July 15, 1952 N. A. HACKNEY 2,603,426

DOUBLE REVERSE SPRING LOCK FOR PAPER ROLLS

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Fig. 1.

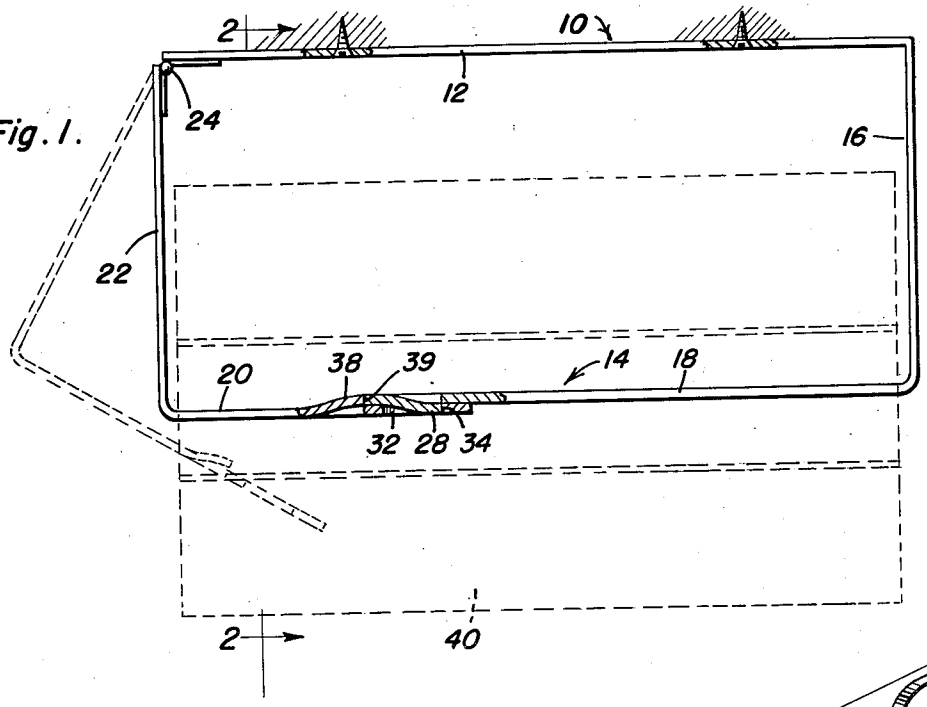


Fig. 2.

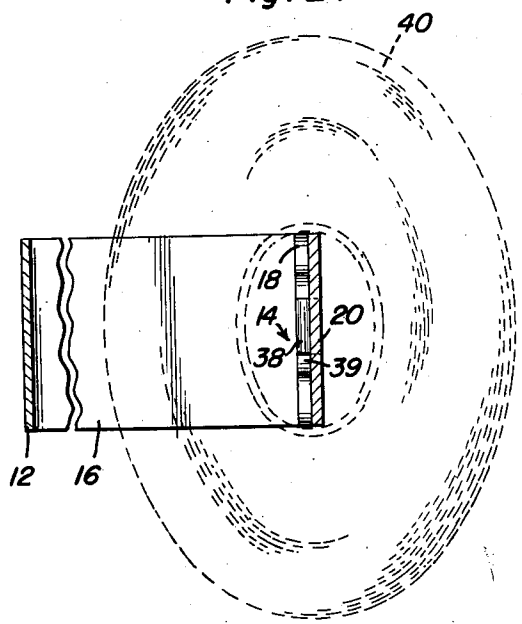
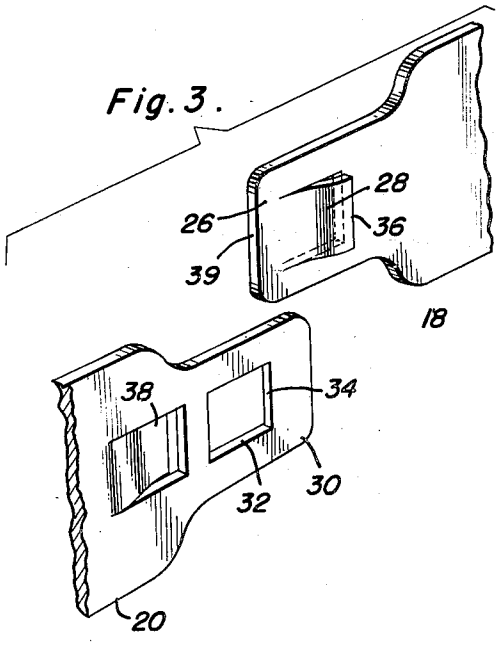


Fig. 3.



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DOUBLE REVERSE SPRING LOCK FOR PAPER ROLLS

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Application December 28, 1949, Serial No. 135,324

1 Claim. (Cl. 242—55.2)

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This invention relates to improvements in holders for rolls of paper.

An object of this invention is to maintain a roll of paper so that it cannot be removed from its supported position except by ruining the roll, this end being accomplished by an improved locking device consisting of a tongue struck from one side section which engages a wall of an aperture in a second side section, and a stop struck from the second section which engages the end of the first section whereby hinged movement of one section with respect to the other is obviated, it requiring direct pressure on one of the sections urging it toward the back wall of the device in order to release the lock. However, while there is an appreciable amount of paper on the roll, the necessary amount of pressure may not be obtained because of the presence of the roll.

Other objects will become apparent in following the description of the illustrated form of the invention.

In the drawings:

Figure 1 is a plan view of the device with portions broken away in section to illustrate detail of construction and showing in phantom the disposition of a roll of paper and the hinged condition or position of one end together with one section which forms a part of the front support for the roll of paper;

Figure 2 is a transverse sectional view of the device in Figure 1, and taken substantially on the line 2—2 thereof; and

Figure 3 is a fragmentary exploded perspectvie view of the pair of sections which form the front wall of the rectangular frame and the locking mechanism which is operatively connected therewith.

Devices for holding a roll of paper in such a way that it cannot be removed without destruction of the actual roll are known in the art. The instant invention has improved those devices by the structural arrangement for locking the portions of the device together which hold the roll of paper, rendering such devices practical in operation.

A rectangular frame, generally indicated at 10, is made of a resilient material, as certain commercial plastics or metal, for example aluminum or spring steel. The frame is of stock having considerable width so that an ordinary roll of paper has to be pressed to an elliptical shape in cross-section (Figure 2) in order for the roll to be held in place.

The rectangular frame consists of a long or back side 12 together with another long or front

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side, generally indicated at 14. A short side or end 16 is fixed to the side 12 and has a section 18 fixed thereto. The section 18 taken together with the section 20 forms the front side or roll supporting member 14. The end or short side 22 is hinged as at 24 to the back wall 12 and has the section 20 fixed thereto. With the frame so constructed, the resiliency inherent in the construction and materials of construction may be employed and is employed for releasing the locking device which is shown best in Figures 1 and 3.

The section 18 has a reduced end 26 projecting therefrom. This reduced end is provided with a tongue 28 which is struck therefrom and which rises from one surface thereof.

The section 20 has a reduced end portion 30 extending therefrom and is provided with an aperture 32 which has the tongue 28 seated therein when the sections 18 and 20 are in the latched condition (Figure 1). The front wall 34 of the aperture 32 is engaged by the inner wall 36 of the tongue 28 so that the end 22, when pulled from the end 16, will be impeded and prevented from movement.

A stop 38 is struck from the section 20 and is of identical construction to the tongue 28. The outer end surface of the stop 38 engages the end wall 39 of the extension 26 when the sections are in the locked condition (Figure 1). By virtue of the engagement of these surfaces, when the end 22 is pressed toward the end 16 of the frame, no hinged movement of the end 22 will occur because the stop firmly engages the end wall or surface 39 of the extension 26. Hence, the roll 40 cannot be removed by pushing or pulling either end 16 or 22. When the paper is nearly or actually exhausted, pressure on the section 18 toward the back wall 12 releases the locking device so that the end 22 can be hingedly operated.

Having described the invention, what is claimed as new is:

A paper roll holder comprising a substantially rectangular frame including a pair of flat, metallic angular bars hingedly connected at one end and comprising lapped free end portions having registering openings therein, an outwardly struck tongue on one of said free end portions projecting into the opening in the other free end portion and having its free end in abutting engagement with the outer end wall thereof and constituting a positive stop for locking the free ends of the angular bars against swinging movement away from each other, and a stop struck inwardly from said other free end portion for abutting engage-

ment, at its free end, with the free end of said one bar for positively limiting the swinging movement of the bars toward each other.

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