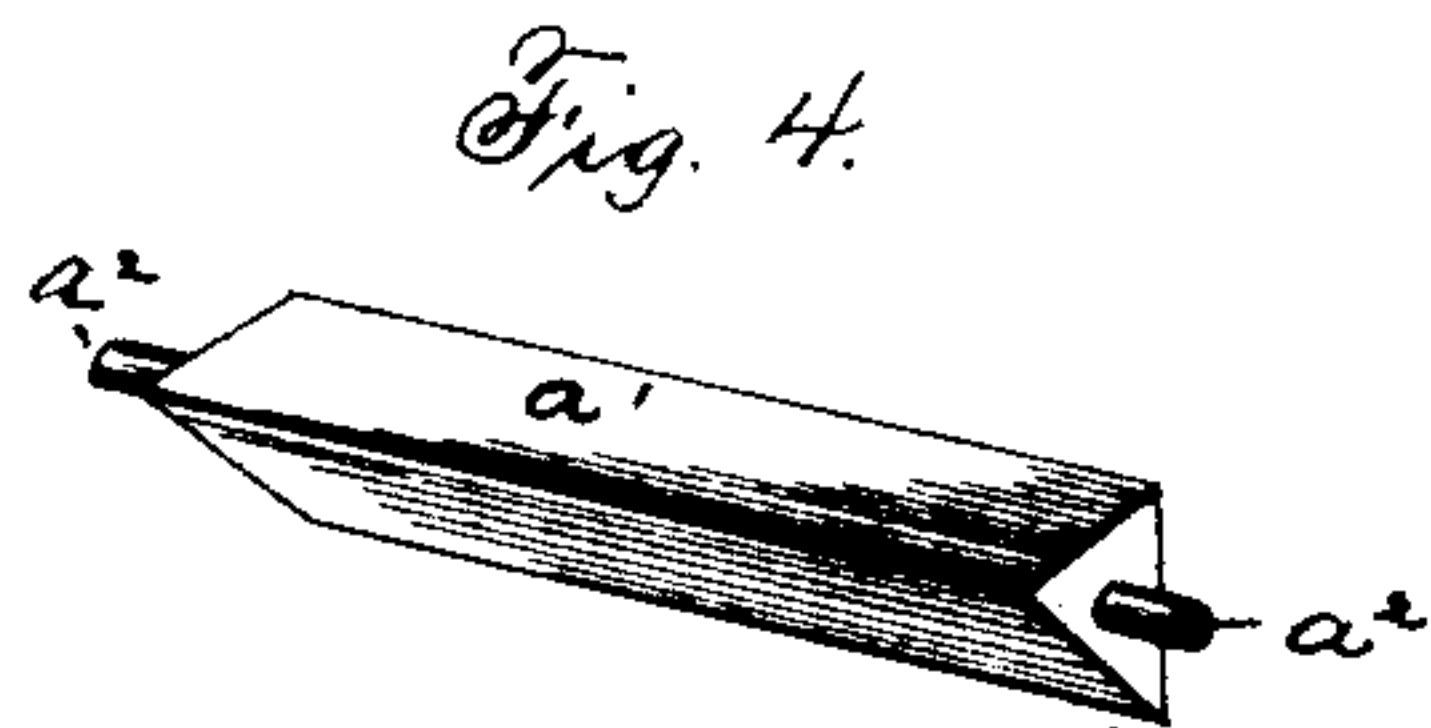
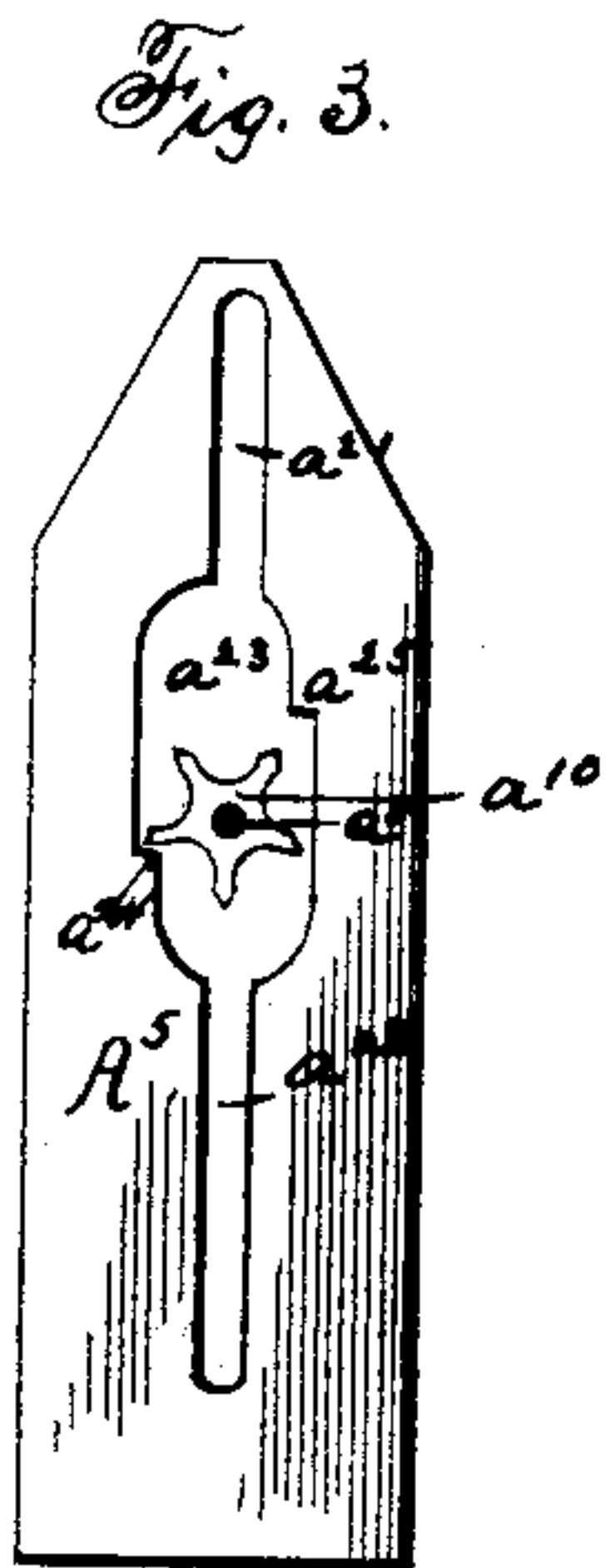
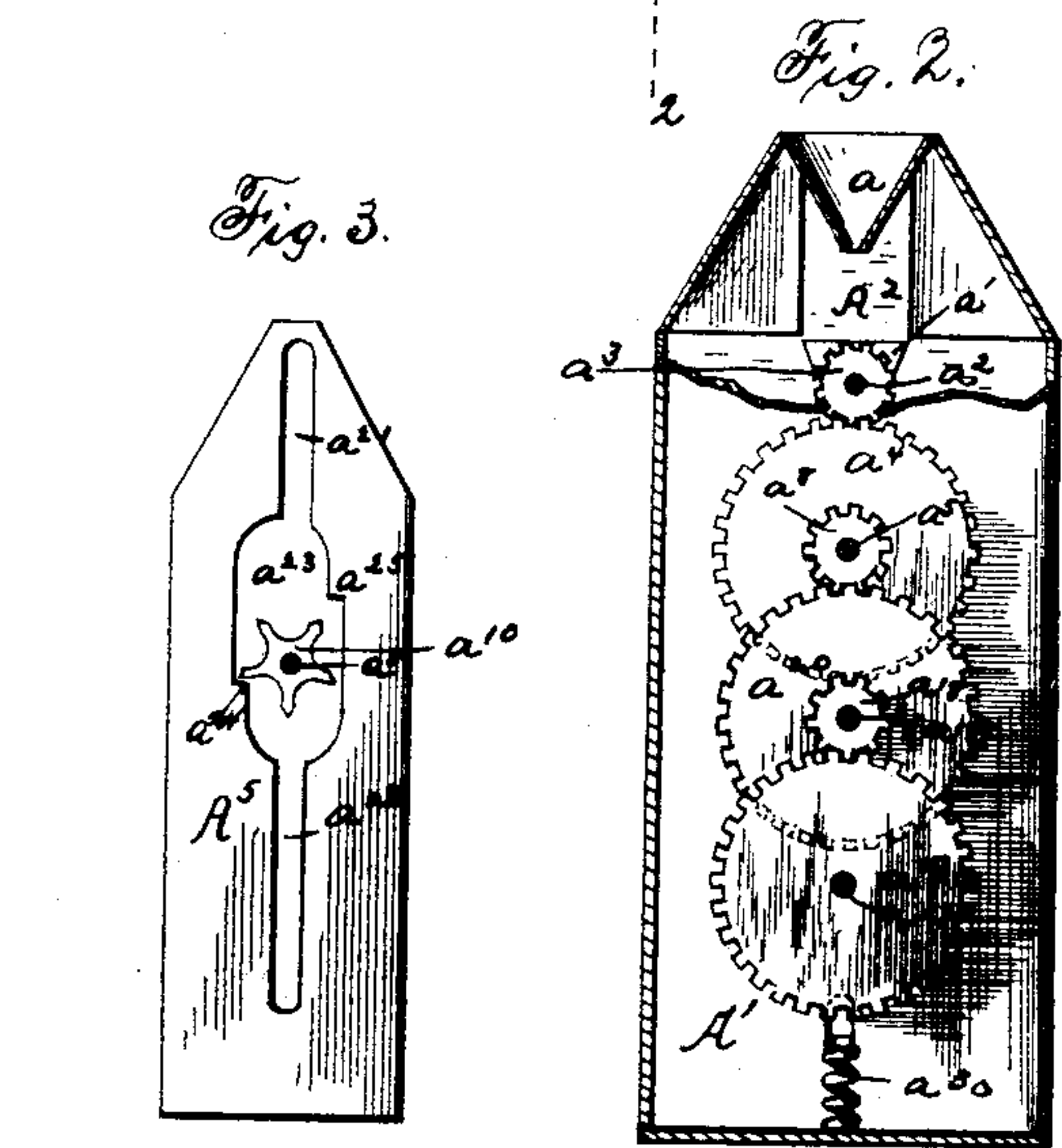
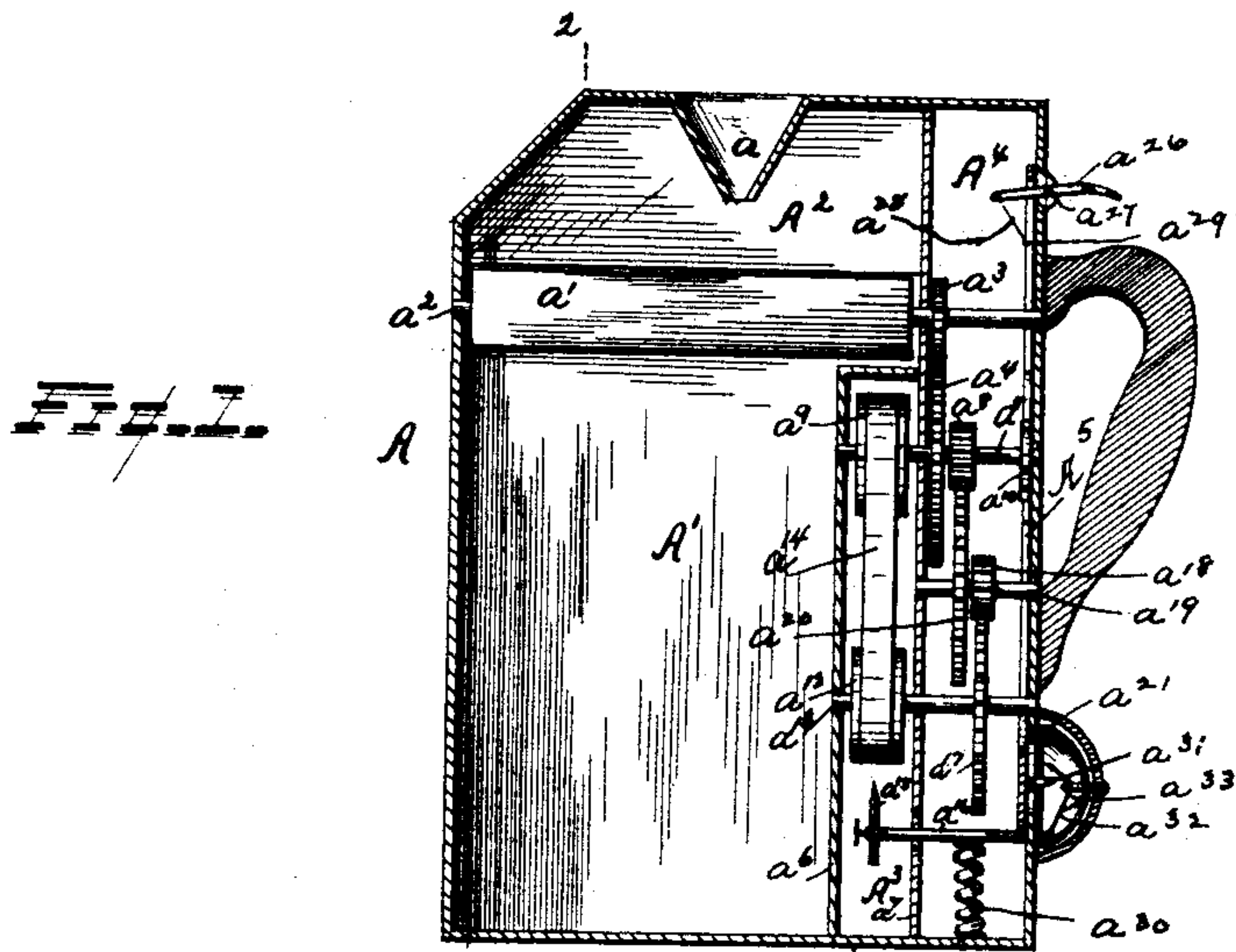


(No Model.)

T. B. LEE.
FARE REGISTER.

No. 445,669.

Patented Feb. 3, 1891.



WITNESSES

Geo. R. Byington
Edw. R. Miller

INVENTOR

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attys

UNITED STATES PATENT OFFICE.

THOMAS BELL LEE, OF TORONTO, CANADA.

FARE-REGISTER.

SPECIFICATION forming part of Letters Patent No. 445,669, dated February 3, 1891.

Application filed February 7, 1889. Serial No. 299,079. (No model.)

To all whom it may concern:

Be it known that I, THOMAS BELL LEE, of the city of Toronto, in the county of York, Province of Ontario, Canada, a subject of the Queen of Great Britain, have invented a new and useful Form of Box for Collecting Fares and Registering the Number Collected, of which the following is a specification.

My invention relates to that class of fare-registers which the conductor or other person collecting fares carries about his person.

The object of my invention is to improve upon the general construction of that class of devices; and it consists of constructions and combinations, all as will hereinafter be described in the specification and pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 represents a vertical section; Fig. 2, a section on line 2 2, Fig. 1, parts being broken away to show the receiving-chamber; Fig. 3, an elevation of the slide, and Fig. 4 a perspective of the prismatic bottom.

A represents a box or other receiver formed of the chambers A', A², A³, and A⁴. Chamber A' is the largest chamber and final receptacle for the money and tickets deposited in chamber A². This chamber A² is provided with a funnel-shaped slot or opening *a*, through which the money or tickets are dropped upon the movable bottom *a'*, having three sides and arranged to close a space of about the same size as one of its faces in the partition between the chambers A' and A². This prismatic-shaped bottom *a'* is provided with a shaft *a*², journaled in the walls of the receiver, and having a pinion *a*³, meshing with a gear-wheel *a*⁴ on a second shaft *a*⁵, journaled in one of the walls of the receiver at one end, and in the walls *a*⁶ and *a*⁷ of the chamber A³ and in the inner wall of chamber A⁴ at the other end. This shaft *a*⁵ also carries a pinion *a*⁸, a loose spool *a*⁹, and a wheel *a*¹⁰. The spool *a*⁹ is connected to a spool *a*¹², fixed or secured on a shaft *a*¹³ by a strip of paper or other suitable medium *a*¹⁴ for receiving impressions from a marker *a*¹⁵, secured to the horizontal arm *a*¹⁶ on the slide A⁵. The shaft *a*¹³ is provided with a gear-wheel *a*¹⁷, meshing with a pinion *a*¹⁸ on shaft *a*¹⁹, which is also provided

with a gear-wheel *a*²⁰, meshing with a gear-wheel or pinion *a*⁸ on shaft *a*⁵.

The slide A⁵ is provided with a slot *a*²¹ for the passage of the shaft *a*², a slot *a*²² for the passage of shafts *a*¹³ and *a*¹⁹, and an opening *a*²³, having the shoulders *a*²⁴ and *a*²⁵ arranged at diagonally opposite points in opening *a*²³. This opening *a*²³ receives the spur-wheel *a*¹⁰, which is partly turned when slide A⁵ is moved up or down, in the manner hereinafter described. When the slide A⁵ is moved up, the shoulder *a*²⁴ strikes one of the spurs of the spur-wheel and partly rotates it and its shaft. This partial rotation to shaft *a*⁵ partially rotates the wheel *a*⁴, spool *a*⁹, and pinion *a*¹⁰. The wheel *a*⁴ partially turns pinion *a*³, which is fixed to the shaft *a*², and consequently inclines the face of the prismatic bottom *a'* that happens to be uppermost or presented to the chamber A² to allow the money or ticket in said chamber to assume such a position as to fall into chamber A' when the bottom is turned to present a new face to the chamber A². The completion of this movement is accomplished when the slide A⁵ moves down and shoulder *a*²⁵ strikes one of the spurs on wheel *a*¹⁰ and partly turns shaft *a*⁵ in the same direction that shoulder *a*²⁴ partly rotated it in the upward movement. The gearing is so constructed that the upthrow of the shoulder *a*²⁴ will turn shaft *a*² one-sixth of a revolution and the downblow of shoulder *a*²⁵ one-sixth of a revolution, so that one up and one down movement of slide A⁵ presents one of the three sides of the prismatic bottom to the chamber A².

The slide A⁵ is moved upward by means of a lever *a*²⁶, fulcrumed upon the receiver at *a*²⁷, and provided with a link *a*²⁸, which is pivoted at *a*²⁹ to the slide A⁵. By pressing upon the end of lever *a*²⁶, which projects outside of the receiver, the slide A⁵ is raised and sets in operation the train of mechanism heretofore described. As soon as the lever *a*²⁶ is released a retracting-spring *a*³⁰ draws the slide A⁵ back to its normal position. The slide in its upward movement carries its horizontal arm *a*¹⁶ and the marker attached thereto, and causes the latter to make an impression upon the paper *a*¹⁴, which is then moved slightly to re-

ceive another impression. The paper is moved by means of the gearing a^8 , a^{19} , a^{18} , and a^{17} , and the fixed spool a^{12} . The slide is also provided with a finger a^{31} , which trips a hammer
5 a^{32} in order to ring the bell a^{33} .

What I claim as new is—

1. The combination of a chamber A' , a chamber A^2 , having the opening in the top and longitudinal opening in the bottom, a
10 prismatic bottom, one of the sides of which closes said longitudinal opening, the slide A^5 , and mechanism connecting said slide and the shaft of said opening, for the purpose set forth.

15 2. The combination of a chamber A' , a chamber A^2 , having the opening in the top and the longitudinal opening in the bottom, a prismatic bottom, one of the sides of which closes said longitudinal opening and provided
20 with a pinion, a slide A^5 , having the opening

provided with shoulders a^{24} and a^{25} , and gearing engaging with the pinion on the shaft of the prismatic bottom and having a spur-wheel in said opening of slide A^5 , substantially as described.

25 3. The combination of a chamber A' , a chamber A^2 , having an opening in the top and a longitudinal opening in the bottom, a prismatic bottom for closing the longitudinal opening and having a shaft provided with a
30 gear-wheel, spools carrying a strip of paper, the slide A^5 , having a marker under said paper, and mechanism operated by the slide for turning the prismatic bottom and moving the paper, for the purpose described.

Toronto, February 2, 1889.

THOMAS BELL LEE.

Witnesses:

A. C. MACDONELL,
A. FRASER.