

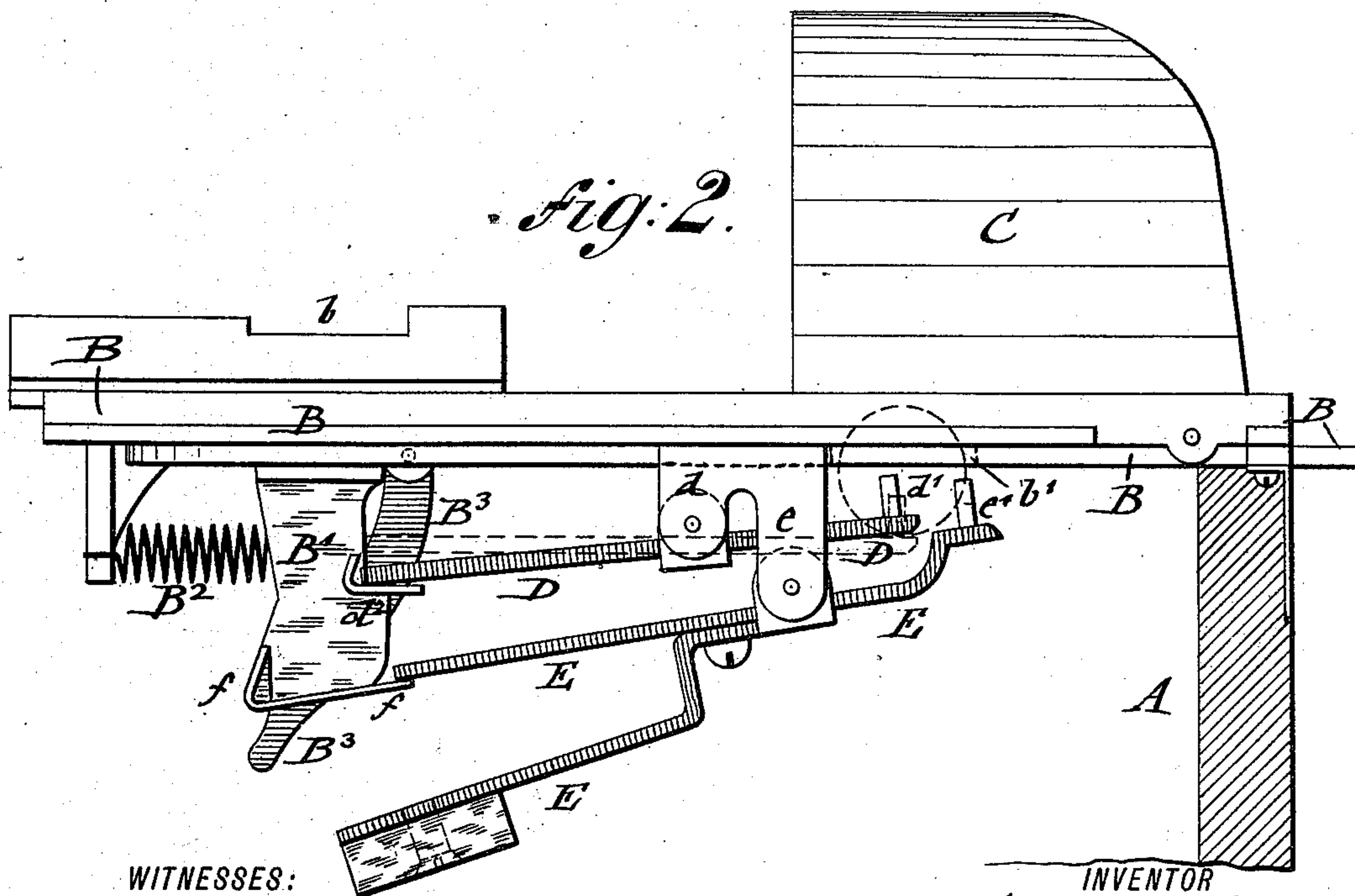
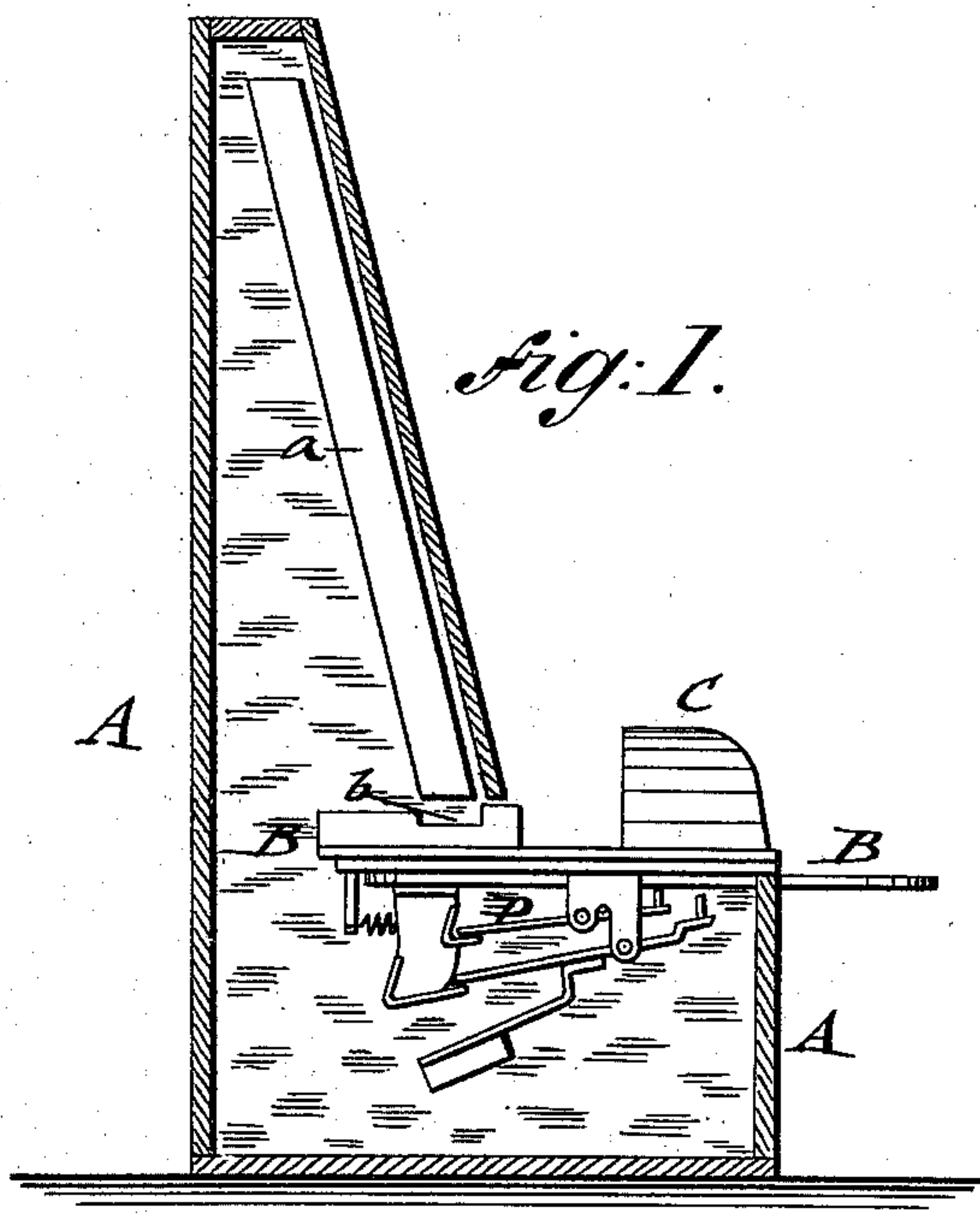
(No Model.)

2 Sheets—Sheet 1.

W. LANG.
VENDING APPARATUS.

No. 401,891.

Patented Apr. 23, 1889.



WITNESSES:

A. Schehl.
Carl Kany

INVENTOR

William Lang
BY *Joseph P. Regener*
ATTORNEYS.

(No Model.)

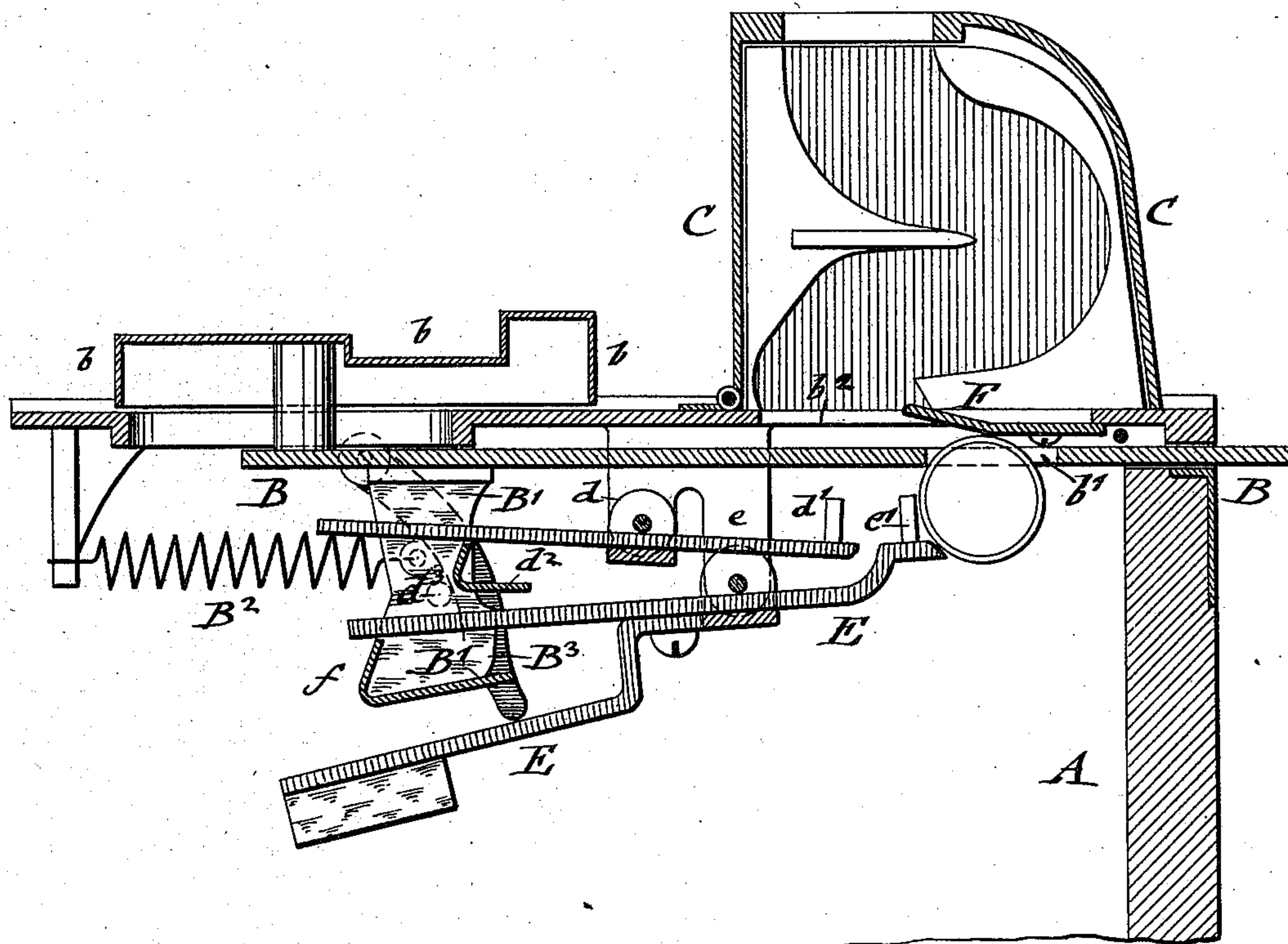
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Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM LANG, OF BROOKLYN, NEW YORK.

VENDING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 401,891, dated April 23, 1889.

Application filed January 30, 1889. Serial No. 298,054. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LANG, of Brooklyn, in the county of Kings and State of New York, a citizen of the United States, have invented certain new and useful Improvements in Vending Apparatus, of which the following is a specification.

This invention relates to certain improvements in the vending apparatus for which Letters Patent were granted to Henry Bailey, No. 394,904, dated December 18, 1888, said improvements being designed with a view to secure the more reliable working of the releasing mechanism and prevent the tampering with the releasing mechanism and the delivery of the merchandise from the apparatus without a proper equivalent; and the invention consists, in a vending apparatus, of the combination of a merchandise-delivery slide having a locking-bar attached thereto, a tilting locking-lever that is actuated by a coin dropped into one end of the same, so as to be released from said locking-bar, and an auxiliary fulcrumed and weighted lever that is actuated by the pressure of the coin on its outer end in connection with a fixed incline above said end, so that the auxiliary locking-lever is released from the locking-bar by the action of the incline and coin on the auxiliary lever, so as to produce the release of said locking-bar and permit of the outward motion of the merchandise-delivery slide.

In the accompanying drawings, Figure 1 represents a vertical longitudinal section of my improved vending apparatus. Fig. 2 is a side elevation of the locking-levers of the delivery mechanism, showing the same in normal position ready for the dropping of the coin; and Fig. 3 is a vertical longitudinal section of the delivery mechanism with the coin-chute and locking-levers, showing the parts in position after they were actuated by the coin and the delivery-slide pulled out.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, *a* represents a merchandise feeding and delivery chute, which is arranged in the upper part of the inclosing-case A of the vending apparatus. The lower end of the delivery-chute *a* termi-

nates above a recessed shifting-block, *b*, at the rear end of the merchandise-delivery slide B, which latter is guided in ways of the casing A, connected by a pin with the shifting-block *b*, and extended through a slot at the front of the same to the outside, so as to be taken hold of for pulling out the delivery-slide B. The slide B is provided with a slot, *b'*, below the coin-chute C, so that a coin which is dropped into the coin-chute can pass from the bottom opening, *b*², of the coin-chute through the opening *b'* of the delivery-slide B onto the front end of a primary locking-lever, D, which is fulcrumed to fixed lugs *d* at the inside of the casing, as shown clearly in Figs. 1 and 2.

The front end of the fulcrumed locking-lever D is preferably provided with two studs, *d'*, between which the actuating-coin is retained, the weight of said coin producing the tilting of the locking-lever D, so that the latter clears recessed keeper *d*², attached to a locking-bar, B', attached to the under side of the rear part of the merchandise-delivery slide B.

When the locking-lever D is tilted by the coin received at its front end, the rear end of the locking-lever D is lifted clear of the keeper of the locking-bar B', so that the slide B can be pulled forward against the tension of a spiral spring, B², which is attached to a fixed pin at the rear part of the casing and to a pivoted lever-arm, B³, that presses on a laterally-projecting pin, *d*³, of the locking-bar B'.

To prevent tampering with the locking-lever D by the insertion of a wire, so the merchandise-delivery slide could be operated without the proper equivalent, an auxiliary locking-lever, E, is arranged below the primary locking-lever D, fulcrumed to fixed lugs *e* of the casing, and provided at the front end with guide-pins *e'*, for receiving the coin from the primary locking-lever D. The rear part of the auxiliary locking-lever E is forked, the lower arm being weighted and the upper arm engaged by a second keeper, *f*, of the locking-bar B', as shown clearly in Fig. 2. A fixed inclined plate, F, is arranged in front of the bottom opening, *b*², of the coin-chute, and serves to guide the coin which is delivered from the front end of the primary locking-

lever D by the slot of the slide B onto the front end of the auxiliary locking-lever E, and to exert a positive downward pressure on the front end of said lever, so as to tilt the same and lift its upper rear end above the keeper *f* of the locking-bar B'; so that the delivery-slide B can be moved forward without being arrested by the stops or keepers *d*² and *f*. The merchandise on the recessed block *b* at the rear part of the delivery-slide is thereby carried from the delivery-chute of the casing to the outside of the apparatus. When the delivery-slide has been drawn out to its full length, the coin is dropped into the lower part of the vending apparatus and the delivery-slide prevented from being returned by the frictional action of the oscillating and spring-actuated arm on the lateral pin of the locking-bar B' until, upon slightly pushing the delivery-slide back, the oscillating arm and spring act on the lateral pin of the locking-bar and move the delivery-slide quickly in backward direction to its normal position in the apparatus.

As soon as the coin is dropped and the delivery-slide returned to its normal position, the locking-levers are tilted back into their normal position by their heavier rear ends, they being then in a position for the next operation on the dropping of another coin.

The auxiliary locking-lever secures the reliable working of the vending apparatus and prevents any tampering with the same, as even in case the first locking-lever be released by some means the auxiliary locking-lever, which requires a positive action, could not be released by any outside influence, as the delivery-slide, having been moved forward, prevents any access to the auxiliary locking-lever through the coin-chute.

Another advantage is that only a coin of the required diameter can release the auxiliary locking-lever, so that worthless metal disks

of smaller size could not be used, as they would not actuate the auxiliary lever, while disks of larger size could not pass through the coin-chute or the slot in the delivery-slide.

If desired, the primary locking-lever can be dispensed with and the auxiliary locking-lever be used without the same whenever it is desired to simplify the construction; but in most cases I prefer to use two levers, so as to provide the required safeguards for preventing tampering with the vending apparatus.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a vending apparatus, the combination of a merchandise-delivery slide having a slot for dropping the coin, a primary locking-lever, a locking-bar on said delivery-slide having a stop or keeper for the primary locking-lever, an auxiliary weighted locking-lever, a stop or keeper on the locking-bar for the latter, and a fixed incline above the front end of the auxiliary locking-lever adjoining the bottom opening of the coin-chute, substantially as set forth.

2. The combination, in a vending apparatus, of a merchandise-delivery slide having a slot for the passage of the coin, a coin-chute above said slot, a fulcrumed and weighted locking-lever, a locking-bar attached to the delivery-slide and provided with a stop or keeper for said locking-lever, and a fixed incline arranged vertically above the front end of the locking-lever and adjoining the bottom opening of the coin-chute, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

WILLIAM LANG.

Witnesses:

PAUL GOEPEL,
MARTIN PETRY.