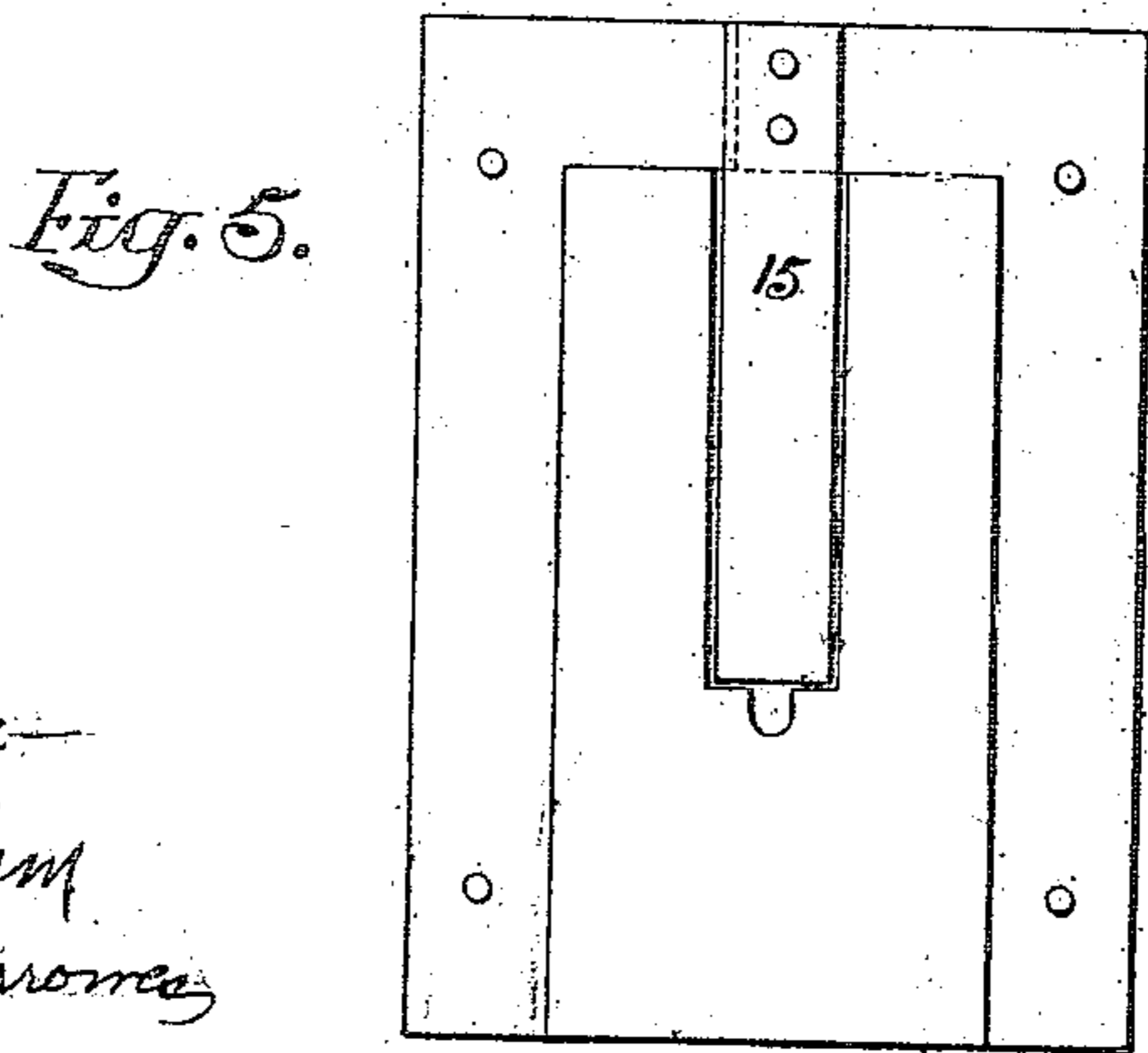
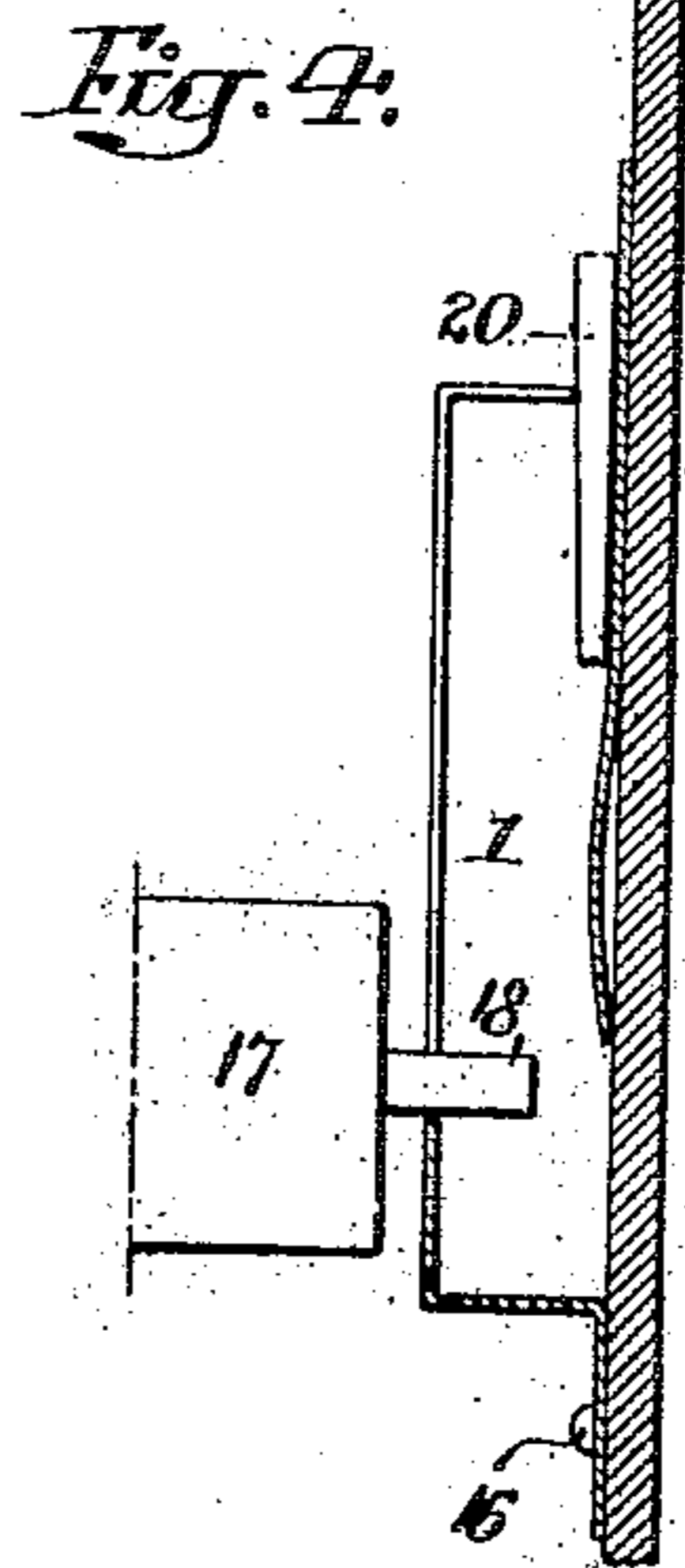
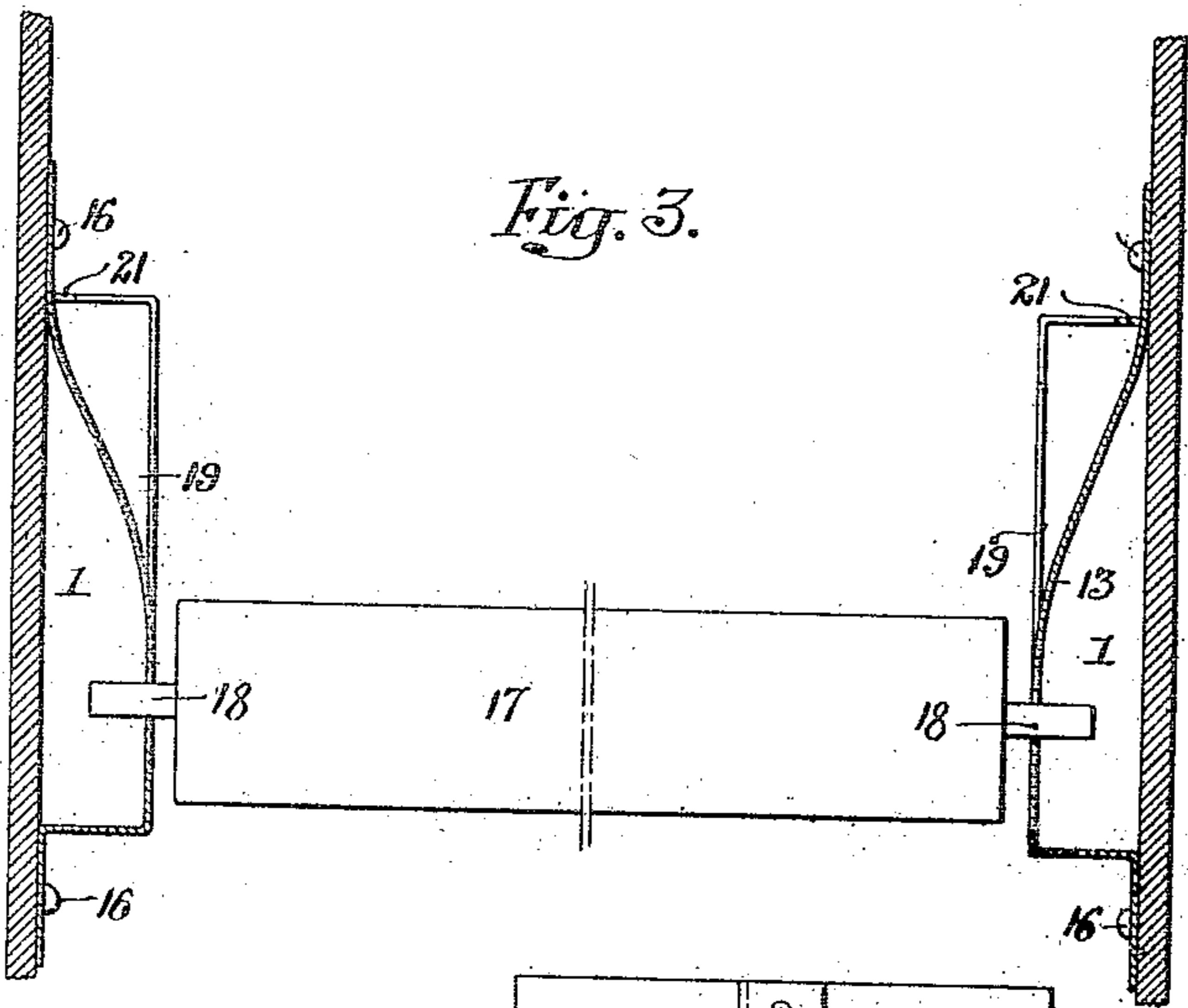
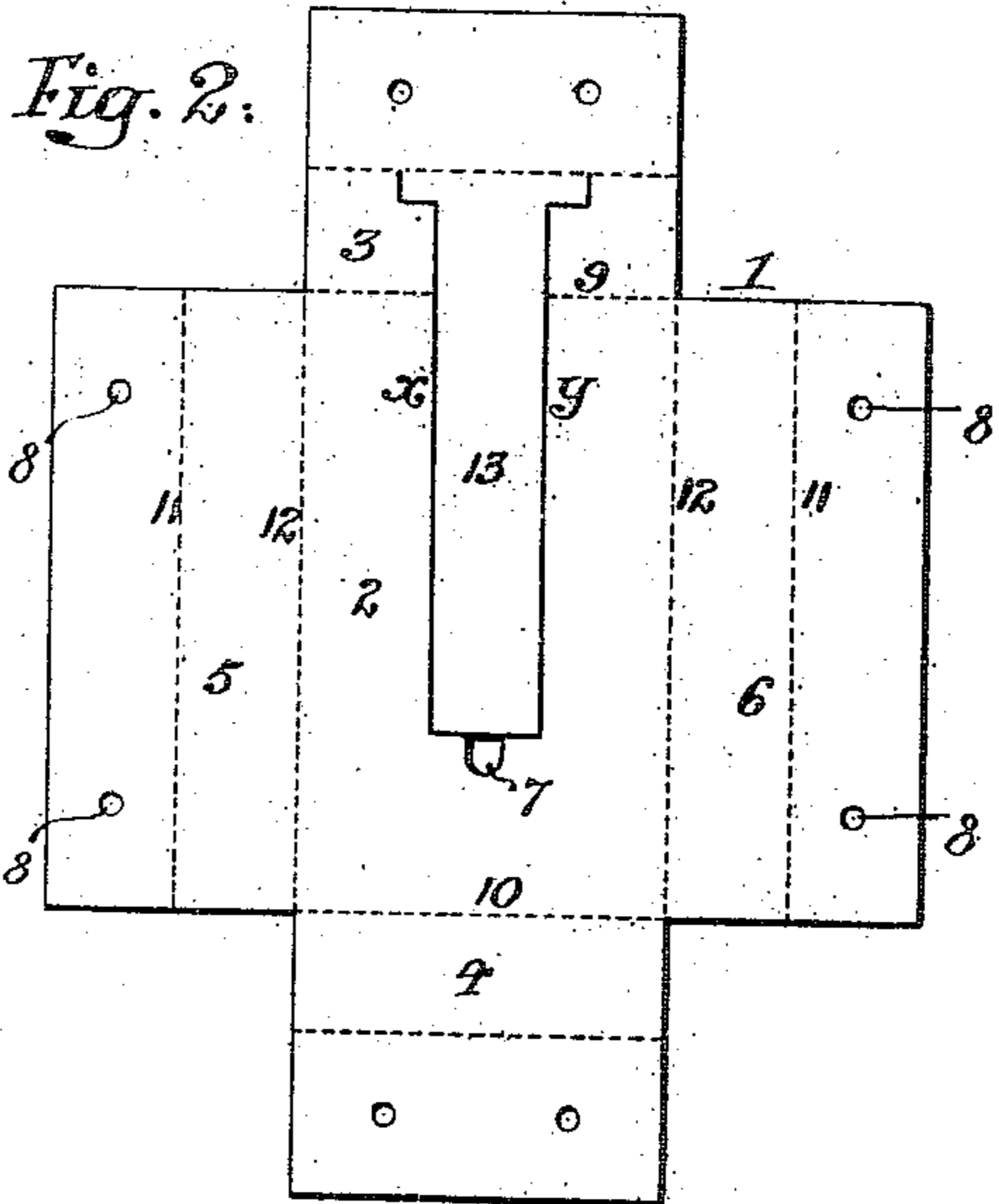
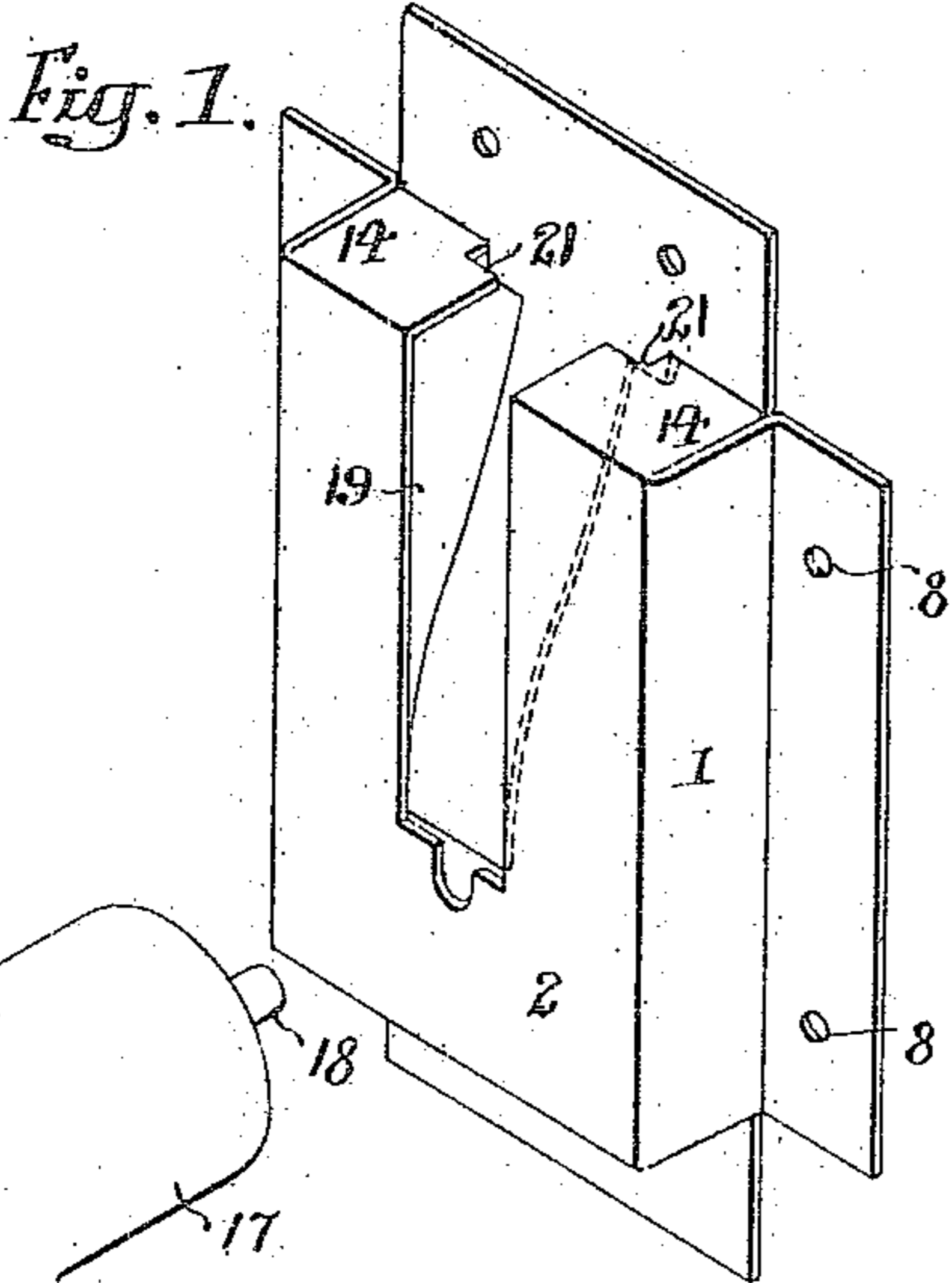


W. S. ALDHOUSE.
 SOCKET FOR RETAINING THE SPINDLES OR PINS AT THE ENDS OF ROLLERS.
 APPLICATION FILED NOV. 20, 1909.

953,657.

Patented Mar. 29, 1910.



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UNITED STATES PATENT OFFICE.

WALTER STEPHEN ALDHOUSE, OF MANCHESTER, ENGLAND.

SOCKET FOR RETAINING THE SPINDLES OR PINS AT THE ENDS OF ROLLERS.

953,657.

Specification of Letters Patent.

Patented May 29, 1910.

Application filed November 20, 1909. Serial No. 529,122.

To all whom it may concern:

Be it known that I, WALTER STEPHEN ALDHOUSE, a subject of the King of Great Britain and Ireland, residing in Manchester, county of Lancaster, England, have invented an Improvement in Sockets for Retaining the Spindles or Pins at the Ends of Rollers, of which the following is a specification.

My invention relates to spindle supports for rollers and spools, which, owing to their functions, frequently require removal from and replacement in their bearings, *i. e.* such rollers as are used for window shades or for merchantable material such as cloth, paper or the like.

The object of my invention is to produce a spindle support that will facilitate the removal and replacement of rollers of the nature mentioned above and which will be constructed in such a manner that it will be durable yet salable at a nominal price. This object I attain in the following manner, reference being had to the accompanying drawing, in which,—

Figure 1, is a perspective view of my invention showing the same cut and formed from one piece of sheet metal; Fig. 2, is a view of the sheet metal blank, cut and ready for forming; Fig. 3, is a sectional elevation showing a roller mounted in the supports; Fig. 4, shows a sectional elevation of one end support, the spring tongue having been forced back free of the spindle; Fig. 5, is a view of a modification showing the spring tongue formed of a separate piece.

Referring to the drawings, the construction of my invention is as follows:

A plate of sheet metal 1 is cut so as to have a central portion 2 and four extensions 3, 4, 5 and 6. The central portion 2 and the extension 3 are cut as indicated in full lines at *x* and *y*; the central portion 2 being punched or cut away at 7 to form a spindle bearing. Each of the extensions is also punched at 8 to provide means of attachment.

In forming my invention from the flat plate indicated in Fig. 2 to the finished article shown in Fig. 1, I first bend the extensions 3 and 4 on the lines 9 and 10 (shown

in dot, Fig. 2) and thus form the top and bottom; then the extensions 5 and 6 are bent on the lines 11 and 12, thus forming the sides. The support or socket in this state will have the tongue of metal 13, which was produced by cutting on the lines *x* and *y*, running parallel with the face or central portion 2. The next step is to bend this tongue 13 toward the face portion 2 as clearly shown in Figs. 1 and 3. The corners 14 may be soldered to form a rigid structure.

In the modification shown in Fig. 5, the spring spindle retaining tongue 15 is shown as a separate piece from the body of the socket.

In its use, my invention is affixed by means of nails or screws 16 to any desired structure, as shown in Fig. 3; the roller 17 to be supported is then inserted from the top and so that the spindles 18 pass down the opening 19 in the central portion 2 and finally rest in the bearings 7. During the lowering of the roller, the spring tongues are pressed rearward by the ends of the spindles but are freed and spring forward into their normal positions with their ends directly above the spindles as soon as the spindles reach the journal bearings 7. Thus the spindles are free to revolve in the bearings 7 but are kept from rising therein. The roller may be removed by inserting wedges 20 or the like into the opening 21, as shown in Fig. 4. The wedges will press the spring tongues 13 rearward until they are free of the ends of the spindles, and the roller may then be lifted out.

While I have herein shown only two ways of making my support, I wish it understood that it can be modified without departing from the spirit of my invention.

I claim:

A spindle support consisting of a hollow structure having in one face a slot opening at one end of said structure and closed at the other end thereof to form a bearing for the spindle; with a flat spring tongue fixed within the hollow structure at the end thereof adjacent the open end of the slot; said spring tongue projecting toward the closed end of said slot, but having its extremity

spaced away from said closed end to define
an opening for the reception of the spindle,
and being in position to engage and nor-
mally prevent removal of the spindle mount-
5 ed in said opening between said extremity
and the end of the slot.

In testimony whereof, I have signed my

name to this specification, in the presence of
two subscribing witnesses.

WALTER STEPHEN ALDHOUSE.

Witnesses:

THOS. PRESCOTT,

HAROLD WALKER.