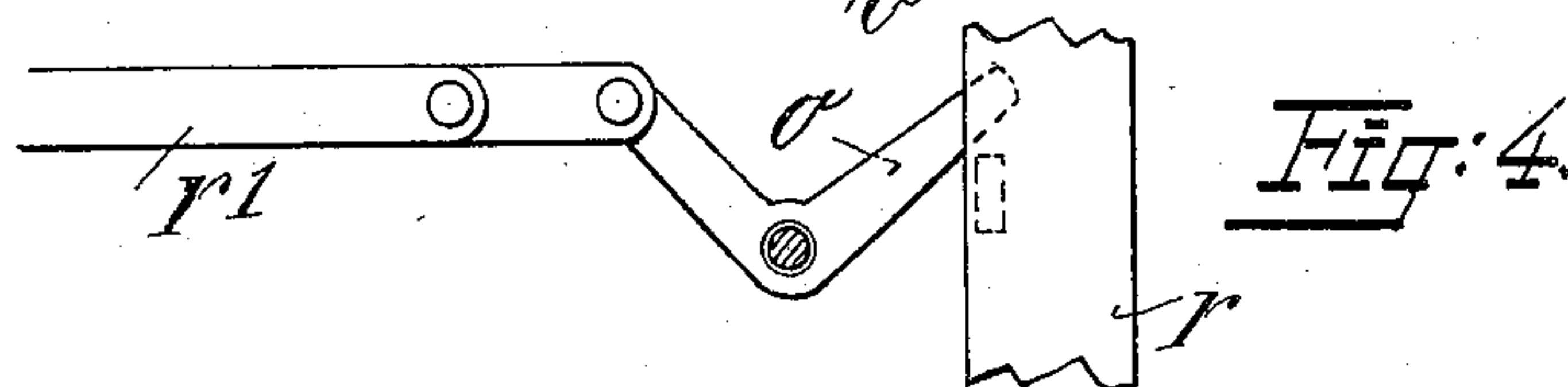
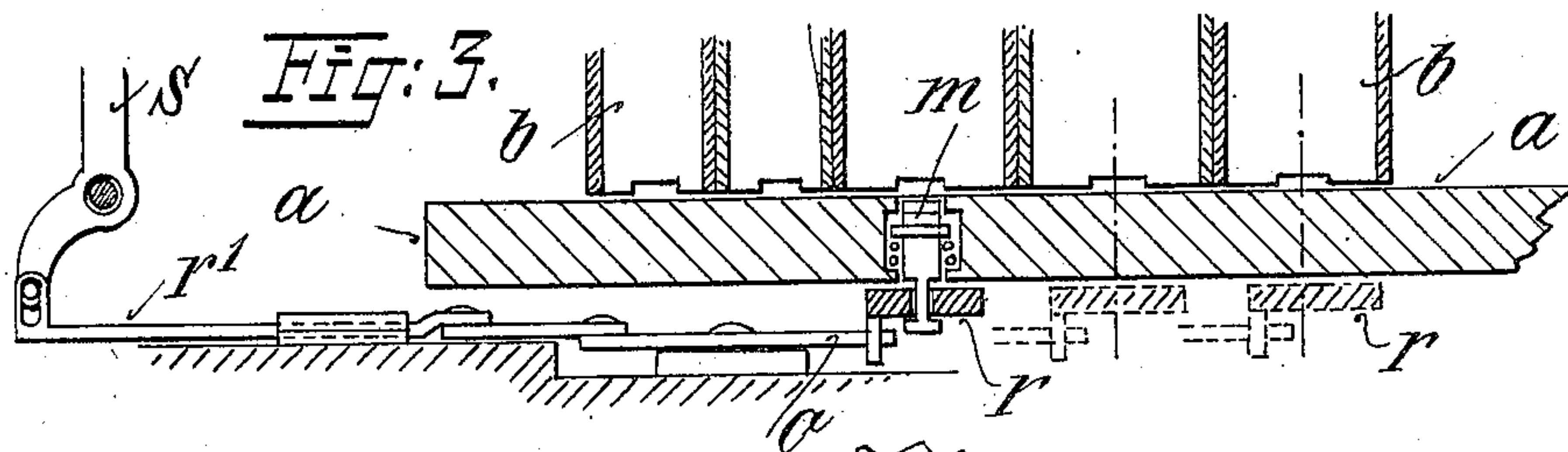
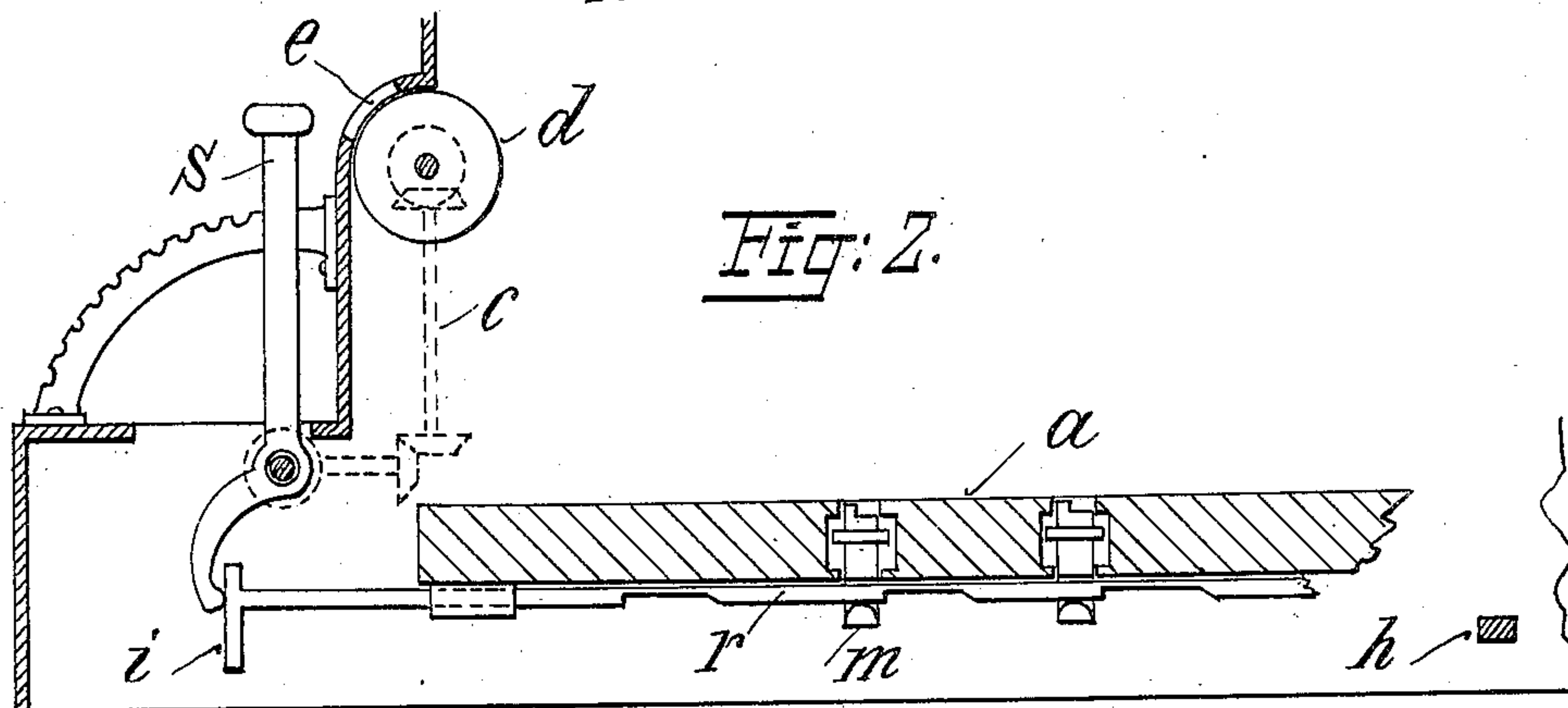
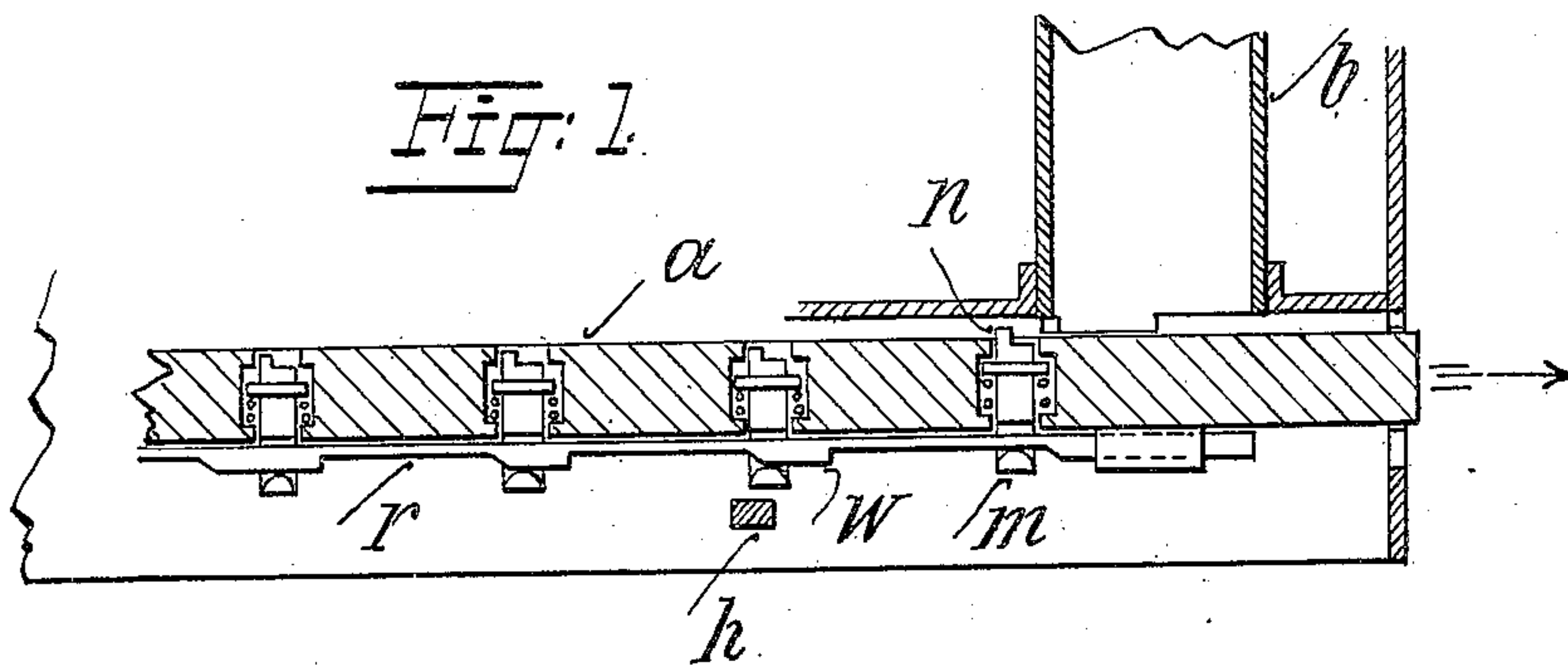


No. 897,082.

PATENTED AUG. 25, 1908.

A. GAUSS.
COIN DELIVERING APPARATUS.
APPLICATION FILED JULY 8, 1907.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

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COIN-DELIVERING APPARATUS.

No. 897,082.

Specification of Letters Patent.

Patented Aug. 25, 1908.

Application filed July 8, 1907. Serial No. 382,741.

To all whom it may concern:

Be it known that I, ALPHONS GAUSS, a subject of the King of Würtemberg, residing at Steinbach, Würtemberg, Germany, have 5 invented certain new and useful Improvements in Coin-Delivering Apparatus, of which the following is a specification.

This invention relates to improvements in coin-delivering apparatus of the type where- 10 in slides or the like arranged at the lower orifices of fixed tubes containing the money are adapted to be actuated for the purpose of removing coins from the tubes by means of tappets or the like so arranged that the num- 15 ber of coins removed by the movement of a slide depends, within limits, on the length of the said movement.

The purpose of the invention is to simplify apparatus of this type so that a single slide 20 can be used for all the money-tubes, and that a single lever or handle can be used for each tube instead of a plurality of keys. For this purpose the coin-removing devices on the slide are not fixed in permanent positions but 25 are adapted to be adjusted by actuating a key or the like before the slide is moved, the number of coins removed depending on the adjustment made.

A construction embodying the invention 30 is illustrated in the annexed drawing, in which

Figure 1 is a longitudinal section of part of the slide and Fig. 2 a longitudinal section of the continuation of the apparatus on the 35 left-hand side of Fig. 1. Figs. 3 and 4 show another form of construction of the key mechanism in a side view (Fig. 3) and a plan view (Fig. 4).

In the construction shown in the drawing 40 the coin-removing devices consist of tappets *n* formed on pins *m* controlled by means of a cam-rod *r* (Fig. 1), so that movement of the said cam-rod causes the upper ends of the said pins to be successively thrust out of 45 holes in the slide *a* or to be successively withdrawn into the said holes, the upper surface of the slide *a* being quite smooth when all the pins are withdrawn. When all the pins *n* are thrust upwards movement of the slide *a* 50 in the direction indicated in Fig. 1 by the arrow causes a number of coins equal to the number of pins to be successively removed from the tube *b*. When all the pins are withdrawn the slide *a* can be moved without dis-

placing any coins. Preferably the tube *b* is 55 provided at its lower end with an abutment or rest for the coins, so that the latter do not rest on the surface of the slide; this arrangement obviates risk of the removal of coins by mere friction with the slide-surface. 60

The cam-parts *w* of the rod *r* are of unequal 65 lengths. In Fig. 1 each part *w* is longer than any part *w* on the right-hand side thereof. Owing to this construction movement of the rod *r* causes the pins to be successively thrust 65 upwards or withdrawn, as will be seen from Figs. 1 and 2. The movement of the rod *r* for displacing a given number of coins may be produced by means of a single lever *s* (Fig. 2) which is moved along a scale and moves 70 the rod *r* proportionately. When the slide *a* is moved forwards all the displaced rods *r* are thrust back by fixed stops *h* with which the abutments *i* formed on the rods come into 75 contact. The cams *w* are thus caused to withdraw the tappets *n*, so that the surface of the slide is smooth when it moves back. The slide *a* also serves as a pay-slab from which the rows of coin can be swept off by 80 hand when the tappets *n* have been withdrawn.

The lever *s* for each denomination of coin may be connected by mechanism *c* (Fig. 2) to registering mechanism *d*, the numerals of 85 which are visible at *e*.

Fig. 3 illustrates a device for actuating the levers *s* from the side of the slide-plate *a*, so that the pay-slab does not move out in front of the person actuating the lever *s*, as in the construction shown in Figs. 1 and 2, but at 90 his side; viewing Fig. 3, for example, the plate *a* would move out from the plane of the drawing. In this case the levers *s* may be made to actuate bell-crank levers *o* (Fig. 4, plan-view) which actuate the rods *r*. Dur- 95 ing the return-movement of the plate *a* the rods *r*, which are mounted in their bearings with a certain amount of friction, move the levers *o* and *s* back to their original positions.

The use of the adjustable coin-removing 100 devices described not only greatly simplifies the apparatus, but enables the apparatus to be made very strong and reliable.

The apparatus can easily be combined with a cash-register, the paid-in coins being 105 inserted into the respective tubes *b* and the amount thereof being indicated to the customer by known means.

What I claim as my invention and desire to secure by Letters Patent of the United States is:—

1. In a coin delivering apparatus the combination of a plurality of coin tubes, a sliding plate movable under said tubes having recesses therein, a plurality of tappets movable in said recesses and rods having cam faces of successively increasing length coöperating with said tappets.

2. In a coin delivering apparatus the combination of a plurality of coin tubes, a sliding plate movable under said tubes having recesses therein, a plurality of tappets movable in said recesses, rods having cam faces of successively increasing length coöperating with said tappets and a hand lever for setting each rod.

3. In a coin delivering apparatus the combination of a plurality of coin tubes, a sliding

plate movable under said tubes having recesses therein, a plurality of tappets movable in said recesses, and means operative for successively raising said tappets.

4. In a coin delivering apparatus the combination of a plurality of coin tubes, a sliding plate movable under said tubes having recesses therein, a plurality of tappets movable in said recesses, rods having cam faces of successively increasing length coöperating with said tappets a hand lever for setting each rod and an indicator coöperating therewith to indicate the position of setting of said rod.

In witness whereof I have signed this specification in the presence of two witnesses.

ALPHONS GAUSS.

Witnesses:

GEORGE KÖRNER,
LOUIS I. MÜLLER.