E. O. BULMAN.
PAPER ROLL HOLDER AND CUTTER.
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INVENTOR:

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PAPER-ROLL HOLDER AND CUTTER.

1,400,521.


To all whom it may concern:

Be it known that I, ElvaH O. Bulman, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented new and useful Improvements in Paper-Roll Holders and Cutters, of which the following is a specification.

The present invention relates to paper-roll holders and cutters; and its object is, generally, to provide a device of that character which may be very economically constructed and may be readily and efficiently operated; and, more particularly, to provide such a device having improved arms for the cutters thereof and improved mountings therefor; and further, to provide improved means for releasably holding the cutter of such a device in contact with the paper roll; and further, to provide improved means for joining the arms and cutting bar of the cutter together.

These objects are attained by, and the invention finds preferable embodiment in, the structure hereinafter particularly described and illustrated by the accompanying drawings, in which:

Figure 1 is a front view of a paper-roll holder and cutter, one of the supports being shown in central vertical section and certain parts being broken away;

Figure 2 is a side view of one of the supports and associated parts, certain parts being broken away and certain parts being shown in vertical section;

Figure 3 is a like view showing the parts in another position;

Figure 4 is a view of certain parts, some of which are sectioned on line 4—4 of Figure 2;

and

Figure 5 is a view of certain parts partially sectioned on line 5—5 of Figure 1.

In the embodiment of the invention chosen for illustration by the drawings and for detailed description in the body of this specification, my paper-roll holder and cutter has a pair of upright supports 1 suitably secured at their lower ends to a base indicated 2 and connected at their upper ends by a cross bar 3. These supports carry pivot pins 4, such pins being desirably secured to the body members of the supports by being passed through openings 5 therein and also to the members 6 of the supports by being passed through openings 7 therein, said members 6 being spaced apart from the bodies of the supports and secured thereto in suitable manner as by the ends 8 of the members 6 being passed through openings 9 in the body members of the supports and thereupon upset to join said members together.

The cutter, designated generally 10, comprises a cutting bar 11 whose outer or cutting edge contacts with the paper-roll (not shown) turnably supported on the rod 12 whose ends are removably held by the struck-up tongues 13, 14 of the supports, and said cutter also comprises the supporting arms 15 whose inner ends are bent over to form integral spaced-apart portions 15, 16 parallelly disposed, and the bight portion 17 between them, said portions 15, 16 lying between the body of the support and its member 6. The pivot pins 18 pass through alined orifices 19 in the arms' portions 15, 16, the arms thus bearing rockably on the pivot pins. The bight portion 17 has an aperture 90 forming a rock member 20 at one side thereof whose axis is spaced from the axis of the pivot pin. A plunger 21 slidable and swingable in a bearing 22 on the support has spaced-apart lugs 23 between which the rock member 20 bears. A spring 24 presses the plunger into such bearing engagement with the rock member and urges the cutting bar into contact with the paper-roll in the operative position of said bar shown in Figure 2.

When however the cutter is swung upwardly on the pivot pins and into the position seen in Figure 3, the rock member 20 passes to the opposite side of the pivot pin's axis whereby the cutter is held upwardly and free from the paper-roll.

The corresponding edges 25 of the arms 26 have recesses 27 and their free ends have reduced portions 28 received in the apertures 29 of the cutting bar and held therein as by turning over such reduced ends. In this assembled position of the parts of the cutter, the outer edge 29 of the longitudinally extending flange 30 of the cutting bar is seated in the recesses 28 whereby a rigid connection of the cutting bar 11 and supporting arms 15 is provided.

The cutter may be pivotally mounted as above described on only one of the supports, such support alone carrying the plunger and associated parts, the cutter in such case being pivotally mounted on the other support in any suitable manner.

The invention being intended to be point-
ed out in the claims, is not to be limited to or by details of construction of the particular embodiment thereof illustrated by the drawings or hereinbefore described.

I claim:

1. In a device of the character described; a support carrying a pivot pin; a cutter comprising a cutting bar and a supporting arm therefor having integral spaced-apart portions parallelly disposed and provided with alined orifices therethrough rockably bearing on the pivot pin and having also an integral right portion between said parallelly disposed portions provided with an aperture and a rock member at one side thereof; a spring-pressed plunger slidable and swingable in a bearing on the support and having spaced-apart lugs between which said rock-member bears.

2. In a device of the character described; a support; a cutter having an arm rockably mounted on the support and provided with a member spaced from the axis of the arm's mounting; a spring-pressed plunger slideable and swingable in a bearing on the support to positions on the opposite sides of said axis and having a bearing on the rock member.

In testimony whereof I have hereunto set my hand at Grand Rapids, Michigan, this 22nd day of March, 1921.

ELVAH O. BULMAN.