

(No Model.)

C. DREIMILLER & J. BOVE.  
COIN OPERATED VENDING APPARATUS.

No. 408,466.

Patented Aug. 6, 1889.

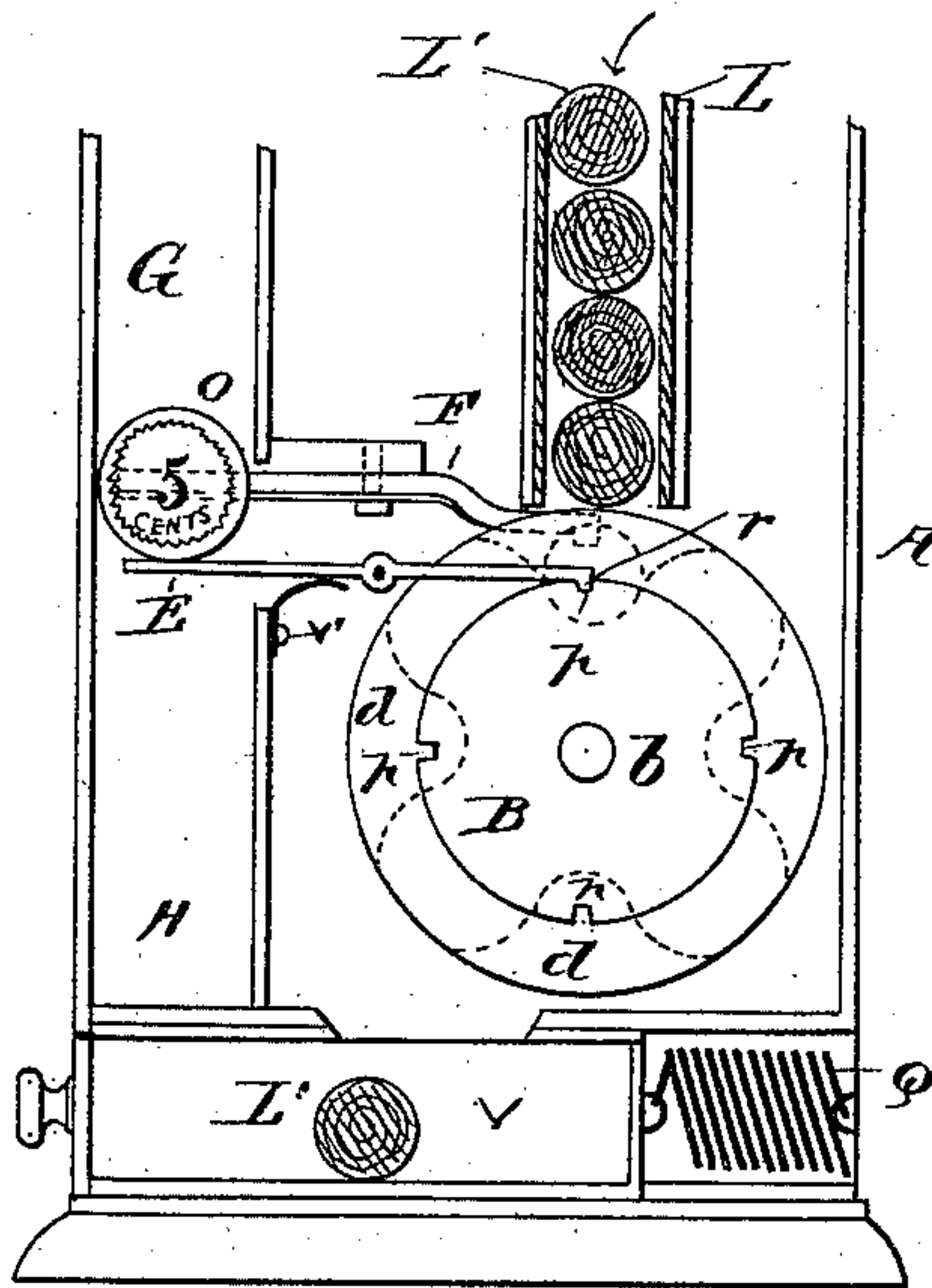


Fig. 1.

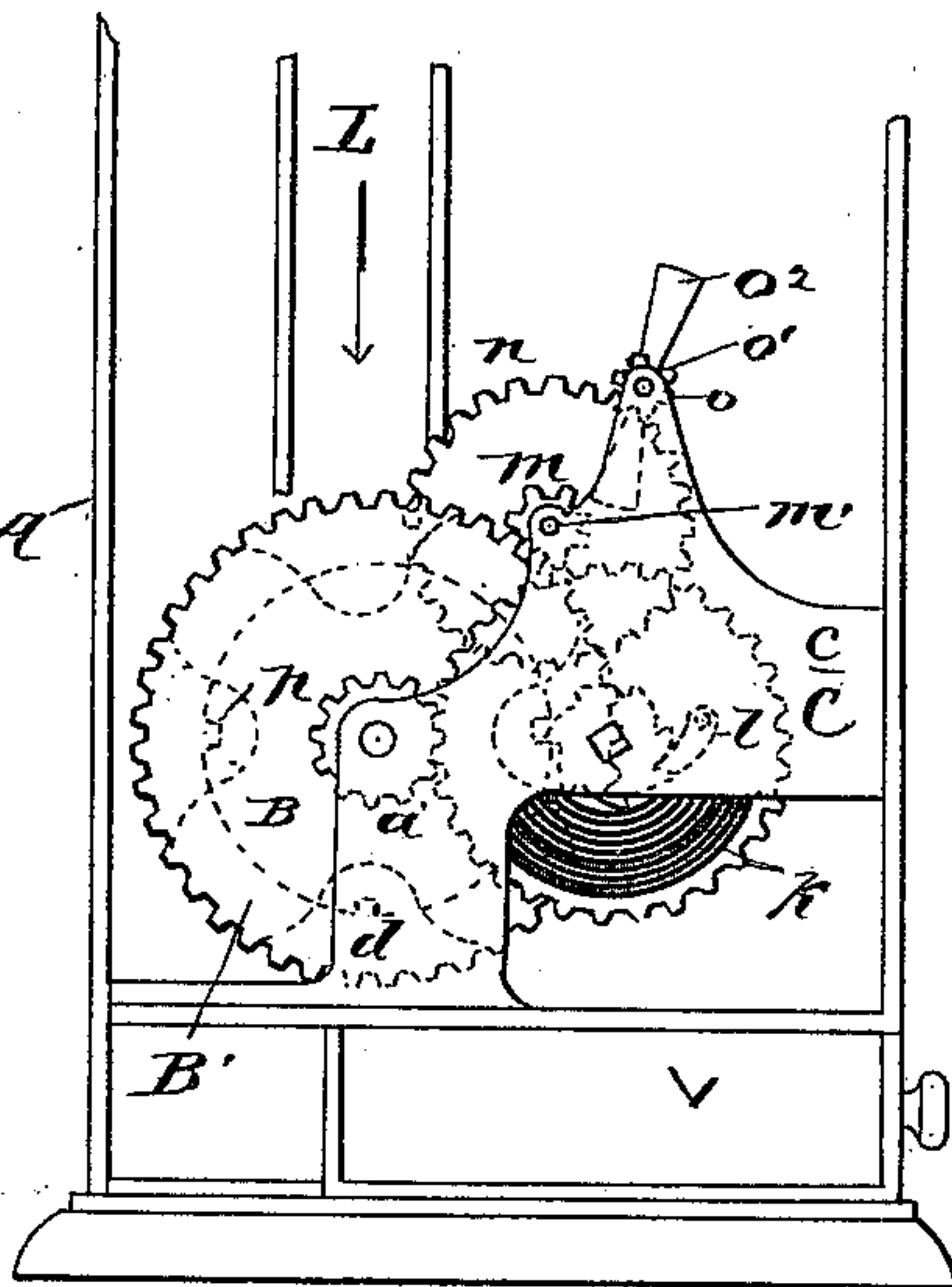


Fig. 2.

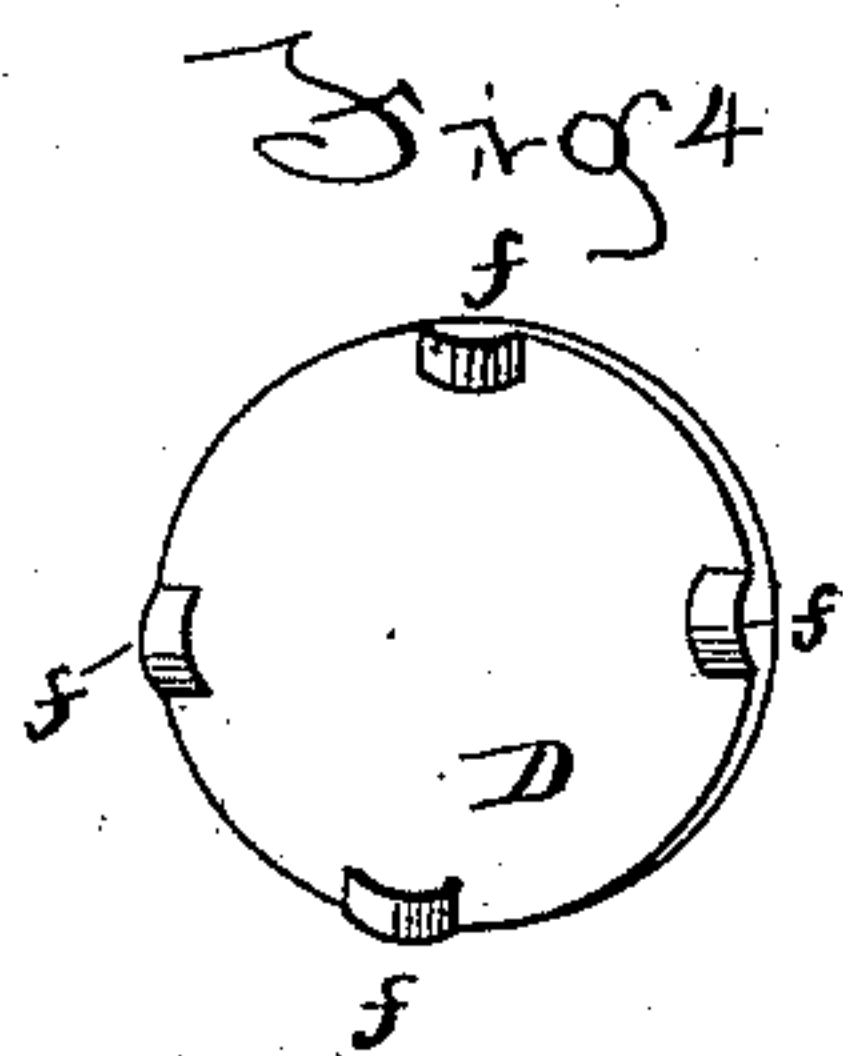


Fig. 4.

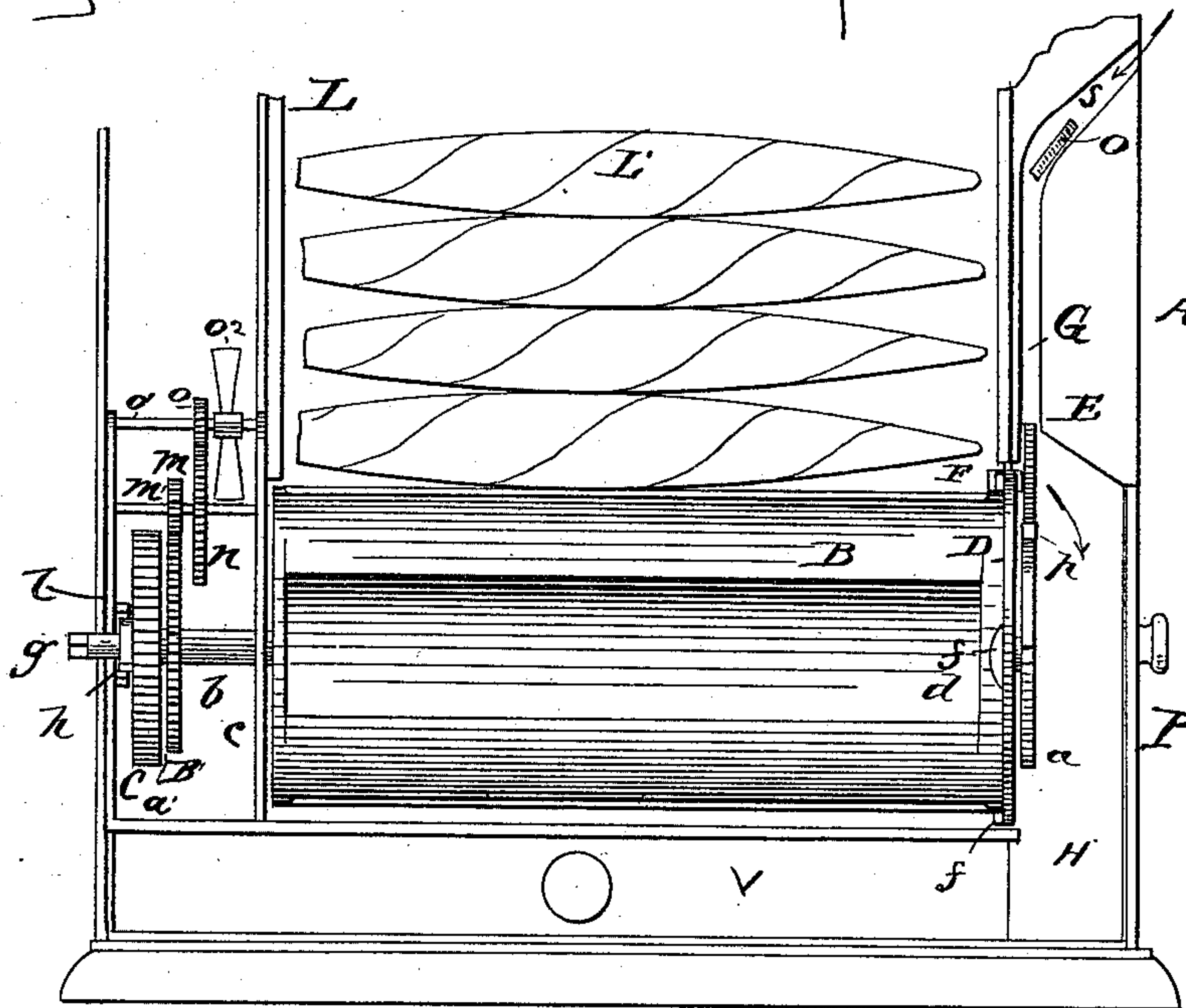


Fig. 3.

WITNESSES:  
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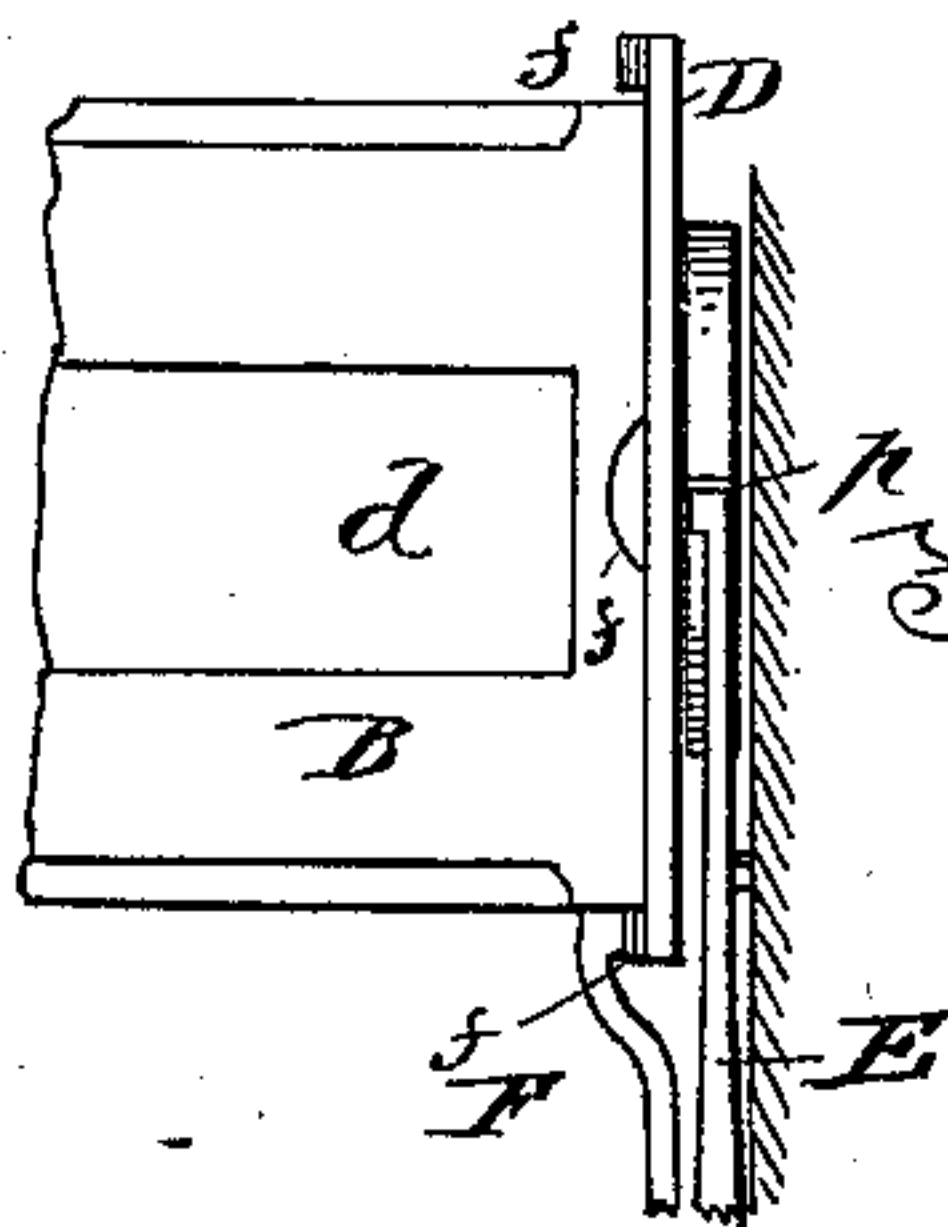


Fig. 5.

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# UNITED STATES PATENT OFFICE.

CASPAR DREIMILLER, OF BROOKLYN, NEW YORK, AND JOHN BOVE, OF  
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## COIN-OPERATED VENDING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 408,466, dated August 6, 1889.

Application filed December 5, 1888. Serial No. 292,690. (No model.)

*To all whom it may concern:*

Be it known that we, CASPAR DREIMILLER, of Brooklyn, county of Kings, State of New York, and JOHN BOVE, of West Hoboken, county of Hudson, State of New Jersey, have invented certain new and useful Improvements in Coin-Operated Vending Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of this invention is to provide an improved coin-operated apparatus for automatically delivering cigars and other articles to purchasers.

The invention consists of a spring-actuated revoluble drum, a coin-operated lever for regulating the revolutions of said drum, a drum-operated lever for controlling the action of the first-named lever by removing the coin therefrom, and suitable auxiliary mechanism combined with these to produce the desired effects, all inclosed in a suitable case, all of which will be hereinafter fully set forth.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a partly-sectional side elevation of our improved apparatus. Fig. 2 is a partly-sectional elevation of the opposite side thereof. Fig. 3 is a front elevation of the same with the face of the apparatus removed. Fig. 4 is an elevation of the drum-ring, showing the lever-operating bosses thereon. Fig. 5 is a plan view showing an end of the drum with bossed ring and the coin-operated and coin-dislodging levers.

In the drawings, A represents the case of the apparatus, which may be chiefly of glass, that the mechanism and the articles to be vended may be readily seen from the outside, or may be of wood or metal. Preferably the case will be chiefly of glass when it is designed for the vending of cigars, which will always be introduced therein in their original boxes.

Within the case, at a short distance from one side thereof, is fixed a standard *a*, in which is journaled an end of the shaft *b*,

whose opposite end, journaled in standard *c* at the opposite end of the case, has secured on it a large cog-wheel *B'* and a smaller one *a'*. This shaft *b* also carries the delivery-drum *B*, in which are several (in this instance four) longitudinal grooves or depressions *d*, each of which is fit to receive a cigar or other small article. About that end of the said drum nearest the standard *a* is secured a ring *D*, on which are formed bosses *f*, equidistant from each other and equal in number to the drum-grooves *d*, which bosses are designed to make contact with and move the coin-dislodging lever as said drum revolves, as will be hereinafter more fully set forth; and in the periphery of this end of the drum *B* are several sockets *p*, of equal number with the grooves *d*.

Journaled in a side of the case *A* is a shaft *g*, whose outer end, projecting outside the case, is fashioned so that a key may be applied to turn it, and on this said shaft is secured a ratchet *h* and cog-wheel *C*, within which latter is a coiled spring *k*, (shown in Fig. 2,) which is wound up by turning said shaft with a key. A pawl *l*, fixed in proper position, engages with the ratchet *h*, to hold it when the spring *k* is being wound up.

The cog-wheel *C* gears with the small cog-wheel *a'* on shaft *b*; hence when the shaft *g* is turned by the key (not shown) the shaft *b* is also revolved, and the cog-wheel *B'*, being geared into the cog-wheel *m*, fixed on shaft *m'*, causes the cog-wheel *n* on same shaft to revolve, and the cog-wheel *n*, gearing with cog-wheel *o* on shaft *o'*, causes the latter and its regulating-fan *o'* to revolve.

The coin-operated lever *E*, with finger *r* on one end, is pivoted within the case, so that its said finger is normally engaged in a drum-socket *p* and is held therein by a spring *r'*, to prevent the drum from revolving until said lever is disengaged by the introduced coin. Near this lever *E* and above it is another lever *F*, designed to move in a horizontal plane. One end of this lever *F* is extended across the coin-conductor *G*, (as best seen in Fig. 1,) while the other end extends rearward of the ring *D* in such a position that as the drum *B* revolves the ring-bosses *f* will make



contact with said lever and so move it that its free end will strike the introduced coin, and dislodging it from the lever E will enable the said lever E to return to its normal position of holding the drum from further revolving, while the coin will fall into the receptacle H.

A variety of small articles may be vended by this apparatus; but preferably it is herein shown as arranged for the vending of cigars. A box L containing cigars L' is introduced into the case at the top, (one end of the box being first removed,) so that the cigars shall rest on the drum B, as shown in Figs. 1 and 3, the lower cigar in one of the drum-grooves *d*. The spring *k* and drum being wound up, they are held stationary by the lever E. A coin, as O, Figs. 1 and 3, dropped into the slot *s* will fall upon the free end of the lever E and release it from the drum B, which will then be put in revolution by the action of the spring *k*. As the drum revolves, a boss *f* makes contact with the lever F and moves it to push the coin from off the lever E, and at the same time the cigar in the drum-groove falls into the drawer V, from which it may be taken. The coin falls from lever E into the receptacle H, whence it may be removed on opening the slide or door P, and the lever E, being relieved from the weight of the coin, immediately engages its finger in the next approaching drum-socket *p* and arrests for the time the further revolution of the drum. This operation may be repeated so long as there are any cigars or other suitable articles to be delivered by the drum, and so long as suitable coins are introduced into the case to fall upon the lever E.

The fan *o*<sup>2</sup> in revolving serves to regulate or moderate the speed of the drum's revolutions, and the coiled spring Q serves to hold the drawer V closed, or to close it when it has been opened and released.

Having thus described our invention, we

claim as new and desire to secure by Letters Patent—

1. A coin-actuated vending apparatus constructed, substantially as herein shown and described, with a spring-actuated vertically-revoluble drum provided with surface grooves or depressions for holding and delivering articles to be vended, with peripheral sockets for the engagement of the coin-actuated lever, and with a ring having bosses for operating the coin-dislodging lever, a coin-actuated drum-releasing lever, a coin-dislodging lever, a suitable train of gearing, an actuating-spring, and a regulating-fan, all arranged and operating substantially as set forth.

2. In a coin-actuated vending apparatus, the combination, with a coin-actuated lever, of a lever adapted and arranged to be moved to dislodge the coin from the first-named lever, substantially as herein shown and described.

3. The combination, with the spring-actuated revoluble drum B, having grooves *d*, adapted to receive and deliver articles to be vended and provided with sockets *p* and bosses *f*, of arresting-lever E and dislodging-lever F, all constructed and arranged substantially as herein shown and described.

4. In a coin-operated vending apparatus, the spring-actuated revoluble drum having grooves *d*, adapted to receive and deliver articles to be vended and provided with sockets *p* and bosses *f*, substantially as herein shown and described.

In testimony that we claim the foregoing we have hereunto set out hands, in the presence of two witnesses, this 18th day of November, 1888.

CASPAR DREIMILLER.  
JOHN BOVE.

Witnesses.

JACOB J. STORER,  
CHAS. H. LOTT.