bar, and the handles consequently being free to swing upon the pivot-journal, they may be adjusted, as indicated in dotted lines, Fig. 1, either in a forward or backward direction, as may be desired.

When properly adjusted the locking-block is permitted to return to its normal position for the purpose of securing the handles at the desired angle.

The locking-block will act simply by gravity; but, if desired, a spring may be employed to give it its return movement.

In addition to the locking-block, the set-screw may be employed, if desired, to lock the handle firm to the guide-frame.

The advantages of the described construction are simplicity, strength, and ease of adjustment.

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

1. In combination with the share and handles, the intermediate metal frame, B, sub-



stantially as described, pivoted at its lower end to the share, as and for the purpose set forth.

2. In combination with the metal frame B, having the pivoted journal and handle recesses, as described, the transverse pin  $b^4$  and handles C, as set forth.

This specification signed and witnessed this 28th day of October, 1878.

JOHN H. BURGHARDT.

Witnesses:

WILLIAM A. MILES,  
WILLIAM WRIGHT.