J. MIDDLEDITCH.

Plows.

No. 166,127. Patented July 27, 1875.

Fig: 1.

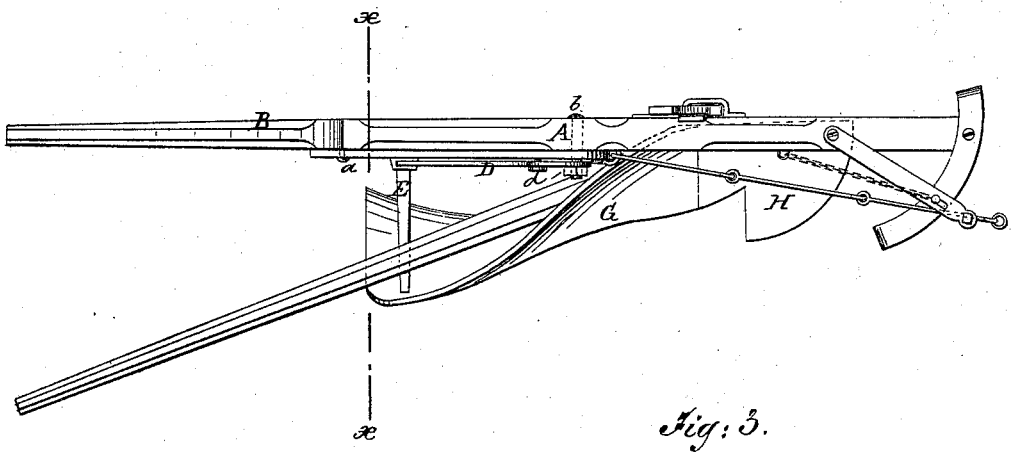


Fig: 3.

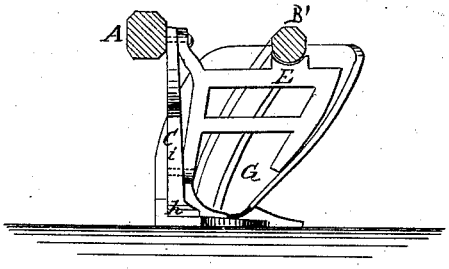
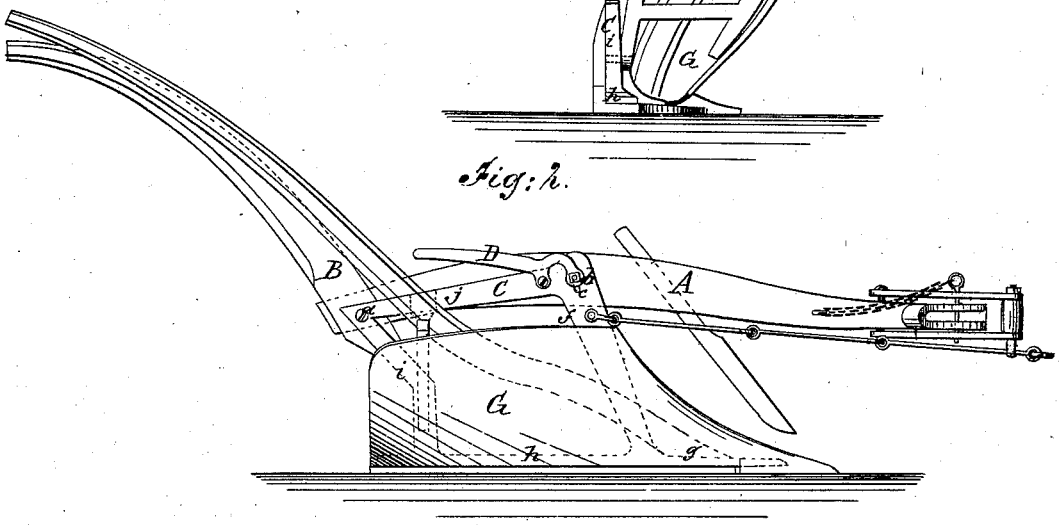


Fig: 2.



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UNITED STATES PATENT OFFICE.

JOHN MIDDLEDITCH, OF NEW YORK, N. Y.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **166,127**, dated July 27, 1875; application filed May 17, 1875.

To all whom it may concern:

Be it known that I. JOHN MIDDLEDITCH, of the city, county, and State of New York, have invented a new and useful Improvement in Plows; and 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, making a part of this specification.

This invention is in the nature of an improvement in plows; and the invention consists in a plow constructed with an adjustable beam and lever whereby the adjustment is effected; and also the framing of the plow, constructed in the manner hereinafter more particularly described.

In the accompanying sheet of drawings, Figure 1 is a plan or top view of my improved plow; Fig. 2, a side view; and Fig. 3 a cross-section in line *x x*, Fig. 1.

Similar letters of reference indicate like parts in the several figures.

A represents the beam of a plow. This may be of any desirable size or shape. The rear end of the beam is mortised into one of the handles B. This beam is secured to the upper side of a frame, C, by a pivotal bolt, *a*, which passes through the frame and handle B, and by a bolt, *b*, which passes through the beam and a slot, *c*, in the frame C, and near its front edge. To the frame C is secured a lever, D, the fulcrum of the lever being pivoted to the frame, and one end of the lever being affixed to the bolt *b*.

Now, if for any purpose it is desired to raise or lower the beam A (as, for instance, if it is desired to plow with a horse, it is necessary that the beam should be at a greater elevation than when plowing with oxen) it is simply necessary to bear down on the lever D, when the beam will be raised to the desired elevation by the action of the lever on the bolt *b*, which draws it up to the full extent of the slot *c*, in which position it is retained by a set-nut, *d*, on the bolt *b*. When the lever is forced down or raised the beam freely turns on the pivotal bolt *a*, which admits its rising and falling.

In combination with the adjustable beam just described, I construct an iron frame, C. This frame is formed in an entire piece of iron, and from the front standard *f* there extends an angular piece of metal, *g*, which runs under and supports the front side of the mold-board G and share H, thus enabling the mold-board and share to resist shocks, as when coming in contact with stones, roots, &c. Extending from the point of this angular piece *g* is a strip of metal, *h*, and from near its rear end extends upward the rear standard *i*, which extends vertically a short distance, and then at an angle, (as shown in Fig. 2,) forming the support for the handle B and pivotal bolt *a*. Thence a bar, *j*, extends alongside of, and parallel with, the beam, until it meets the front standard *f*, making a continuous frame of wrought metal. E is a metal frame, secured laterally to the frame C and serving to support the handle B′ and brace the mold-board. In this way the plow is thoroughly strengthened, and yet rendered as light as possible under the circumstances, and, at the same time, it enables the plow to be constructed at a reasonable cost, and the adjusting feature of the beam permits the use of the plow with facility either with horses or oxen.

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

1. In a plow, the beam A pivoted at its rear end to a frame, C, and made rigid with the handle B in combination with the adjusting-lever D, set-nut, and said frame, substantially as shown and described.

2. The cross-frame E, composed of two vertical and two or more horizontal bars, and having a socket to receive the handle B′, substantially as specified.

3. In a plow, the combination of the frame E, constructed as described, the removable handle B′, and mold-board, substantially as specified.

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