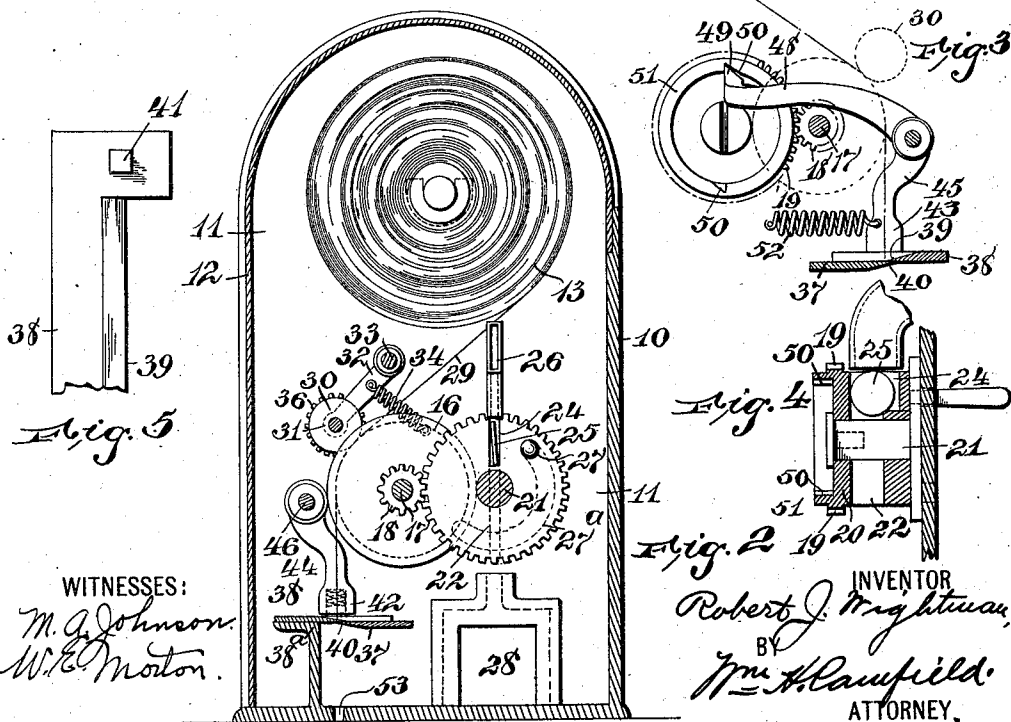
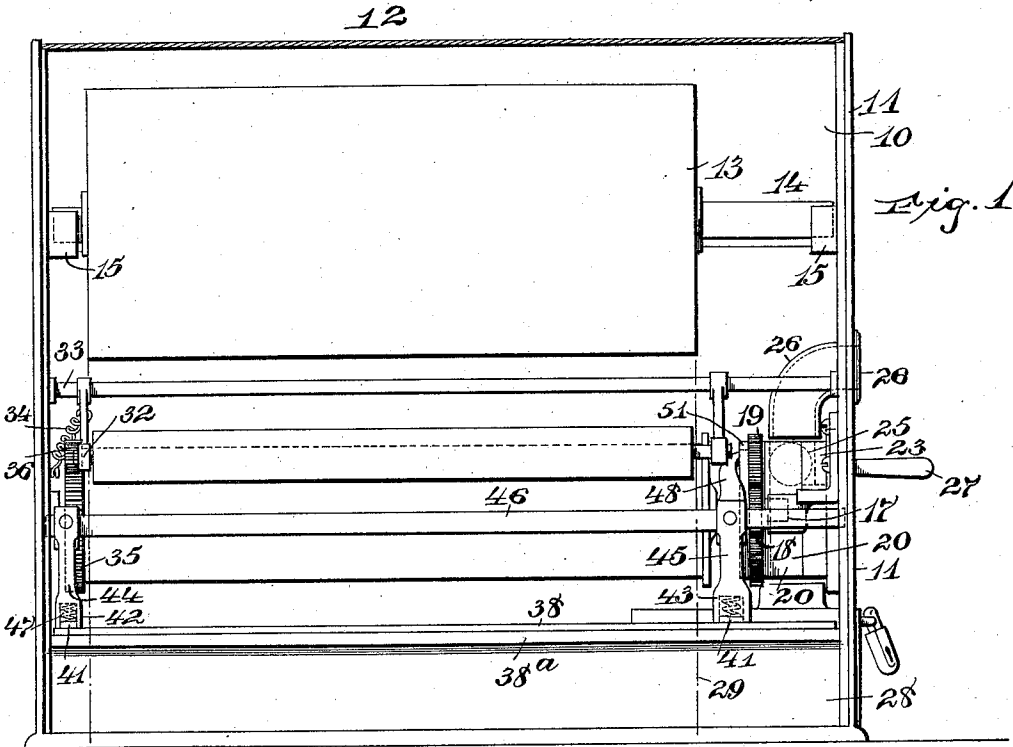


R. J. WIGHTMAN.
DISPENSING APPARATUS.
APPLICATION FILED OCT. 21, 1911.

1,045,347.

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UNITED STATES PATENT OFFICE.

ROBERT J. WIGHTMAN, OF NEWARK, NEW JERSEY.

DISPENSING APPARATUS.

1,045,347.

Specification of Letters Patent.

Patented Nov. 26, 1912.

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To all whom it may concern:

Be it known that I, ROBERT J. WIGHTMAN, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Dispensing Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

This invention relates to an improved machine for dispensing sheet material, such as paper, and feeding the material from the machine for a predetermined amount.

The invention also comprises a severing or cutting mechanism which severs the part of the sheet that has issued from the machine, the severing or cutting mechanism remaining shut until the next feeding operation, so that the outlet of the machine is normally closed.

The machine also embodies a mechanism from which the feeding means and the cutting mechanism is actuated, this means being preferably coin-controlled, the coin-controlled mechanism being of any kind, but preferably of the kind illustrated and described.

The invention also consists of a locking means for holding the severing or cutting mechanism shut, said locking means also acting to open the severing mechanism when the feeding of the sheet begins.

Another element of the invention is the knife used in the cutting and its particular means for holding it down to insure a positive cut.

The machine can be used for feeding sheet material, whether flat, folded or in a roll, but I have illustrated the machine as feeding from a roll. Any material of a pliable nature and subject to cutting can be fed from the machine, but I propose using the machine particularly for dispensing paper, such as the absorbent paper used as paper toweling, and while I do not wish to be understood as limiting myself to this material, I have, for the purpose of definition, described and claimed the material dispensed as sheet paper.

The invention is illustrated in the accompanying drawing, in which—

Figure 1 is a front view of the machine with the front of the casing removed. Fig. 2 is an end view of the machine with the cutting mechanism in section. Fig. 3 is a detail of the knife-operating mechanism. Fig. 4 is a detail of the coin-controlled mechanism, and Fig. 5 is a top view of one end of the knife.

The machine is inclosed in a casing which is of any desired construction, being preferably made with the back 10 and sides 11 and having a removable front 12. The paper is preferably made into a roll 13 which is mounted on a rod 14 which in turn is loosely mounted in the bearings 15. The paper is passed from the roll 13 over a feed-roll 16 which is mounted on a shaft 17 journaled in the sides of the machine. On the shaft 17 is a gear-wheel 18 which is driven from a gear 19 which is secured on or integral with a barrel 20. The barrel 20 is rotatably secured to the casing preferably by a stud 21 and is provided with a slot 22 extending diametrically through it. A disk 23 abuts on the barrel 20 and is provided on one side with a recess 24 which co-acts with the slot 22 to receive a coin 25 dropped through the coin-slot 26. A handle 27 projects from the disk 23 and provides for turning the disk, the movement of the handle being limited by the slot 27^a in the side of the machine. Other means of stopping the rotation of the disk can be employed.

When the coin is deposited and is in place as shown in Figs. 1, 2 and 4, the handle, when turned, causes the disk and the barrel to rotate together, the coin acting as a key. When the coin has been rotated to the bottom of the barrel, the handle engages the slot 27^a and the pressure on the coin is released and it drops down into a suitable receptacle 28. This rotation of the coin-controlled mechanism operates the shaft 18 and the feed-roll 16 which feeds the paper as the paper is engaged by the contact-roll 30 arranged to rotate in bearings 31 swinging on the lever 32 on a shaft 33, and held by a spring 34. If desired, the gears 35 and 36 can be used to insure the driving of the contact-roll 30.

The cutting mechanism consists of a fixed blade 37 and a sliding blade 38 which has

a cutting edge 39 which can be parallel with the edge 40 of the fixed blade or at a slight angle thereto to give a shearing effect. The knife 38 is supported at its ends and can be supported along its whole length by the bracket 38^a. The sliding blade or knife 38 has studs 41 on its ends. The studs 41 are engaged by the socketed ends 42 and 43 of the levers 44 and 45, respectively, which levers swing with the rod 46 to which they are secured. Springs 47 are placed in the sockets and press down to force the knife against the fixed blade so that when the knife slides it bears closely on the fixed blade to sharply and cleanly cut the paper. The lever 45 has an arm 48 which has a tooth 49 on its end. This tooth fits into a detent 50 in the flange 51 of the barrel 20, being pressed against the surface of the flange by the spring 52. The tooth is in the detent when the slot 22 and the recess 24 are in line, and the knife is thus swung shut to close the outlet of the paper between the blades. As soon as the coin-controlled mechanism is started, the rotation of the barrel in the direction of the arrow in Fig. 3, causes the tooth to be forced out of the detent and thus swing the rod 46 and the levers 44 and 45 to move the knife 38 back and permit the paper to be fed between the blades. If any slight feeding of the paper has taken place, the bending of the paper takes it up. When the barrel has made a half turn, the next detent 50 permits the tooth 49 to snap into it, and the spring 52 carries the knife 38 sharply across the paper sheet to sever it. An opening 53 in the casing is provided for the exit of the severed part of the sheet.

Having thus described my invention, what I claim is:—

1. A delivery apparatus comprising means

for holding a paper sheet, feed rolls for feeding the sheet from the machine, means for actuating the feeding means, a flange on the actuating means and having detents therein, a fixed bracket extending across the path of travel of the paper, a sliding severing element on the fixed bracket, levers swinging above the severing element, the levers having sockets, springs in the sockets, studs on the severing element for entering the sockets and bearing on the springs, a spring acting on at least one of the levers to force the severing element shut, and an arm on one of the levers, said arm having a tooth to enter the detent in the flange to permit the spring to close the severing element.

2. A delivery apparatus comprising means for holding a paper sheet, feed-rolls for feeding the sheet from the machine, means for actuating the feeding means, a flange on the actuating means and having detents therein, a fixed blade, a sliding knife, levers engaging the sliding knife to move it, a spring for normally forcing the sliding knife against the blade, a shaft on which the levers are mounted for swinging them, and an arm secured to the shaft having a tooth to enter the detent in the flange, said detent and tooth co-acting to permit the spring to force the knife shut when the feeding means stops and to force the knife away from the blade when the feeding means begins to operate.

In testimony that I claim the foregoing, I have hereunto set my hand this 13th day of October, 1911.

ROBERT J. WIGHTMAN.

Witnesses:

WM. H. CAMFIELD,
M. A. JOHNSON.