

No. 695,680.

Patented Mar. 18, 1902.

L. L. FOSS.

PUNCH.

(Application filed July 5, 1901.)

(No Model.)

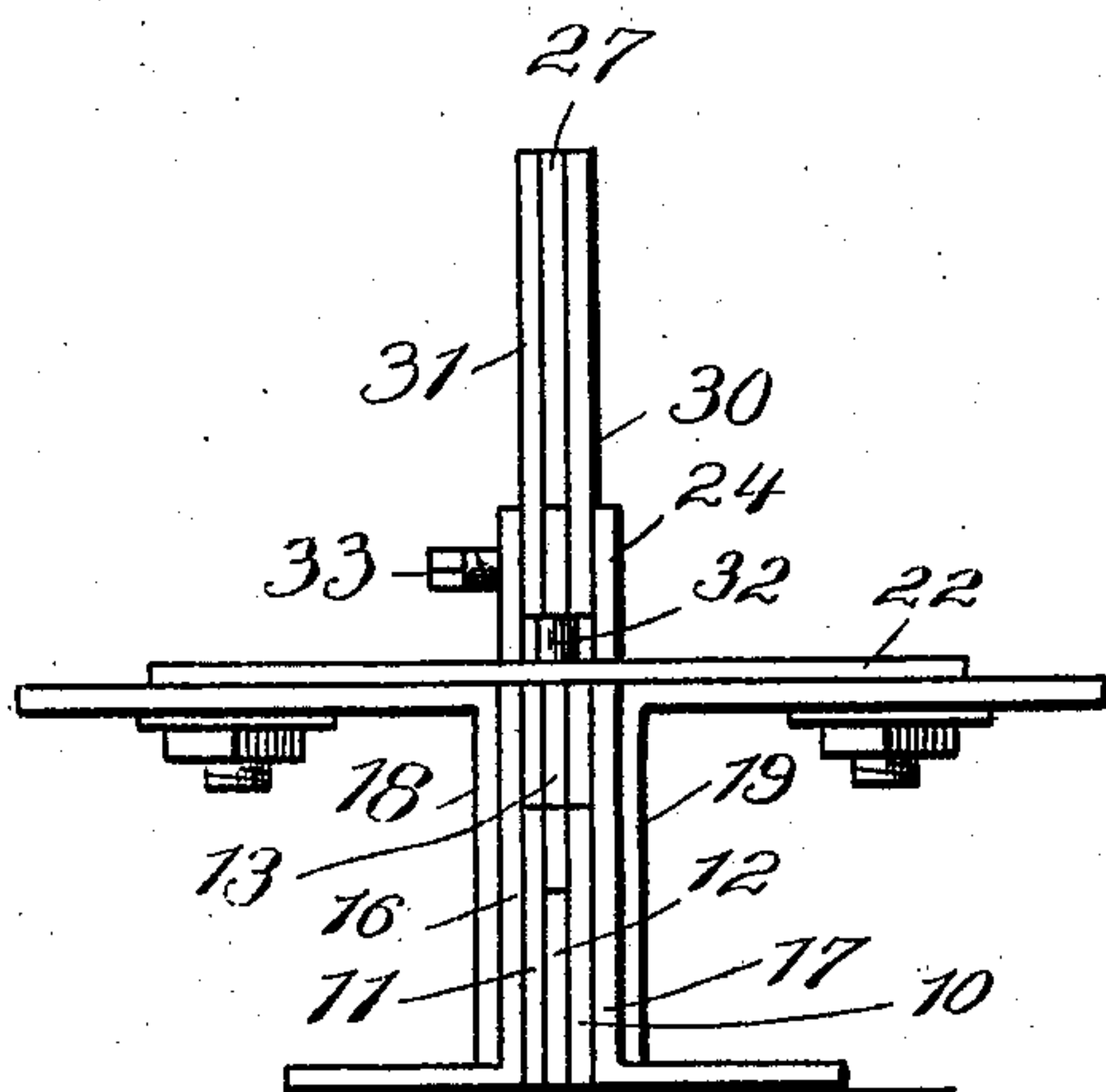
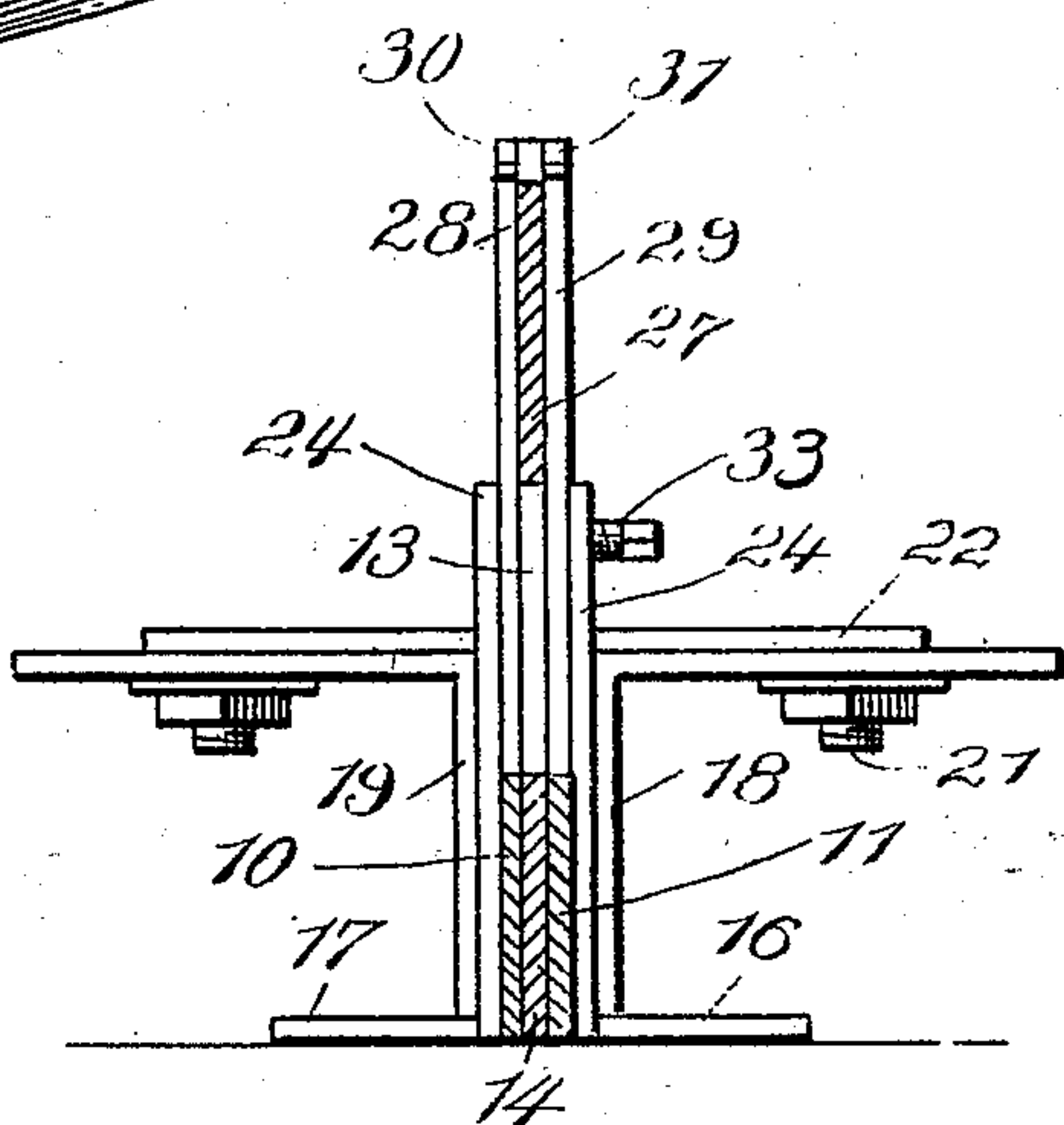
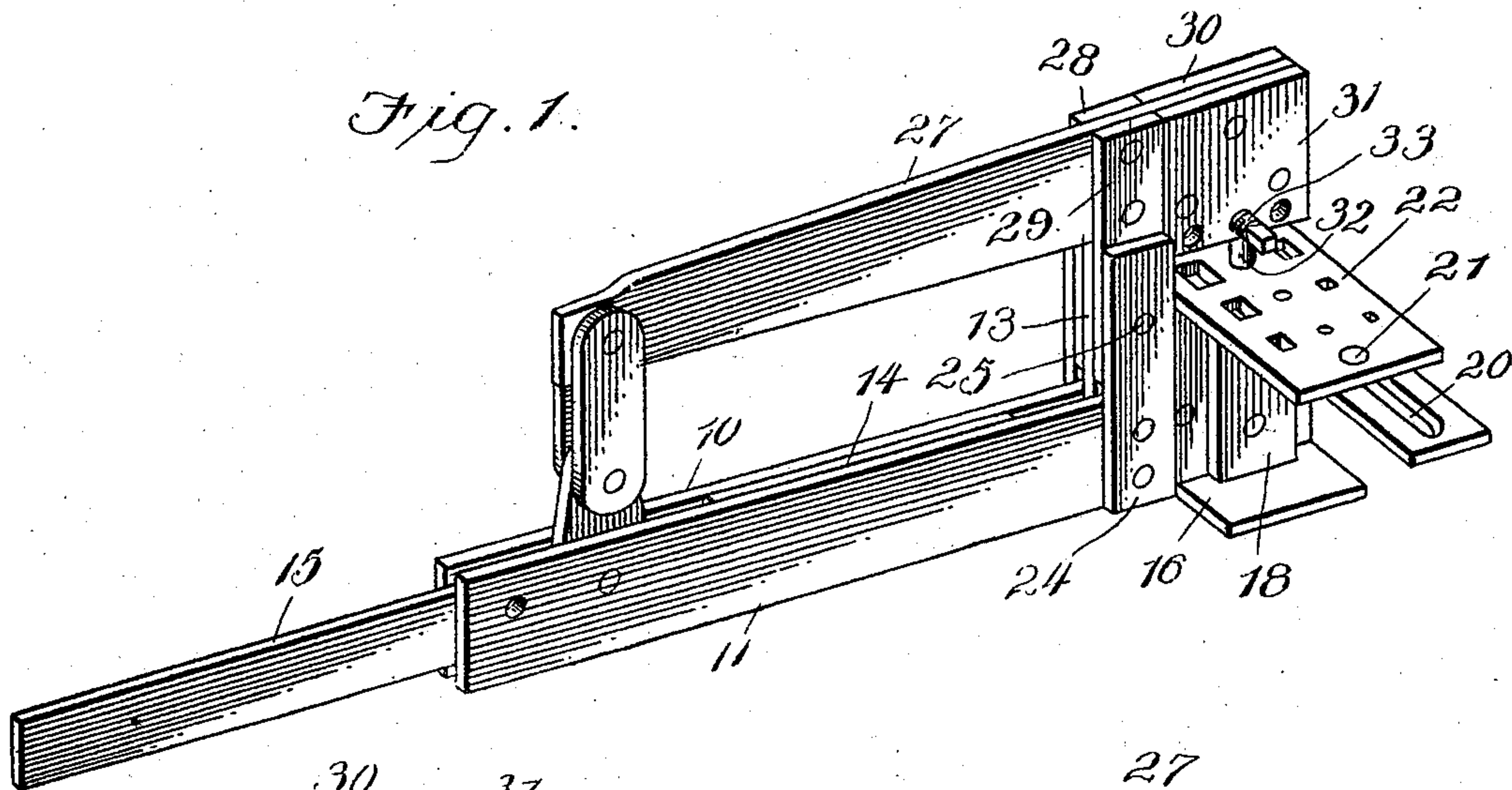
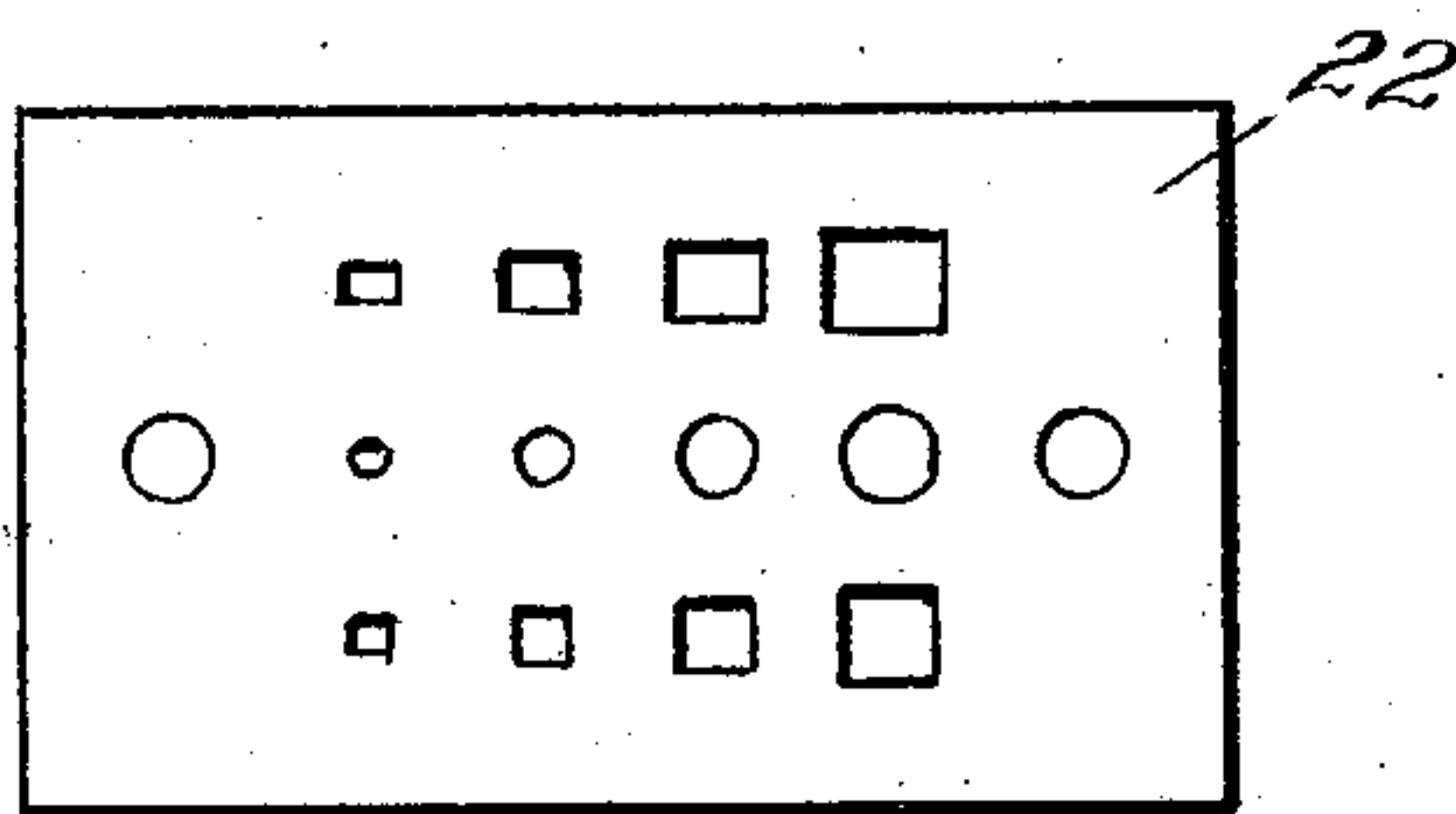


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

LELAND L. FOSS, OF MANASSAS, GEORGIA.

PUNCH.

SPECIFICATION forming part of Letters Patent No. 695,680, dated March 18, 1902.

Application filed July 5, 1901. Serial No. 67,203. (No model.)

To all whom it may concern:

Be it known that I, LELAND L. FOSS, a citizen of the United States, residing at Manassas, in the county of Tatnall, State of Georgia, have invented certain new and useful Improvements in Punches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to punches, and more particularly to the class of metal-punches; and it has for its object to provide a simple, cheap, and durable punch which may be used for operating upon heavy metal, wherein the parts will be held rigidly against displacement.

A further object of the invention is to provide a shiftable table having openings therein corresponding to the different forms of bits and providing means for holding the bits in operative relation to the different series of openings.

Other advantages of the invention will be understood from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing the punch. Fig. 2 is a transverse section taken in the rear of the table. Fig. 3 is a front elevation. Fig. 4 is a plan view of the table.

Referring now to the drawings, there is shown a press including a base, comprising laterally-spaced plates 10 and 11, which are held in spaced relation by a forward intermediate plate 12, a second plate 13, which projects above the plates 10 and 11, and a third plate 14 in the rear thereof. The extreme rear ends of the plates 10 and 11 are held spaced by the angular lever 15, which is pivoted between them. Against the sides of the forward ends of the plates 10 and 11 are riveted angle-plates 16 and 17, which extend above the plates 10 and 11, and at the outer faces of these angle-plates, the feet of which lie in the plane of the lower edges of the plates 10 and 11, are riveted other angle-plates 18 and 19, one member of each of which lies in the same horizontal plane with the upper edges of the first angle-plates. The horizon-

tal members of the second angle-plates have alining longitudinal slots 20, in which are engaged clamping-bolts 21, which are passed through the table 22, which rest upon the angle-plates, as shown. These clamping-bolts when loosened permit of lateral adjustment of the table and when tightened hold the table securely in place.

Against the outer faces of the plates 10 and 11 are riveted or bolted upright plates 24, which aline transversely with the plate 13, and through these alining plates is passed a pivot-pin 25. This pin forms a pivot for the jaw or lever of the punch. This upper lever consists of a plate 27, having plates 28 and 29 riveted to the opposite sides thereof and extending therebelow between the plate 13 and the plates at the opposite sides thereof where they are arranged upon the pivot-pin referred to.

Secured against the side face of the upper lever at the opposite end thereof and above the table are plates 30 and 31, which extend below said lever and form the head of the punch, and in the interspace between the depending portions of these plates are received the heads of the different punch-bits 32, which are held securely by means of a set-screw 33, engaged with a threaded perforation in one of the plates.

Upon referring to the drawings it will be noted that the table is provided with three rows of openings, the different rows extending transversely of the punch, while the head of the punch has three perforations, which interchangeably receive the set-screw, so that a bit may be held in operative relation to any one of the lines of the openings. The openings, as will be seen, are of different sizes, and some have different shapes to correspond to the different punch-bits. Thus by shifting the table and properly positioning the bit there may be provided cooperating dies, which may be operated to punch desired shapes and sizes.

It will be understood that in the present machine there is a high leverage, secured by the use of toggle connections between the two levers, while the construction is most rigid.

In practice modifications to the specific construction may be made and any suitable materials and proportions may be used for the

various parts without departing from the spirit of the invention.

What is claimed is—

1. A punch comprising a base including
5 spaced plates, angle-plates secured against
the side faces of the first-named plate and ex-
tending thereabove, additional angle-plates
secured to the first angle-plates and having
10 horizontally-disposed slotted members form-
ing a table-support, a table disposed upon
the angle-plates and having clamping-bolts
passed through the slots thereof to permit of
adjustment of the table, said table having
15 laterally-extending series of openings, and a
movable head adapted to hold the punch-bits
interchangeably.

2. A punch comprising a base including
spaced plates, having a spacing-plate dis-
posed therebetween and projecting there-
20 above additional plates secured against the

outer faces of the base-plates and projecting
thereabove, a lever having plates disposed
against its opposite sides and extending there-
below and between the spacing-plate and the
plates against the outer face of the base-plate, 25
additional plates secured against the side face
of the upper lever and extending therebelow,
one of the plates having threaded perforations
to receive a clamping set-screw to hold the
bits between the said plates, a table mounted 30
upon the base, and a lever pivoted between
the base-plates and having linked connec-
tions with the upper lever.

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

LELAND L. FOSS.

Witnesses:

W. F. BARNETT,
J. B. BREWTON.