J. SAHLIN.

COIN CONTROLLED VENDING APPARATUS FOR CIGARETTES AND THE LIKE.

APPLICATION FILED DEC. 31, 1907.

905,003. Patented Nov. 24, 1908.

Fig. 1.

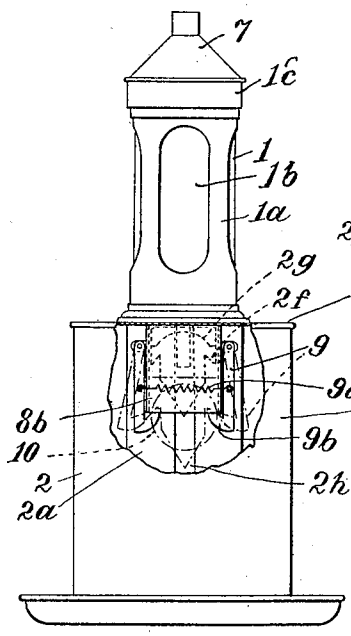


Fig. 2.

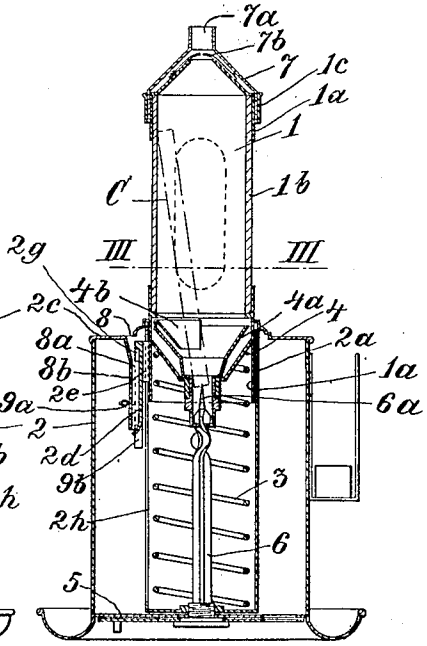
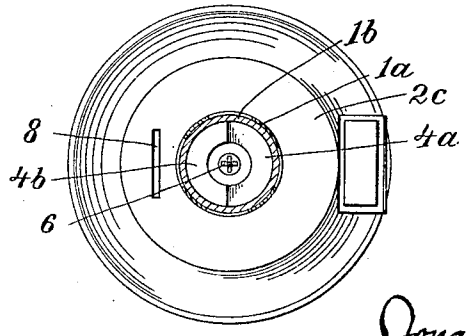


Fig. 3.



Witnesses
P. E. Barnes.
J. J. Sheehy Jr.

Inventor
Jonas Sahlin
by Jarvis J. Sheehy
Atty.

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JONAS SAHLIN, OF STOCKHOLM, SWEDEN.

COIN-CONTROLLED VENDING APPARATUS FOR CIGARETTES AND THE LIKE.

No. 905,003. Specification of Letters Patent. Patented Nov. 24, 1908.

Application filed December 31, 1907. Serial No. 408,836.

To all whom it may concern:

Be it known that I, JONAS SAHLIN, a citizen of the Kingdom of Sweden, residing at Stockholm, Sweden, have invented new and useful Improvements in Coin-Controlled Vending Apparatus for Cigarettes and the Like, of which the following is a specification.

This invention relates to improvements in coin-controlled vending apparatus for cigarettes and the like.

The object of the invention is to provide a single and reliably working vending apparatus, by means of which it is possible to sell cigarettes and the like piece by piece.

The invention consists, chiefly, in the combination of a holder movable up and down and having a perforate bottom, in which the cigarettes are placed, a fixed push rod entering through the bottom of the said holder when the latter is moved downwards and pushing out a cigarette through an opening in the cover of said holder, and a coin-mechanism locking the said holder so as to prevent the latter from being moved downwards until the coin has been dropped down into the coin-mechanism.

In the accompanying drawing I have shown one embodiment of my invention.

Figure 1 shows a side-elevation of the apparatus, the casing being partly broken away to show the coin-mechanism. Fig. 2 is a vertical section of the apparatus, and Fig. 3 shows a plan-view and sectional view on line III—III in Fig. 2.

The apparatus comprises a holder 1 in which the cigarettes C (Fig. 2) or other subjects to be sold are placed in an upright or substantially upright position. The said holder, which may consist of an outer perforated metal-casing 1^a and an inner glass-cylinder 1^b, is movable up and down in a suitable frame or casing which may be composed of two cylindrical parts 2 and 2^a, the inner of which serves as a guide for the holder 1. A coil spring, or the like, 3 tends to keep the holder 1 in the uppermost position. The bottom of the holder may, preferably, consist of two funnels 4 and 4^a, the outer one 4 being rigidly secured to the metal-casing 1^a, and the inner one 4^a being rotatable for the purpose hereinafter set forth. To the bottom 5 of the apparatus is secured an upright push-rod 6 which, as is shown, may be cruciform in cross-section. The upper end of said push-rod enters through a correspondingly shaped opening in the bottom of the said rotatable funnel 4^a and may be provided with a point 6^a in order to insure the delivering of the cigarettes. The upper end of the push-rod 6 is turned as a cork-screw, preferably in two opposite directions, so as to cause the inner bottom 4^a or funnel to rotate first in the one direction and then in the other when the holder 1 is pressed down. When the said bottom 4^a is thus rotated a wing 4^b rigidly secured thereto will move the lower ends of the cigarettes sidewise, thereby preventing them to lock each other above the neck of the funnel-shaped bottom, whereby it will be insured that in every case one cigarette places itself just above the neck of the bottom, so that it can be caught by the push-rod 6. The cover 7 of the holder 1 is like-wise conical in order that the top of the cigarette caught by the push-rod may easily slide towards the central opening 7^a of the cover when the holder is pressed down. The said opening may be closed by means of spring-plates 7^b, or the like, which permit the cigarettes to pass upwards through the opening 7^a when the holder 1 is pressed down, but prevent the cigarettes from being taken out in other manner. The lower edge of the cover may be inserted in an annular recess, or the like, 1^c of the metal-casing 1^a as is shown.

The coin-mechanism shown comprises a coin-slot 8, a coin-chute 8^a formed between a plate 8^b, rigidly secured to the annular cover 2^c of the casing $2—2^a$, and a plate 2^d rigidly secured to the holder 1 by means of a stud 2^e engaging a longitudinal slot 2^h of the cylinder 2^a. Further the coin-mechanism comprises two arms 9 pivoted to the cylinder 2^a and connected to each other by means of a spring 9^a. The lower ends of said arms 9 are formed with hooks 9^b adapted to engage corresponding portions 2^f of the said plate 2^d so as to prevent the holder from being pressed down until a coin has been dropped down into the coin-mechanism.

The apparatus described above works as follows: When a coin of the determined size is dropped down through the coin-slot into the coin-chute it will be arrested therein by the hooks 9^b of the arms 9, the latter taking up the position shown by full lines in Fig. 1. When the holder is thereupon pressed down a suitably curved edge or flange 2^g on the plate 2^d forces down the coin 10 (Fig. 1)

between the said hooks 9^b turning the arms 9 outwards as is shown by dotted lines in Fig. 1, so as to permit the hook-shaped portions 2^f to pass freely downwards past the hooks 9^b. A cigarette will simultaneously be pushed up to a certain extent through the opening of the cover 7 and will be kept in such position by the spring-plates 7^b while the holder 1, after having been released, moves upwards, whereupon the cigarette can be easily taken out by the hand. When the plate 2^d has passed the hooks 9^b in the upward movement of the holder 1, the arms 9 will return into their locking position by the action of the spring 9^a.

For the coin-mechanism above described any other suitable or well known mechanism may be substituted, as will be easily understood by those skilled in the art, and also for the means shown for moving the lower ends of the cigarettes sidewise other suitable means may be used.

Having now described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a vending apparatus, the combination of a reciprocatory holder for articles to be vended, open at its ends, a push-rod arranged to enter through the inner end of the holder and also arranged to push out an article from the holder when the holder is moved inward, a rotatable device in the holder, arranged to move articles laterally in said holder, and means on the push-rod arranged to coöperate with and turn said rotatable device incident to inward movement of the holder.

2. In a vending apparatus for cigarettes and the like, the combination of a holder movable up and down and having perforate cover and bottom, a rotatable funnel arranged in the lower portion of the holder and carrying a wing, a fixed push-rod entering through the said bottom of the holder and the rotatable funnel and adapted to push out a cigarette through the cover of the holder incident to downward movement of the latter, and means on the rotatable funnel coöperating with means on the fixed push-rod for rotating the former by the latter incident to downward movement of the holder.

3. In a vending apparatus for cigarettes and the like, the combination of a holder movable up and down and having perforate cover and bottom, a rotatable funnel arranged in the lower portion of the holder and carrying a wing, and a fixed push-rod entering through the said bottom of the holder and the rotatable funnel and adapted to push out a cigarette through the cover of the holder incident to downward movement of the latter; the said push-rod having a spiral portion arranged to rotate the said funnel incident to downward movement of the holder.

4. In a vending apparatus for cigarettes and the like, the combination of a holder movable up and down and having perforate cover and bottom, a rotatable funnel arranged in the lower portion of the holder and carrying a wing, and a fixed push-rod entering through the said bottom of the holder and the rotatable funnel and adapted to push out a cigarette through the cover of the holder incident to downward movement of the latter; the said push-rod terminating at its upper end in a point and being provided below said point with a spiral portion arranged to rotate the said funnel incident to downward movement of the holder.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JONAS SAHLIN.

Witnesses:
EVALD DELMAR,
HILDEN HÅKANSON.