

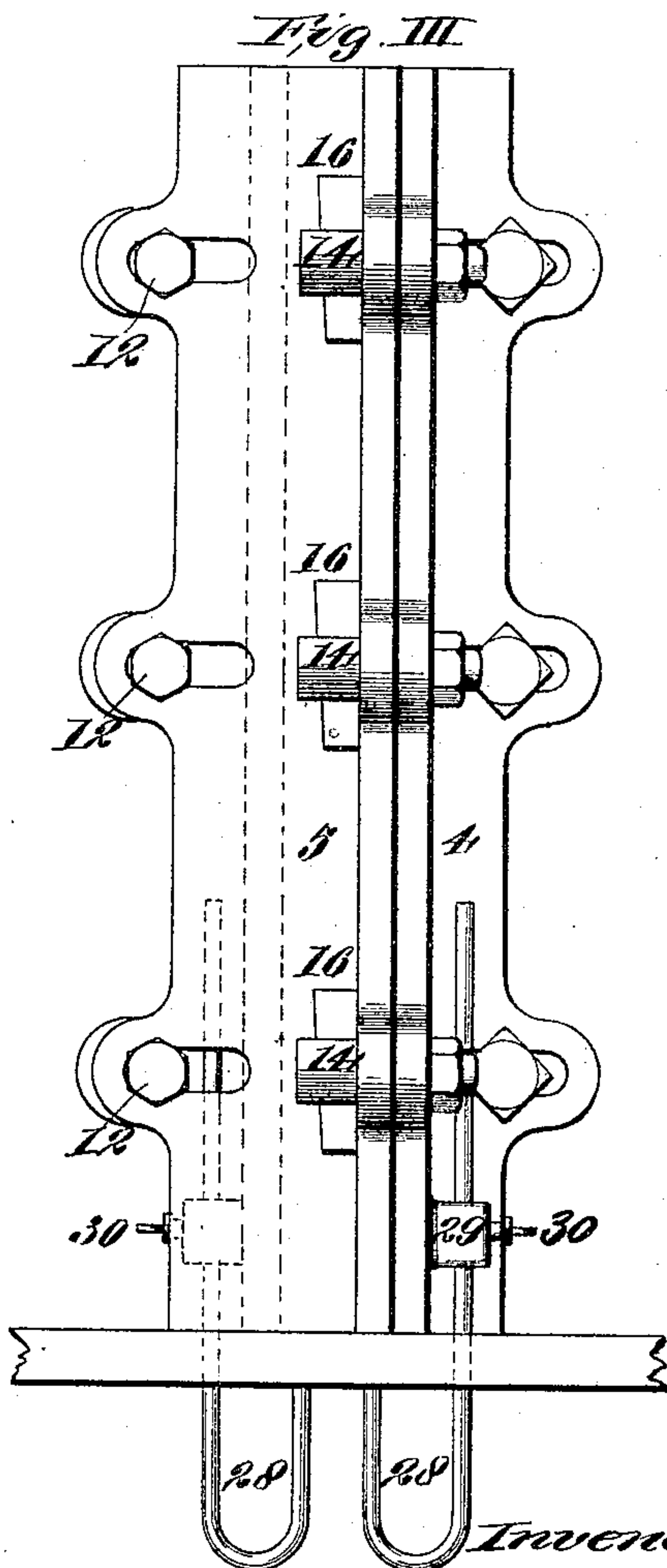
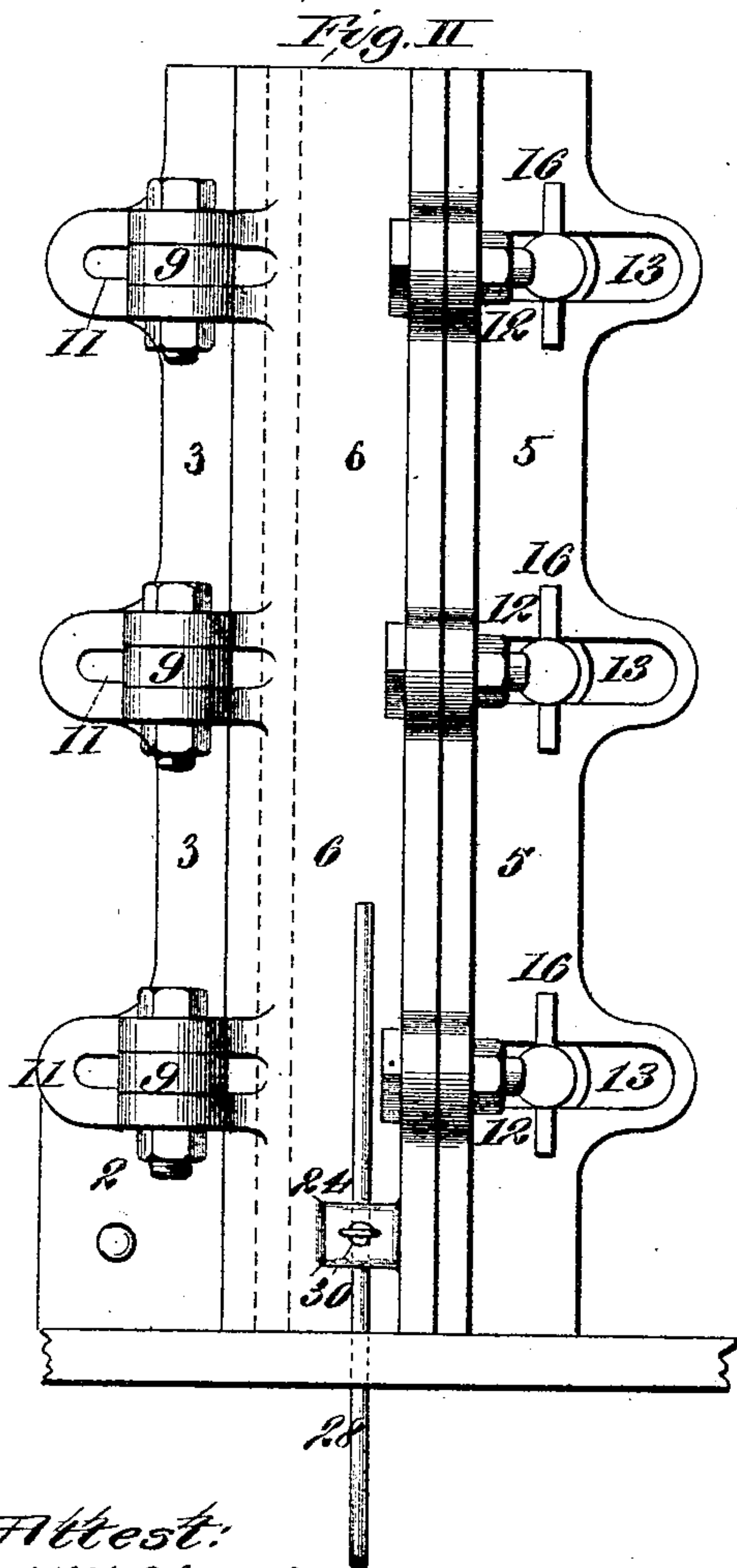
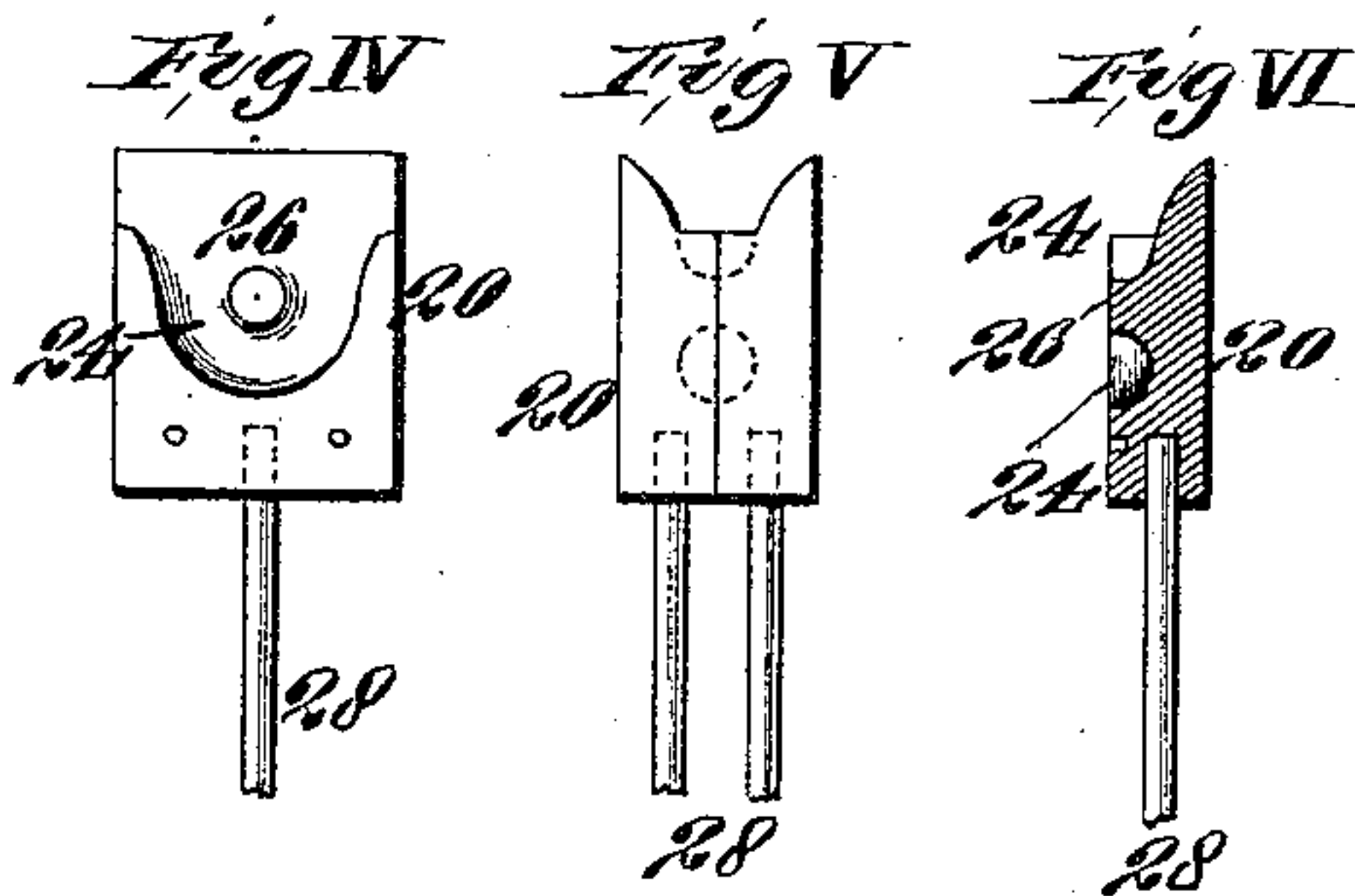
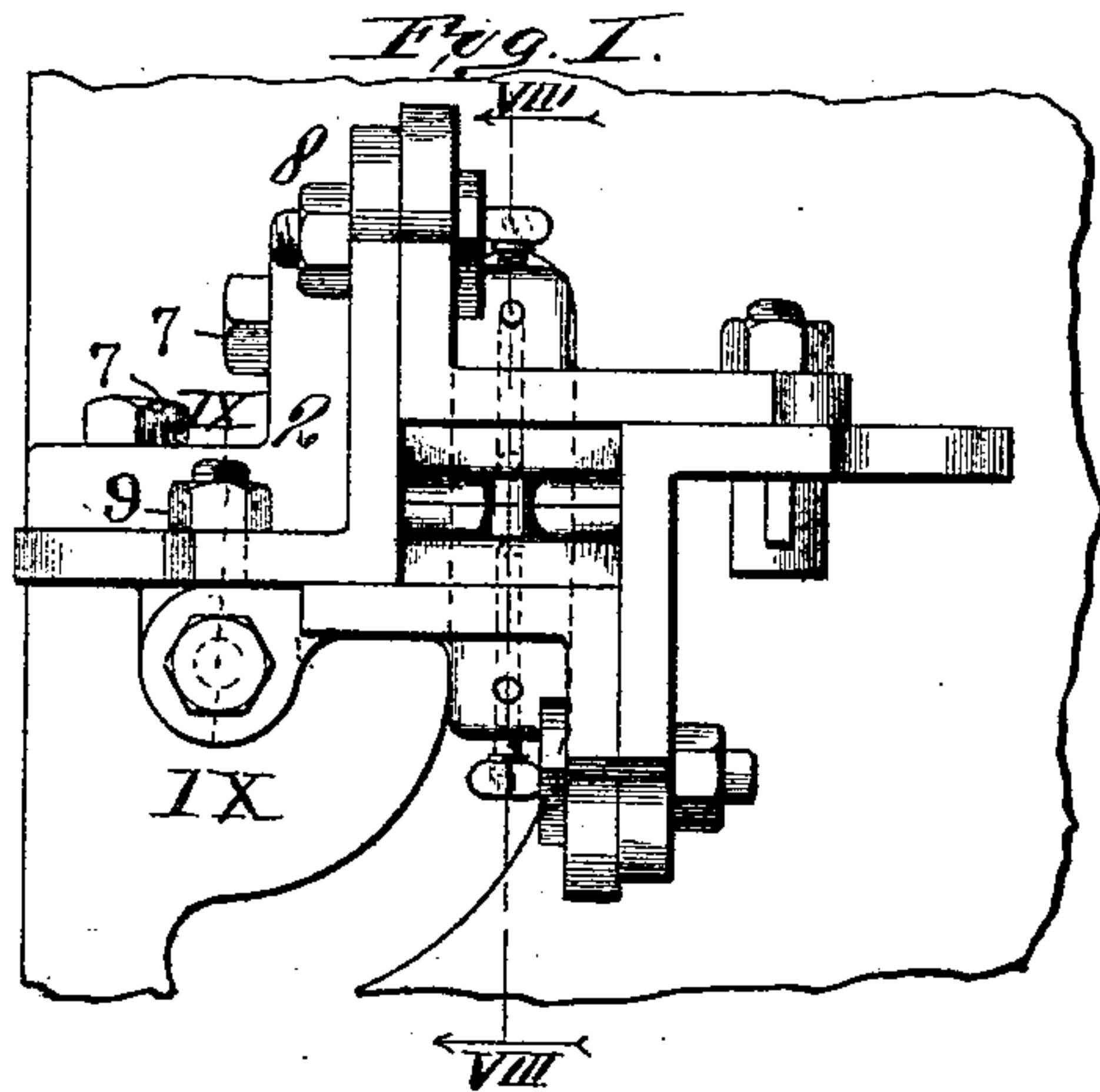
(No Model.)

2 Sheets—Sheet 1.

J. RAMMING.
MOLD.

No. 529,309.

Patented Nov. 13, 1894.



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By Knight Bros.

(No Model.)

2 Sheets—Sheet 2.

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Fig. VII

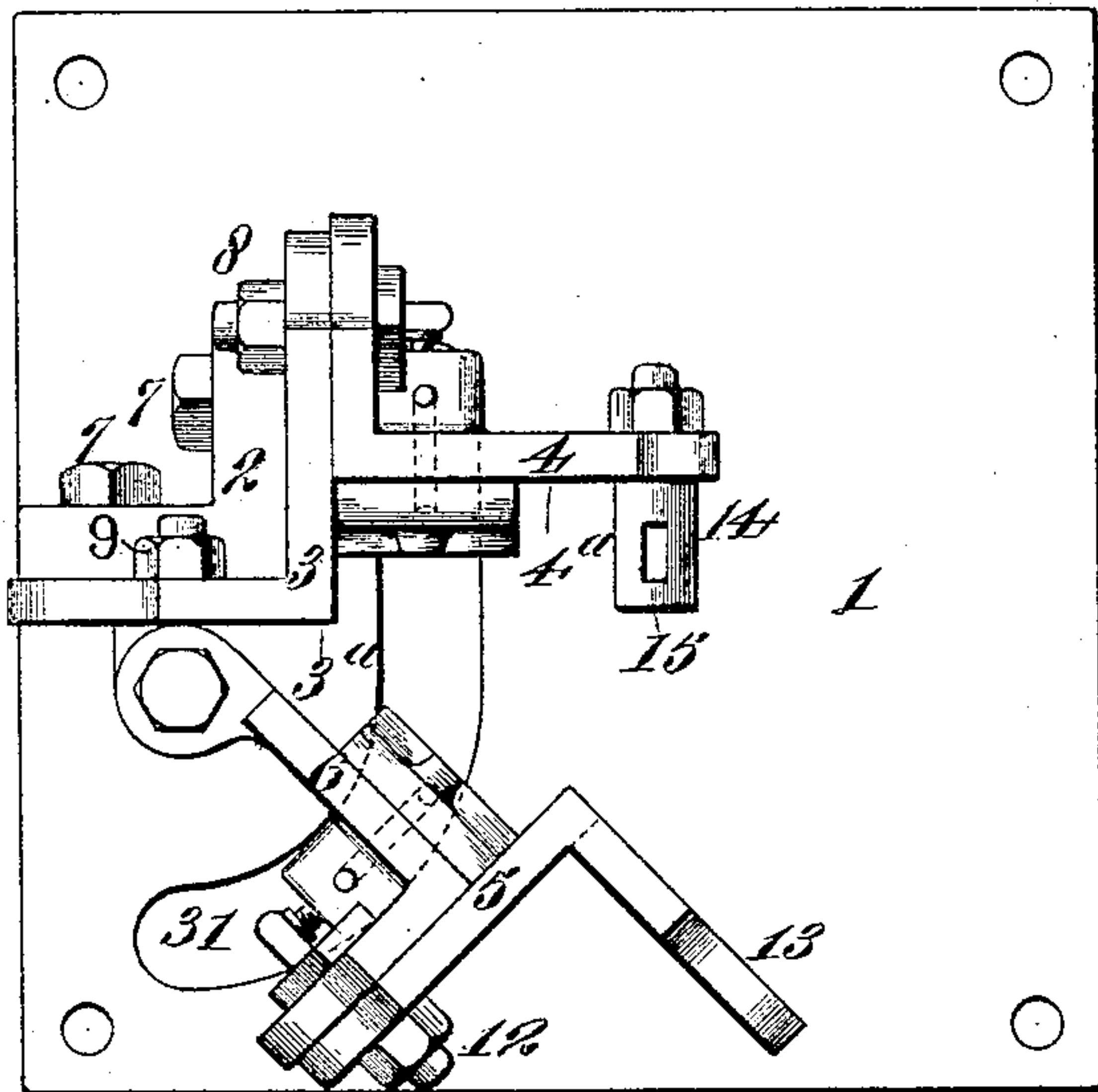


Fig. VIII

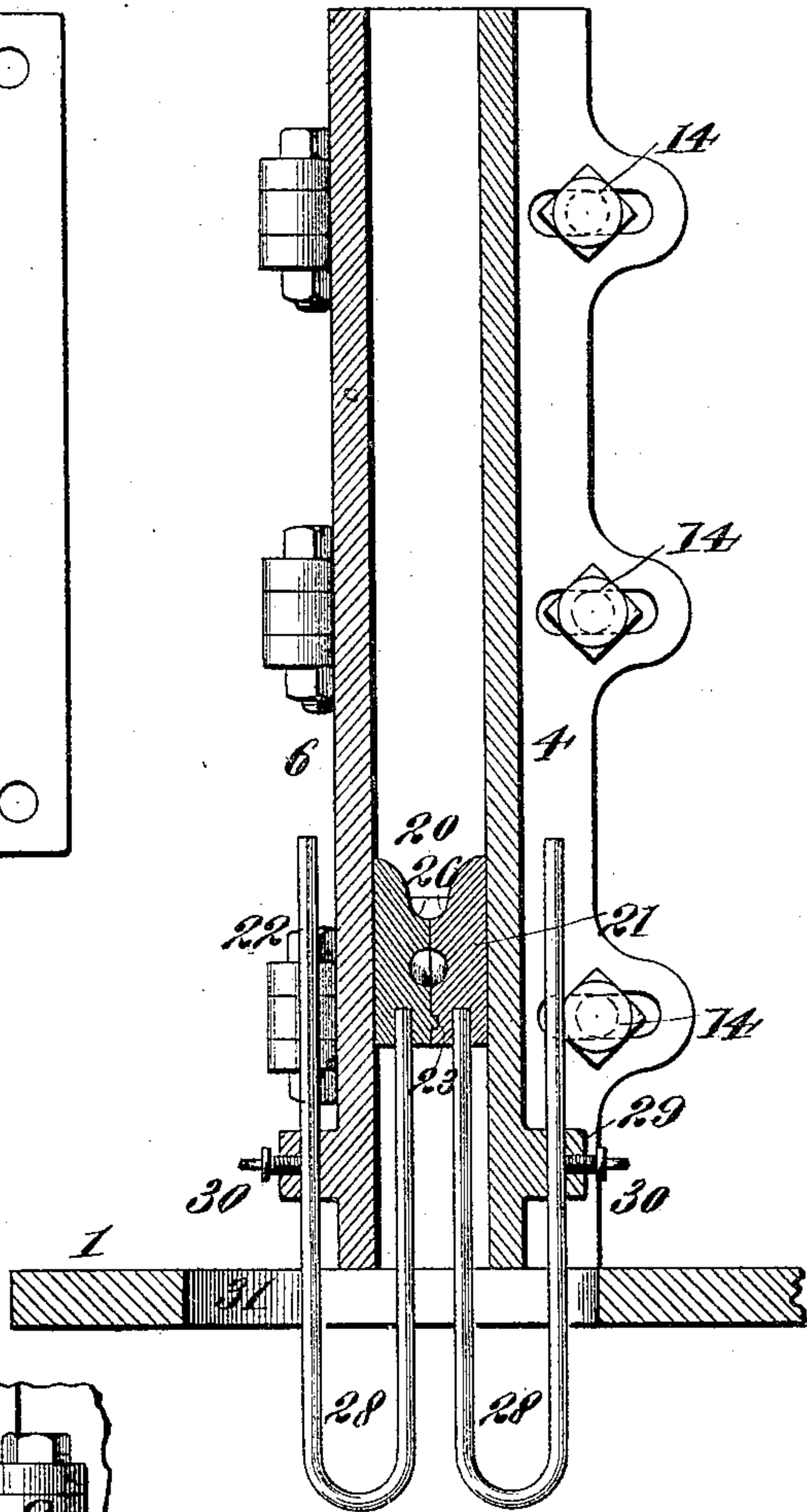


Fig. XII Fig. XI

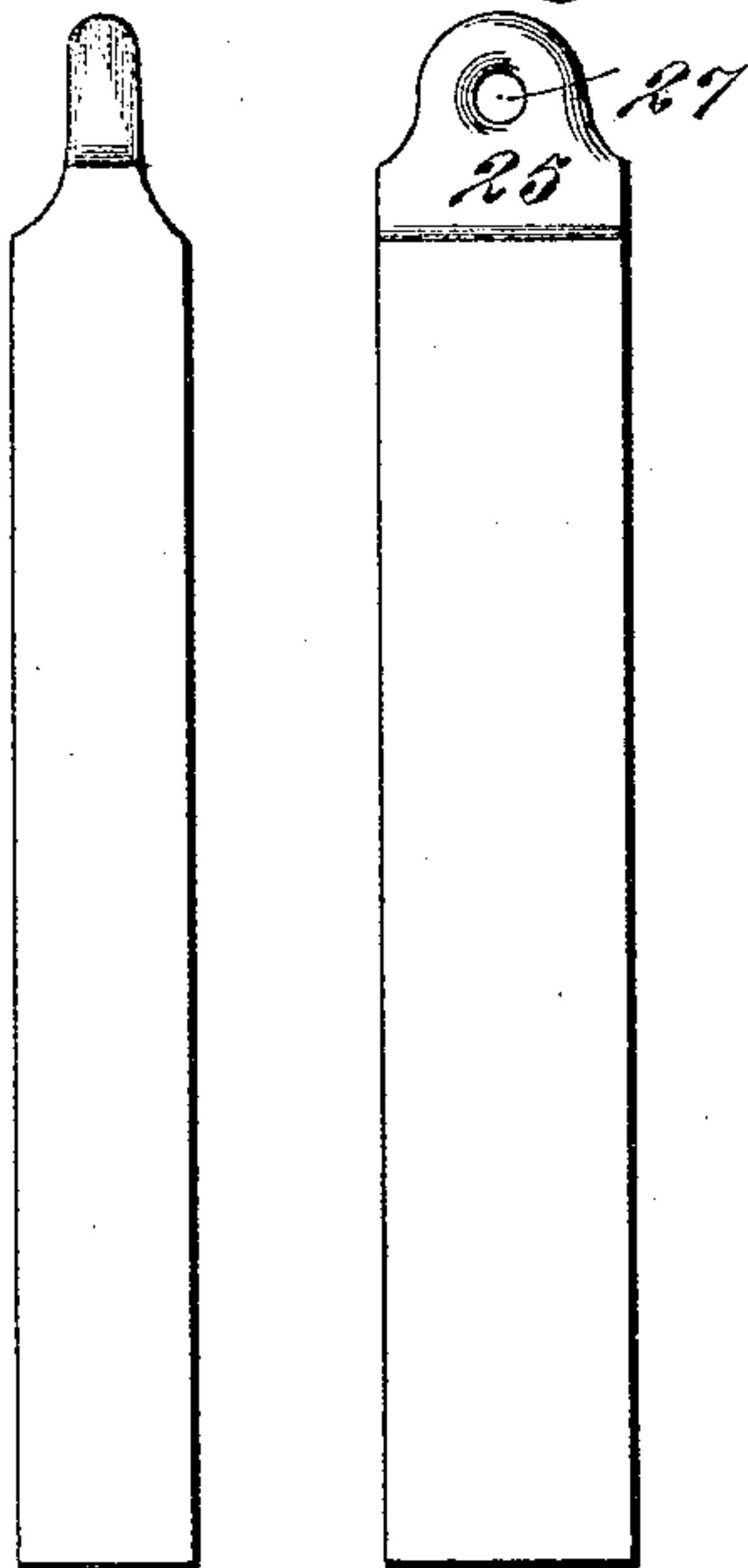


Fig. IX

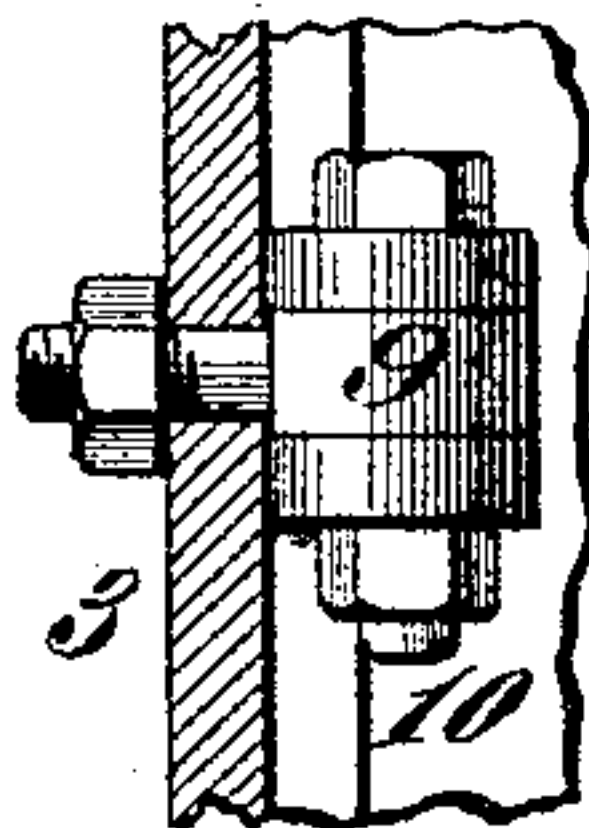
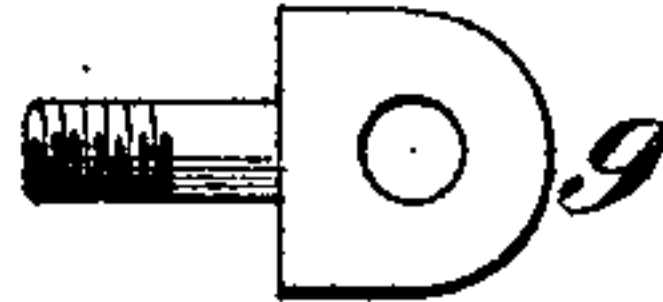


Fig. X.



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UNITED STATES PATENT OFFICE.

JOHN RAMMING, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE NATIONAL
LEAD COMPANY, OF JERSEY CITY, NEW JERSEY.

MOLD.

SPECIFICATION forming part of Letters Patent No. 529,309, dated November 13, 1894.

Application filed March 10, 1894. Serial No. 503,138. (No model.)

To all whom it may concern:

Be it known that I, JOHN RAMMING, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Molds, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to an improved mold, well adapted for casting sash-weights, but which may be used for other purposes; and my invention consists in features of novelty hereinafter fully described and pointed out in the claims.

Figure I is a top or plan view of my improved mold. Fig. II is a front elevation. Fig. III is a side elevation. Fig. IV is an inside view of one member of the die. Fig. V is an elevation of the die. Fig. VI is a section of one member of the die. Fig. VII is a top view with the mold in its open position. Fig. VIII is a vertical section, taken on line VIII—VIII, Fig. I, and looking in the direction of the arrows. Fig. IX is a section taken on line IX—IX, Fig. I. Fig. X is a view of one of the hinge eye bolts. Fig. XI is a side view of a sash-weight cast in my improved mold; and Fig. XII is an edge view of same.

Referring to the drawings, 1 represents a suitable base or support, having an angle bracket 2 formed upon or secured thereto. The mold proper consists of four angle members 3, 4, 5 and 6. The member 3 is secured to the bracket 2 by means of bolts 7, as shown in Fig. VII. One wing of the member 4 is secured to one wing of the member 3 by means of bolts 8; the inside face 4^a of the member 4 being set back a distance from the corner 3^a of the member 3, and the bolts 8 fit in slots in one of the members 3, 4, so that the member 4 can be moved in a horizontal direction relatively to the member 3. The member 6 is connected to the other wing of the member 3 by means of bolts 9, (see Figs. VII, IX and X,) the heads of the bolts 9 being perforated to provide eyes to receive pintle bolts 10. The shanks of the bolts 9 fit in slots 11, in the member 3, as shown in Fig. II, so that the member 6 may be moved horizontally relative to the member 3. The member 5 is connected

to the wing of the member 6, which is not connected to the member 3, by means of bolts 12; the bolts fitting in slots in one of the members formed after the manner of the slots 11, so as to permit the member 5 to be moved horizontally relatively to the member 6. The wing of the member 5 which is not connected to the member 6 is provided with slots 13, (see Fig. II,) to receive bolts or pins 14 projecting from the member 4, and the pins are slotted at 15 to receive keys 16 when the members are connected. When the members are thus connected, and in their using position, they appear as shown in Fig. I.

After a casting is made, it is removed by opening up the mold, as shown in Fig. VII, and this is permitted by removing the keys 16, and swinging the members 5 and 6 around on the hinges 10, as shown in Fig. VII. After the casting is removed, the parts are brought together again, ready for another casting to be made.

In the lower part of the mold is a die 20, consisting of two members 21 and 22. One of the members is provided with dowel projections 23, fitting in recesses in the other member, to prevent vertical displacement of one of the members with relation to the other.

The inner faces of the members are cut out, as shown at 24, Fig. IV, to form the ends on the sash-weights. On the inner face of each member, a short distance above the bottom of the cavity 24, is a projection 26. The inner faces of the two projections come together, as shown in Fig. VIII, and form the eye 27 of the sash-weight. The member 21 of the die is carried by the section 4 of the mold, and the member 22 is carried by the section 6 of the mold, so that when the mold is opened out, as shown in Fig. VII, the two members of the die separate, permitting the removal of the weight.

To permit of longer or shorter sash-weights being cast in the same mold, I support the members of the die upon U-shaped rods 28, one leg of each rod extending up and being connected to a member of the die, and the other leg of each rod being extended up outside of the mold, and passing through a perforated lug 29 on its member of the mold.

The rods are held in the lugs 29 by set screws 30. By loosening the set screws 30, the die 20 can be raised or lowered, and then by tightening the set screws again, the die will be
5 held to its adjustment. In this manner any desired length of sash-weight may be cast in the same mold.

The base 1 is provided with a semi-circular slot 31 for the passage of the rod 28, which is
10 carried by the hinge member 6 of the mold, and the rod 28, which is secured to the member 4 of the mold, also extends through the slot, as shown in Fig. VIII.

By adjustably connecting the sections together as described, the sectional inside area
15 of the mold may be increased or diminished at will, so that any sized weight in cross section may be cast. Of course if the size of the mold is changed, a die to fit the size would
20 have to be substituted for the one used before the change was made.

I claim as my invention—

1. A mold comprising a suitable base 1, an angle bracket 2 secured to the base, the angle
25 member 3 bolted to the bracket, the angle member 4 having one wing adjustably secured by bolt and slot connection with one

wing of the member 3, the eye-bolt 9 adjustably secured to the other wing of the member 3, the angle member 6, the pintle-bolts 10
30 by which one wing of the member 6 is hinged to the eye-bolts, the angle member 5 having one wing adjustably secured by bolt and slot connection with the other wing of the member 6, key-bolt and slot connection between
35 the other wing of the member 4, and the other wing of the member 5, and a die adjustable in the mold; substantially as described.

2. A mold comprising a suitable slotted base 1, and angle bracket 2, the angle members 3 and 5, the angle members 4 and 6 having perforated lugs 29, means for connecting
40 the angle members, the die 20 having two members 21, 22, means for inter-locking the members, the U-shaped supporting rods 28
45 for the members of the die, and the set-screws for securing the rods to their adjustment in the perforated lugs; substantially as described.

JOHN RAMMING.

In presence of—

A. M. EBERSOLE,
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