

No. 815,092.

PATENTED MAR. 13, 1906.

R. L. KEARNEY.
PLOW.

APPLICATION FILED DEC. 14, 1904.

3 SHEETS—SHEET 1.

Fig. 1.

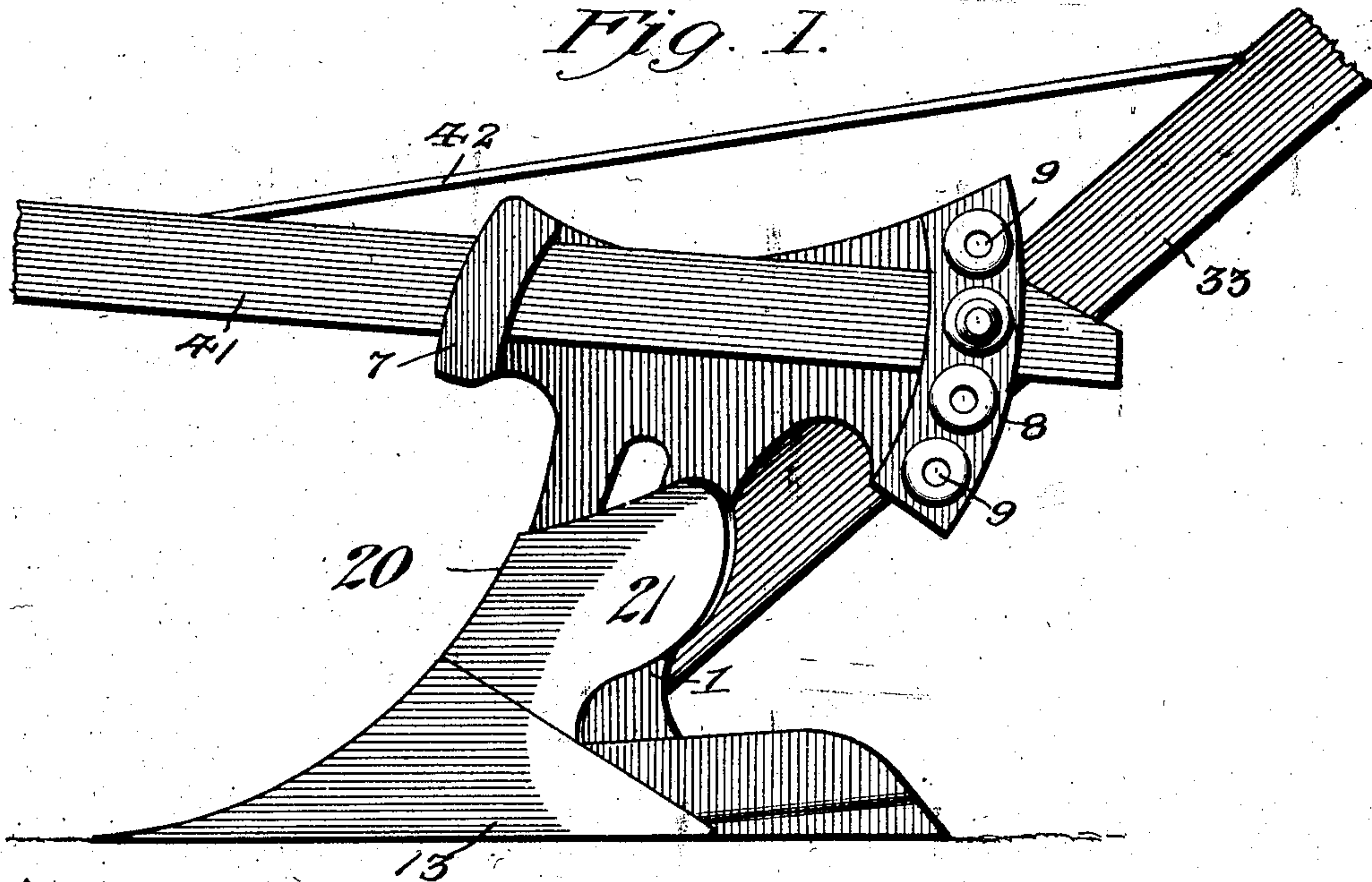
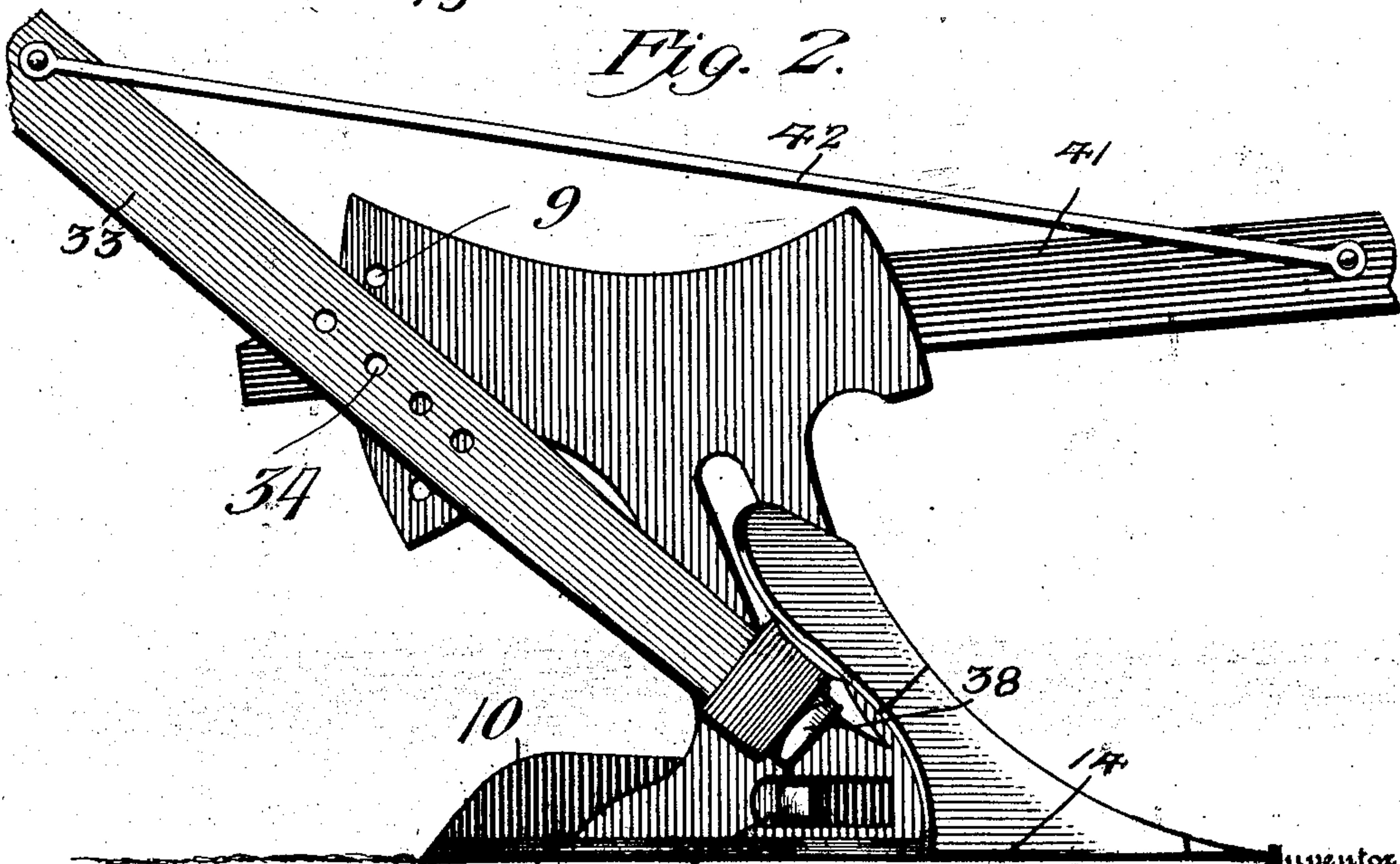


Fig. 2.



Witnesses
Wm. Koerth
D. J. Elmore

Robert Lee Kearney,
By *Victor J. Evans*
Attorney

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3 SHEETS—SHEET 2.

Fig. 3.

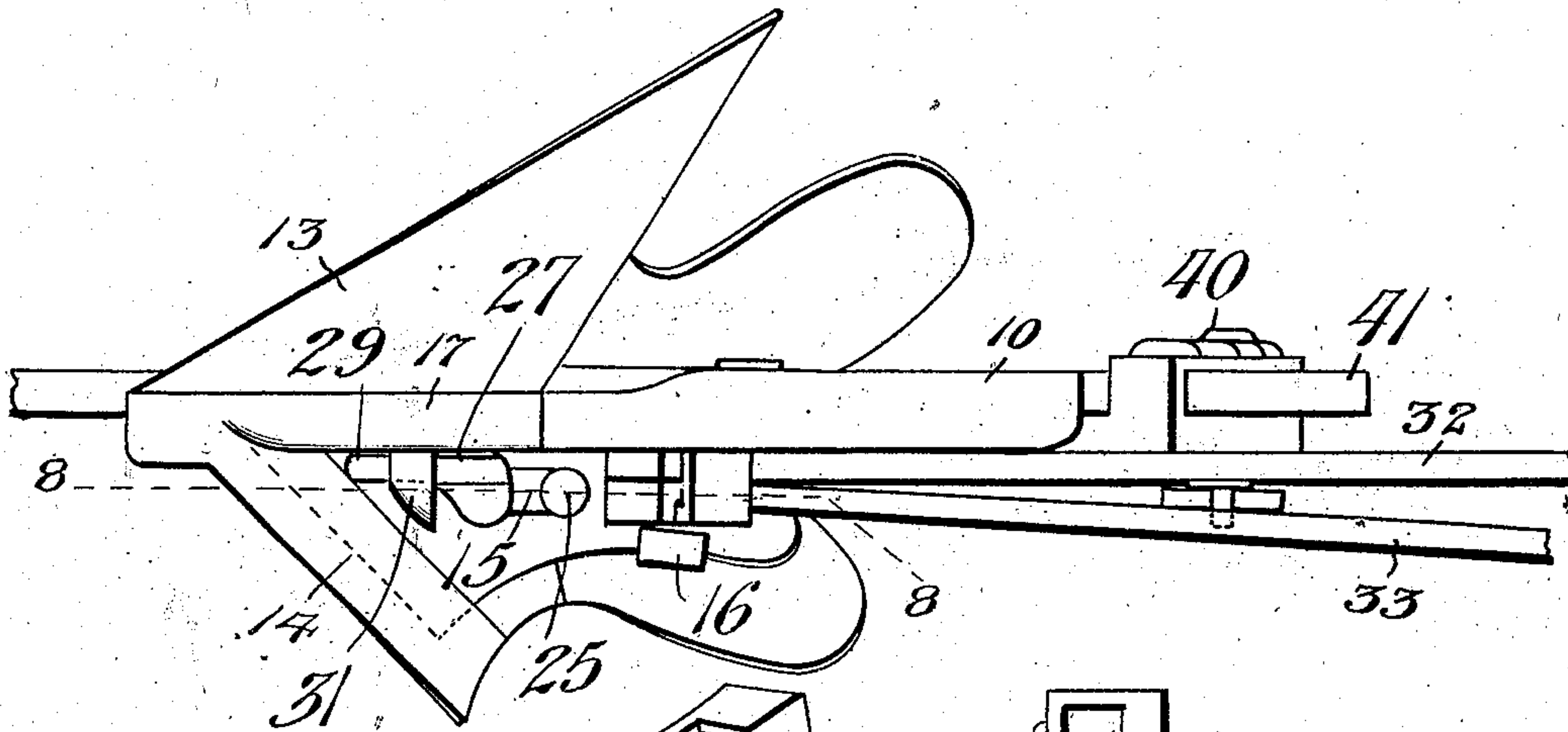


Fig. 5.

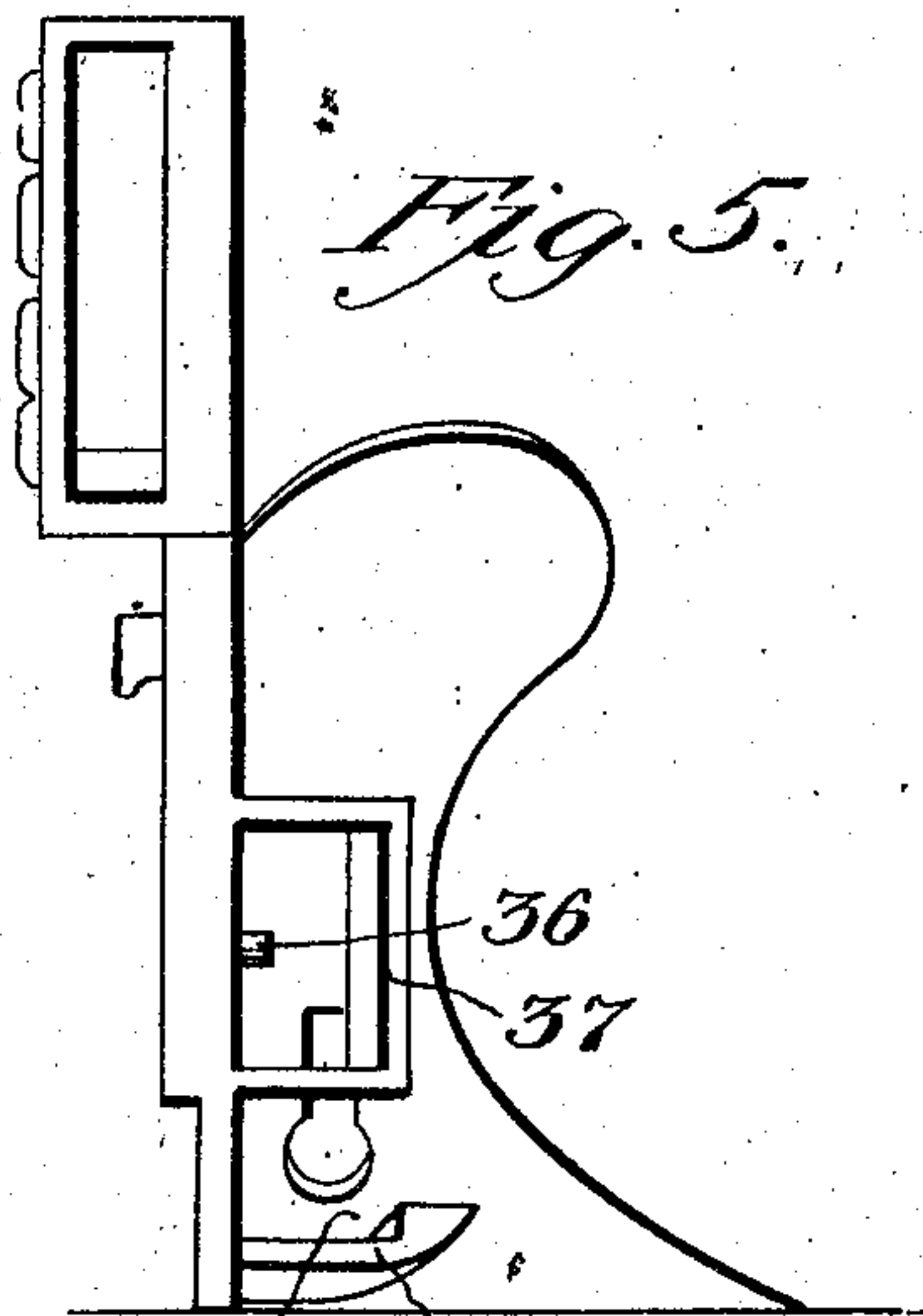


Fig. 4.

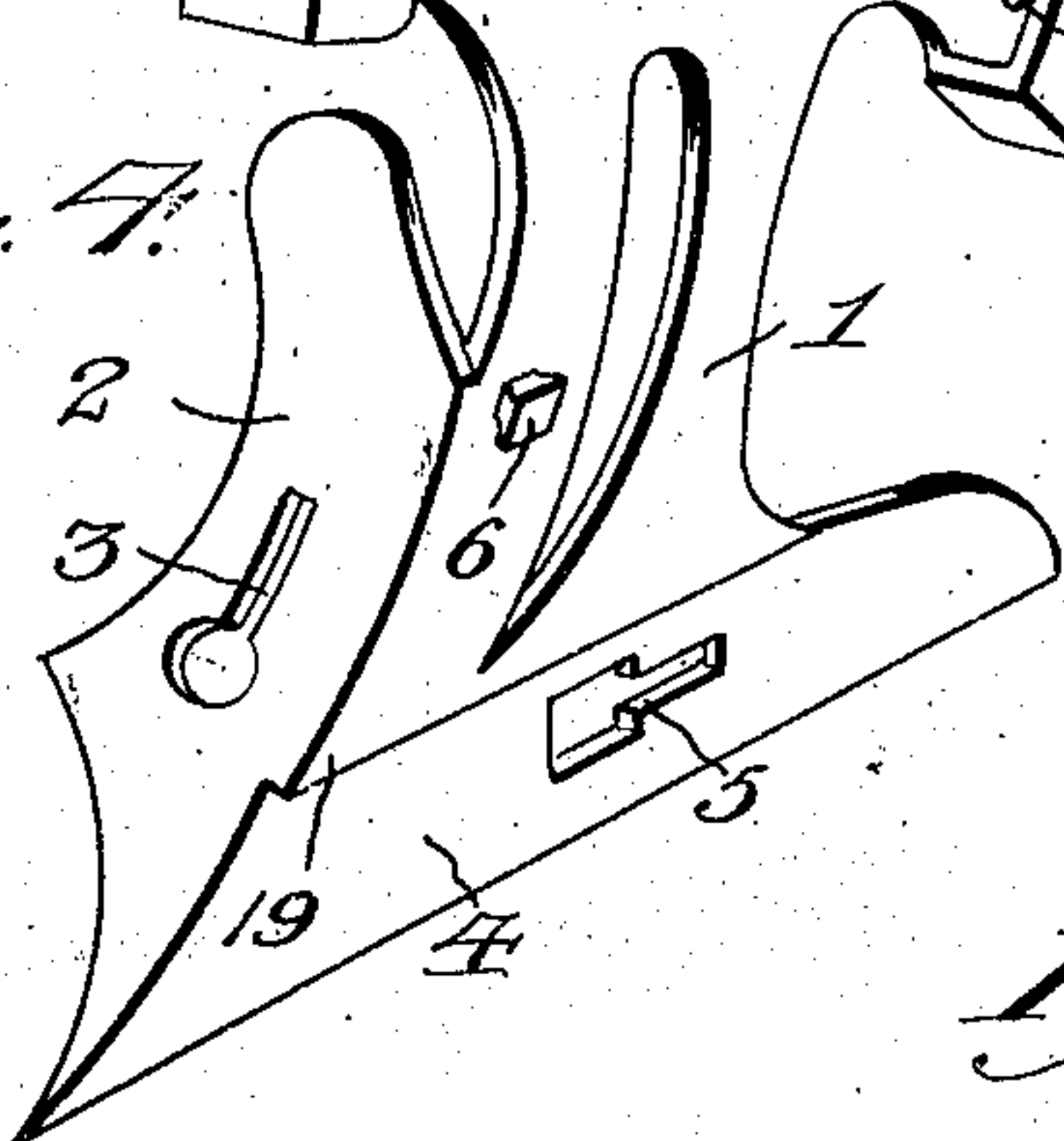


Fig. 6

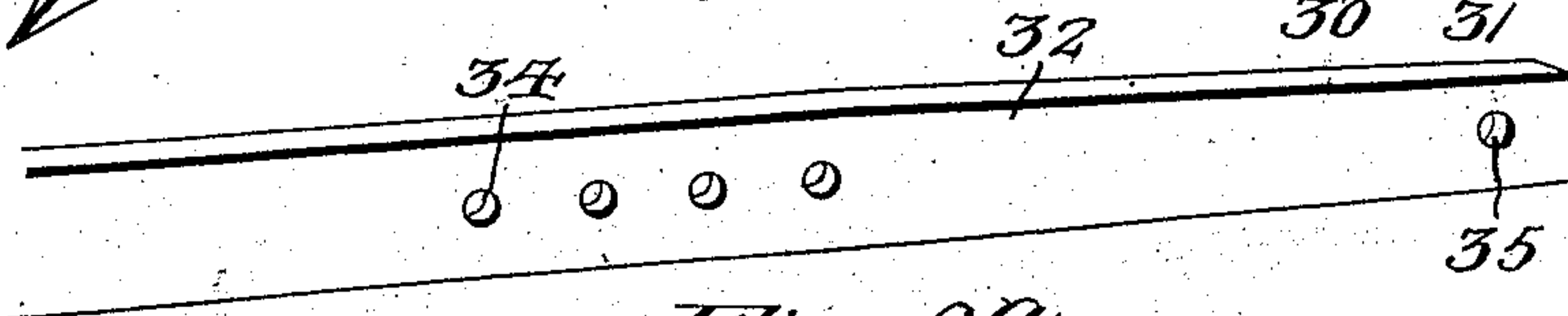
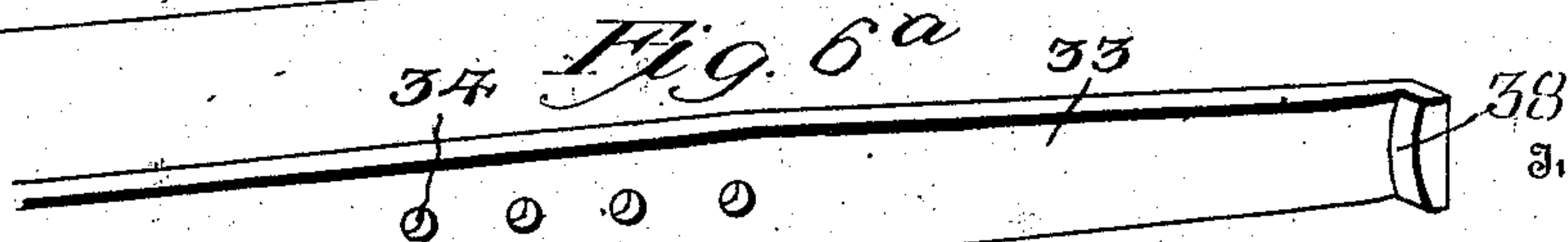


Fig. 6a



Witnesses

Wm. North
A. S. Elmore

Robert Lee Kearney,

Fig. 7 By *Victor J. Crane*
Attorney

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3 SHEETS—SHEET 3.

Fig. 8.

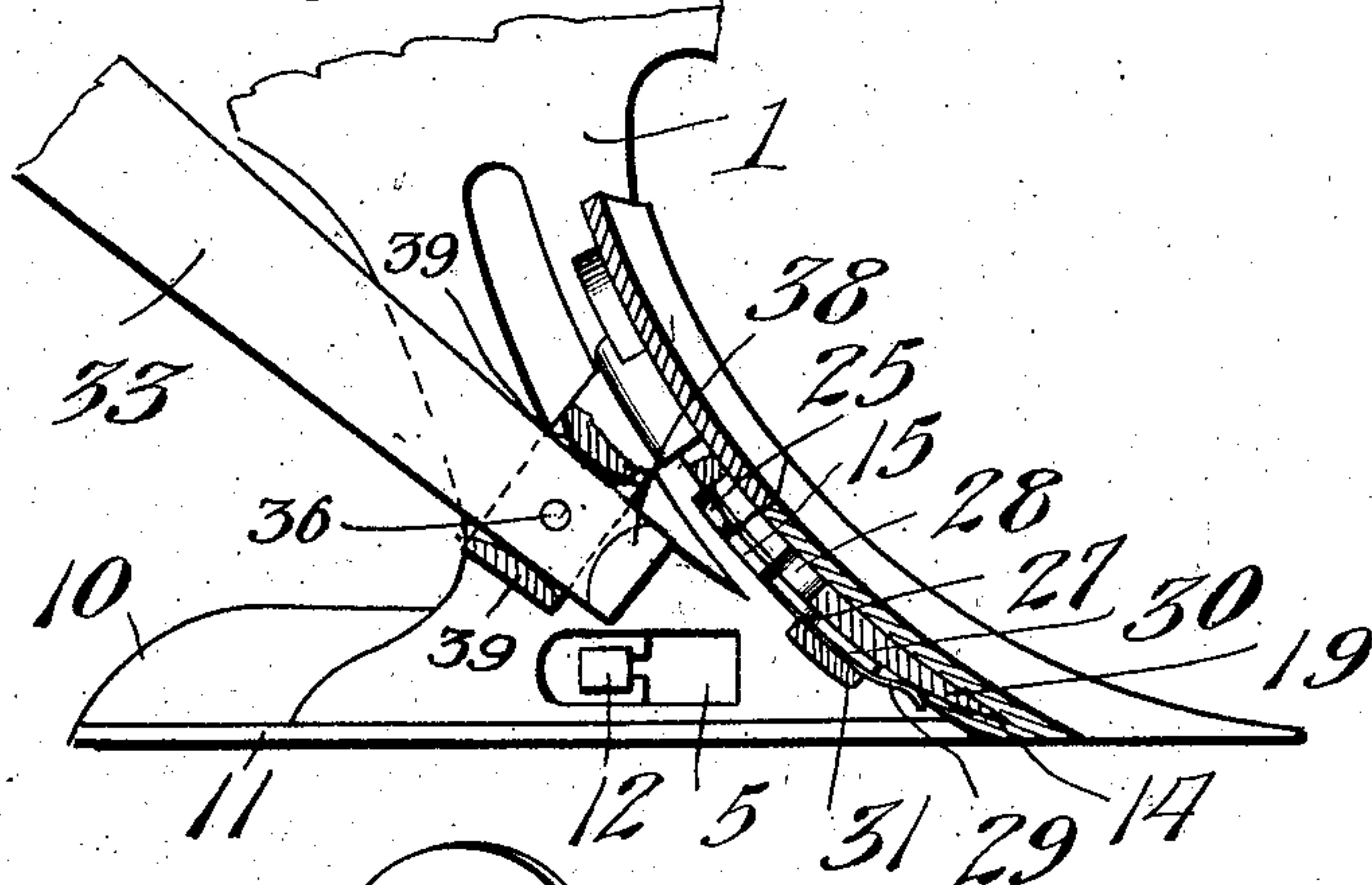


Fig. 9.

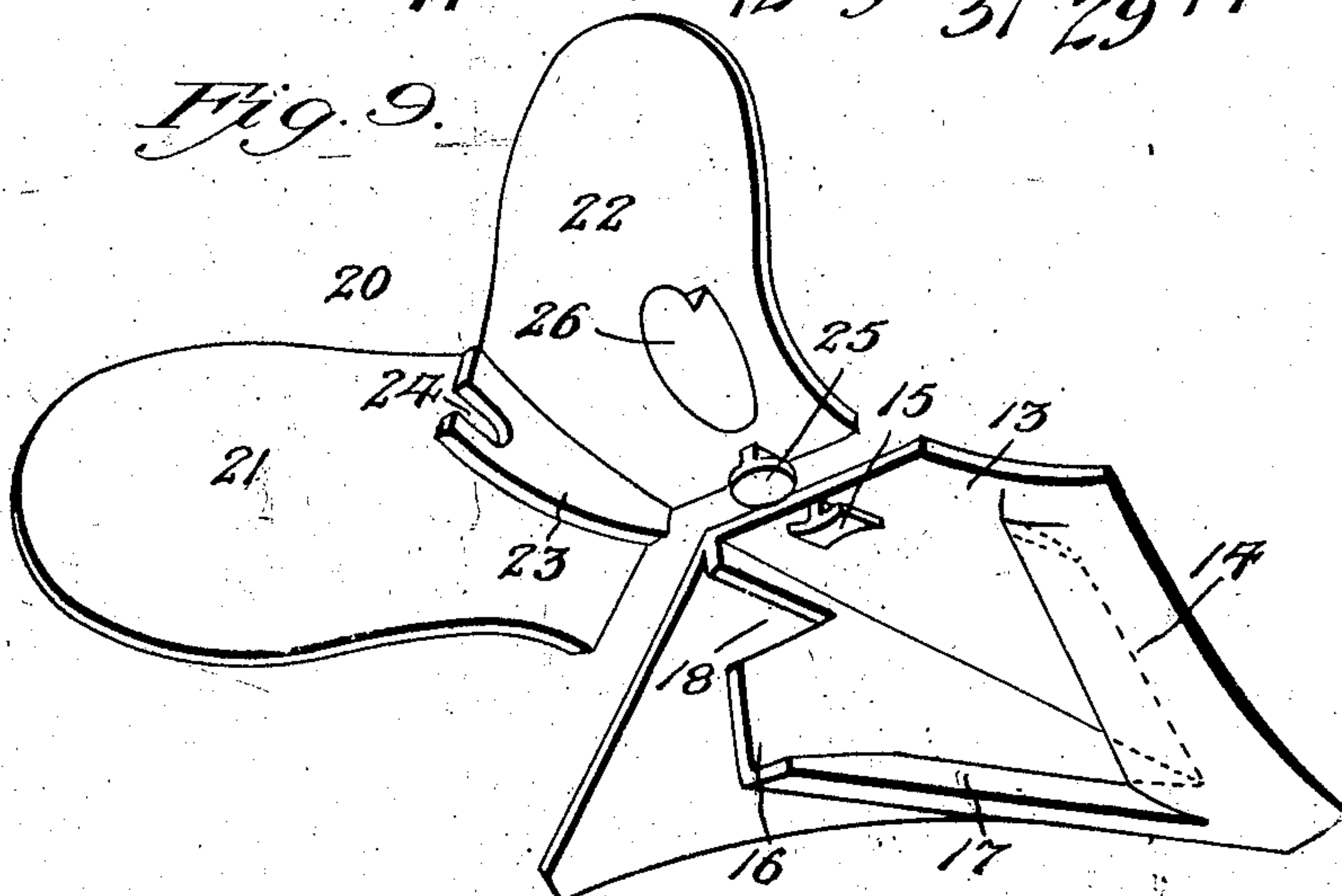


Fig. 10.

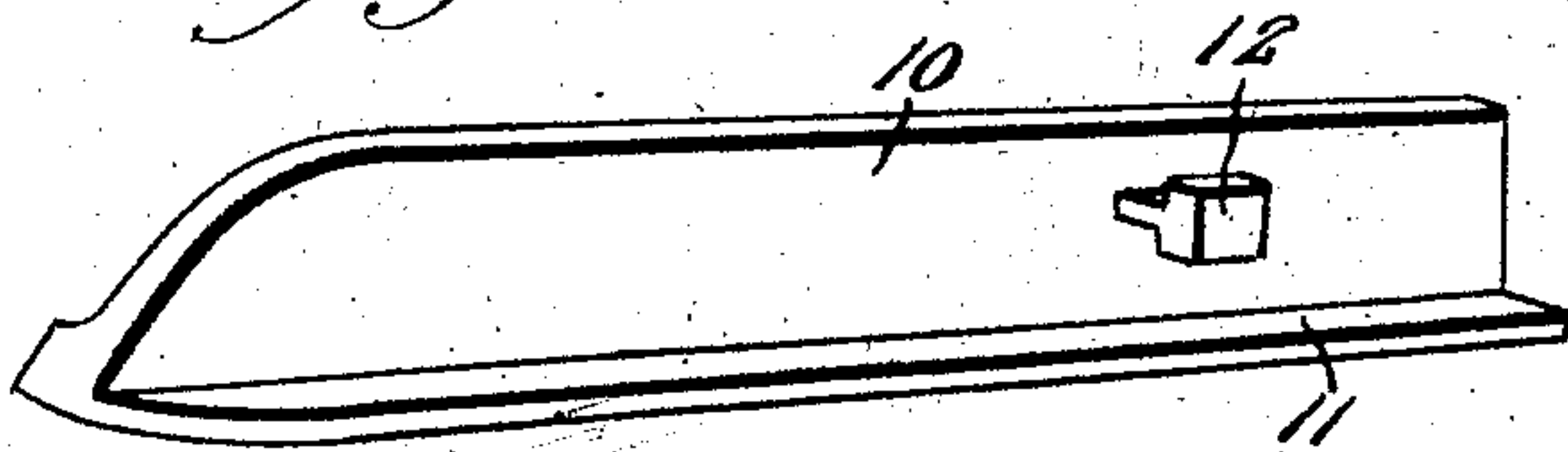
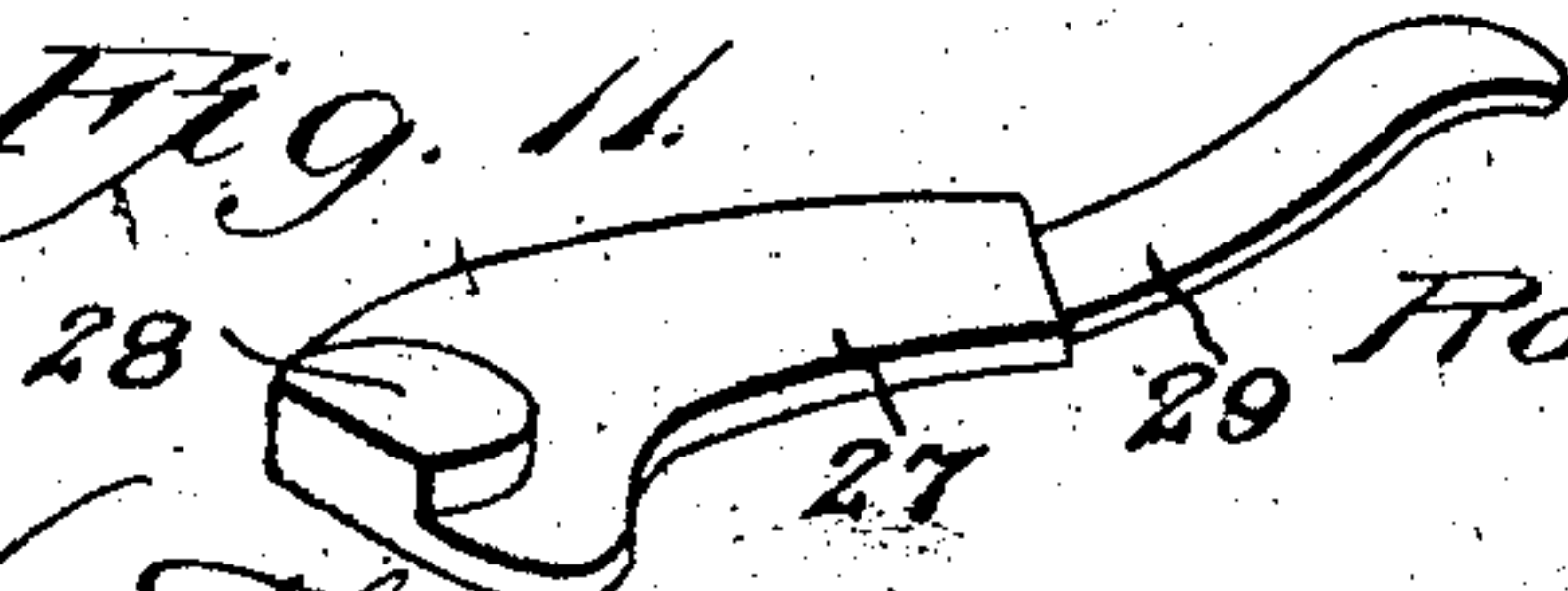


Fig. 11.



Inventor

Robert Lee Kearney,

Witnesses

Wm. Koeth
R. S. Elmer

By

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

ROBERT LEE KEARNEY, OF GREENVILLE, NORTH CAROLINA,

PLOW.

No. 815,092.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed December 14, 1904. Serial No. 236,839.

To all whom it may concern:

Be it known that I, ROBERT LEE KEARNEY, a citizen of the United States, residing at Greenville, in the county of Pitt and State of North Carolina, have invented new and useful Improvements in Plows, of which the following is a specification.

This invention relates to plows, and has for its objects to produce a comparatively simple inexpensive device of this character in which the point, landside, and moldboards are attached to the standard without the use of bolts or the like and one wherein the said parts may be readily detached as circumstances may require and as will more fully appear hereinafter.

A further object of the invention is to provide for the attachment of the handles to the plow without the employment of bolts and to provide a locking-key which will retain all of the parts of the plow-blade in position and one which is readily operable for releasing and permitting removal of the parts.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of a plow embodying the invention. Fig. 2 is a similar view of the plow viewed from the opposite side. Fig. 3 is a reverse plan view of the plow. Fig. 4 is a perspective view of the plow-standard stripped. Fig. 5 is a rear elevation of the same. Figs. 6 and 6^a are perspective views of the handles. Fig. 7 is a perspective view of the locking-pin. Fig. 8 is a sectional elevation taken on the line 8 8 of Fig. 3. Fig. 9 is a perspective view of the plow-point and moldboard viewed from beneath. Fig. 10 is a perspective view of the landside. Fig. 11 is a perspective view of the locking-key.

Referring to the drawings, 1 designates a plow-standard provided at its forward edge with a laterally-extending flange 2, having a longitudinal keyhole-slot 3, there being provided at the lower end of the standard and on the inner or land side a horizontal recess 4, at the longitudinal center of which and formed in the standard there is a keyhole-slot 5. The standard is also provided upon the inner or land side with a square-headed projection or lug 6 and at its upper end with a forward hollow portion or head 7 and at its rear end with a vertical slotted guide 8, the transverse walls of which are provided with a se-

ries of vertically-spaced opposite perforations 9 for a purpose which will later appear.

Designed to seat within the recess 4 is a removable landside 10, having at its lower normally horizontal edge a longitudinal flange 11, which engages beneath the lower edge of the standard, and upon its normally inner face a headed engaging member or lug 12, designed to enter the slot 5 for retaining the landside in place, the plow being also equipped with a point or share 13, having on its under face a recess 14 for the reception of the normally lower edge of the flange 2 and a headed engaging member or lug 15, designed to enter the slot 3 for engagement with the standard-flange, whereby the point is detachably secured in place, while upon the under side of the share is formed a central longitudinally-extending and vertically-depending web or partition 16, provided at its lower edge with a horizontal laterally-projecting flange 17, designed to engage beneath the lower edge of the standard and form a forward continuation of the landside 10. The partition 16 has at its rear end a substantially V-shaped recess 18, adapted to receive the correspondingly-shaped end 19 of the standard to thus hold the share steadily in position.

Formed to fit upon the standard 1 and normally above the share 13 is a double moldboard 20, having wings or blades 21 22, centrally between which and on the under side of the moldboard is provided a web or flange 23, projecting at right angles to the plane of the moldboard, and provided at its upper end with a recess or seat 24, adapted for engagement with the headed lug 6, the moldboard being also provided upon the blade 22 with a headed engaging member or lug 25, adapted to fit within the slot 3, and with a recessed engaging portion or lug 26, designed to receive the outer edge of the flange 2, the parts 6, 25, and 26 serving to maintain the moldboard in secure detachable engagement with the standard.

In practice the parts are assembled in the order as above described by engaging the lug 12 on the landside with the slot 5, next fitting the moldboard onto the standard with the lug 6, seated in the recess 24, the lug 25 in the slot 3, and the outer edge of the flange 2 in the recessed lug 26, and finally arranging the point in position on the standard with the lower edge of the flange 2 seated in the recess 14, the flange 17 beneath the lower edge of

the standard, the projection 19 in the recess 18, and the headed engaging member 15 in the slot 3 beneath the headed lug 25, whereby the moldboard 20 will be fixed against vertical movement upon the standard.

After the parts have been positioned as just described they are secured in place by means of a locking member or key 27, provided at its normally upper end with a laterally-projecting lug 28 and at its other or normally lower end with a forwardly-projecting spring 29, the body of the key being adapted to enter a socket 30, formed between the inner face of the flange 2 and a bridge-piece 31, attached to the latter, while the lug 28 enters the enlarged or circular portion of the keyhole-slot 3 beneath the lugs 15 and 25. The key 27 is securely held in place, owing to the bowed spring 29 bearing upon the inner face of the flange 2, while the lug 28 serves to prevent movement of the lugs 15 and 25 longitudinally of the slot 3, and consequently the detachment of the point of the moldboard.

The plow is equipped with a pair of handlebars 32 33, each provided between its ends with a series of spaced perforations 34, designed to register relatively when the handles are in place, while the handle 32 has at its normally lower end a perforation 35 for the reception of a pin or stud 36, projecting from the outer or furrow side of the standard within a substantially rectangular boxing 37, formed by an angular strap fixed at its ends to the standard, there being provided on the lower end of the handle 33 a laterally-projecting portion or flange 38, adapted for engagement beneath the lower edge of the strap or boxing 37. The inner face of the flange 38 is outwardly curved in a direction transversely of the handle, while the inner faces of the end walls of the boxing 37 are inwardly and reversely curved, as at 39, thus to permit adjustment of the handles for varying their upward inclination, the handles being secured in their adjusted positions by means of a through-bolt or pin 40, entered through the perforations 9 and 34.

Disposed within the hollow head 7 is a substantially horizontal draft-beam 41, the rear end of which is perforated transversely and seated in the guideway 8, the perforation in the beam being designed to register with the perforations 9 and 34, whereby the forward end of the beam may be disposed vertically and the beam secured in its adjusted position by means of the pin 40.

Attached at one end adjacent to the longitudinal center of the beam 41 is a brace-rod 42, having its other end attached to the handle 33 between the ends of the latter.

It is the intention in practice to equip the plow with a plurality of points or shares and moldboards of varying shapes and sizes, which may be readily interchanged to adapt the device for various kinds of work. For exam-

ple, there will be a plurality of shares and moldboards, such as illustrated in Fig. 9, but of different sizes, a plurality of single points and single moldboards of varying sizes, which may be attached to the standard 1 to adapt the device as an ordinary single-moldboard turning-plow and a plurality of colter-points of varying sizes to be attached to the standard when the device is to be employed for turning weeds and the like between cotton or tobacco rows, it being understood, of course, that these various parts will be equipped with attaching members such as heretofore described adapting them for ready detachable engagement with the standard.

From the foregoing it is apparent that I produce a simple inexpensive device which will be wholly free from bolts or analogous fastening devices and one wherein the parts of the plow will be maintained in secure engagement with the standard, but may be readily removed therefrom by disengaging the key 27, which serves as a common means for maintaining all of the parts in engaged position. In attaining these ends it is to be understood that various minor changes in the details herein set forth may be resorted to without departing from the spirit or scope of the invention.

Having thus fully described the invention, what is claimed as new is—

1. In a plow, a standard, moldboard and share, said standard having a keyhole-slot and the moldboard and share being provided with headed engaging members designed to enter said slot for detachably connecting the parts, a socket provided in one of the parts, and a removable locking-key engaged in the socket and having a lug designed to enter said slot for retaining the engaging members therein.

2. In a plow, a standard, a moldboard and a share, said parts being relatively detachable, one of the parts having a keyhole-slot and the others being provided with headed engaging members designed to enter said slot, a key detachably engaged with one of the parts and having a lug designed to seat in the slot to prevent escape of the engaging members therefrom, and means for retaining the key in place.

3. In a plow, a standard having a horizontal and a vertically-disposed keyhole-slot, a detachable moldboard having a headed engaging member adapted to enter the vertical slot, a removable share having a headed engaging member designed to enter said slot beneath the first-named member and together therewith, a landside provided with a headed engaging member adapted to enter the horizontal slot, said share having a flange adapted to lie in advance and form an extension of the landside, and a locking-key detachably engaged with one of the parts and having a lug designed to seat in the vertical slot

to prevent escape of the engaging members therefrom.

4. In a plow, a standard and a removable
landside, one of said parts being provided
5 with a slot and the other with a headed en-
gaging member to enter the slot for detach-
ably engaging the landside with the stand-
ard, the latter being provided with a verti-
cally-disposed keyhole-slot, a moldboard hav-
10 ing a headed engaging member entered into
said slot, a share also having an engaging
member seated in the vertical slot, said share

being provided with a socket, a locking-key
seated in the socket and having a lug to enter
the keyhole-slot for preventing escape of the 15
engaging members therefrom, and a spring
carried by the key designed to bear on the
share for preventing escape of the key from
the socket.

ROBERT LEE KEARNEY.

Witnesses:

WILLIAM REDMOND,
BARTON N. BOYD.