

(No Model.)

G. S. ROBERTS.

PLOW JOINTER.

No. 287,778.

Patented Oct. 30, 1883.

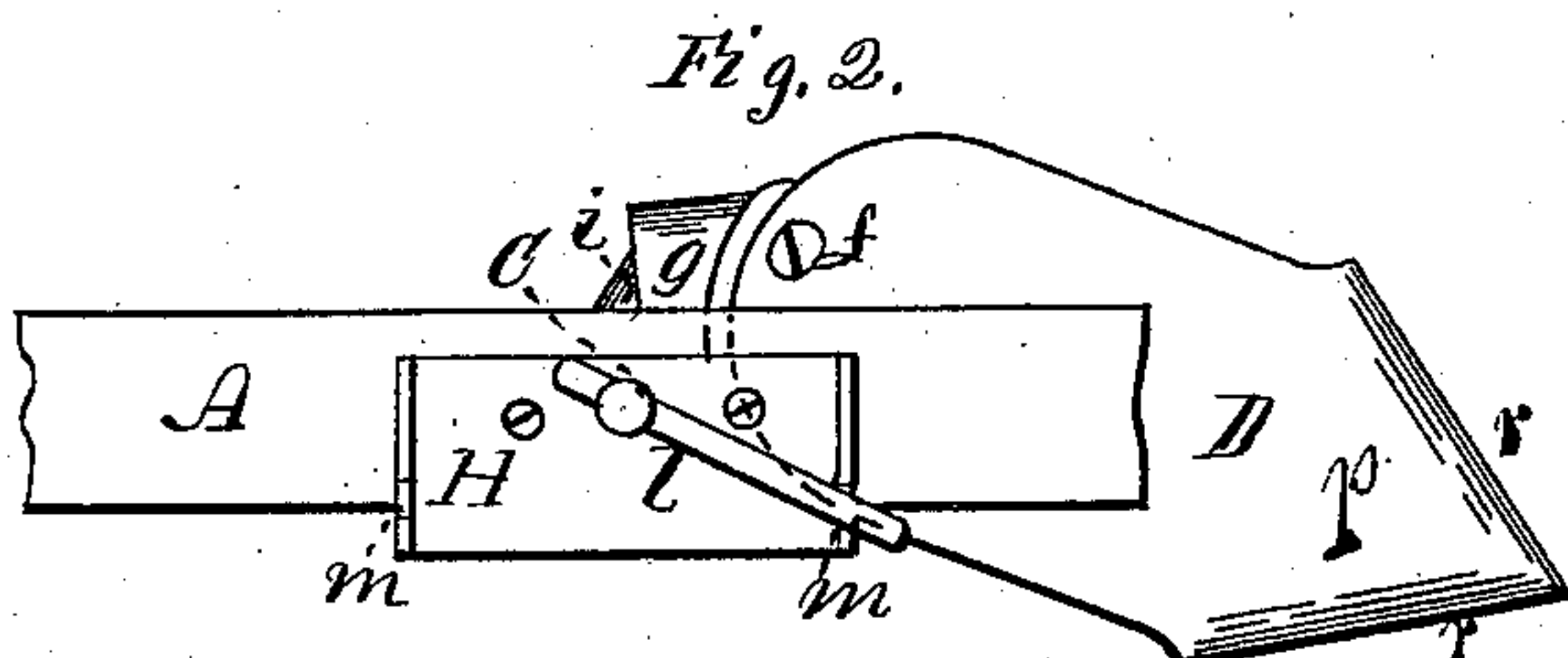
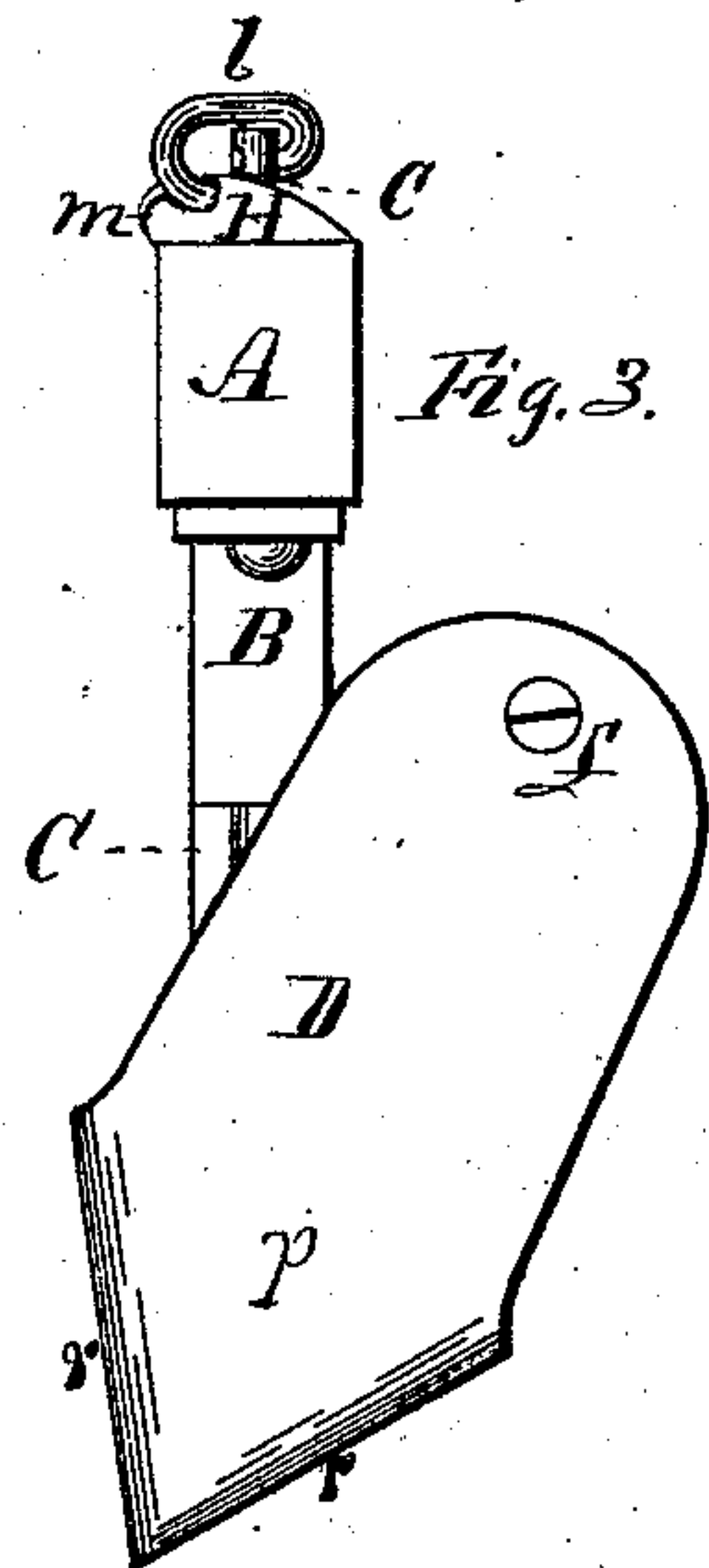
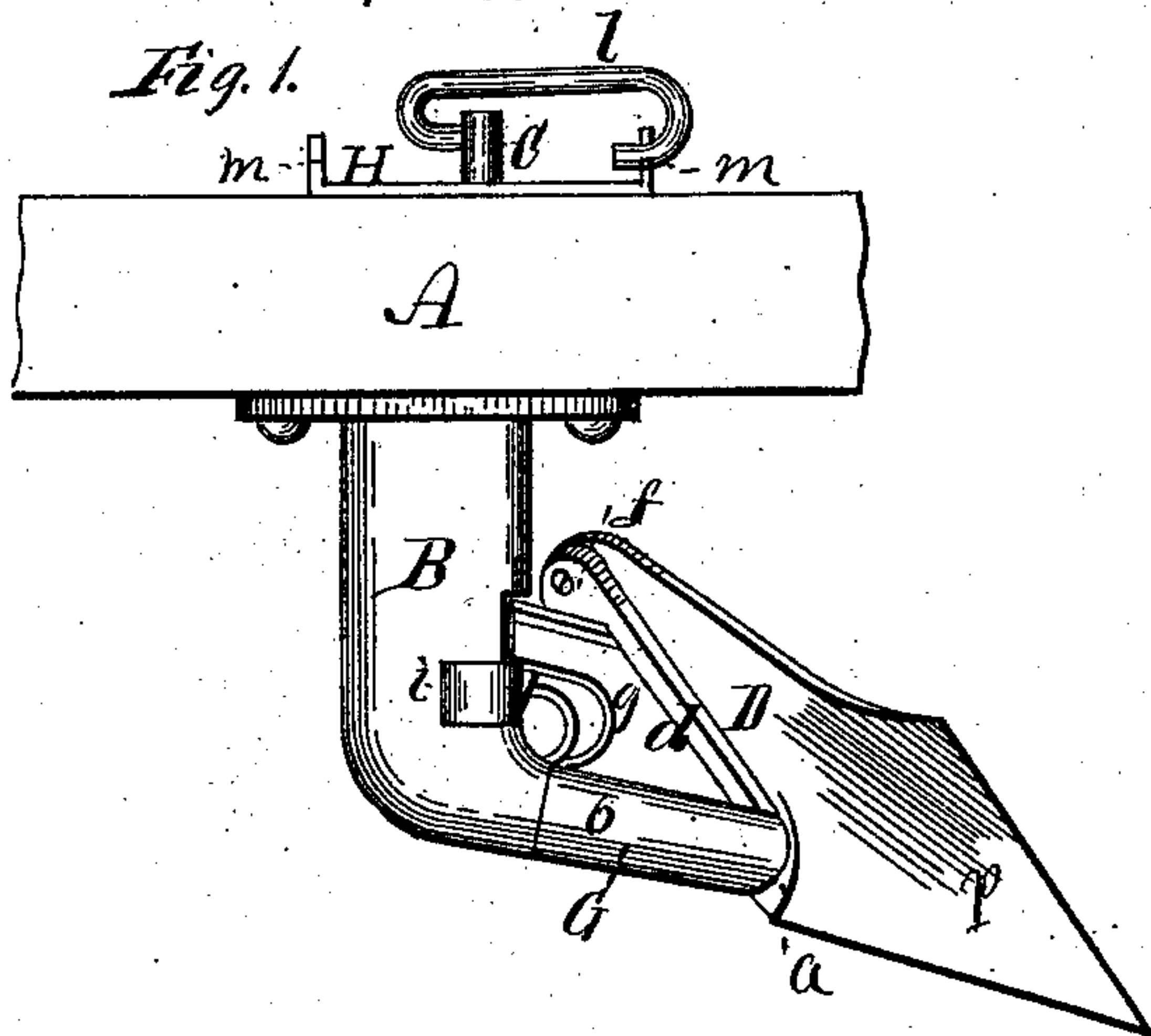
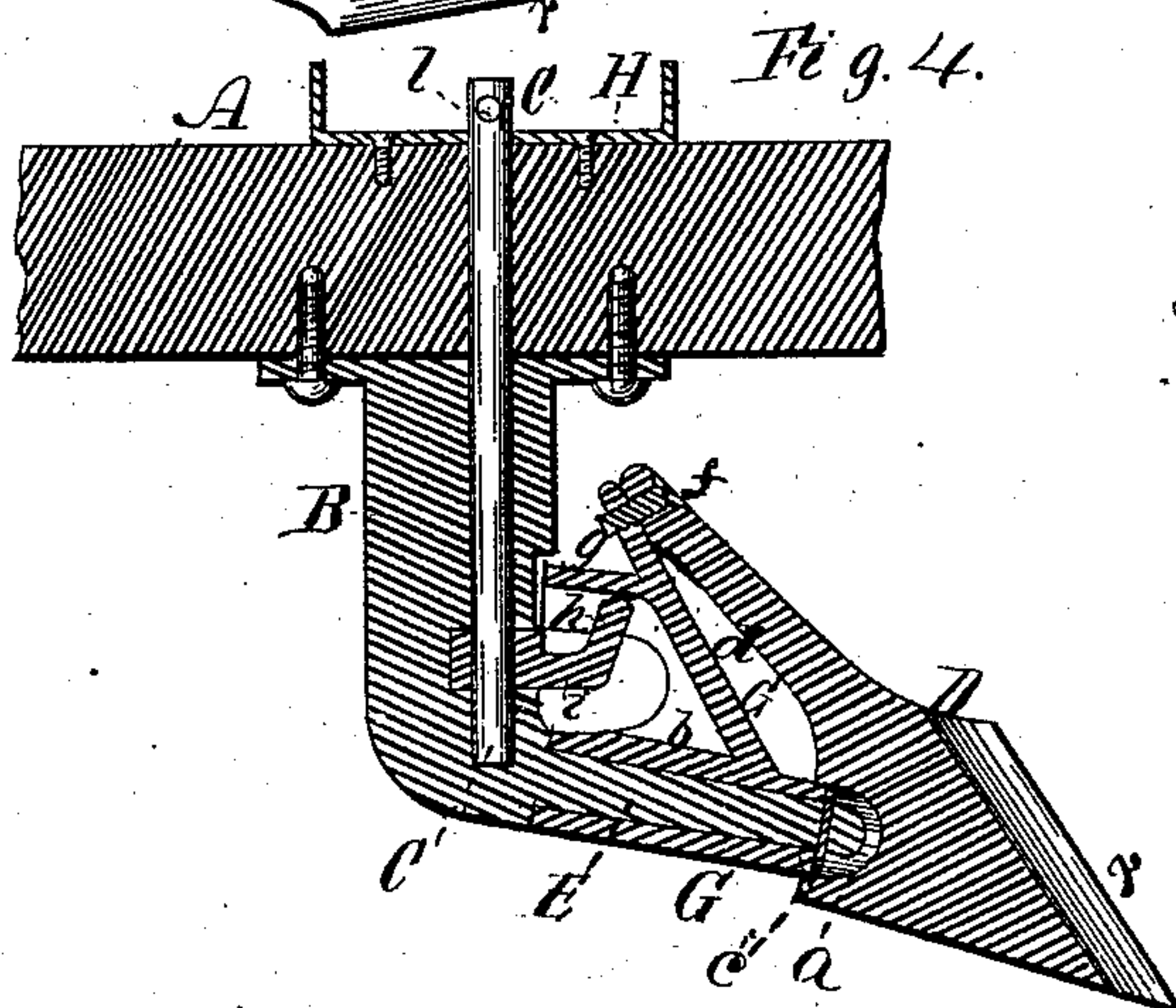
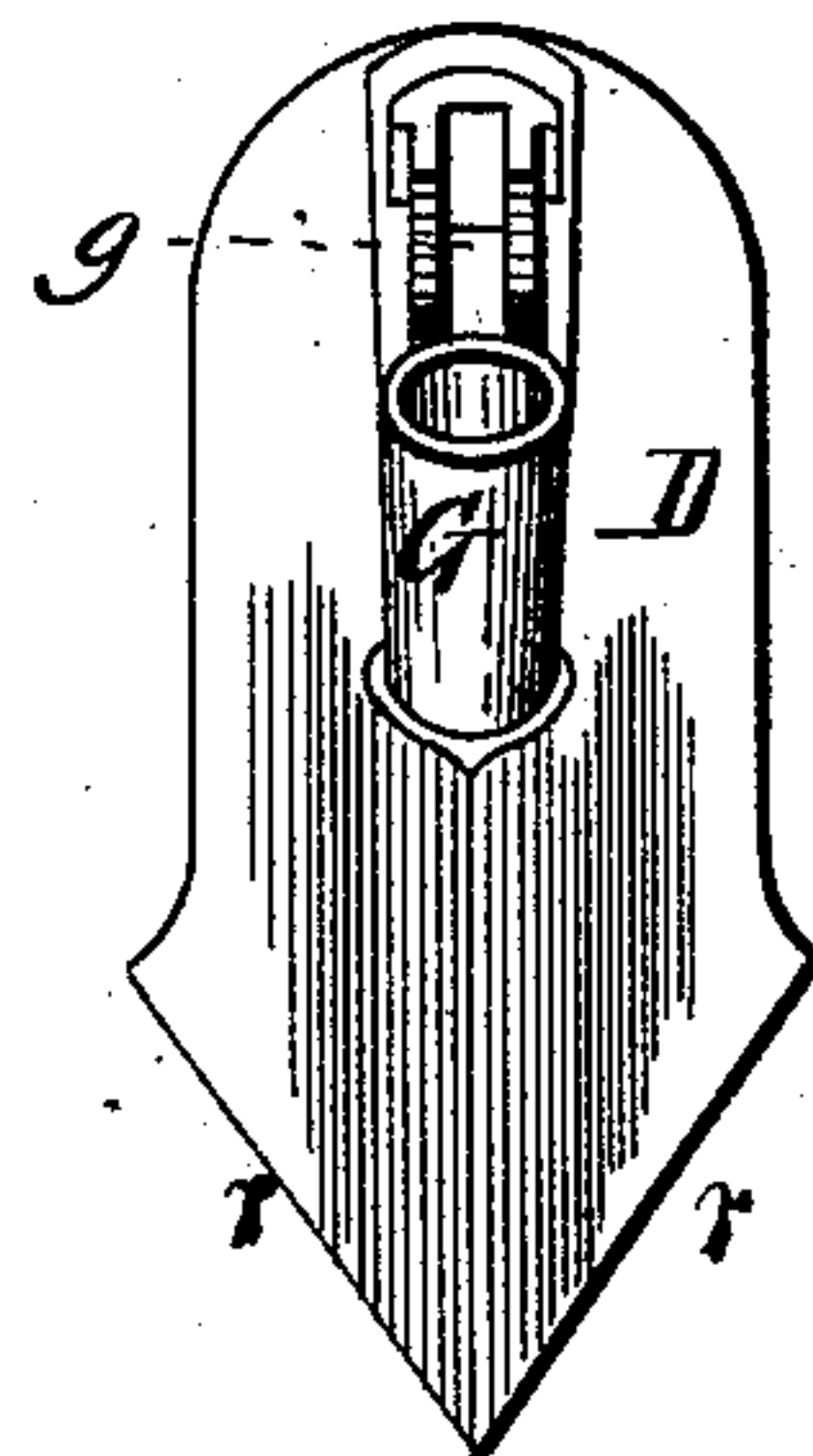


Fig. 5.



Witnesses
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Inventor,
George S. Roberts,
By A. S. Brown,
his attorney.

UNITED STATES PATENT OFFICE.

GEORGE S. ROBERTS, OF MEREDITH VILLAGE, NEW HAMPSHIRE, ASSIGNOR
TO JOHN A. LANG, OF SAME PLACE.

PLOW-JOINTER.

SPECIFICATION forming part of Letters Patent No. 287,778, dated October 30, 1883.

Application filed May 21, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. ROBERTS, of Meredith Village, in the county of Belknap and State of New Hampshire, have invented an Improved Plow-Jointer; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a side view of the improved plow-jointer as attached to the plow-beam; Fig. 2, a top view of the same; Fig. 3, a front view thereof; Fig. 4, a central longitudinal vertical section of the same, the jointer being shown in a central position under the plow-beam to show the construction clearly; Fig. 5, a view of the under side of the plow-jointer separate.

Like letters designate corresponding parts in all of the figures.

My improved plow-jointer is especially intended for reversible plows, and the main features of the invention are improved means by which the jointer is reversed to adapt it to reversible plows, such plows requiring the jointer to be reversed when the mold-board is reversed.

In the drawings, A represents a portion of a plow-beam, and B the "stamen" or standard on which the plow-jointer is mounted under the beam. This standard is secured to the beam in the position of an ordinary colter in advance of or over the mold-board, and it may be vertical, or nearly so, as shown. In this standard is located a rock-shaft or oscillating rod, C, extending from above the plow-beam A down to a position for operating upon the jointer D. This rock-shaft also is preferably vertical, though it may be somewhat inclined.

From the lower end of the standard B a fixed pivot or axle, E, extends in a nearly horizontal direction, but preferably somewhat inclined forward, as shown, so as to be adapted to the inclined position of the jointer itself, and on this pivot swivels the jointer, for changing its position to the right and left alternately. This nearly horizontal pivot is a most important feature of my invention, and renders the whole invention simple, effectual,

and convenient. I have also an improved means of constructing the jointer and of mounting it on the pivot E. The jointer D proper is made of a single casting, with a socket, *a*, in the under side, substantially as shown, to receive the forward end of the pivot E. In addition to this, there is a separate thimble or sleeve piece or casting, G, the sleeve part *b* of which surrounds the pivot, and is held thereon by a pin, *c*, inserted through the forward end of the pivot, as shown, or by any equivalent or suitable means. Above the sleeve extends an inclined seat or bolster, *d*, on which rests the rear end of the jointer, which is secured thereto by a screw or bolt, *f*, or any equivalent means. This construction of the jointer in two parts is not only very simple and cheap, but enables the jointer to be easily and very securely mounted on the pivot E, and also enables the jointer proper to be removed and replaced by a new casting whenever it wears out or is broken.

On the rear side of the bolster *d* is a slotted or grooved projection, *g*, in which works a finger-projection, *h*, on the end of a crank-arm, *i*, that extends forward from the rock-shaft C. The oscillation of the rock-shaft to the extent of somewhat less than half a revolution by means of the said crank-arm acting in the slot of this jointer-bolster, turns the jointer about one-fourth of a revolution, or sufficiently to reverse its position from right to left, and vice versa. For oscillating the rock-shaft and securing it in the two extreme positions of its movement, and thereby holding the jointer in its two reverse positions, I have shown a rod or handle, *l*, secured to the upper projecting end of the rock-shaft, and the outer end of this rod springing into two catch-notches, *m n*, respectively, of a stationary catch, H, on the top of the plow-beam. Any other suitable device for oscillating and holding the rock-shaft may be employed instead of the one herein described.

The jointer D has a single face, *p*, which is alternately turned to the right and left. From the point thereof back to the side edges or wings of the jointer the edges *r r* are turned upward from the face, to serve for properly entering and cutting the sod or surface of the

ground. This form of the jointer is effectual to accomplish the purpose, and thereby no surface thereof suitable for one position of the jointer interferes with its action in the reverse position.

What I claim as my invention is—

1. A plow-jointer, D, provided with a removable sleeve, G, constructed and adapted to receive a pivot, E, substantially as and for the purpose herein specified.

2. The combination of the standard B, having a jointer-pivot, E, projecting therefrom, a rock-shaft, C, turning in the standard and provided with a crank-arm, *i*, and a jointer, D, having a slotted projection, *g*, on its rear side, substantially as and for the purpose herein specified.

3. The combination of a reversible plow-jointer swiveled on an approximately horizontal pivot and an approximately vertical rock-shaft for effecting the reversing movements of the jointer, as herein specified.

4. The combination of the standard B, the rock-shaft C, mounted therein, the pivot E, projecting from the standard, and the sleeved plow-jointer D, swiveled on the said pivot, substantially as and for the purpose herein specified.

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Witnesses:

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