

July 10, 1945.

J. TAIT

2,380,345

PERIODICAL DISPENSER

Filed Oct. 5, 1942

2 Sheets-Sheet 1

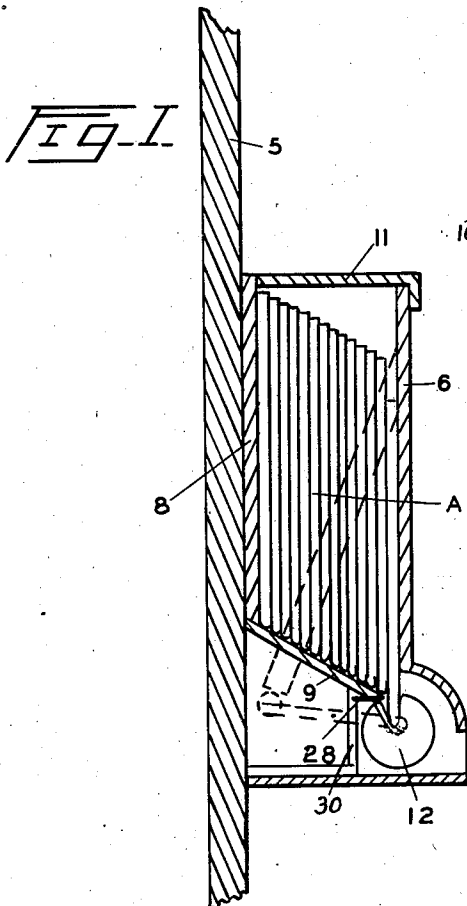
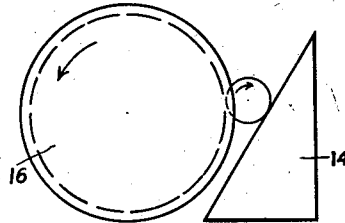
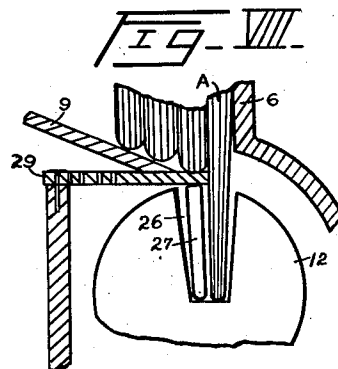
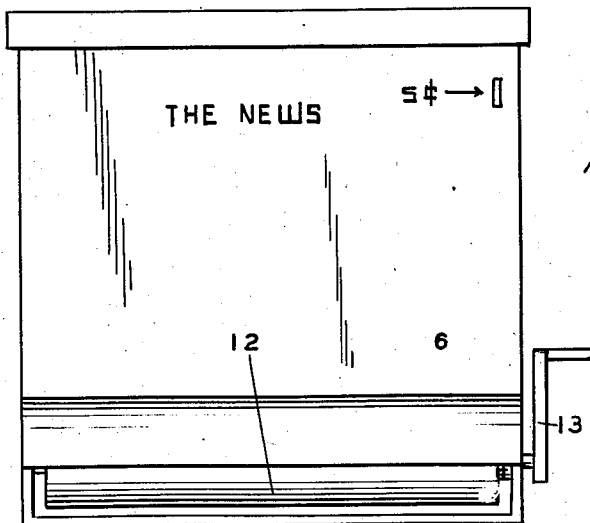


FIG. II

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2 Sheets-Sheet 2

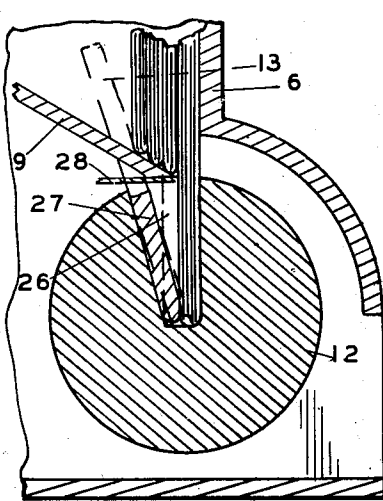


FIG. III

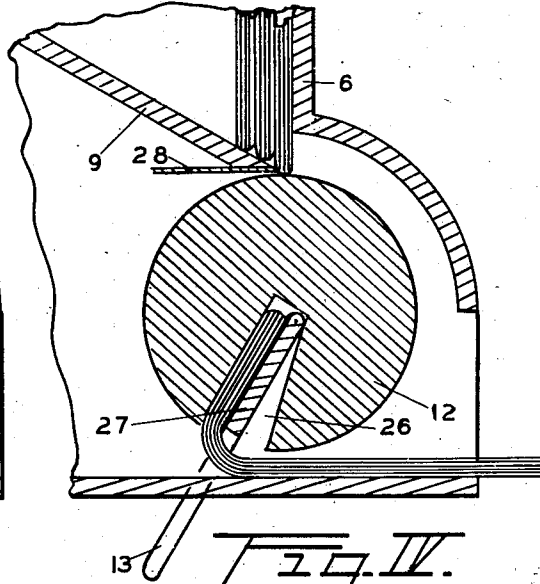


FIG. IV

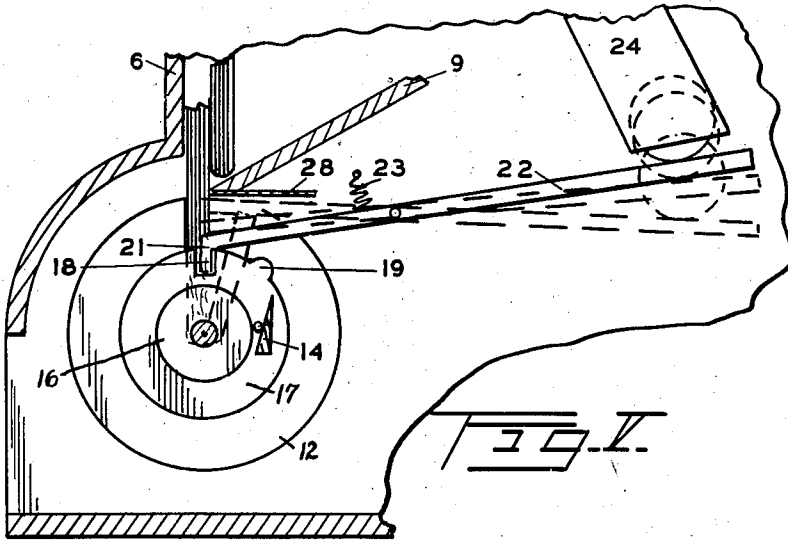


FIG. V

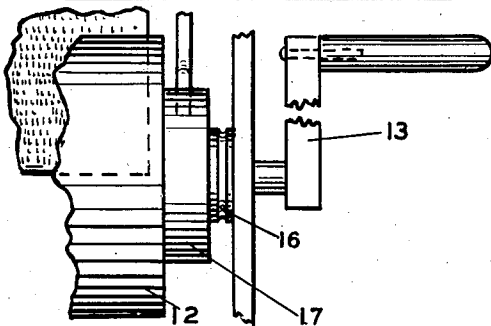


FIG. VI

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UNITED STATES PATENT OFFICE

2,380,345

PERIODICAL DISPENSER

John Tait, San Francisco, Calif.

Application October 5, 1942, Serial No. 460,784

2 Claims. (Cl. 312—51)

This invention relates to improvements in periodical dispensing devices, and has particular reference to means for vending newspapers and similar periodicals.

The principal object of this invention is to provide a cabinet wherein a number of issues of a newspaper may be arranged and dispensed, one at a time, through the vending machine in contradistinction to the customary distribution of papers by newsboys.

A further object is to produce a device which may be mounted upon a stable support such as a wall, telephone poles, etc., and a device which will be economical to manufacture.

A further object is to produce a device wherein only one paper will be dispensed at a time, irrespective of its size, as, for instance, a thin daily edition or a thick Sunday edition.

A still further object is to produce a device wherein the periodicals are protected against the elements and against a person receiving more than one paper at each operation of the machine.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Fig. I is a side elevation of my device, particularly in cross section.

Fig. II is a front elevational view of my device.

Fig. III is an enlarged fragmentary, cross sectional view, showing the dispensing roller.

Fig. IV is a similar view showing the dispensing roller partly rotated and discharging paper.

Fig. V is an enlarged fragmentary, cross sectional view showing a coin-controlled mechanism.

Fig. VI is a fragmentary front elevation of the dispensing roller.

Fig. VII is a diagrammatic illustration of a ball clutch to prevent retrograde movement.

Fig. VIII is a fragmentary detail view showing a gauge plate which is slidably adjusted through the medium of a pin and spaced openings there-through.

Newspapers and similar periodicals are usually dispensed through the medium of news vendors, located at strategic points. The average news vendor only keeps his post a portion of the day and often a person cannot secure a paper when desired. This is particularly true in inclement weather. During the present war crisis, vendors are hard to secure, and therefore applicant has invented an automatic vendor of the coin-

operated type, thus permitting a person to secure a paper at any hour he desires.

In the accompanying drawings, wherein for the purpose of illustration is shown a preferred embodiment of my invention, it will be noted that the numeral 5 designates the support upon which my device is mounted. My device is essentially a cabinet having a front portion 6, a back portion 8 and an inclined bottom as shown at 9, and a hinge cover as shown at 11. It will be noted that the forward edge of the inclined bottom is spaced from the back of the front and slightly therebelow. This permits a stack of papers, as shown at A, to ride downwardly on the inclined bottom and to abut the back of the front 6 of the cabinet.

Mounted below the forward end of the inclined bottom 9 is a dispensing roller 12, which is rotated by a hand lever 13. This dispensing roller is mounted so as to be rotated in one direction only, and is controlled by a ball clutch 14 or by any other type of device to prevent retrograde movement.

In the present instance, the ball 14 contacts an inclined surface, which causes a pinching action between the wedge and the groove 16 when the shaft is rotated in a clockwise direction as shown in Fig. V. This type of clutch is well known and is often referred to as an over-running clutch. Intermediate of the roller 12 and the portion 16 is a locking disc 17 which has a slot 18 formed therein and a lifting cam 19 formed thereon. The bent nose 21 of the pivotal lever 22 engages a slot 18 and is normally held therein by a spring 23. The opposite end of this lever 22 passes beneath the lower end of the coin slot 24, the purpose of which is to be later seen.

Formed in the roller 12 is a longitudinal slot 26 within which is mounted a gripper 27, the purpose of which will be later disclosed. The gripper is a plate rigidly secured to the shaft of crank handle 13.

Slidably positioned at the lower end of the inclined bottom 9 is a gauge plate 28, which may be manually advanced or retracted to accommodate thick or thin editions of the publication to be dispensed, adjustment being made by a pin passing through holes in the slide 28 and engaging the vertical wall 30.

The operation of my device is as follows: Assuming a stack of papers had been placed within the cabinet, as indicated at A in Fig. I. The foremost paper in the stack will drop into the longitudinal opening 26, and the machine is ready to dispense.

We will now assume the operator places a coin in the coin slot; the coin dropping down the slot will first engage lever 22 and cause the front end to raise against the tension of spring 23. The operator now grasps the lever 13 and rotates the roller 12 in a clock-wise direction, as viewed in Figs. III and IV, and as the lever 13 is directly connected to the gripper 27, the first movement of the handle will cause the gripper to move against the paper and pinch it against the roller, as indicated in Fig. IV. Continued rotation of the roller will cause cam 19 to engage the nose 21 of the lever 22, raising it further and allowing the coin to move from beneath the coin slot and fall into the coin receptacle.

As the roller is rotated the free end of the paper will wrap around the roller until it has passed the top of the opening in the front of the cabinet, when it will project outwardly, as shown in Fig. IV. The paper is now grasped and pulled from the machine.

The next succeeding paper will ride upon the surface of the roller and be in position to drop into the slot 26 as soon as the roller is returned to its normal position, where it will become locked against further rotation and retrograde movement will be prevented by the ball clutch 14. Thus it will be seen that I have produced a device which will accomplish all of the objects above set forth.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that various changes relative to the material, size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. In a dispensing device, a cabinet having a front wall consisting of a vertical portion and an outwardly bowed lower portion, a back portion and an inclined member extending from said back portion downwardly toward the bottom of said vertical portion and terminating short thereof and at a point slightly below the bottom of said vertical portion to provide a discharge opening, a horizontal bottom mounted below said

inclined member and spaced from the lower edge of said bowed portion to form a dispensing slot, a gauge plate secured to said inclined member whereby the width of said discharge opening may be regulated, a slotted dispensing roller rotatably positioned beneath said discharge opening, a gripper plate movably mounted in said roller slot to engage an article in said roller slot to be dispensed, a hand lever connected to said gripper plate and article to press said plate and article against a wall of said roller slot and thereby actuate said roller whereby an article from said cabinet will be dispensed from said dispensing slot.

2. In a dispensing device, a cabinet having a front wall consisting of a vertical portion and an outwardly bowed lower portion, a back portion and an inclined member extending from said back portion downwardly toward the bottom of said vertical portion and terminating short thereof and at a point slightly below the bottom of said vertical portion to provide a discharge opening, a horizontal bottom mounted below said inclined member and spaced from the lower edge of said bowed portion to form a dispensing slot, a gauge plate secured to said inclined member whereby the width of said discharge opening may be regulated, a slotted dispensing roller rotatably positioned beneath said discharge opening, a gripper plate movably mounted in said roller slot to engage an article in said roller slot to be dispensed, a hand lever connected to said gripper plate and article to press said plate and article against a wall of said roller slot and thereby actuate said roller, whereby a long flexible article will be drawn from said discharge opening and rolled about said roller until the free end of said flexible article will leave said roller through its inherent springiness and project through said dispensing slot, and means for preventing retrograde movement of said roller and means for locking said roller at the end of each revolution, said means including a coin operated lever, having a nose engaging a second slot formed in said roller.

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