May 24, 1938. L. B. WOLFSON 2,118,751

PAPER CUTTER

Filed Aug. 16, 1937

Fig. 1.

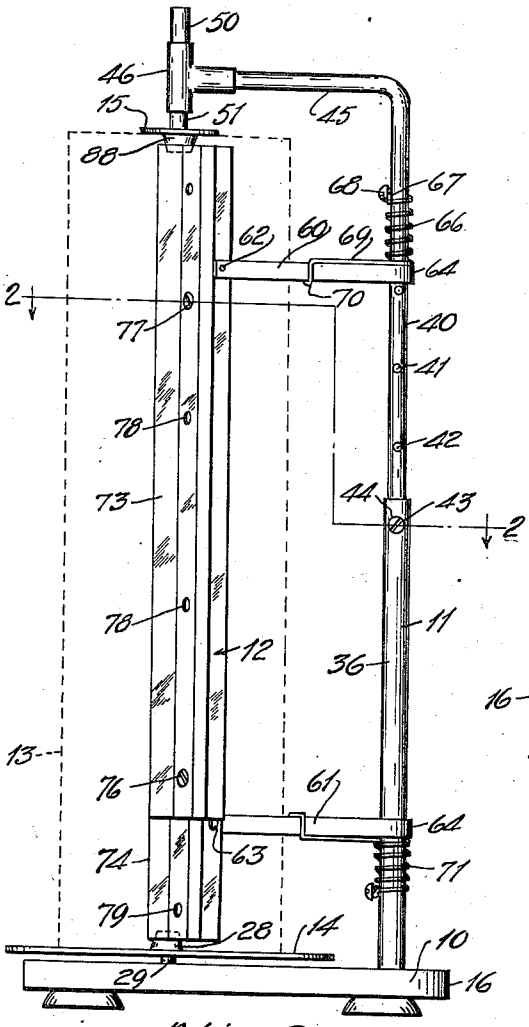


Fig. 4.

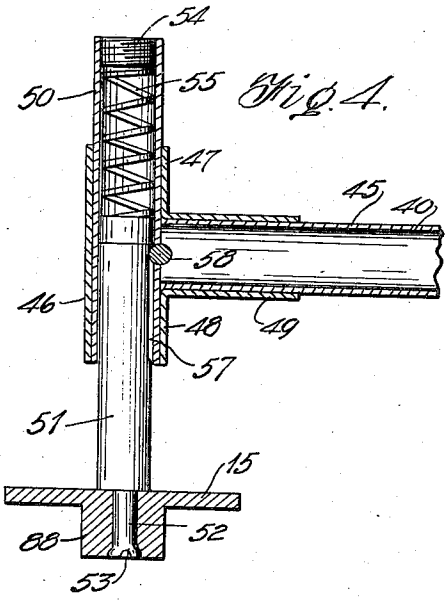


Fig. 3.

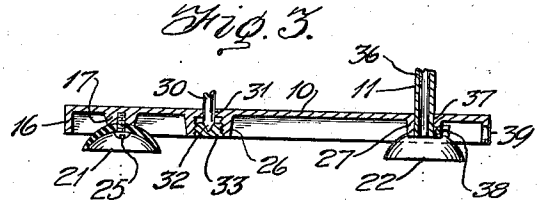


Fig. 2.

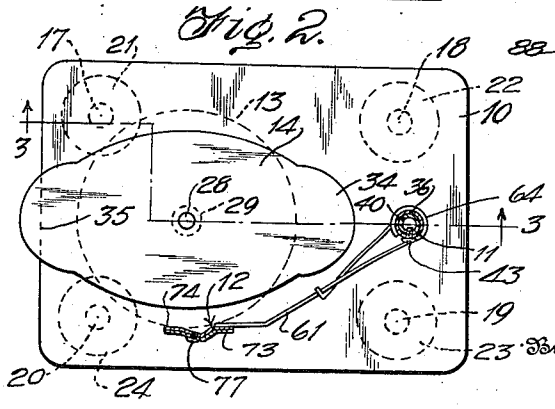
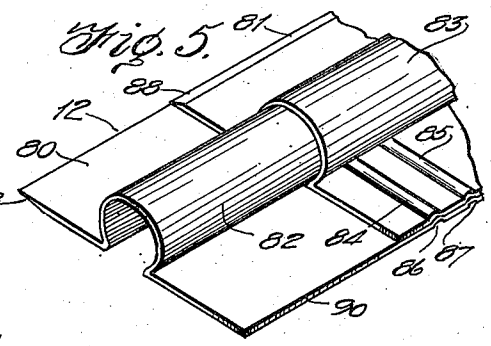


Fig. 5.



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Patented May 24, 1938 2,118,751

UNITED STATES PATENT OFFICE

2,118,751

PAPER CUTTER

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Application August 16, 1937, Serial No. 159,440

7 Claims. (Cl. 242—55.5)

This invention relates to paper cutters and more particularly to wrapping paper cutters used to tear or cut wrapping paper from rolls.

One object of this invention is to provide a new and improved wrapping paper cutter. Another object is to provide such a device having cutter means which is adapted for cutting paper of various widths. A further object is to provide such a device with a cutter which may be used with different widths of paper and which may be readily arranged to cut the different widths of paper. Yet another object is to provide such a device which will remain in adjusted position. Another object is to provide means for holding rolls of paper of different widths. A further object is to provide paper holders and cutters which are relatively extensible. Other objects and advantages of this invention will be understood by reading the following description taken in connection with the accompanying drawing.

In the drawing Fig. 1 is a view in side elevation of a device incorporating features of this invention. Fig. 2 is a sectional plan view taken on the line 2—2 in Fig. 1. Fig. 3 is a section elevation taken on the line 3—3 of Fig. 2. Fig. 4 is a detail view showing the upper paper roll engaging roller. Fig. 5 is a three-cornered perspective showing a slightly different detail of the cutter blade.

Considering the drawing, the device incorporating features of this invention comprises a base member 10 and an extensible upright standard 11. The standard is arranged to carry an extensible cutter 12 which is arranged to rest against a roll of paper 13 which latter is supported by the turntable 14 mounted on the base and the roller 15 carried at the upper end of the standard.

Considering the drawing in greater detail, the device is arranged to be mounted upon or secured to any appropriate supporting structure. The base 10 comprises a substantially rectangular metal plate having a downwardly extending flange 16 and a plurality of downwardly extending protuberances 17, 18, 19 and 20. These protuberances are positioned adjacent the four corners of the base plate and have been shown with suction cups 21, 22, 23 and 24 attached thereto. These cups are secured to the protuberances by the holding means, shown as machine screws 25. The base may be secured to glass or marble cases by the suction cups or it may be screwed to the counter or table using these same protuberances for the threaded connections. Two other protuberances, 26 and 27 extend downwardly from the plate, the former providing the bearing for the turntable 14 and the latter providing the point of securement for the upright standard 11.

The turntable 14 is provided with an upwardly extending boss 28 to be engaged by the center opening in the roll of paper and with a downwardly extending boss 29 containing the bearing pivot 30. The pivot 30 is arranged to extend into the opening 31 of the plate 10 and to have its lower end 32 supported on a bearing plug 33 which is threadedly secured in the boss 26. In this manner, the turntable is rotatably supported upon the base plate and may be removed if the circumstances should demand such action. The turntable itself has a plane surface upon which the roll of paper is supported and has an overall configuration which is substantially oval in shape having irregular bulged ends 34 and 35.

The upright standard 11 may comprise two or more telescopic members one or more of which may be either solid or tubular in cross section. The lower tubular member 36 is arranged to pass through an opening 37 in the plate 10 which latter opening extends downwardly through the boss 27. A suitable set screw 38 secures the tubular member in locked position. In order to provide a means for tightening the connection between the base plate and the tubular standard 36, on occasion, if the latter should work loose, an opening 39 is provided in the downwardly extending flange in the base plate. By means of this opening it is possible to insert a screw driver to tighten the screw 38, especially when the base is secured by the suction cups or other means to the structure to which it is mounted. Another tubular member 40 is arranged to telescope within the member 36 so as to be relatively movable with respect thereto. This latter member may be provided with a plurality of holes 41, 42, etc., which are threaded for the reception of a screw 43 which is arranged to pass through an opening 44 and a tubular member 46. In this way, the two parts of the standard are relatively movable and adjustable with respect to each other, but they may be readily locked in adjusted position when a paper roll of definite width is to be used. The machine screw 43 is screwed up tight to lock these parts together. It will be readily understood, however, that other means for securing these parts together may be used as, for instance, a slot and bolt connection. At the upper end of the member 40 of the standard is carried the roller 15.

The standard 40 extends upwardly having a horizontally extending part 45 at the outer end of

which is secured the upper roller or turntable. The roller 15 is secured to the standard so as to have limited relative movement with respect to the turntable 14 when the two component parts of the standard are fastened together. A T shaped tubular member 46, which may have the inner walls 47 and 48 of the cross part of the T and the leg part 49 split, is secured to the standard. A second tubular member 50 provides the bearing for the spindle 51 carrying the roller 15. The roller may be secured to this spindle in any appropriate manner, having been shown as mounted on a small shaft portion 52, the end of which is upset at 53 to retain the roller on the shaft. It will be noted that the roller 15 is provided with a boss 88 which is arranged to cooperate with the lower boss 28 in holding the paper. Roller 15 is rotatably mounted on the shaft 52. At the upper end of the tubular bearing member is placed a plug 54 which serves as a fixed abutment for the yieldable spring 55, the opposite end of which engages the upper end of the spindle 51. The spindle, being a relatively movable member, it is readily understood that the roller 15 may be moved a limited distance against the action of the spring, when placing a roll of paper into the device. To provide for a definite relative movement the spindle 51 is provided with a slot 57 of definite longitudinal extent. The pin or key member 58 is arranged to lock the T end bearing members together as well as to provide the means for limiting the longitudinal movement of the spindle 51. This latter limitation of movement is accomplished by allowing the pin 58 to extend into the slot 57.

For the purpose of cutting the paper, the knife 12 is carried on the standard by means of two arms 60 and 61, each of which is secured to the knife sections by appropriate fastening means at the points 62 and 63. The other ends of the arms engage the standard by the curved portion 64. Each arm is retained in engagement with the paper of the roll by means of a resilient element 66 having one end 67 secured by a bolt 68 to the standard 40 and the opposite end 69 being in engagement with the arm by means of the gripping portion 70. The corresponding yieldable means 71 is engaged with the lower standard 36 and the arm 61. As a result of these connections, the paper cutter will always be yieldably urged against the roll of paper.

The extensible knife itself comprises a plurality of relatively slidable cutter elements, blades or members, by way of example two in number and indicated at 73, 74. As the elements 73, 74 are relatively slidable provision is had for increasing the length of knife to an extent greater than the length of a cutter element. The elements 73, 74 are arranged to fit together tightly and to be locked together by two or more fastening elements 76 and 77. These latter elements are arranged to lock the parts together by a threaded engagement with the threads in the holes 78 and 79. The knife may be tapered to cut and fit close to the paper roll as at 88, or along edge 90, depending upon the details of construction.

Other methods of securing the blades together may be used. For instance, the two portions of the knife 12 may be arranged as in Fig. 5, in the latter arrangement, knife 12 is composed of two metal members 80 and 81 each having a centrally formed ridge 82 and 83 respectively. The two parts of the knife may be put together with a snap action and can be arranged to lock in position with respect to each other by a series of two or more transverse complementary rib elements 84 and 85 on the members 81 and 86 and 87 on the member 80.

The device illustrating the features of this invention has been shown in connection with a paper cutter of the upright type. It should be understood that the features of this invention are not limited to such a construction but are equally applicable in the structure of a horizontally extending cutter. Various details of the structure can be changed without departing from the true spirit and scope of this invention as set forth in the appended claims.

What I claim is:

1. A device of the class described comprising a supporting structure, a standard comprising at least two relatively movable telescoping members secured to said structure, relatively movable rotatable members carried by said structure and by said standard and arranged to rotatably support a roll of paper, and at least two relatively slidable, cutter elements, each supported from said standard and pivotally mounted on said standard and arranged to yieldably contact said roll of paper.

2. A device of the class described comprising a supporting structure, a standard comprising at least two relatively movable members in secured relation to said structure, relatively movable rotatable members carried by said structure and by said standard and arranged to rotatably support a roll of paper, and at least two relatively slidable, cutter elements, each supported from said standard and pivotally mounted on said standard and arranged to yieldably contact said roll of paper.

3. A device of the class described comprising a base, an extensible standard projecting from said base, and cutter members carried by said standard and operative upon a roll of paper carried upon said base and standard, said cutter members being relatively slidable, each cutter member supported from said standard and pivotally mounted thereon.

4. A device of the class described comprising a base, a lengthwise extensible standard projecting from said base, a roll of paper carried by said base and said standard, cutter members arranged in operative relation to said roll, said cutter members being relatively slidable, and means for securing the standard and cutter members in adjusted position, each cutter member supported from said standard and pivotally mounted thereon.

5. A device of the class described comprising a supporting structure, a standard comprising at least two telescoping movable members secured to said structure, relatively movable rotatable members carried by said structure and by said standard and arranged to rotatably support a roll of paper, at least two relatively slidable cutter elements, each one of said elements being pivotally mounted upon one of said telescoping standard members, means for yieldably placing said cutter elements in contact with the roll of paper, and means for locking said elements and said standard in adjusted positions.

6. A device of the class described comprising a supporting structure, a standard comprising at least two relatively movable telescoping members secured to said structure, relatively movable rotatable members carried by said structure and by said standard and arranged to rotatably support a roll of paper, and at least two relatively slidable cutter elements separately and pivotally mounted on said standard and arranged to yield-

ably contact said roll of paper, the rotatable member carried on said standard being relatively movable with respect thereto.

7. In a device of the class described, comprising a base, a lengthwise adjustable sectional standard thereon, telescopic cutter members carried by said standard and operable upon a roll of paper carried by said base and standard, said cutter members being relatively slidable, each cutter member being pivotally and independently mounted upon a separate standard section.

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