

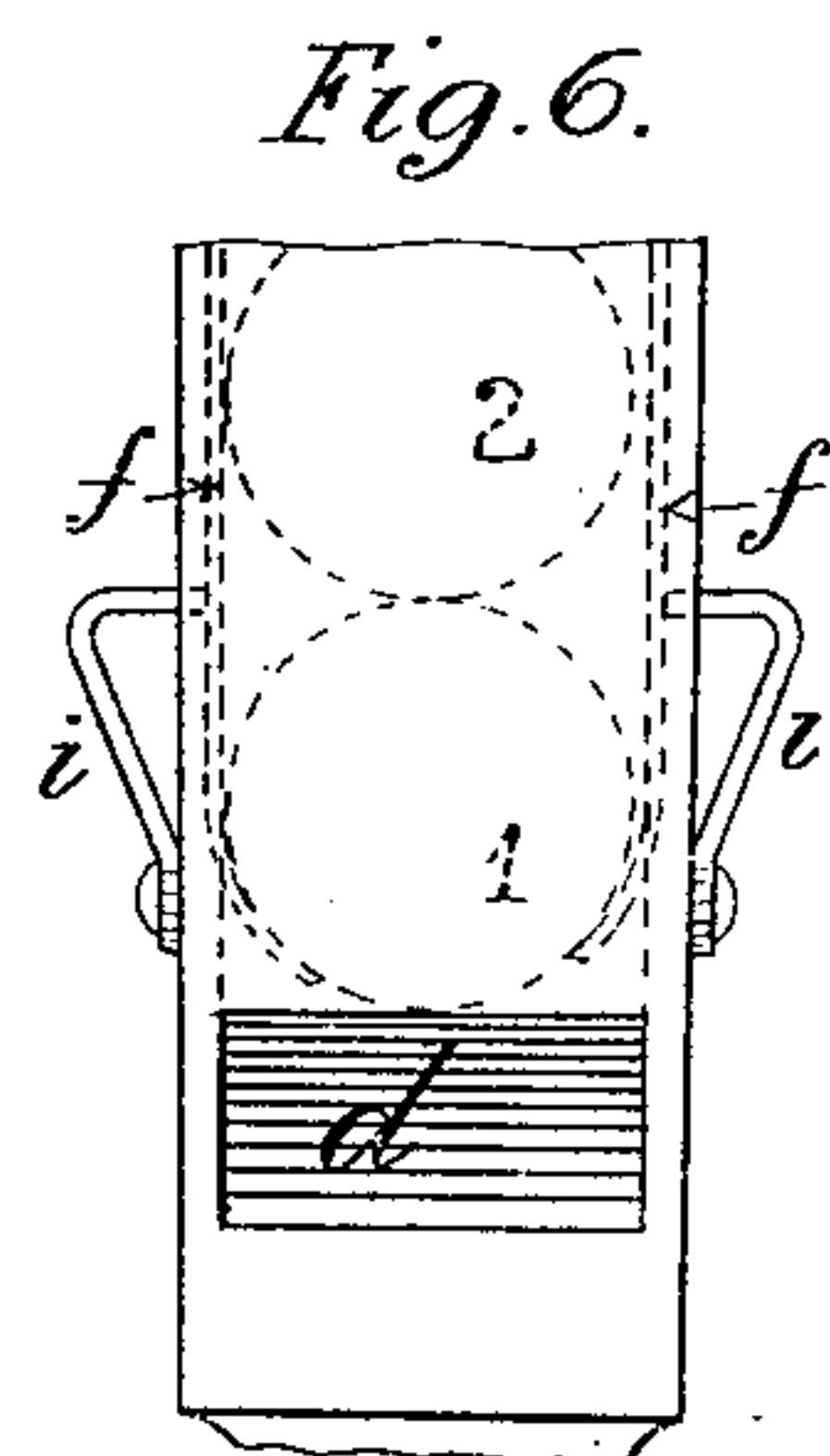
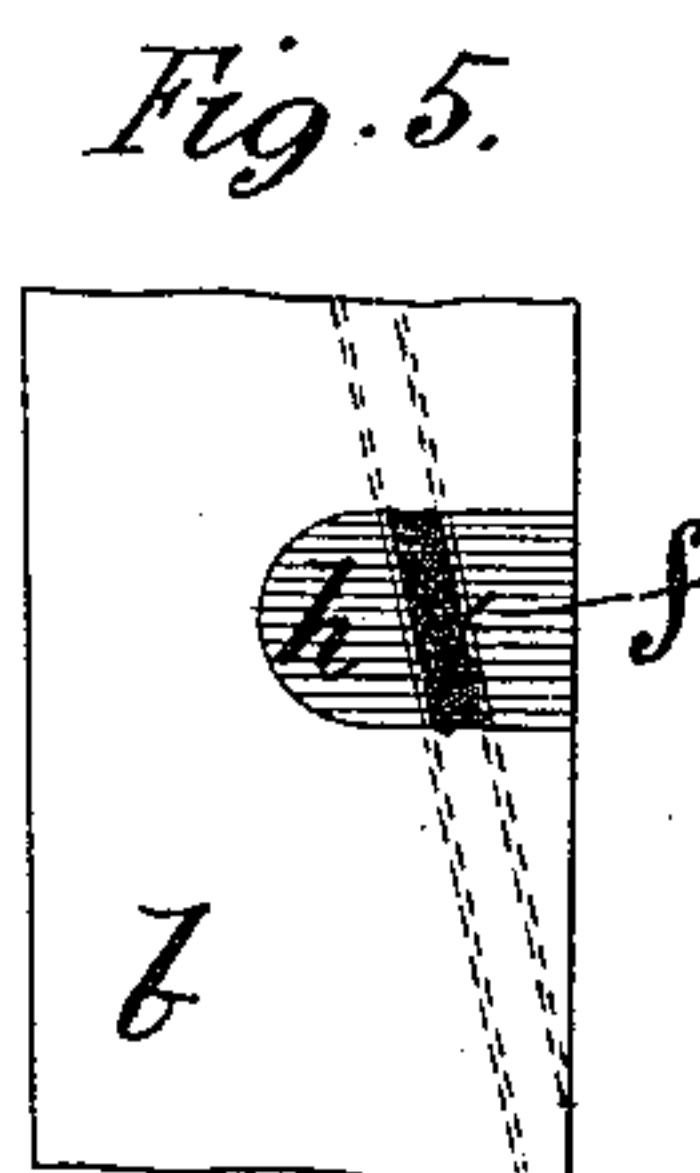
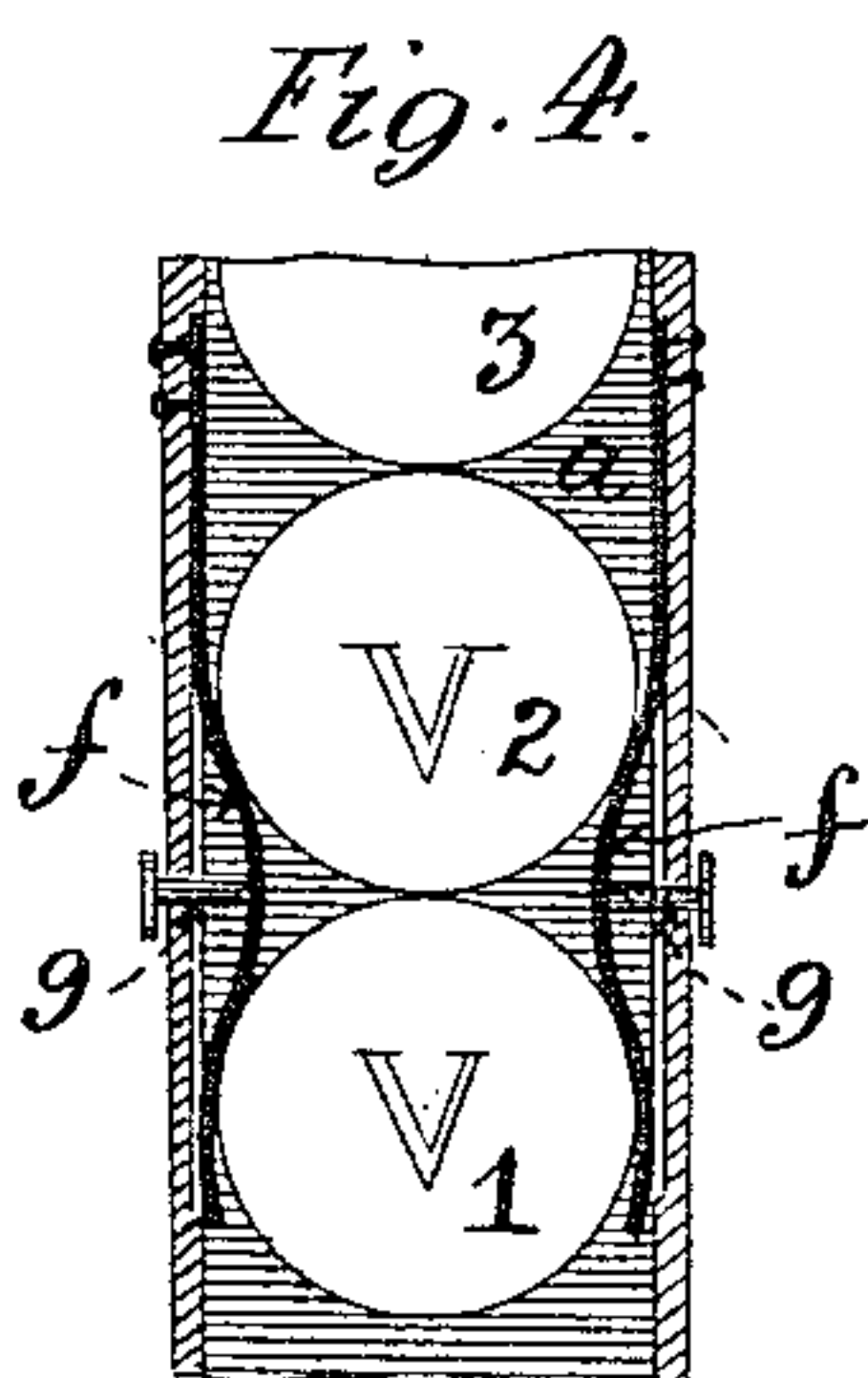
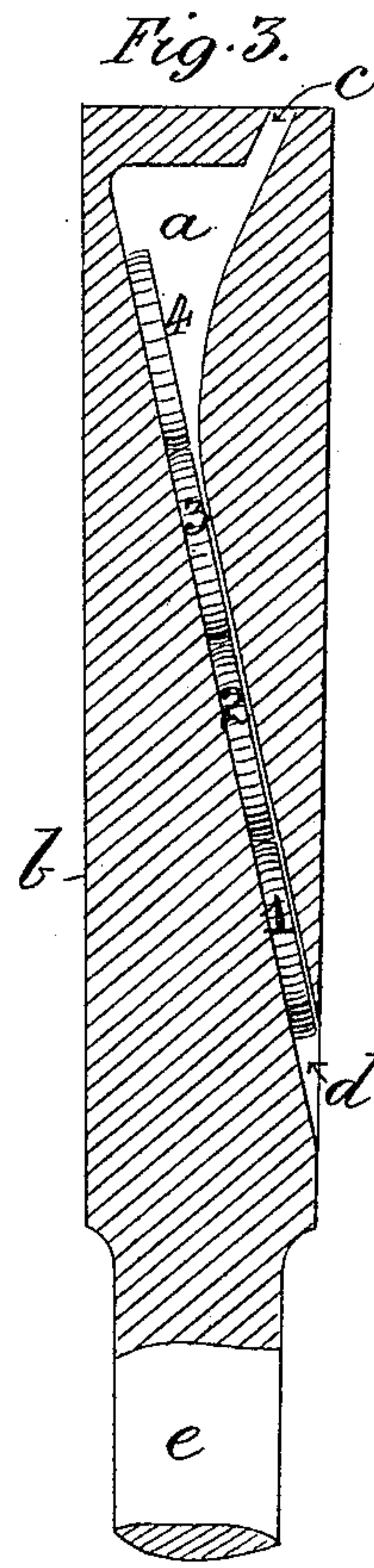
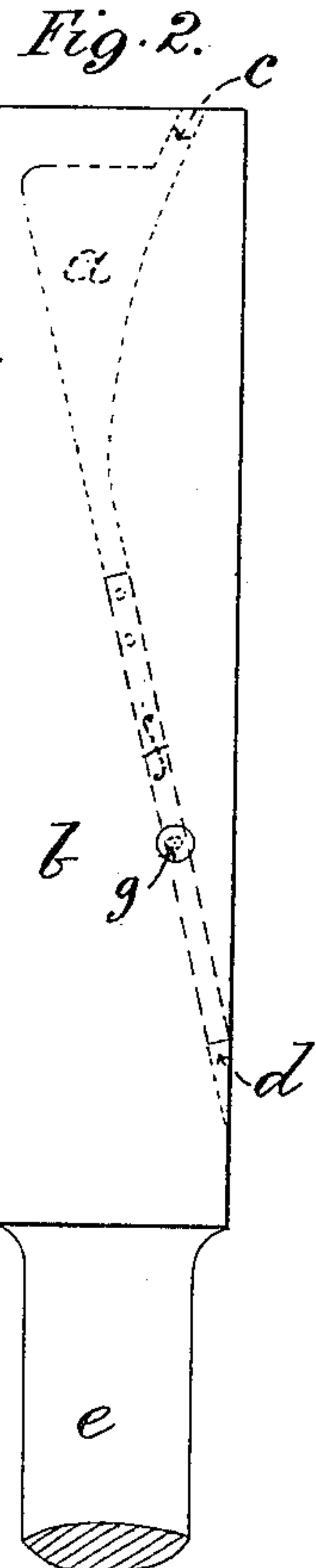
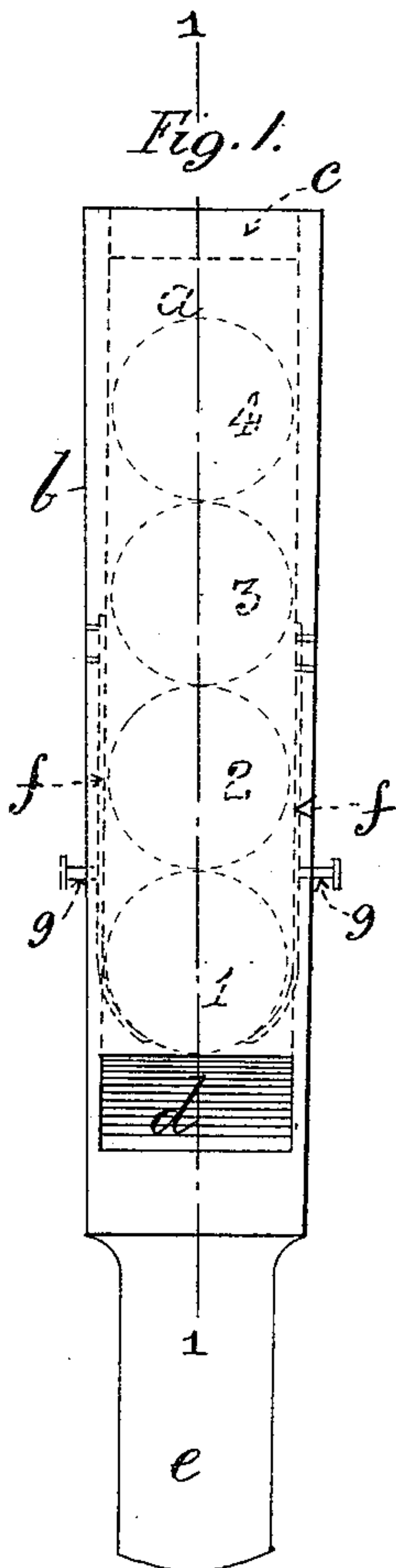
(No Model.)

E. W. FURRELL.

COMBINED BOX OR CHUTE AND MEANS FOR INTERMITTENTLY  
DISCHARGING COINS THEREFROM.

No. 362,886.

Patented May 10, 1887.



WITNESSES  
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INVENTOR.  
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# UNITED STATES PATENT OFFICE.

EDWARD W. FURRELL, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF  
TO PAUL BAKEWELL, OF SAME PLACE.

COMBINED BOX OR CHUTE AND MEANS FOR INTERMITTENTLY DISCHARGING COINS THEREFROM.

SPECIFICATION forming part of Letters Patent No. 362,886, dated May 10, 1887.

Application filed September 2, 1886. Serial No. 212,486. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD W. FURRELL, a subject of the Queen of Great Britain, and now residing in the city of St. Louis, State of Missouri, mechanical engineer, have invented a certain new and useful Combined Box or Chute and Means for Discharging Intermittently therefrom Coins or other Articles, of which the following is a full, clear, and exact description.

My invention has for its object, preferably, as an application to the handle of an umbrella, sunshade, or walking-stick, to hold and discharge, when required, the small coins or money used by passengers for defraying street-car fares, the cost of newspapers, and other trifling items of expenditure, so as to avoid the trouble and annoyance of seeking access to the pockets of the dress, as at present; but I do not limit my invention to this particular object, as the principal feature thereof may be applied to other purposes where circular, spherical, or othersuitably-shaped articles are required to be discharged intermittently and consecutively.

On the accompanying drawings, Figure 1 is a front elevation of my invention as applied to the handle of an umbrella, sunshade, or walking-stick; Fig. 2, a side elevation thereof; Fig. 3, a section on line 1 1 in Fig. 1; Fig. 4, a detached part sectional view of Fig. 1; and Figs. 5 and 6, detached views of modifications of parts of Figs. 1 and 2, like letters of reference denoting like parts in all the figures.

My invention consists of an elongated box or chute, *a*, formed in the present case of a rectangular section and at an inclination longitudinally through the handle *b* of an umbrella, sunshade, or walking-stick. One end or receiving-opening, *c*, of this box or chute *a* may be placed at the end of the handle *b*, as shown, or otherwise, as found most suitable, the other end or discharging-opening, *d*, of the box or chute *a* being at one side of the handle *b*, near the junction of the latter with the stick *e*. The box or chute *a* is of such a size in cross section as to allow of the easy passage through it of one, two, or more five (or ten) cent coins, 1 2 3 4.

Into and along the narrow sides of the box or chute *a* are recessed flat steel springs *f*, (one on each side,) the ends of which nearest the end of the handle *b* are fixed to the narrow

sides of the box or chute *a*, while the lower ends are free and slightly curved or set inward toward each other, so as to normally form a stop to the passage of the coins through the end or discharging opening *d*.

From the flat springs *f*, at a point immediately opposite to the point of meeting between the circumferences of coins 1 and 2, studs *g* project through the sides of the handle *b*; or, in lieu of studs *g*, holes *h* may be formed through the sides of the handle *b*, as shown in the detached view, Fig. 5, so as to expose those portions of the springs *f* opposite to the point of contact between coins 1 and 2; or finger-springs *i*, for pressing against springs *f*, may be used, as shown in Fig. 6.

The operation of the apparatus is as follows: The umbrella or sunshade being held end downward, or with the end of its handle *b* horizontal, or thereabout, the five-cent piece 1 is dropped through the receiving-opening *c* into the box or chute *a*, and slips down through the latter until stopped by the free ends of the springs *f*. Coins 2 3 4 are then dropped through opening *c*, and, slipping down through the chute *a*, are stopped, respectively, by the edges of coins 1 2 3. When desired to abstract coin 1 from the box or chute *a*, the springs *f* are pressed inward by the thumb and finger acting on the studs *g* (or on the springs *f* direct through holes *h*, or on the springs *i*) against the edges of coins 1 and 2, and are thereby caused to assume a curved form at that part, as shown in Fig. 4, so that the convex portions of the springs *f* enter the spaces formed between coins 1 and 2, (owing to the convexity of their edges,) and in so doing press upward on and hold coin 2, and at the same time press down upon and discharge coin 1 past the free ends of springs *f*, (which have meanwhile been receded or drawn toward the narrow sides of the chute or box *a*,) and through discharging-opening *d* into the hand. The springs *f*, being then released, assume their normal position, so that coin 2 drops into the position before occupied by coin 1 against the free ends of the springs *f*, the operation being repeated until all the coins are consecutively discharged through opening *d*.

I claim—

1. In apparatus for intermittingly discharging coins or other articles, the box or chute *a*,

formed with receiving and discharging openings, and of an oblong section, in combination with the springs *f*, arranged longitudinally along the narrow sides of said box, substantially as and for the purpose described.

2. A box or chute for holding coins, in combination with springs arranged longitudinally in said box or chute, and with their free ends curved or set inward toward each other, so as normally to close the discharge-opening, substantially as and for the purpose described.

3. A box or chute, *a*, in combination with springs *f*, arranged longitudinally therein, and studs *g*, arranged in the sides of said box or

chute, so as to engage with the springs *f*, substantially as and for the purpose described.

4. The combination, with the handle of an umbrella, of the chute *a*, springs *f*, arranged therein, and springs *i*, arranged in the sides of said handle, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD W. FURRELL.

Witnesses:

S. L. SCHRADER,  
PAUL BAKEWELL.