

No. 812,624.

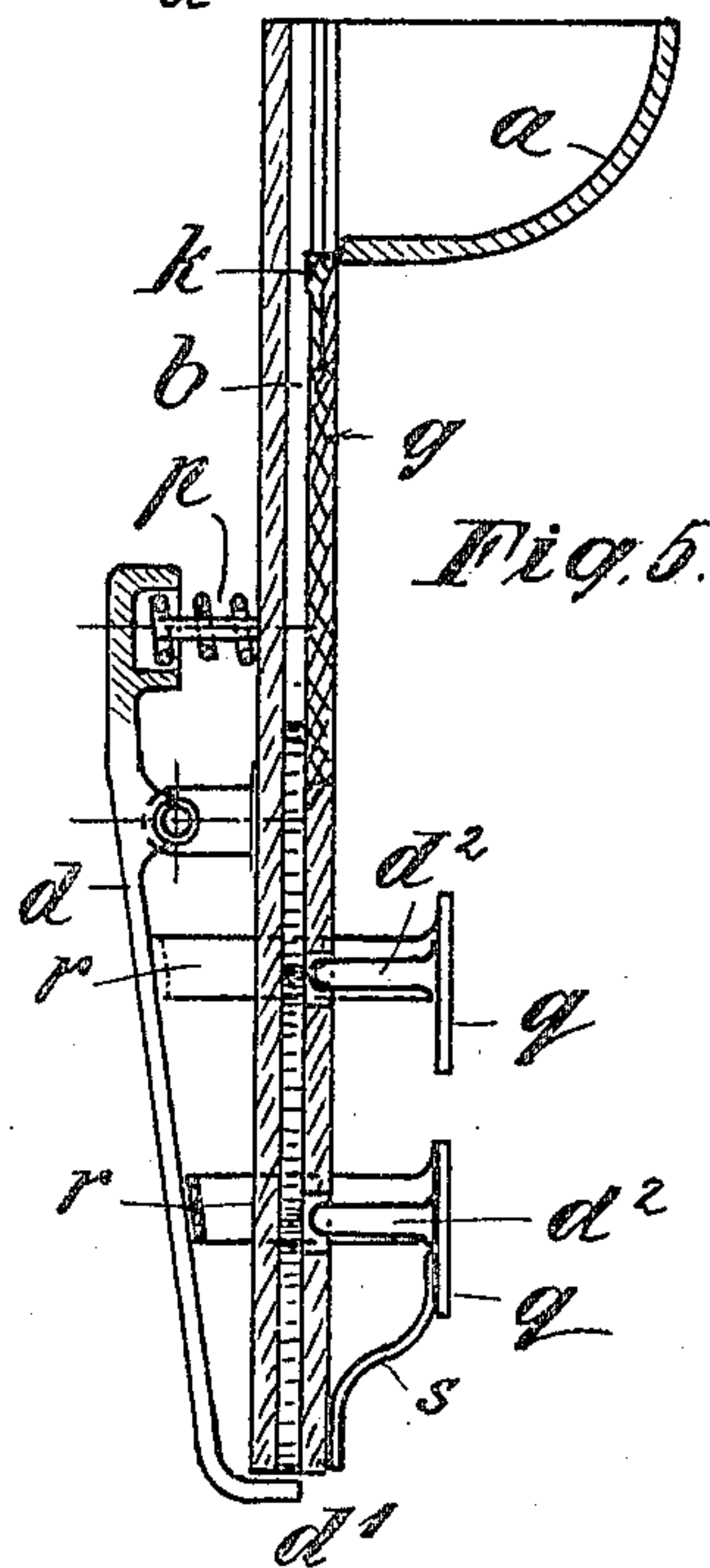
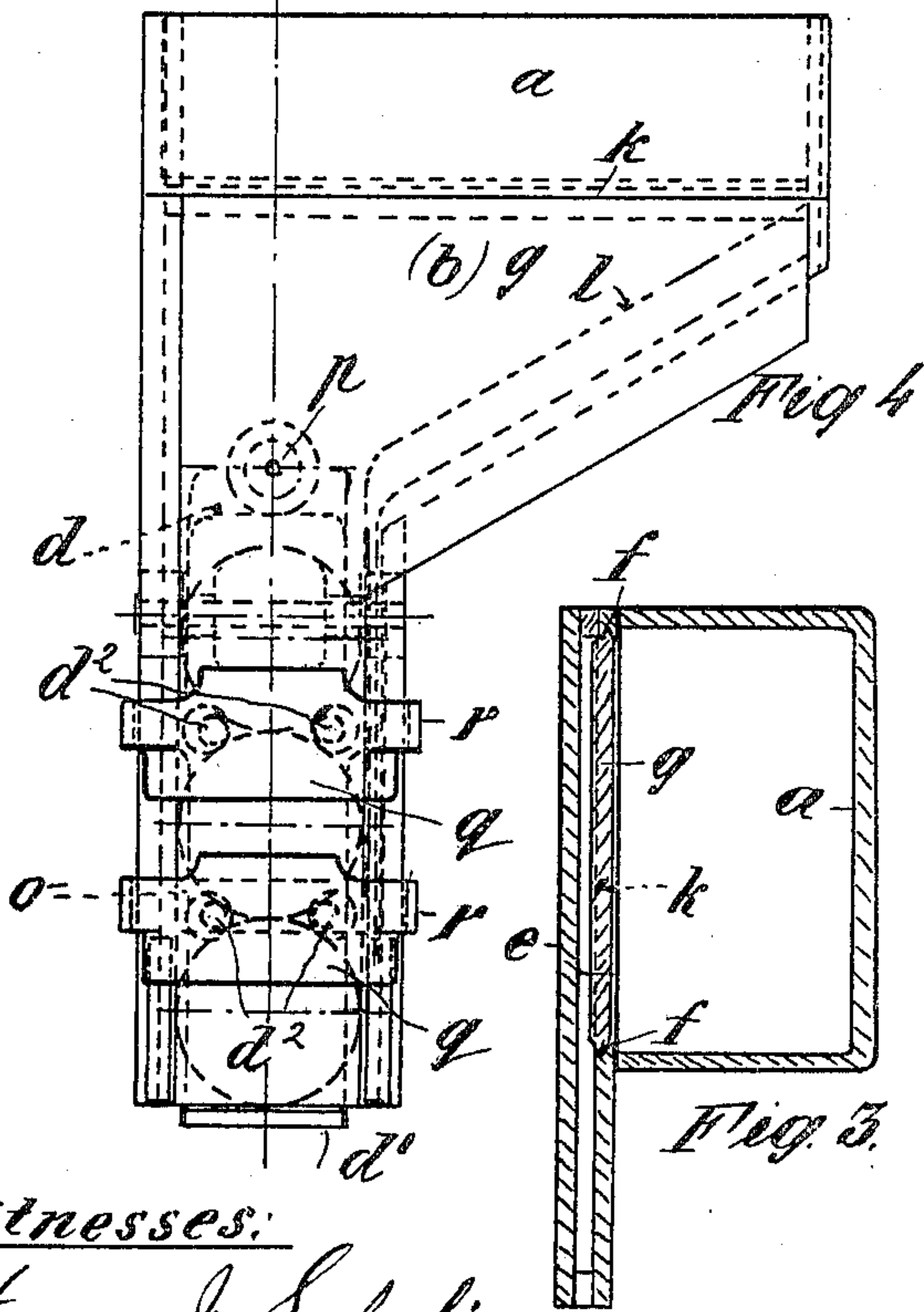
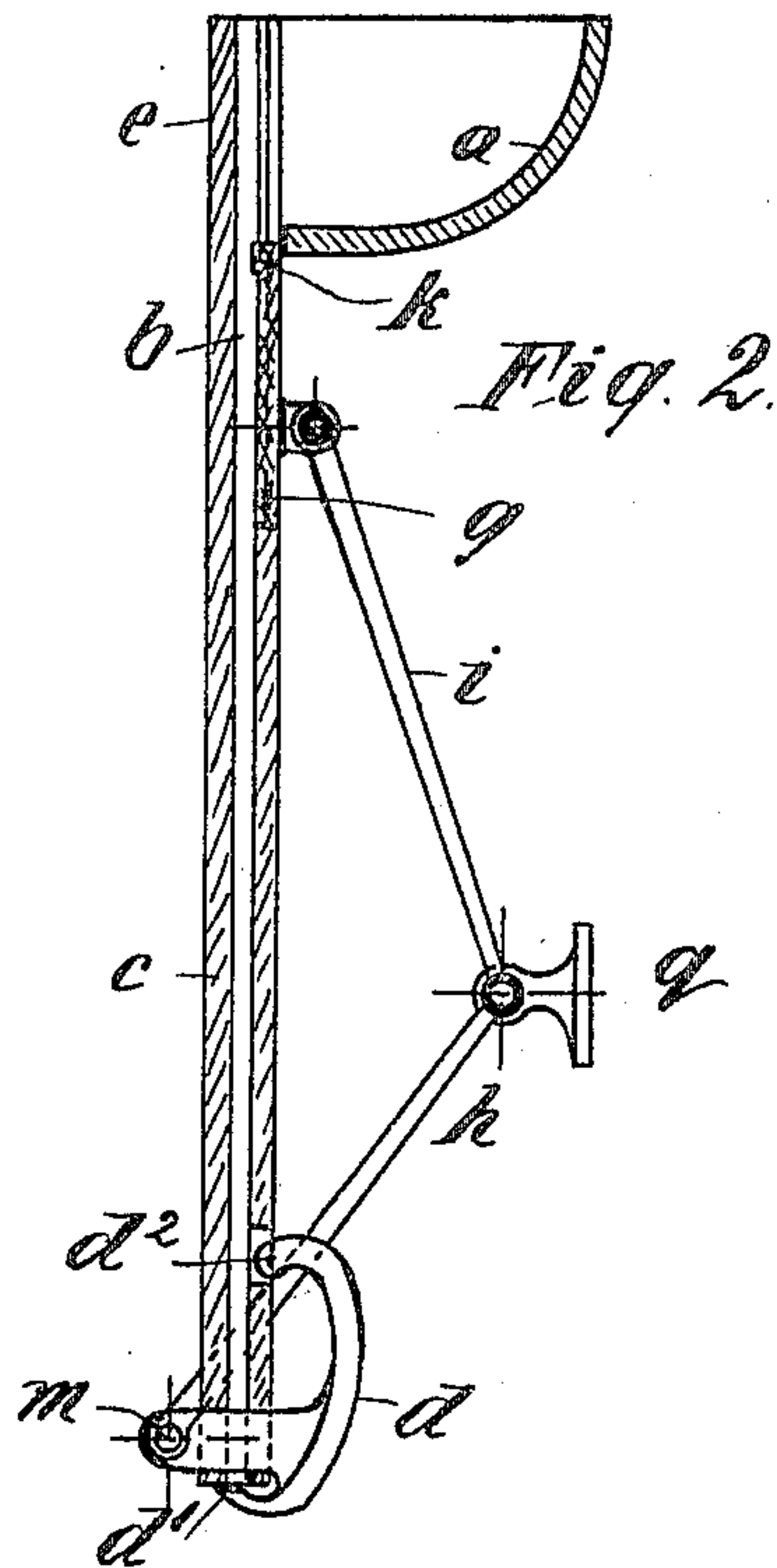
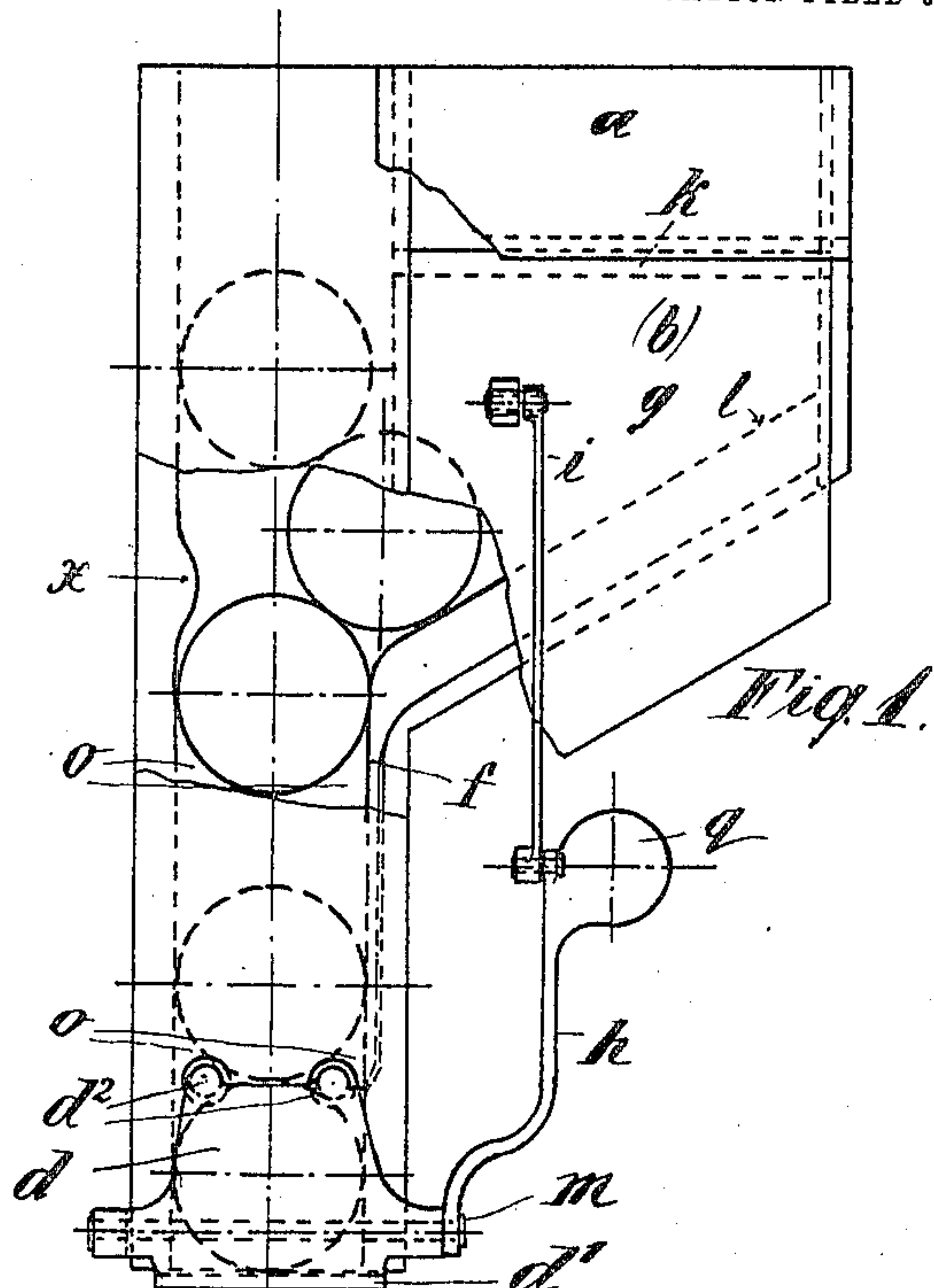
PATENTED FEB. 13, 1906.

L. WEINREB & L. A. RABINOWITCH.

APPARATUS FOR DELIVERING OR COUNTING COINS AND THE LIKE.

APPLICATION FILED JULY 12, 1904.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 6.

Fig. 7.

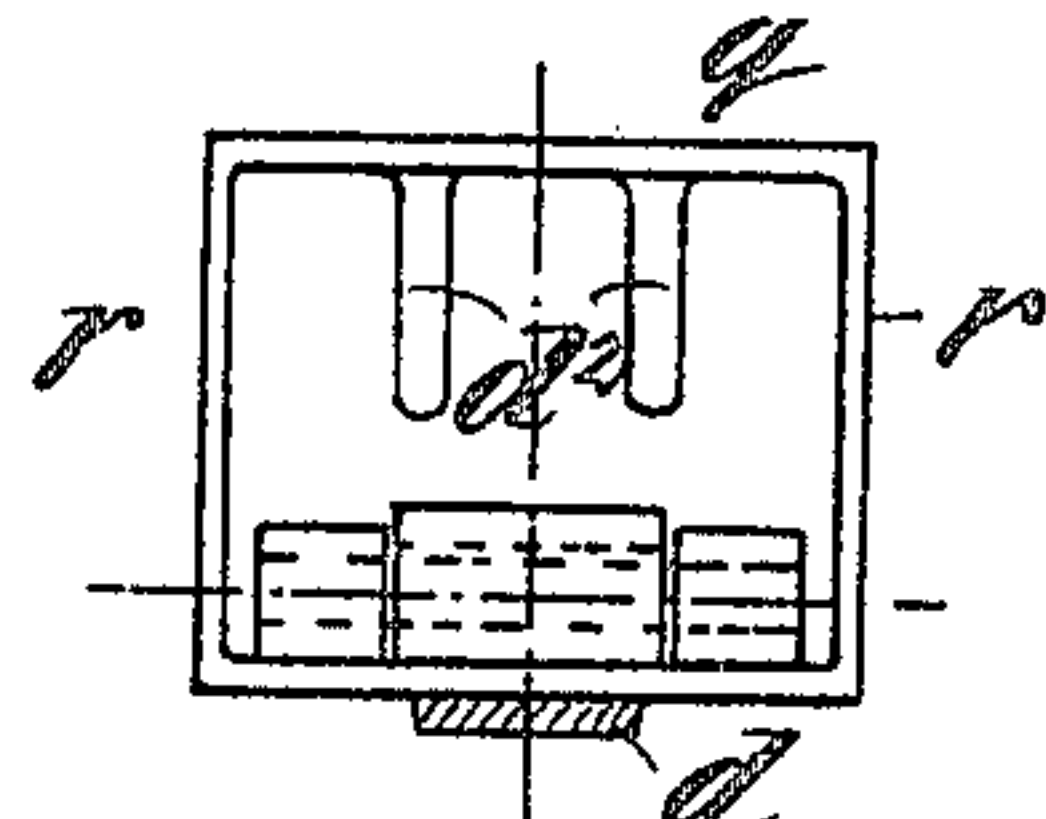
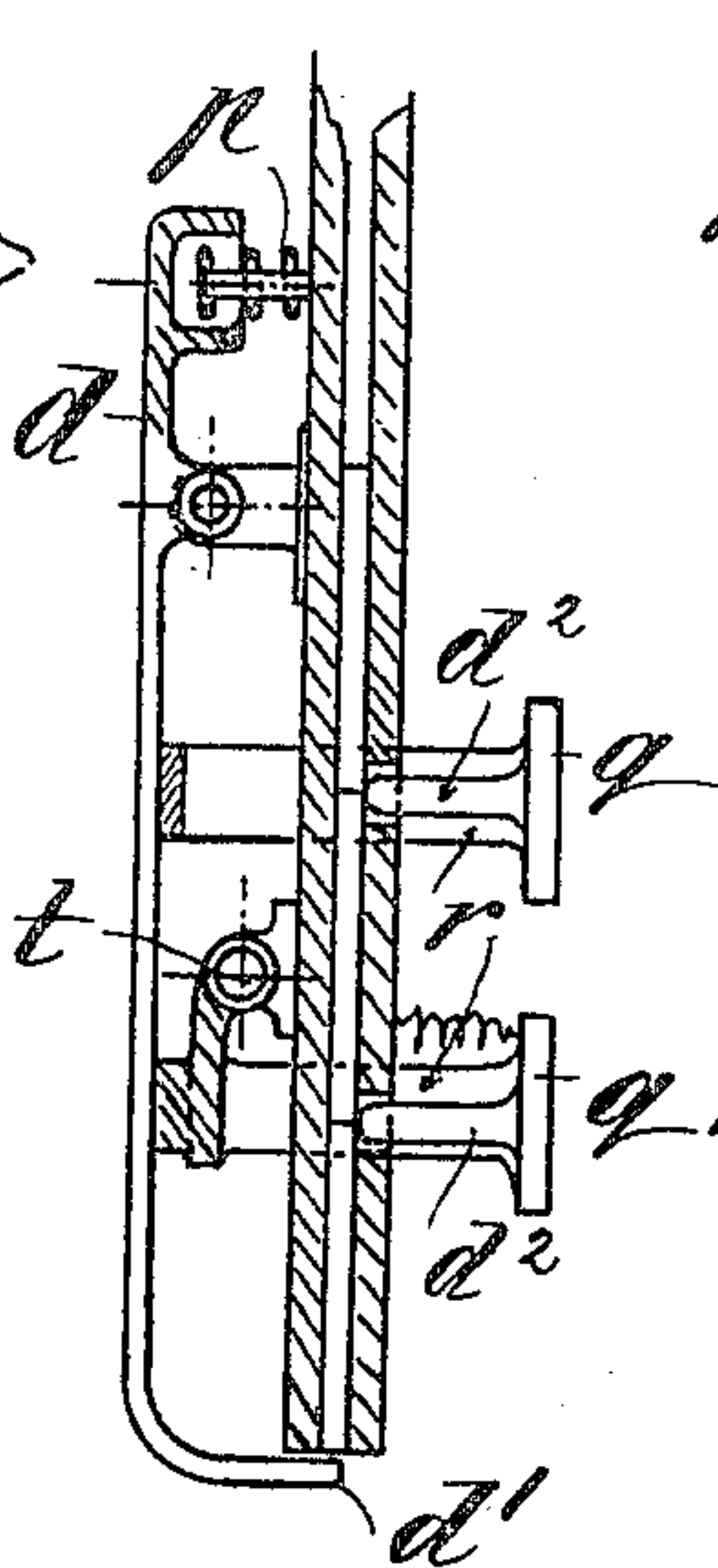
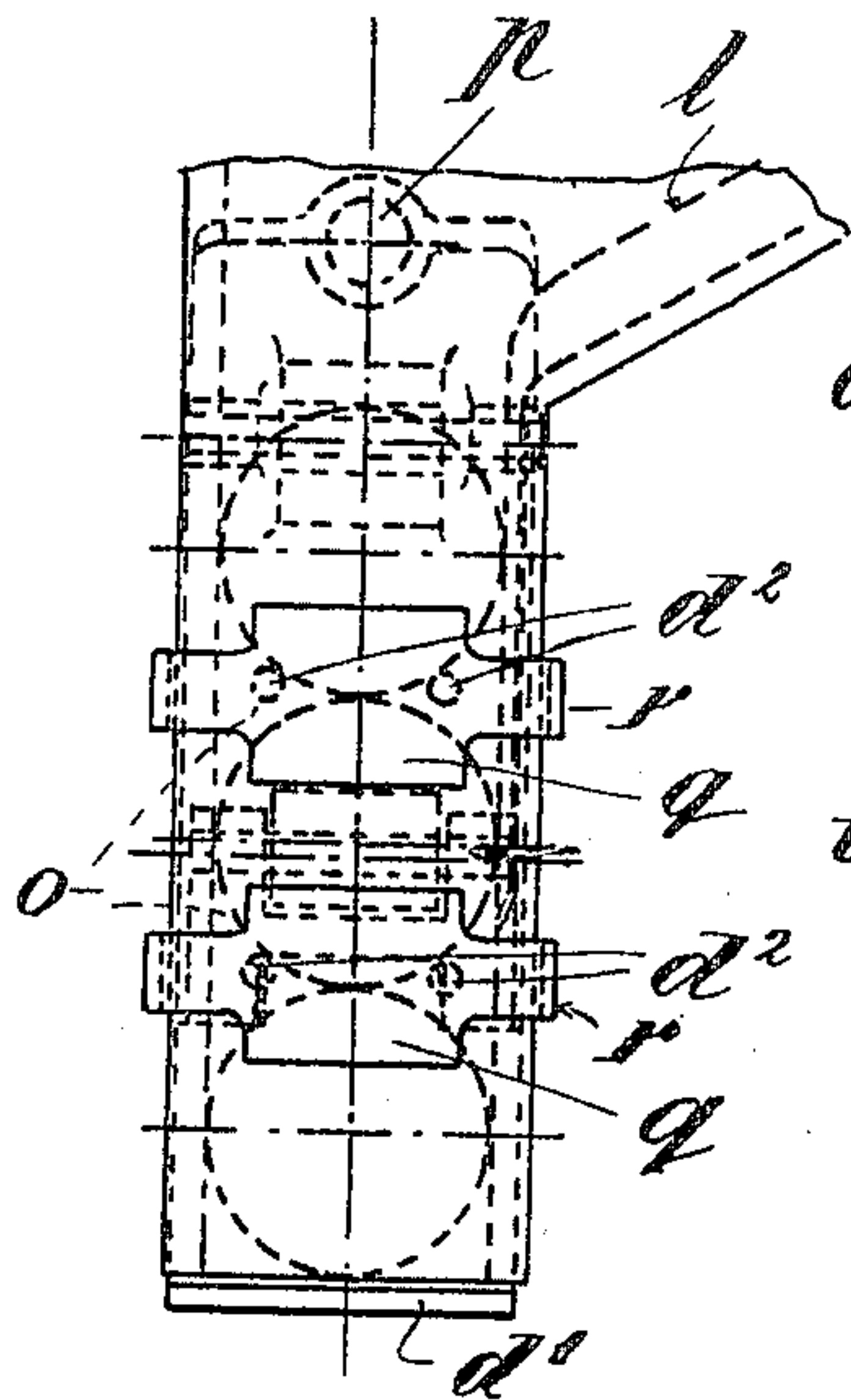


Fig. 7a.

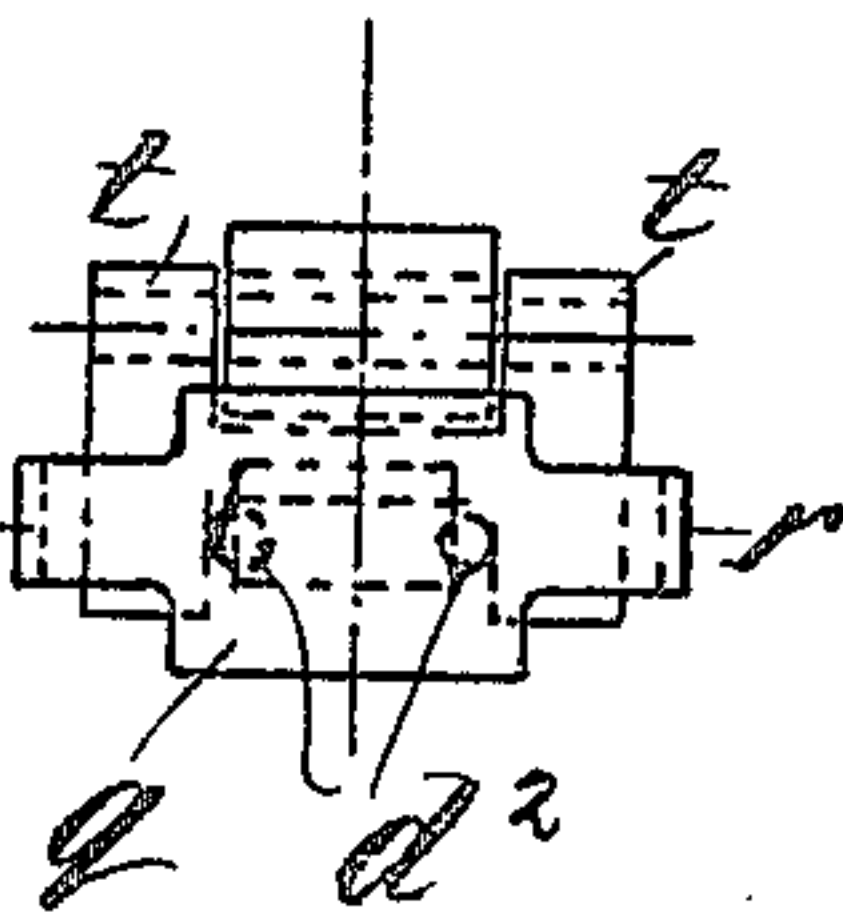
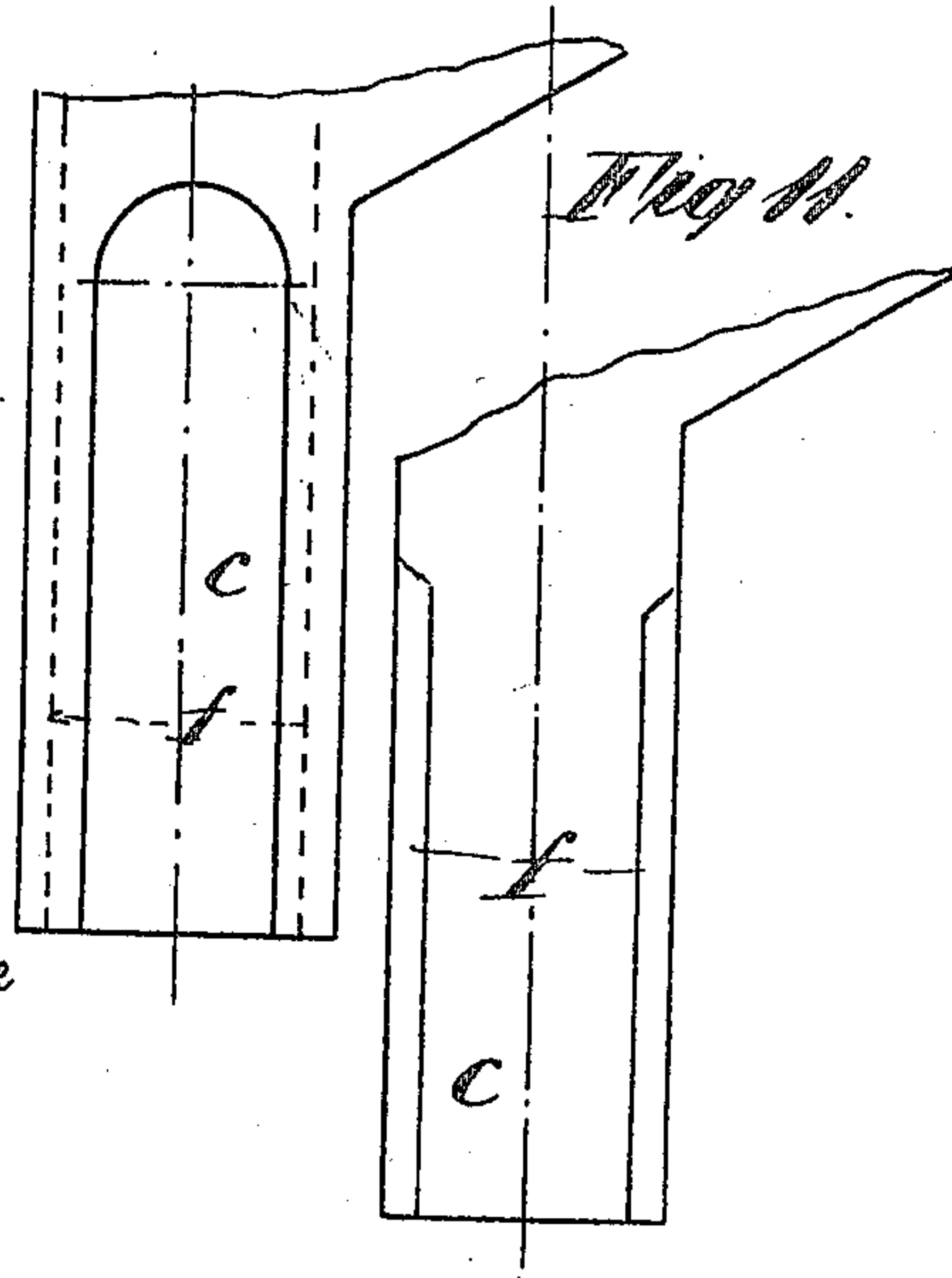
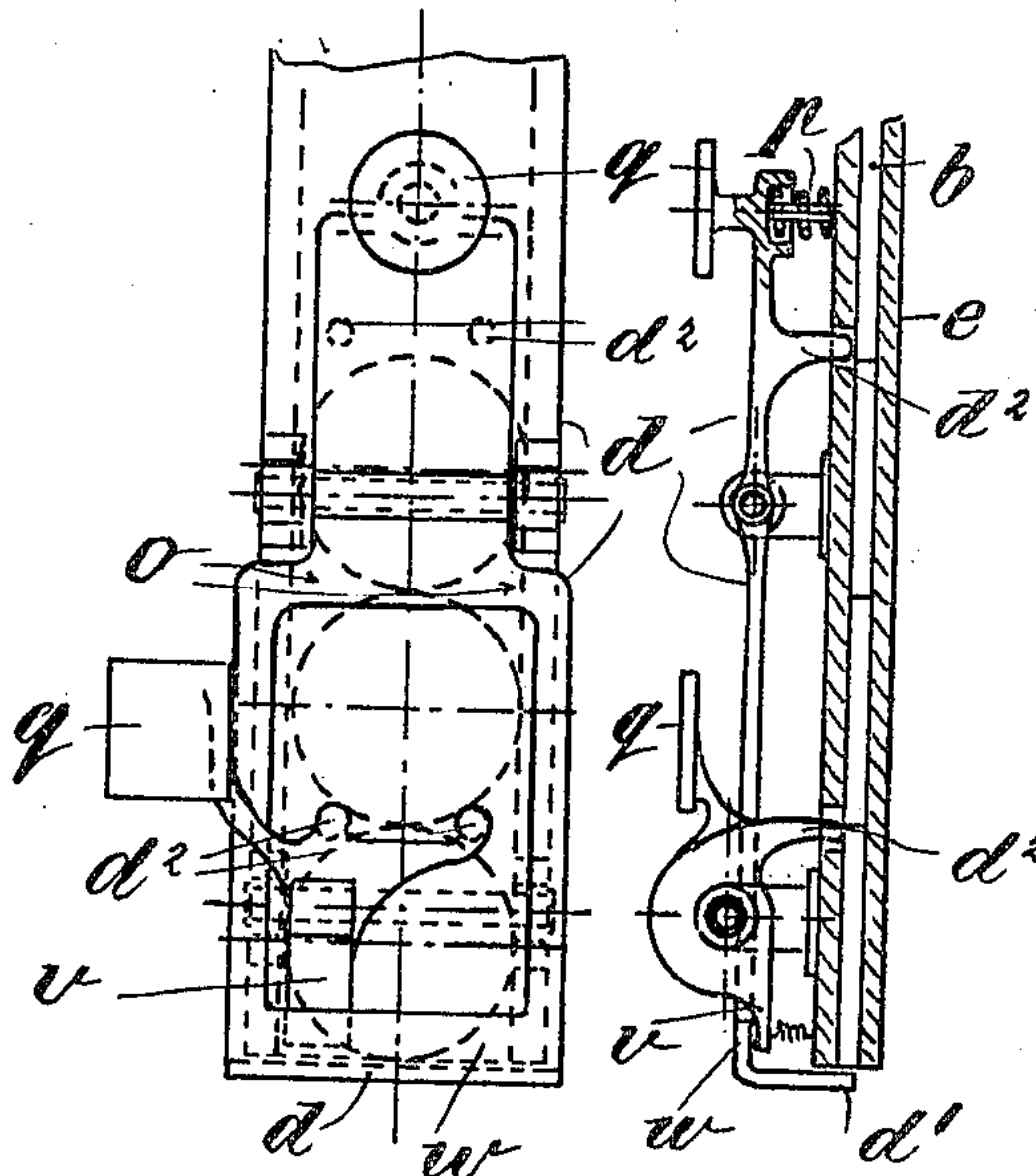


Fig. 9.

Fig. 8.

Fig. 10.



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UNITED STATES PATENT OFFICE.

LEO WEINREB AND LAZAR ALEXANDROWITCH RABINOWITCH, OF
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APPARATUS FOR DELIVERING OR COUNTING COINS AND THE LIKE.

No. 812,624.

Specification of Letters Patent.

Patented Feb. 13, 1906.

Application filed July 12, 1904. Serial No. 216,242.

To all whom it may concern:

Be it known that we, LEO WEINREB, merchant, a citizen of Austria-Hungary, and LAZAR ALEXANDROWITCH RABINOWITCH, a citizen of Russia, residing at Vienna, in the Province of Lower Austria, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in Apparatus for Delivering or Counting Coins and the Like, of which the following is a full, clear, and exact specification.

The present invention consists of a new or improved apparatus for delivering or counting coins, counters, tokens, marbles, balls, and other like objects singly or in any desired number at a time and includes an arrangement for releasing and stirring the objects as they lie in a hopper or reservoir.

The accompanying drawings show the apparatus in several forms, the same letters of reference denoting the same or corresponding parts.

Figures 1 to 3 show in elevation, vertical section, and horizontal section, respectively, the simplest arrangement for delivering single objects. Figs. 4, 5, 6, 7, 8, and 9 are views and sections of three other forms, and Figs. 10 and 11 show details of the apparatus.

The apparatus consists in its essential features of a reservoir or receptacle *a* for the coins, tokens, or other objects which are to be counted or given out, a selection-chamber *b* adjoining it, a chute *c*, counting and delivering catch-lever *d*, and an agitating arrangement.

Within or between suitable guides *f*, traversing the chambers *a b c*, is a slide-plate or slider *g*, which may form at the same time the front wall of the said *a b c* and which is adapted to rise up so that its upper edge enters the reservoir *a*. The slide *g* carries a strip *k* on its upper edge, the distance of which from the rear wall *e* is equal to the thickness of the coin, &c., to be passed between them. This prevents coins or objects of irregular surface from falling into the selection-chamber *b*, and thus becoming wedged in the chute *c*. In the selection-chamber *b* the objects can move freely.

The slide *g* can be moved up and down quite independently, or, as illustrated, it may be operated by means of a lever *i* or its attachment *h*, connecting it with the catch-

lever *d*, causing the feed of the objects through the chute *c*. The slide *g* carries a transverse inclined strip *l*, which moves with it.

The objects (coins and the like) which are at the bottom of the chute *c* are prevented from falling out by the catch-lever *d*. The latter is pivoted upon a pin *m*, mounted along the bottom edge of the chute and parallel therewith, or other hinging means may be provided. Its lower end *d'*, which is flanged toward the coin-chute *c*, is kept pressed against the outlet of the chute by the weight of the slide *g* through the medium of the levers *h i* or by a spring, while its upper end is held away from the chute. This upper end is furnished with fork-points *d''*, which when the catch-lever *d* works enter the two adjacent horizontally-spaced openings *o* in one face of the chute, Fig. 1, between two contiguous objects (coins, &c.) in the chute *c*, this taking place before the lower flange *d'* entirely liberates the object resting immediately upon it. The space between the flange *d'* and the points *d''* corresponds to the number of objects which it is desired to deliver at one and the same time.

The catch-lever *d* can be arranged so that its closing end *d'* is detachable, withdrawable, or hinged in such a manner that the objects can, in case of necessity, be withdrawn all together from the apparatus.

Any objects which may accidentally become wedged at the entrance to the chute are pushed upward into the mass again by means of the strip *l*, moving with the slide *g*, and are thus forced to change their positions, whereby some of them become unwedged and partly direct and partly by rolling upon the strip *l* fall into the chute *c*. Simultaneously the upper strip *k* of the slide *g* enters the reservoir *a*, and so agitates the objects lying in disorder therein that a portion of them falls into the selection-chamber *b* and by the aid of the strip *l*, or even directly, falls into the chute *c*, or it may remain immovable in the chamber *b* until the next operation of the slide.

In order to assist in loosening the objects which may become wedged in the selection-chamber *b*, there may be provided in every case a projection *x* above the entrance to the chute.

According to Figs. 4 to 9, one and the

same apparatus and one and the same chute *c* can be employed for obtaining the delivery of one or several articles. In these forms the catch-lever *d* is made with a two-armed lever 5 the upper end of which is kept normally pressed outward away from the chute *c* by means of a spring *p*. Referring to Fig. 4, pushes *q*, controlled by springs *s*, are situated on the front face of the chute *c*, (the latter being either closed, as in Fig. 1, slotted, as in 10 Fig. 10, or open, as in Fig. 11,) their positions agreeing with those of the superincumbent objects, said pushes, by means of points *d*², being adapted to enter between the individual 15 objects and each keeping touch with the catch-lever or trigger *d* by means of a connecting arm *r*, extending toward the rear on either side of the chute. According to the distance of the push which is pressed from the flange 20 *d'*, a greater or less number of objects will be caused to fall out of the chute. According to Figs. 6 and 7, the pushes *q* are pivoted on knuckles *t*, but act in other respects exactly in the same way as the form shown in Figs. 25 4 and 5. According to the modified forms shown in Figs. 8 and 9, the pushes are hinged in arms *u* and bear extensions *v*, which grip behind a bridge *w*, fixed to the lower end of the catch-lever or trigger *d*. Upon a push 30 *q* being pressed, which normally keeps open by its being counterbalanced, the points *d*² bear against the rear wall of the chute *c*, while its extension *v*, by means of the bridge *w*, keeps the flange *d'* clear of the chute-outlet. 35 Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is—

1. In apparatus for delivering and count- 40 ing coins, counters, tokens and other like objects, the combination of a reservoir, a selection-chamber below said reservoir, a vertically-reciprocatory slide the upper edge of which is adapted to force its way into said 45 reservoir and thereby stir the objects lying in disorder therein thereby causing part of them to fall into said selection-chamber corresponding to their thickness, means for actuating said slide and means for withdrawing 50 said objects from the selection-chamber.

2. In apparatus for delivering and counting coins, counters, tokens and other like objects, the combination of a reservoir, a selection-chamber below same, a chute, and a slide

having an inclined strip thereon, the latter 55 constituting the bottom or floor of the selection-chamber and adapted to assist in stirring or unwedging the objects therein so that part of them may slide down into the chute.

3. In apparatus for delivering and count- 60 ing coins, counters, tokens and other like objects, the combination of a reservoir, a selection-chamber below same, a chute and a projection fixed so as to project sufficiently over the entrance of the chute to serve as a stop 65 for the object immediately against it, thereby compelling the objects which may have become wedged together in the selection-chamber to change their positions.

4. In an apparatus such as described, an 70 upright coin-chute having horizontally-spaced openings in one face, and a member provided with points movable through said openings.

5. In an apparatus such as described, a 75 coin-chute having openings in one face, a member provided with spaced points movable through said openings, and means operable by said member for opening or closing 80 the lower end of said chute.

6. The combination, with the coin-chute *c* having the superposed openings *o* in one face, of the lever *d* adapted to extend at its end *d'* over the lower end of said chute, the spring *p* for normally maintaining said lever in the 85 aforesaid position, and the superposed pushes *q* having points *d*² movable in said openings *o* into the path of the coins, said pushes abutting against said lever and serving when pushed inwardly to move the end *d'* away 90 from the end of said chute.

7. In an apparatus such as described, in combination, a coin-chute provided in one face with superposed rows of horizontally-spaced openings, push members each having 95 points movable through the openings in each row, and a lever pivoted upon one face of the chute, normally closing the lower end thereof, and abutting against said push members.

In testimony that we claim the foregoing as 100 our invention we have signed our names in presence of two subscribing witnesses.

LEO WEINREB.

LAZAR ALEXANDROWITCH RABINOWITCH.

Witnesses:

WILHELM BERGER,

ALVESTO S. HOGUE.