

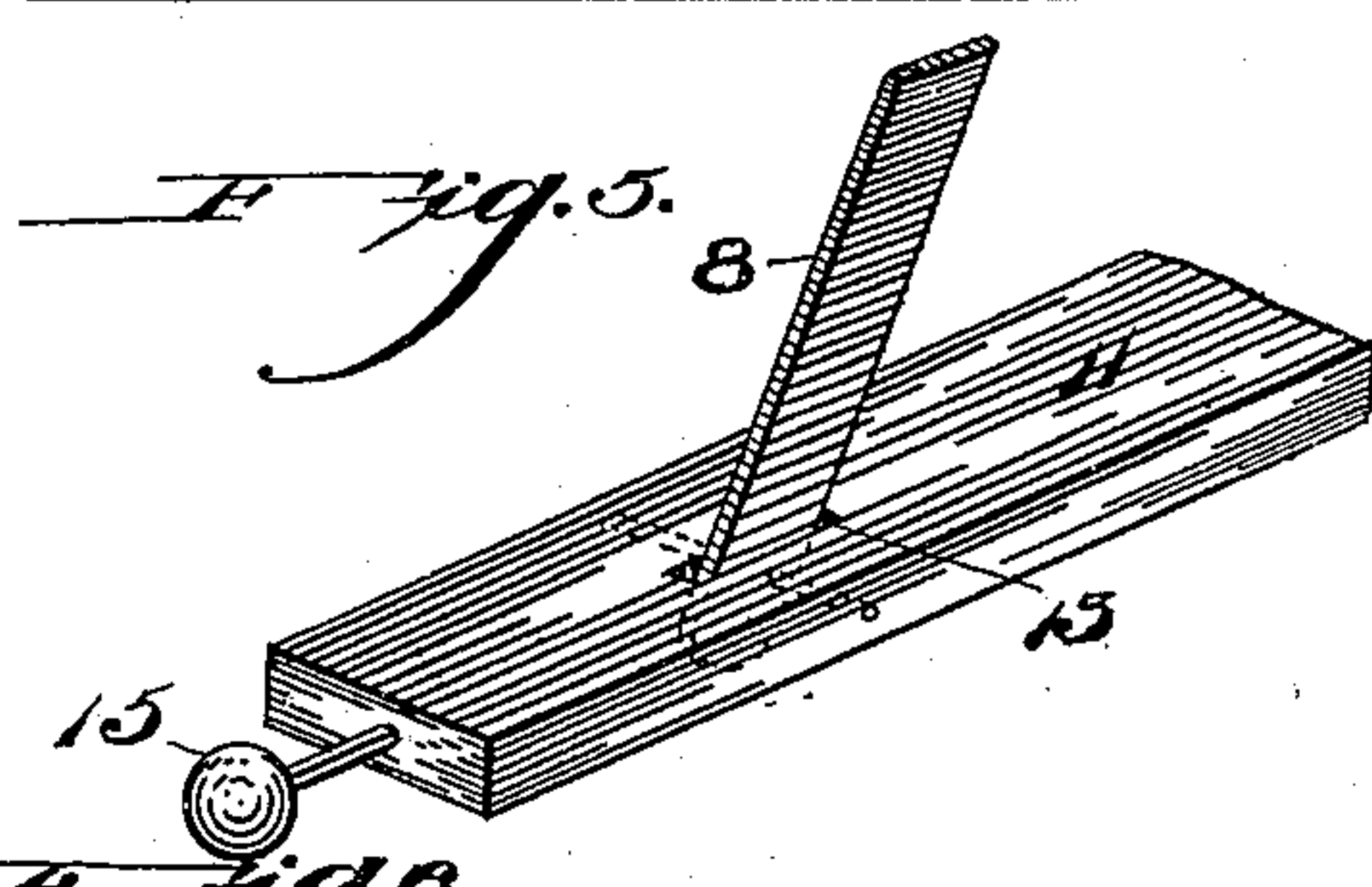
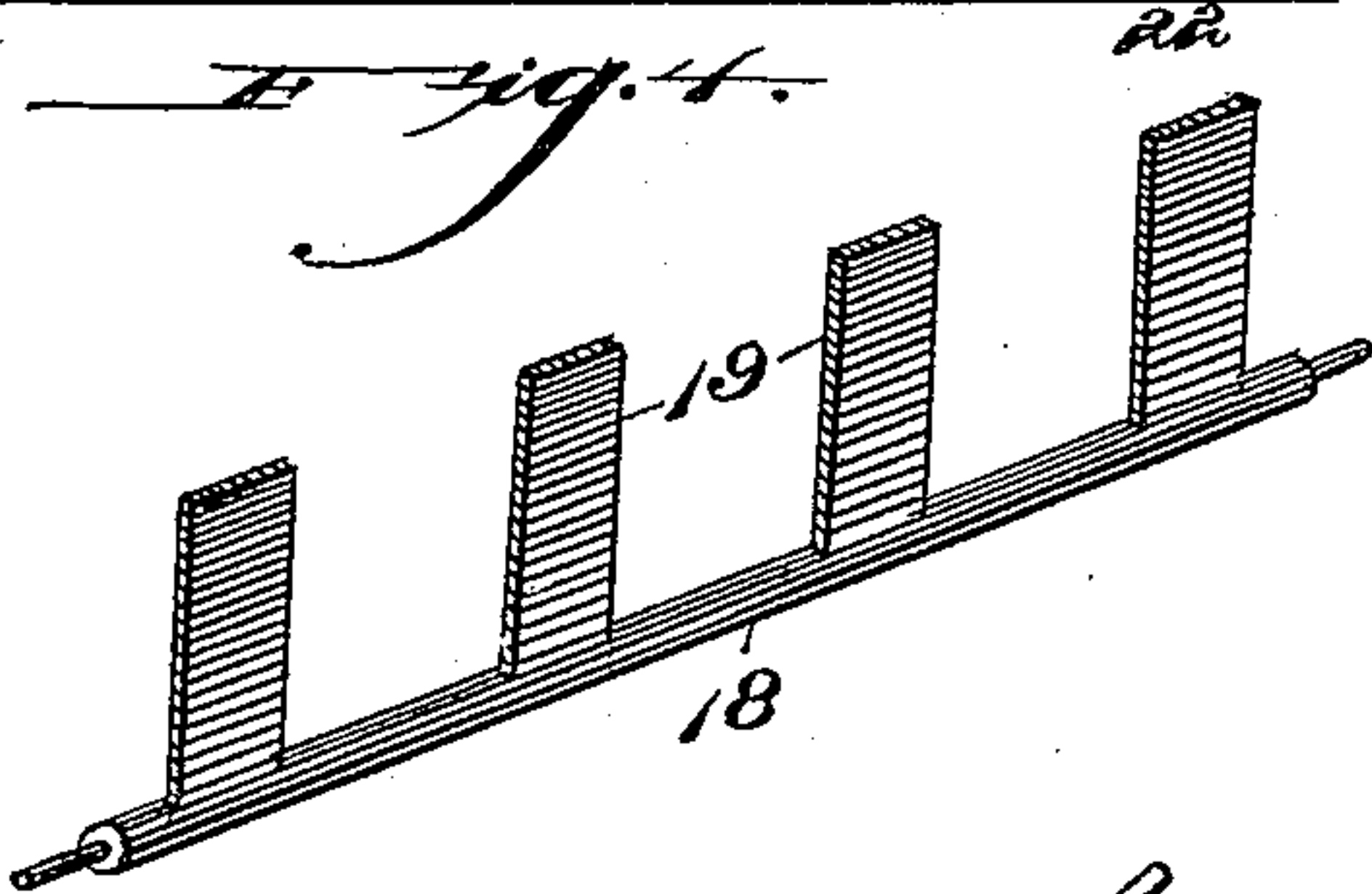
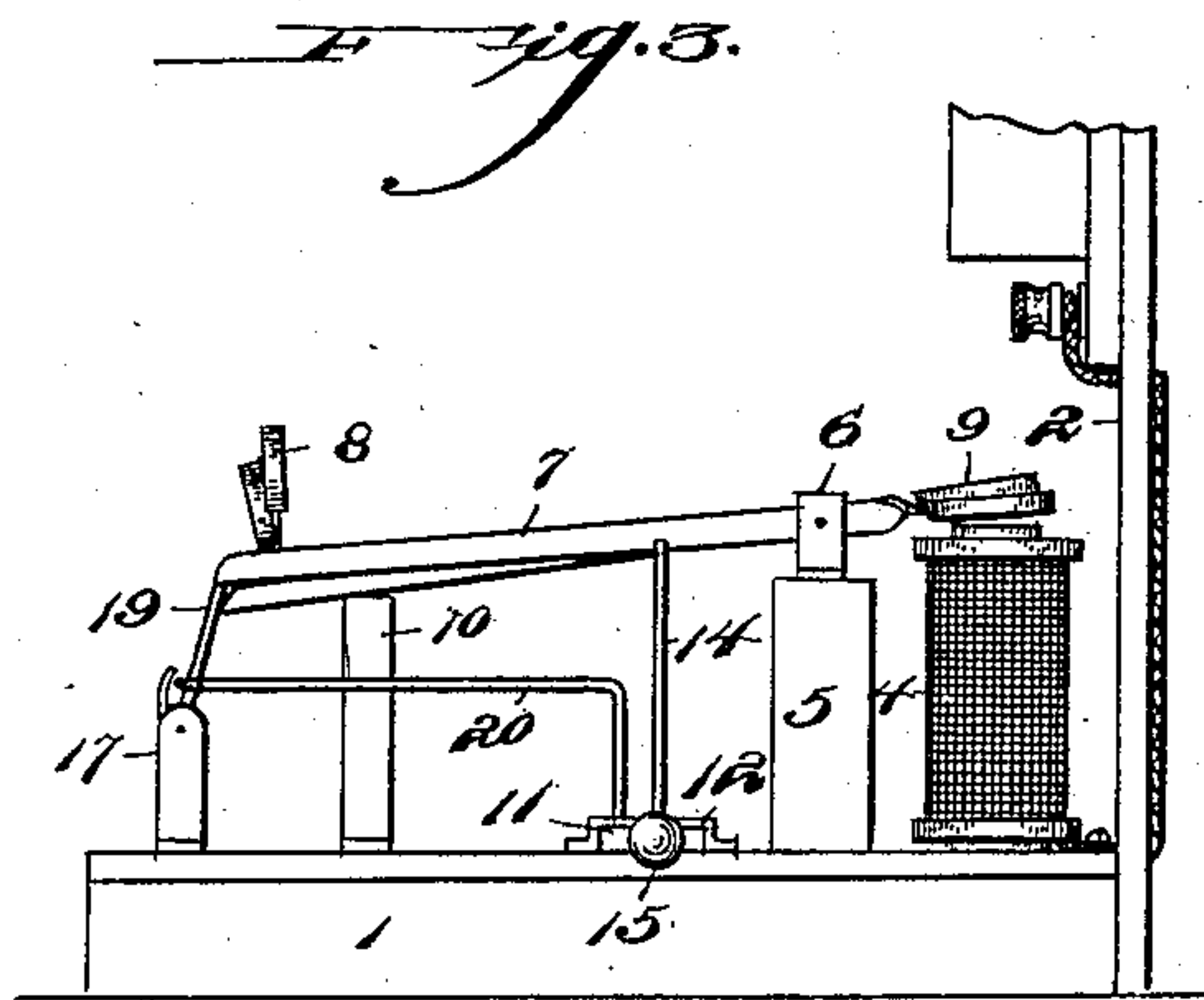
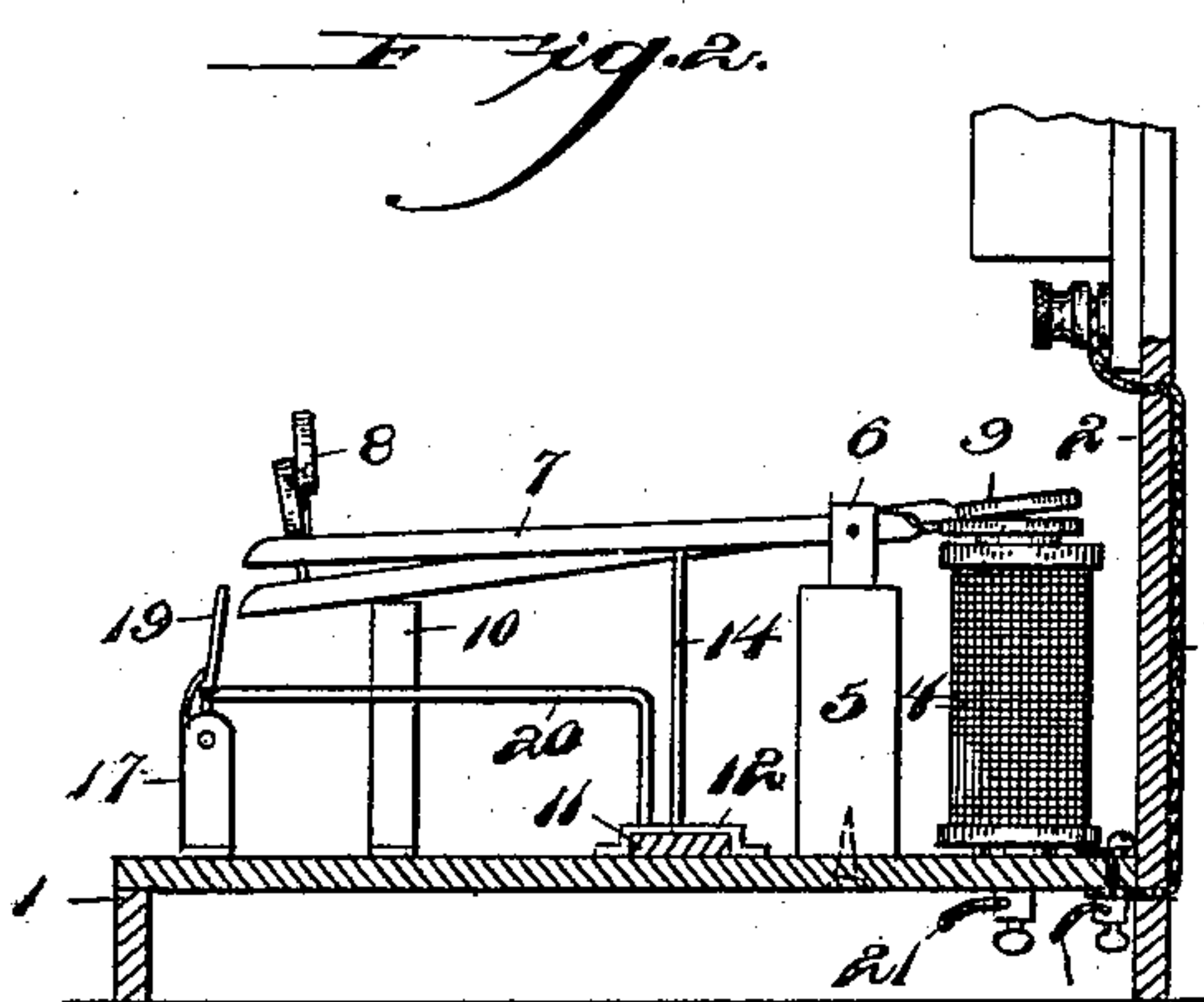
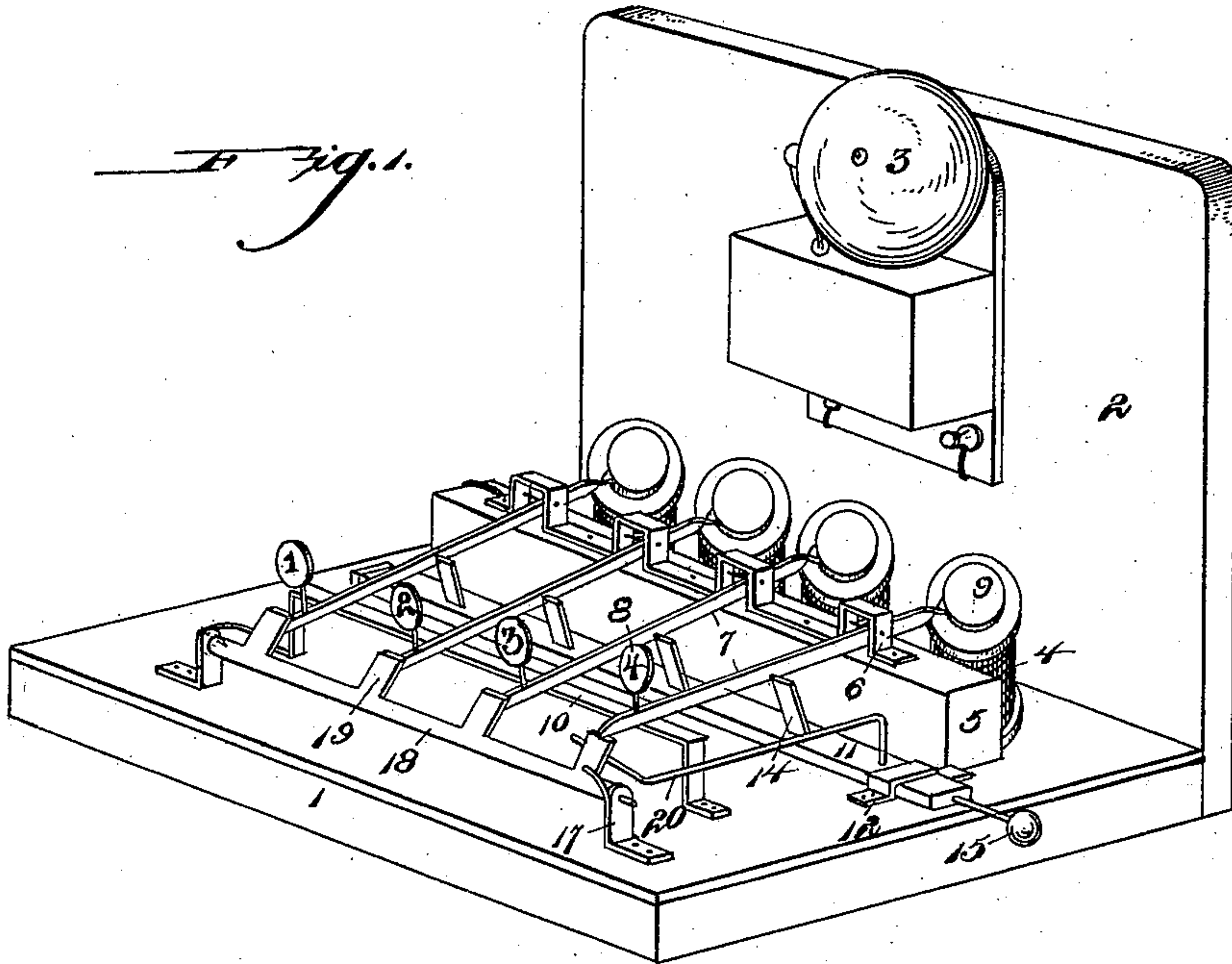
No. 620,319.

Patented Feb. 28, 1899.

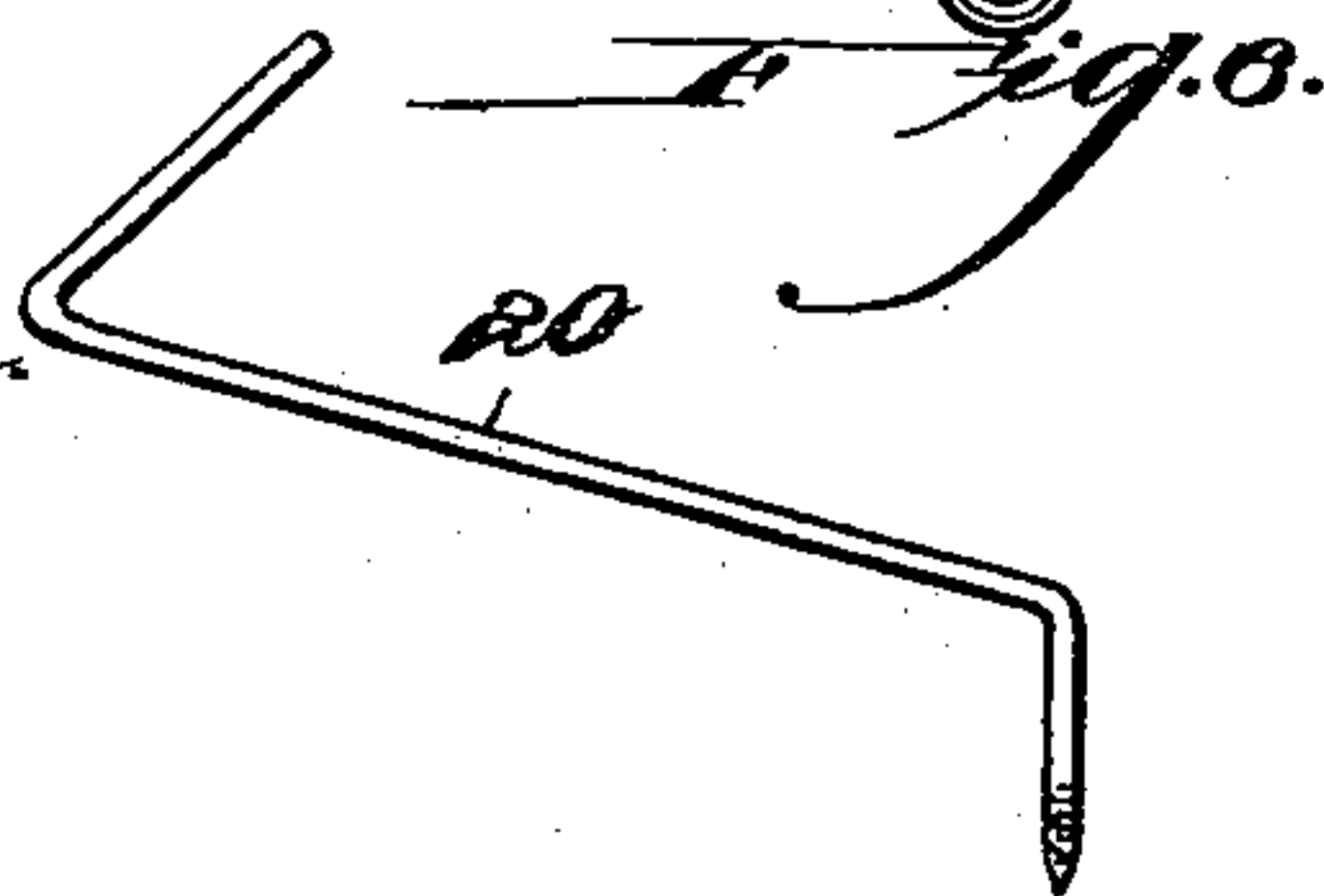
J. HEWITT & C. GAPEN.  
AUTOMATIC INDICATING DROP FOR ANNUNCIATORS.

(Application filed May 3, 1898.)

(No Model.)



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

JACOB HEWITT AND CHARLIE GAPEN, OF PITTSBURG, PENNSYLVANIA.

## AUTOMATIC INDICATING-DROP FOR ANNUNCIATORS.

SPECIFICATION forming part of Letters Patent No. 620,319, dated February 28, 1899.

Application filed May 3, 1898. Serial No. 679,588. (No model.)

*To all whom it may concern:*

Be it known that we, JACOB HEWITT and CHARLIE GAPEN, citizens of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Automatic Indicating-Drops for Annunciators, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in automatic indicating-drops for annunciators; and its object is to provide an automatic drop of this character which will be simple in construction and novel in its combination of parts.

Our invention particularly relates to an automatic drop for annunciators, burglar-alarms, call-signals for hotels, elevators, and other purposes, in which a number of distinct locations are represented each by a corresponding magnet in the annunciators having the automatic drop attached thereto, which magnets act when circuit is made to attract the armatures, thereby raising the tag or indicating-plate above the reading-window of the annunciators, thereby indicating the source of the call or the location at which the circuit has been closed, as announced by the inscription of the raised tag or indicating-plate.

Our invention further relates to the several details of construction for the automatic raising or lowering of the tag or indicating-plate, whereby general simplicity and efficiency are attained.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, wherein like numerals of reference indicate corresponding parts throughout the several views thereof, and in which—

Figure 1 is a perspective view of our improved automatic indicating-drop for annunciators. Fig. 2 is a side view, partly in section, showing one of the tags or indicating-plates held in a raised position upon the slide-bar by means of one of the supporting-standards. Fig. 3 is a side view showing one of the tags or indicating-plates held in a raised position after the magnets have been circuited by an automatic elevating-bar. Fig. 4 is a

perspective view of an automatic elevating-bar. Fig. 5 is a perspective view, broken away at one end, of the slide-bar. Fig. 6 is a perspective view of a wire which is secured to the slide-bar, and the free end abuts against the automatic elevating-bar.

Referring to the drawings by reference-numerals, 1 indicates a base portion, upon which are mounted the various parts forming our improved device, and secured to the rear end thereof is an upright 2, having arranged thereon the bell 3. Suitably secured to the base portion 1 are a series of electromagnets 4, and mounted to the base portion in front of the magnets 4 is a support 5, upon which are arranged the brackets 6, having the tilting bars 7, pivotally secured thereto.

Formed integral with the tilting bars 7, at one end thereof, are indicating tags or plates 8 and at the opposite end of the said bars the armatures 9. 10 indicates the support, which is arranged on the base portion, as shown, for supporting the tilting bars when they are in a lowered position.

Secured to the base portion by means of the keepers 12 is a slide-bar 11, having a series of oblong slots 13 formed therein, in which are pivotally secured the supporting-standards 14. Each of these slots is adapted to arrest the movement of the supporting-standards. The slide-bar is provided with a suitable handle 15 for operating the same.

17 indicates a pair of supports or brackets which are suitably secured to the base portion and are provided with an aperture at or near their upper end which is adapted to receive the ends of the automatic holding or locking bar 18. The bar 18 is provided with a series of supporting extensions 19, formed integral therewith, which are adapted to hold the indicating tags or plates in a raised position after the circuit has been formed.

20 indicates a wire, the one end of which is secured to the slide-bar 11 and the free end thereof operating against the automatic holding or locking bar. The magnets and bell are connected to a suitable source of electric supply by means of the wires 21 and 22. The wire 23 connects the magnets and tapped bell.

The operation of our improved automatic drop is as follows: It will be readily observed that when the circuit is formed by means of



a push-button the armature is drawn to the core of the magnet, thereby elevating the tilting bars, to which, as heretofore stated, is secured the indicating tag or plate, and as the tilting bar is raised the end thereof will force outward the supporting extension of the automatic holding-bar, and as the tilting bar passes the end of the supporting extension formed integral with the holding or locking bar the same will fall inwardly and arrest the movement of the tilting bar in its downward movement, thereby holding the indicating tag or plate in alinement with the reading-window of the annunciator. When the circuit is again formed, the tilting bar on its upward movement will force the supporting extension of the holding or locking bar outwardly, thereby lowering the bar which was elevated, the operation being the same as heretofore stated.

For keeping a tilting bar in the elevated position a slide-bar is moved inwardly until the supporting-standards thereof abut alongside the tilting bars, so when the tilting bar is elevated the standard will immediately fall beneath the bar and arrest its downward movement, thereby keeping the same in an elevated position until the bar is withdrawn. The movement of the supporting-standards is limited by the side of the slot in which they are pivoted in the slide-bar.

The free end of the wire 20 is bent inward, so that when the slide-bar is forced inwardly it will carry the wire therewith and the bent end thereof will force the locking-bar outward, thereby rendering the same inoperative when the slide-bar is used. A suitable casing (not shown) is provided to inclose the various parts heretofore described, and a suitable opening is formed in the casing, so the indicating tags or plates can be read there-through.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of our invention.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In an automatic annunciator-drop, the combination of a base portion having a series of electromagnets mounted thereon, a support carrying brackets mounted on said base portion, tilting bars having armatures formed integral with one end and indicating tags or plates near the opposite end pivotally secured in said brackets, a support for the tilting bars, a pair of brackets mounted on the base portion, an automatic holding or lock-

ing bar pivotally secured in said brackets having extensions formed integral therewith which are adapted to abut against the end of the tilting bars, keepers or guides mounted on said base portion, a slide-bar having a series of standards pivotally secured therein adapted to operate through said keepers, and means carried by slide-bar for rendering the automatic holding or locking bar inoperative when the former is used, substantially as shown and described.

2. In an automatic annunciator-drop, the combination of a base portion having suitably arranged thereon a series of electromagnets, tilting bars, armatures formed integral with one end of said bars and indicating tags or plates formed integral near the opposite end thereof, an automatic holding or locking bar pivotally secured in a pair of supporting-brackets mounted on the base portion, and a series of supporting extensions formed integral with said automatic holding or locking bar, substantially as shown and described.

3. In a drop for annunciators, the combination of a base portion having a series of electromagnets suitably arranged thereon, an upright secured to said base portion having attached thereto a bell, tilting bars, a support mounted on said base portion, brackets mounted on said support and adapted to have pivotally secured therein the tilting bars, armatures formed integral with one end of said bars and indicating tags or plates formed integral near the opposite end thereof, an automatic holding or locking bar, a pair of supports or brackets secured to the base portion adapted to receive the ends of the holding or locking bar, supporting extensions formed integral with said automatic holding or locking bar adapted to abut against the ends of the tilting bars, a slide-bar, supporting-standards pivotally secured in said slide-bar, guides or keepers secured to the base portion adapted to hold the slide-bar in position, a wire secured to said slide-bar having the free end thereof bent inwardly to abut against the extensions formed integral with the automatic holding or locking bar so that when the slide-bar is forced inwardly the holding or locking bar is forced outwardly to an inoperative position, substantially as shown and described.

In testimony whereof we affix our signatures in the presence of two witnesses.

JACOB HEWITT.

CHARLIE GAPEN.

Witnesses:

JOHN NOLAND,

H. H. PATTERSON.