June 25, 1940. N. B. CURRIER 2,205,645

PAPER DISPENSER

Filed Feb. 9, 1938

FIG. 1

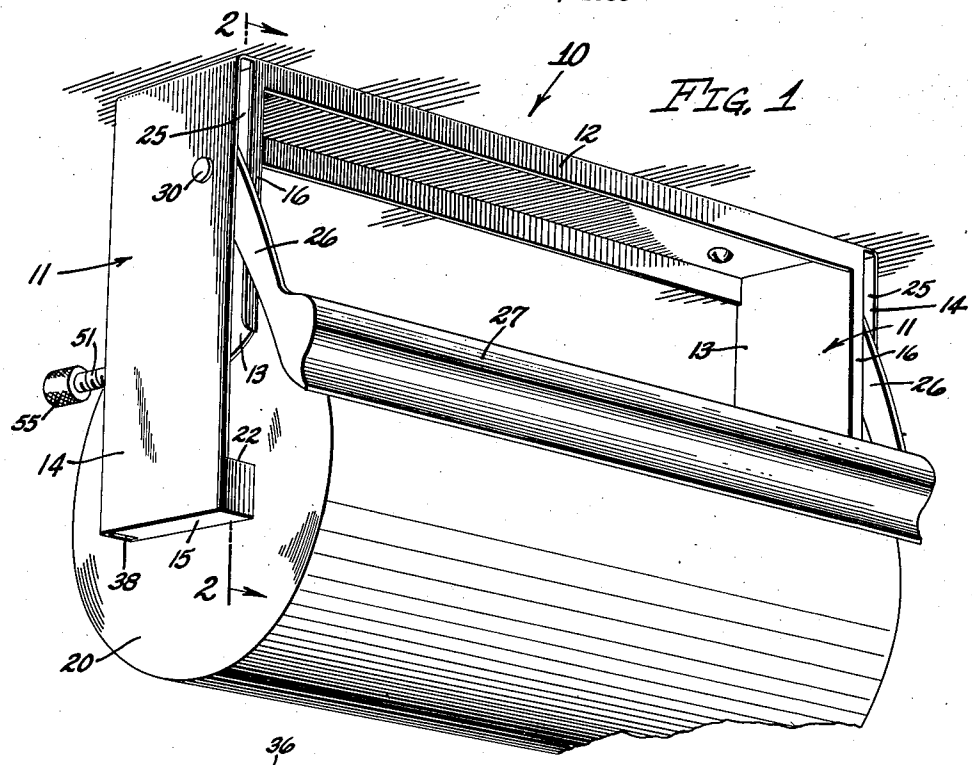


FIG. 2

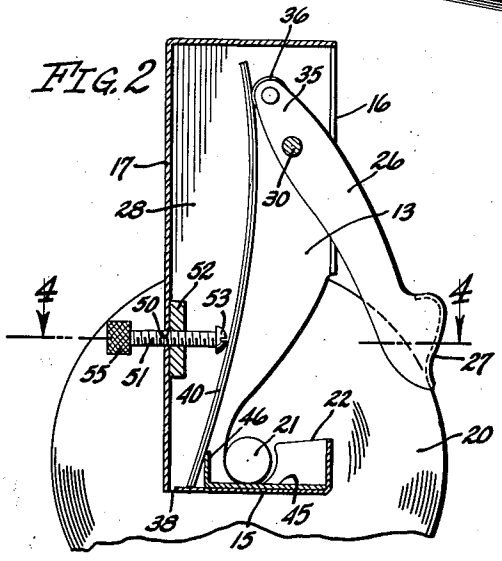


FIG. 3

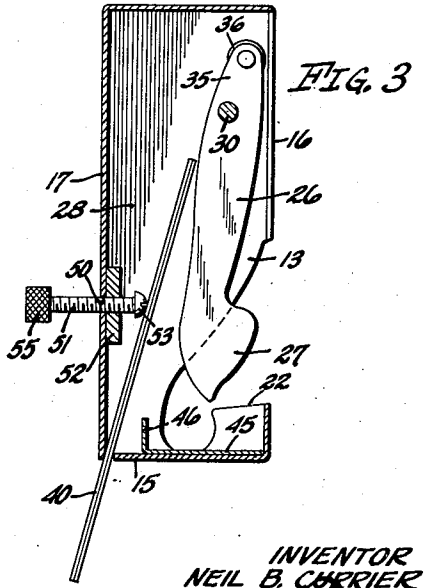
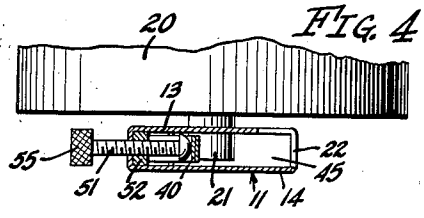


FIG. 4



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2,205,645

PAPER DISPENSER

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Application February 9, 1938, Serial No. 189,575

4 Claims. (Cl. 242—55.5)

This invention relates to holders for rolls of paper and similar material to permit the ready dispensing of said material in sheets as for use in wrapping merchandise.

Holders of this general type for dispensing such material in sheet form have long been in use, these commonly including means for supporting a roll of wrapping material and a tearing blade which is yieldably pressed against the roll. When the sheet material is torn from a roll held in one of these devices, it is pulled against the tearing blade. This produces a tendency for the blade to be lifted out of contact with the roll by the pull exerted on the paper in the tearing operation. When this happens, a ragged edge on the paper results. In holders of this type put out heretofore it has always been necessary to compromise in selecting the amount of pressure with which the tearing blade is pressed against the roll. The reason for this is that the pressure with which the tearing blade is pressed against the roll varies as the diameter of the roll decreases, whereas the requirements for tearing any particular kind of wrapping material are substantially uniform. Furthermore, a given holder must often be used to hold a roll of wrapping material which is much heavier than the kind of wrapping paper normally used in that holder and which therefore has a much higher tearing coefficient.

It is an object of my invention therefore to provide a paper holder and dispenser for holding poper in the roll form and dispensing it in sheets, which is adaptable to handle wrapping material in roll form and dispense this in sheets and which is readily controllable to cause it to perform this function with various weights of wrapping material which differ substantially in tearing coefficient.

It is another object of my invention to provide a holder and dispenser of wrapping material, for carrying out the above mentioned objects, and which is not only pleasing to the eye in external appearance, but very simple in construction.

A still further object of my invention is to provide such a holder and dispenser for wrapping material which is especially adapted to be mounted on the under surface of a table, counter or the like.

In this present application, as distinguished from my copending application, Serial No. 189,574, the subject matter claimed relates to a paper dispenser embodying the characteristic feature of a spring shifting and tensioning mechanism in combination with other parts as hereinafter described, by which unflexed leaf springs may be installed through openings in housings, and shifted away from the openings to prevent dislodgment and to flex the springs so that they perform their function of urging a tear blade into engagement with the roll of paper carried in the dispenser. This statement is not to be construed as a limitation of any of the claims accorded their proper range of equivalents.

The manner of accomplishing the foregoing objects as well as further objects and advantages will be made manifest in the following description taken in connection with the accompanying drawing in which:

Fig. 1 is a perspective view of a preferred embodiment of the invention.

Fig. 2 is a cross sectional view taken on the line 2—2 of Fig. 1 and showing the leaf springs of the invention in operation.

Fig. 3 is a view similar to Fig. 2 illustrating the manner of assembly of said leaf springs with said invention.

Fig. 4 is a horizontal cross sectional detailed view taken on the line 4—4 of Fig. 2.

The preferred embodiment of my invention illustrated in the drawing comprises a paper dispenser 10 which includes a pair of side standards 11 which are connected at their upper ends by a head beam 12. The side standards 11 are in the form of housings having inside walls 13, outside walls 14, a bottom 15, front walls 16 and rear walls 17. For the purpose of supporting a roll 20 of wrapping material through which a shaft 21 extends, slots 22 are provided in the front walls 16 and inside walls 13 of the housings 11 for accommodating opposite ends of said shaft. The front walls 16 have slots 25 through which arms 26 provided on opposite ends of a tear blade 27 extend into interior chambers 28 of the housings 11. The arms 26 have trunnions 30 which extend into suitable openings into the outside walls 14 of the housings 11 so that the arms 26 and tear blade 27 are pivotally mounted as a unit on these trunnions. The arms 26 have short projections 35 on the opposite sides of the trunnions 30 from the tear blade 27. Mounted on these extensions are rollers 36.

Provided in the bottoms 15 of the housings 11 are apertures 38 through which leaf springs 40 are adapted to be inserted into the chambers 28 so that the upper ends of these springs are disposed opposite the rollers 36. In the preferred embodiment illustrated herein, two of the leaf springs 40 are shown as being used in the device 10 in each of the housings 11. It is to be under-

stood, however, that one to three or more of these leaf springs may be used in each of the housings 11, if desired. Mounted, as by spot welding, on the housing bottom 15 is a member 45 which carries a fulcrum lug 46 which is spaced inwardly and at a distance from the aperture 38.

Provided in the rear walls 17 of the housings 11 are openings 50 through which screw members 51 are extended, these members screwing through threaded holes in blocks 52 located in the chambers 28 just inside the walls 17. The inner end of each screw member 51 preferably has a half round head 53 which engages the springs 40 directly. On its outer end, member 51 has a knurled manual control knob 55 by which it may be rotated for advancing it inwardly or retracting it outwardly through the blocks 52.

The assembly of the springs 40 with the device 10 of my invention is illustrated in Fig. 3. Here it is seen that the screw members 51 have been retracted to their outwardmost positions and there is no roll 20 in the device 10 so that the arms 26 and tear blade 27 are swung to their inwardmost positions. Springs 40 are now inserted longitudinally through the apertures 38 into the chambers 28. When these springs have passed through the apertures 38, the screw members 51 are rotated so as to be advanced through the blocks 52 against the springs 40 thereby shifting the lower ends of the latter out of alignment with the apertures 38 and into engagement with the fulcrum lugs 46. The tear blade 27 may then be swung upwardly until the arms 26 engage the upper ends of the slots 25 and a roll of paper 20, with an axle 21 extending therethrough, inserted into the device with the ends of the axle resting in the slots 22. After this the tear blade 27 may be swung downwardly into contact with the roll 20 and the correct pressure of the springs 40 against the arms 26 obtained by manipulation of the knurled thumb screw heads 55.

From the foregoing description it is clear that the device 10 of my invention is relatively simple in construction and provides a means for regulating the pressure with which the tear blade 27 is pressed against the roll of wrapping material 20 supported in the device so that this pressure is adequate for the tearing of whatever weight of paper happens to be contained in this roll and yet is not an excessive pressure so as to cause a wrinkling of the paper when the roll rotates.

Another advantage of my invention is the great ease of assembly of the springs with the device as well as the ease with which disassembly of the device may be effected in case it is necessary to replace a weakened or broken spring.

What I claim is:

1. In a holder adapted to support wrapping material in roll form and dispense this in sheets, the combination of: a pair of side standards for supporting a roll of wrapping material therebetween said standards comprising housings; a tear blade; a pair of arms provided on said tear blade and extending into said housings; leaf springs in said housings, corresponding ends of said springs being positioned to engage said arms to apply pressure thereto to yieldably hold said tear blade against said roll; fulcrum means on said housing on which said springs fulcrum, there being apertures in said housings through which said springs are adapted to be inserted lengthwise into said housings; and manually controllable means for engaging said springs after they are in said housings for forcing said springs into engagement with said arms and said fulcrum means to shift said springs out of alignment with said apertures.

2. A roll paper dispenser comprising housings, means carried by said housings to support a roll of paper, arms pivoted in the housings carrying a paper tear blade, openings in the housings to install unflexed leaf springs in the housings, fulcrum lugs in the housings, leaf springs in the housings, and means accessible outside the housings to shift the springs away from the openings to prevent dislodgment of the springs and to cause pressurable engagement of the springs with the fulcrum lugs and the arms to urge the tear blade into engagement with the paper.

3. A roll paper dispenser comprising housings, means carried by said housings to support a roll of paper, arms pivoted in the housings carrying a paper tear blade, openings in the housings to install unflexed leaf springs in the housings, fulcrum lugs in the housings, leaf springs in the housings, and screws accessible outside the housings to shift the springs away from the openings to prevent dislodgment of the springs and to cause pressurable engagement of the springs with the fulcrum lugs and the arms to urge the tear blade into engagement with the paper.

4. A roll paper dispenser comprising housings, means carried by said housings to support a roll of paper, arms pivoted in the housings carrying a paper tear blade, openings in the housings to install unflexed leaf springs in the housings, fulcrum lugs in the housings, leaf springs in the housings, and screws threaded through the housings and advancing against the springs to shift the springs away from the openings to prevent dislodgment of the springs and to cause pressurable engagement of the springs with the fulcrum lugs and the arms to urge the tear blade into engagement with the paper.

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