

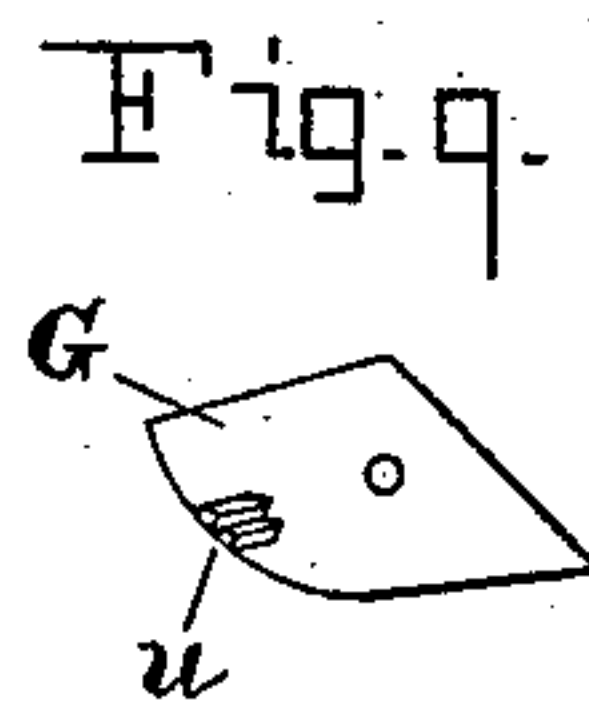
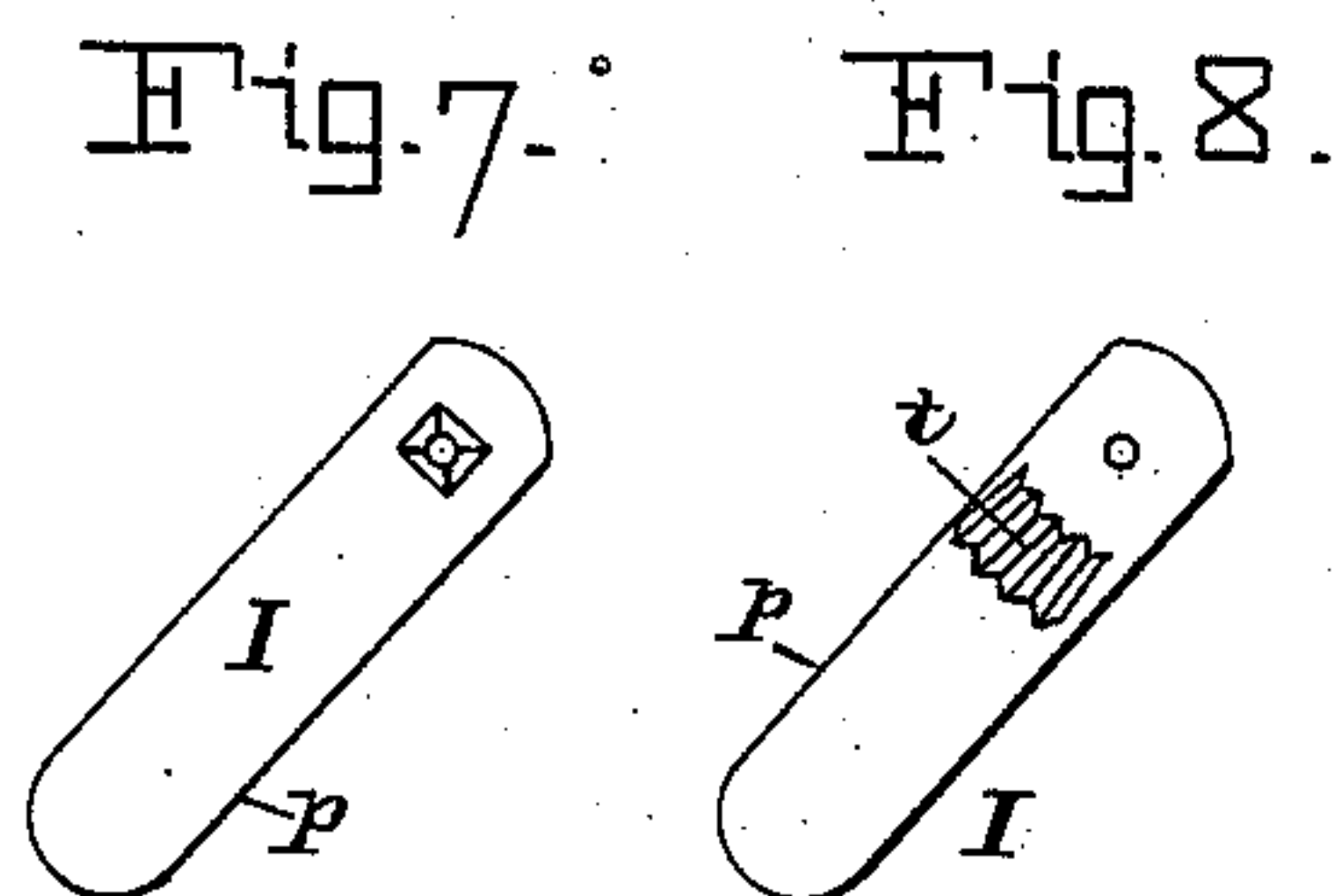
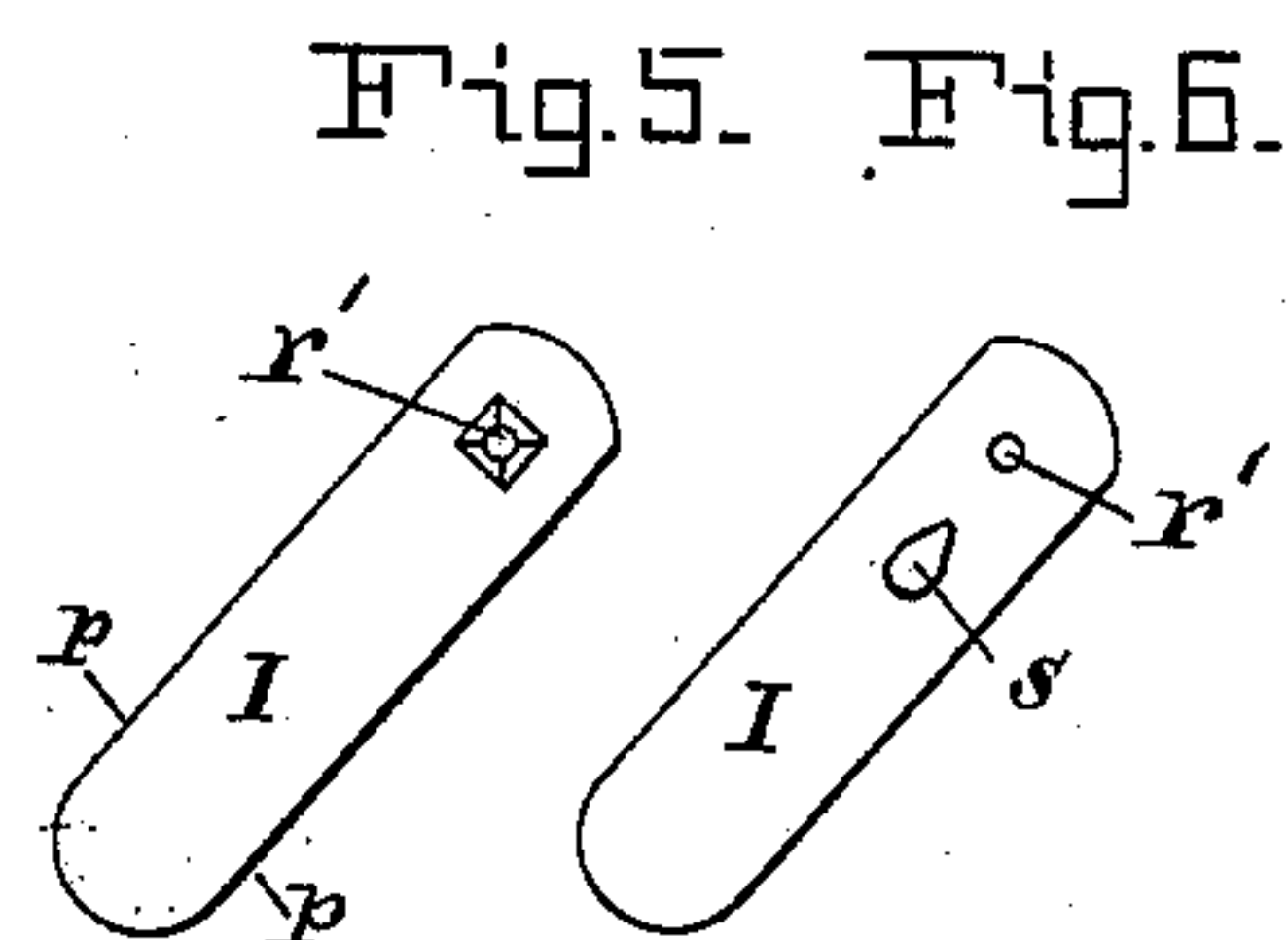
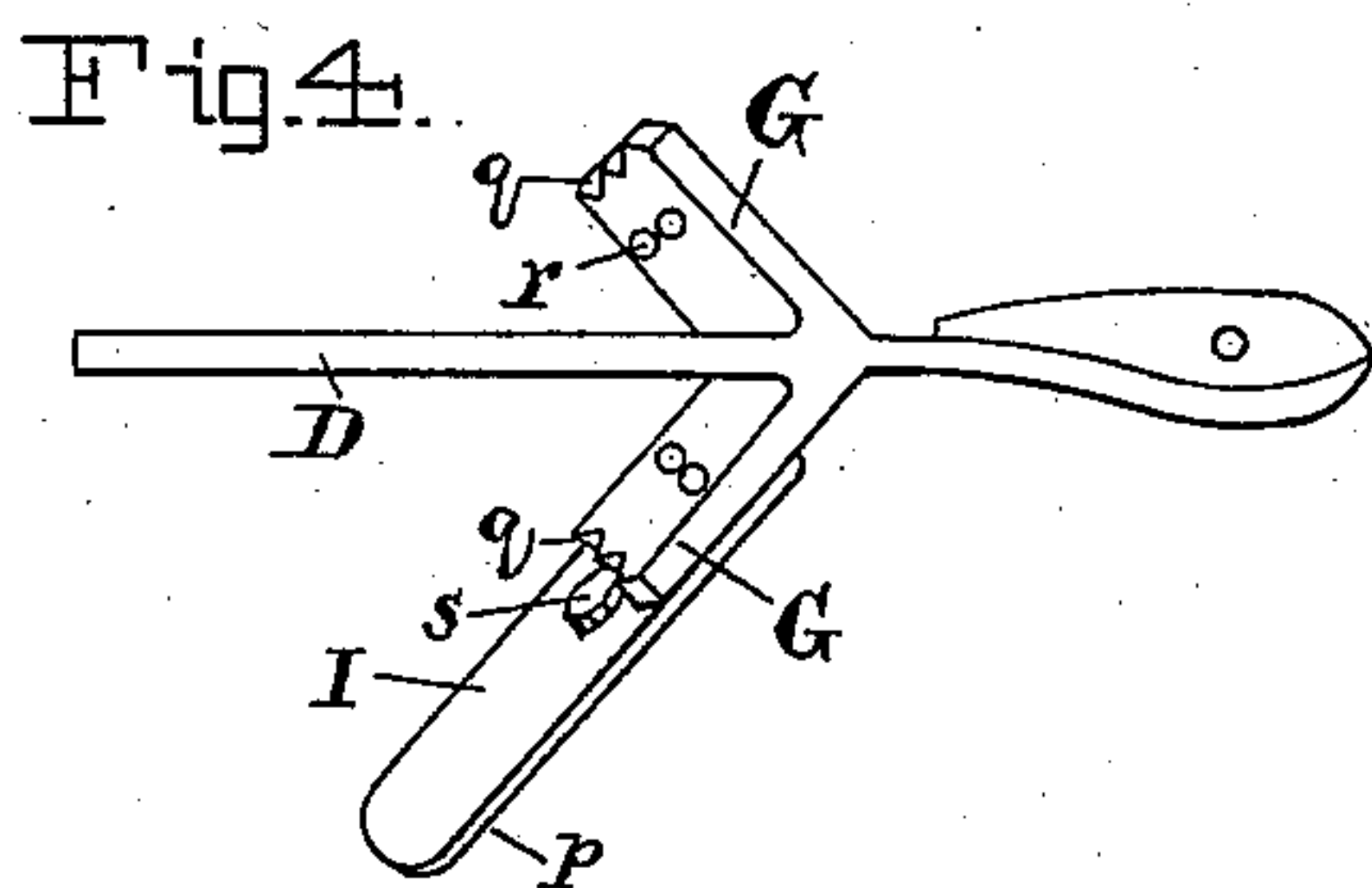
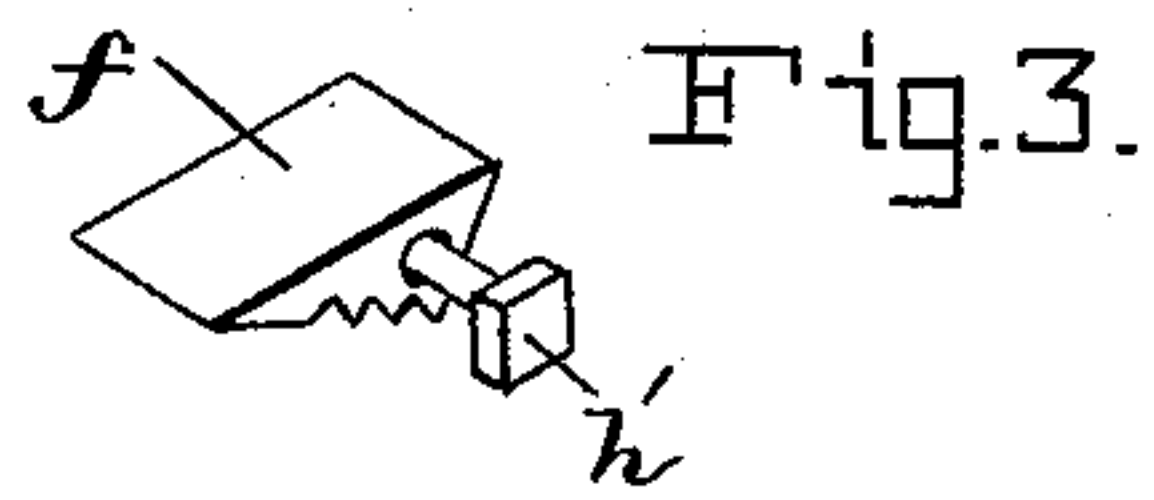
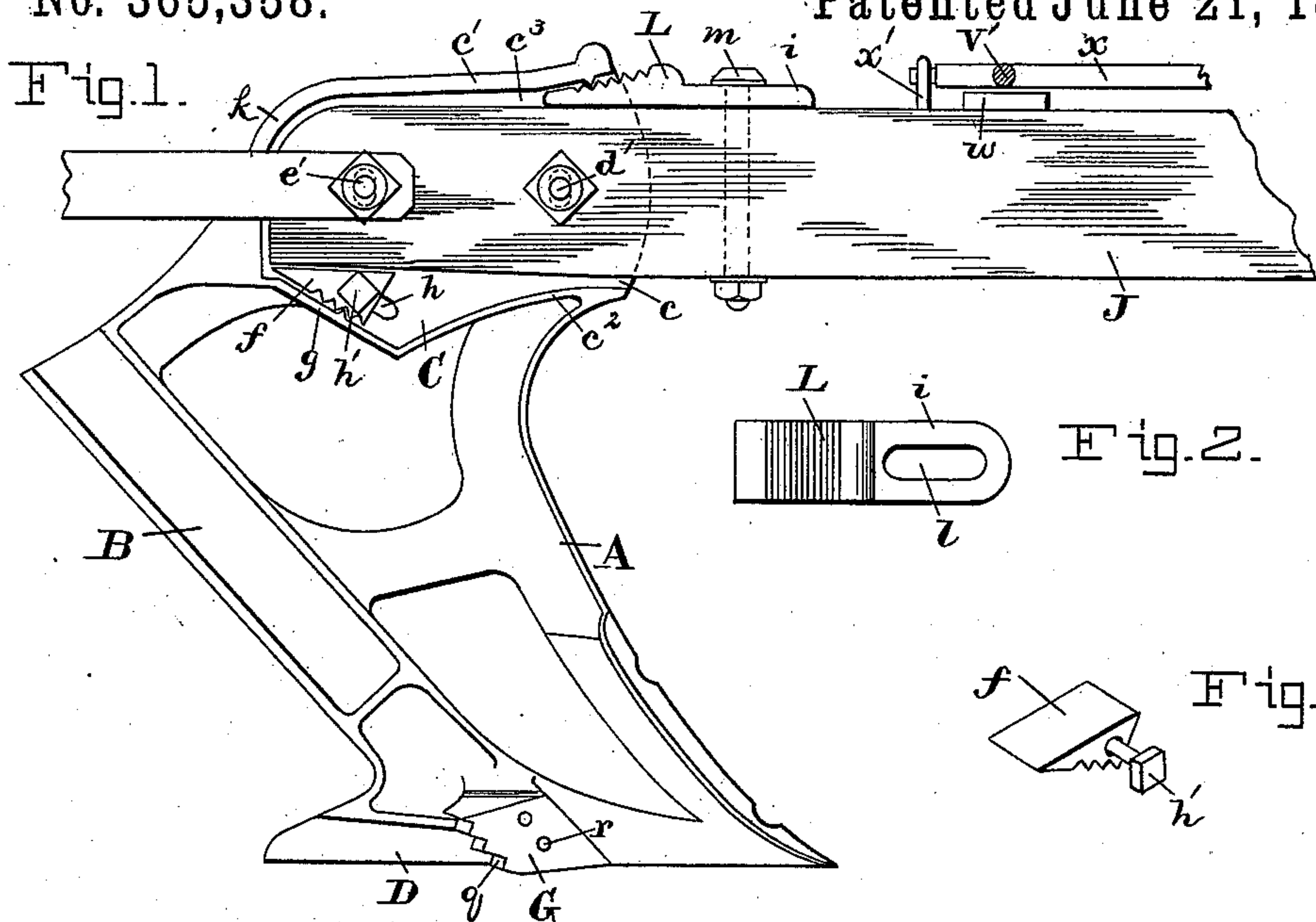
(No Model.)

2 Sheets—Sheet 1.

R. W. WHITEHURST.
PLOW.

No. 365,358.

Patented June 21, 1887.



WITNESSES:

A. C. Eader
John E. Morris

INVENTOR:

R. W. Whitehurst

BY Chas B. Mann

ATTORNEY.

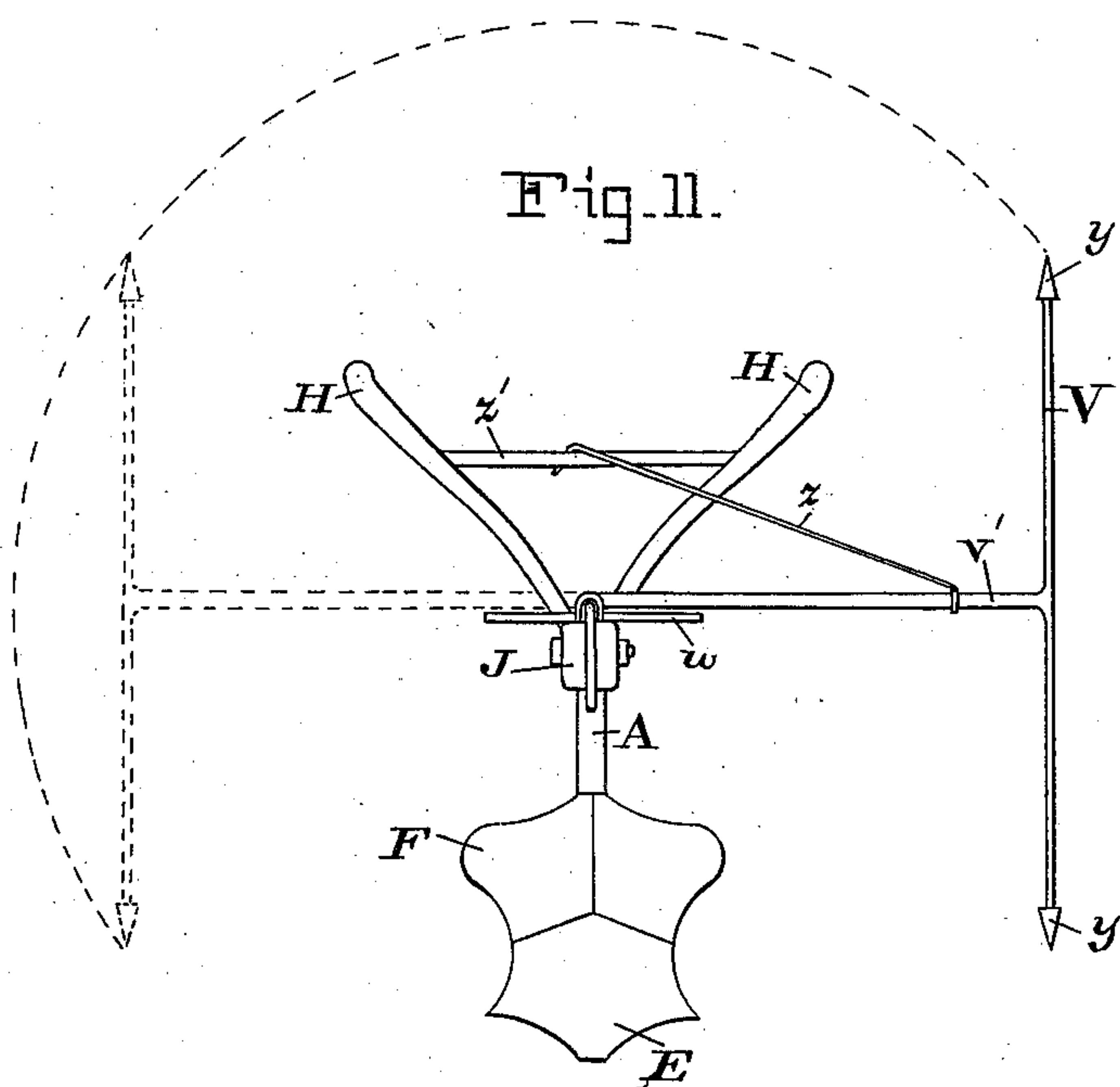
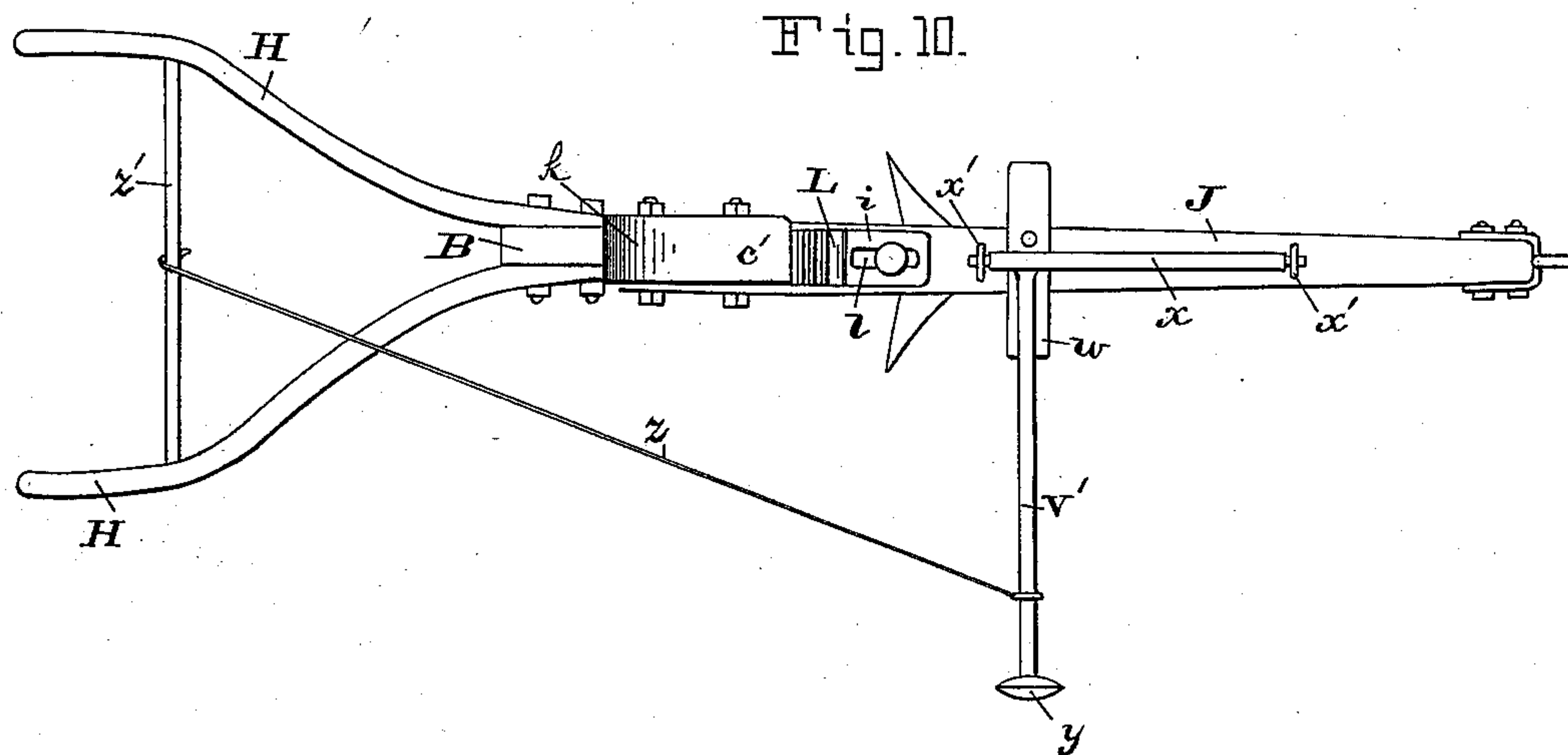
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2 Sheets—Sheet 2.

R. W. WHITEHURST.
PLOW.

No. 365,358.

Patented June 21, 1887.



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INVENTOR:

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ATTORNEY.

UNITED STATES PATENT OFFICE.

ROBERT W. WHITEHURST, OF NORFOLK, VIRGINIA, ASSIGNOR OF ONE-HALF
TO McDONALD L. WRENN, OF SAME PLACE.

PLOW.

SPECIFICATION forming part of Letters Patent No. 365,358, dated June 21, 1887.

Application filed March 24, 1887. Serial No. 232,263. (No model.)

To all whom it may concern:

Be it known that I, ROBERT W. WHITEHURST, a citizen of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Plows, of which the following is a specification.

My invention relates to certain improvements in plows, which are described and pointed out in the following specification, and illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the portions of a plow to which my invention mostly relates. Fig. 2 is a view of the upper wedge. Fig. 3 is a view of the lower wedge. Fig. 4 is a bottom view of the plow-foot, showing one sweep only attached. Figs. 5 and 6 are front and back views, respectively, of one sweep. Figs. 7, 8, and 9 show a modification of the adjusting device in the sweep-stock and sweep. Fig. 10 is a top view of the plow, showing the marker. Fig. 11 is a front view of the plow, illustrating the marker.

The letter A designates the front standard, B the back standard, C the cap-piece connecting the standards at the top, and D the foot connecting them at the bottom.

The point E and mold-board F are secured as usual, and the handles H are made fast to the back standard. The beam J is supported on the cap-piece C. A side recess, *c*, is formed at the cap-piece by the upper flange, *c'*, which continues down at the rear part, *k*, and the lower flange, *c''*. Two bolt-slots in the side wall of the said recess provide for the front bolt, *d'*, and the back bolt, *e'*, and these bolts confine the beam J to the recess. The vertical breadth of the beam is such as to leave a space, *c''*, in side recess for the vertical adjustment of the beam. At the rear lower part of the recess is an inclined seat, *g*, and an inclined slot, *h*, is in the side of the head. A wedge, *f*, occupies the inclined seat, and a bolt, *h'*, passes through the wedge and occupies the said inclined slot and retains the wedge in position. This wedge *f* acts as an adjustable bearing for the rear extremity of the beam, and the manner of shifting the wedge is apparent. A wedge, L, is secured on top of the beam in such position that its point end will take under the

front upper flange, *c'*, of the recess. This wedge has a shank, *i*, provided with a slot, *l*, and a bolt, *m*, passes through the said slot and beam. It will thus be seen the wedge is adjustable.

My improvement of the combined two wedges, one at the rear lower part of cap-piece and the other at the front upper part, both acting at the same time on the beam, provides for a range and a nicety of adjustment not possible with one wedge alone, as heretofore used.

One feature of my invention relates to the sweep-stock G. As heretofore constructed it has been an objection that these parts become loose and require frequent tightening-up and adjusting. To obviate this I have contrived a plow-foot, D, and sweep-stock G, cast in one piece, (see Figs. 1 and 4,) with means whereby the sweep I, attached to the stock, may be adjusted to any desired position. The sweep-stock comprises two wings. The end of each wing of the sweep stock (one wing being on one side of the foot and one on the other) is provided with notches *q* (see Figs. 1 and 4) and bolt-holes *r*. The sweeps I also have a bolt-hole, *r'*, and on the rear side (see Figs. 4 and 6) each sweep is provided with a lug, *s*, which has position on a central longitudinal line between the two cutting edges *p*. When a bolt is passed through the hole *r'* of the sweep and the hole *r* of the stock-wing, the lug *s* on the sweep will engage one of the notches *q* on the stock. As there are two holes on the stock and several notches, the outer end of the sweep may be adjusted vertically to the desired position. By this arrangement and construction for fastening the sweeps the sweeps are suited for either side of the plow-foot. They are interchangeable and reversible. When one cutting-edge *p* on each becomes dull and worn, by placing the sweeps on the opposite sides of plow-foot and reversing them the other cutting-edge will be brought into action.

Figs. 7, 8, and 9 show a modification of the means for effecting an adjustment of the sweep. Here the sweep has a rack, *t*, and the sweep-stock G has one or two teeth, *u*, with which the said rack engages. Either of these constructions may be used with the sweep-stock G cast integral with the plow-foot D.

Another feature of my invention is the improved marker V, pivoted to the beam J. A cross-plate, *w*, is bolted to the top of the beam J, and projects beyond both sides. A rock-shaft, *x*, rests, in two bearings, *x'*, on the beam, and extends lengthwise thereof, and an arm, *v'*, is rigidly attached at right angles to the said rock-shaft, and will project horizontally therefrom and rest on the cross-plate *w*. The marker-rod V is attached by its center at the end of the single arm *v'*, and forms with said arm a T-piece. Each end of the marker-rod V has a scratch-point, *y*. It will thus be seen that the marker V *v'* is pivoted on the draft-
 15 beam and may be turned to either side thereof, and the rod V will have a vertical position, one of the scratch-points *y* being on the ground and the other pointing upward. A wire, *z*, is attached by one end to the marker-
 20 arm *v'* and extends to the handles, or to the cross-bar *z'* between the handles. The plowman can thus easily reach the wire, and when at the end of the furrow, and turned around, he can, by pulling on the said wire *z*, turn the
 25 pivoted marker from one side to the other.

Instead of a wire, a rod, chain, or even a

string will answer the purpose. The term "wire" in the claims, therefore, includes a rod, chain, or string.

Having described my invention, I claim and 30
 desire to secure by Letters Patent of the United States—

1. In a plow, the combination of the standard having a cap-piece, C, provided with a beam-recess, a beam, J, in said recess, a wedge, 35
 L, resting on the beam, with its point end under the front upper flange, *c'*, of said recess, and having a shank, *i*, provided with a slot, and a bolt, *m*, passed through said shank-slot into the beam.

2. In a plow, the combination of the standard having a cap piece, C, provided with a beam-recess, a beam, J, in said recess, and the combined two wedges, *f* L, both acting on the beam, one being at the rear lower part and the 45
 other at the front upper part of said recess.

In testimony whereof I affix my signature in the presence of two witnesses.

ROBERT W. WHITEHURST.

Witnesses:

GEO. W. DEY,

K. R. COBB.