

Feb. 16, 1926.

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1,573,141

PAPER ROLL HOLDER AND CUTTER

Filed April 27, 1923

2 Sheets-Sheet 1

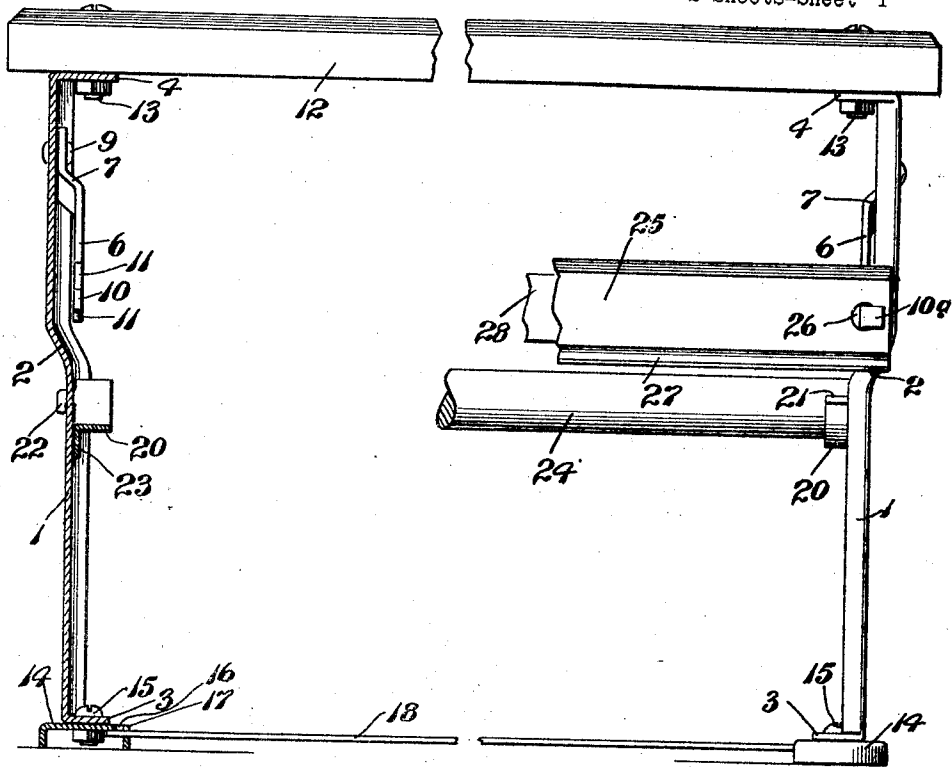


Fig. 1.

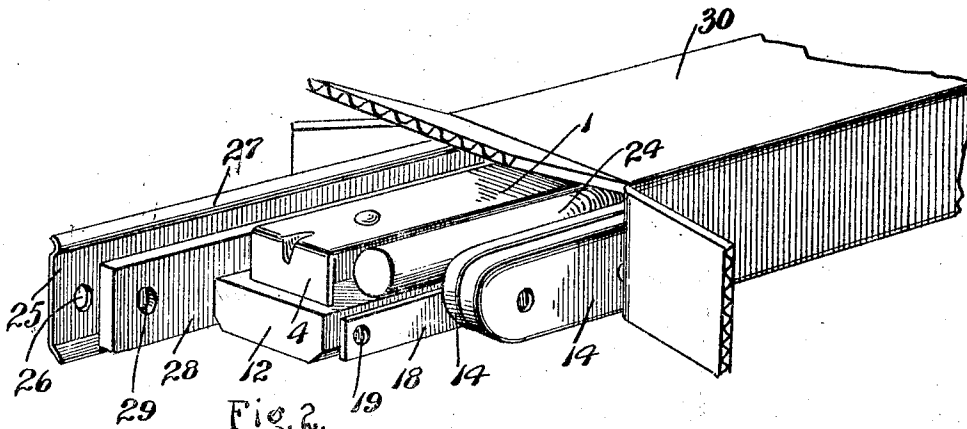


Fig. 2.

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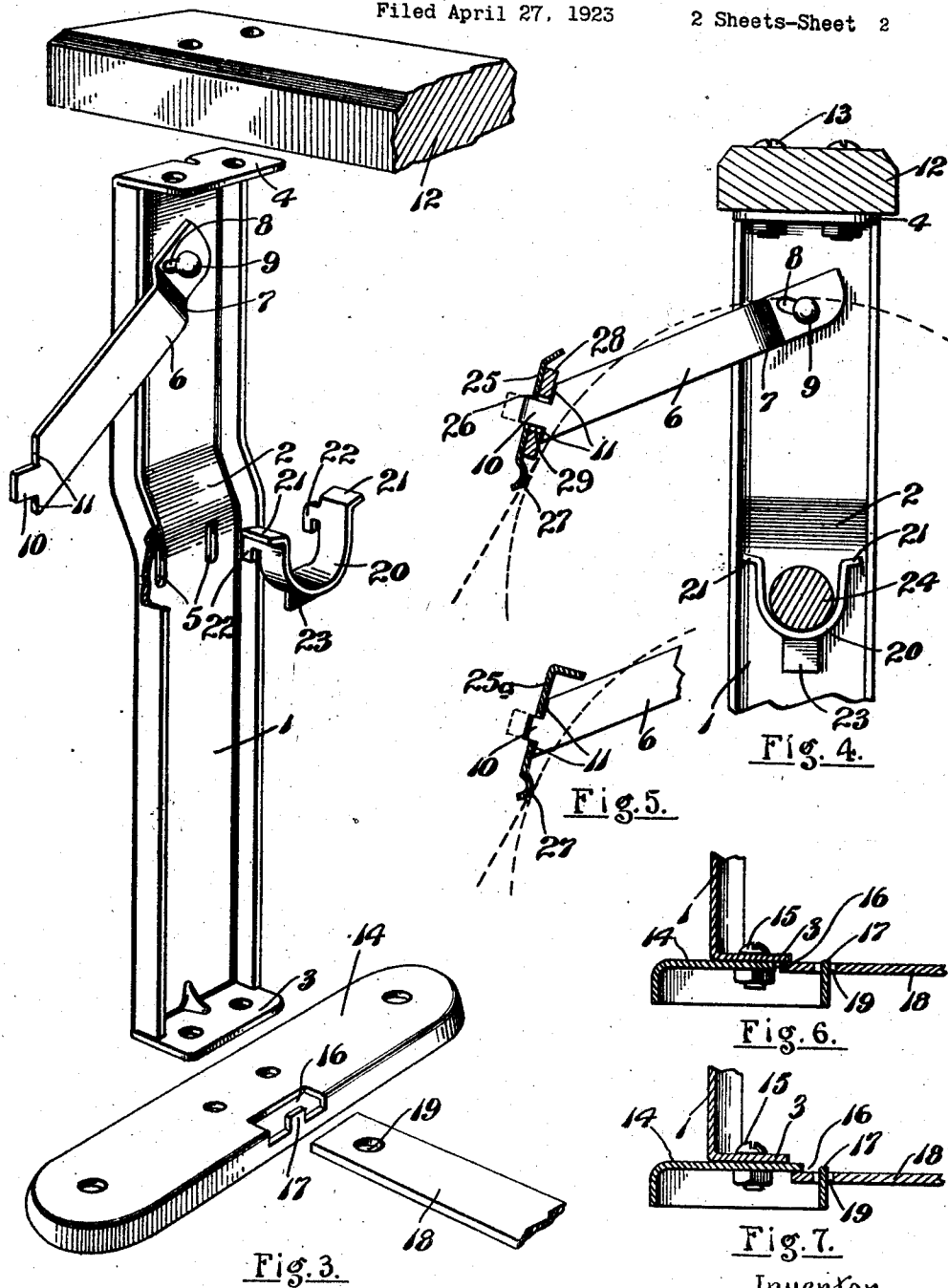
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2 Sheets-Sheet 2



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1,573,141

UNITED STATES PATENT OFFICE.

ELVAH O. BULMAN, OF GRAND RAPIDS, MICHIGAN.

PAPER-ROLL HOLDER AND CUTTER.

Application filed April 27, 1923. Serial No. 634,985.

To all whom it may concern:

Be it known that I, ELVAH O. BULMAN, a citizen of the United States of America, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Paper-Roll Holders and Cutters; 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.

This invention relates to roll paper holders and cutters such as are in common use in stores, paper being taken from a roll of paper mounted on the holder therefor and cut at any desired length as required for wrapping articles of merchandise. The present invention is directed to a device of this character of novel form and particularly one which can be shipped in the knock-down or disassembled state and carried in a carton of the minimum size, being readily assembled into operative form when the place of use thereof is reached. Such minimum size of containing and shipping carton for the structure is of value in that less space is required for storage in the factory, less space for shipping and the shipping is at a less rate than it would be otherwise, and the handling of the parts is easier and at less expense. A further object of the invention is to make a device of this character of parts which are simple and economical to manufacture and which when assembled provide a strong and rigid structure fully capable of withstanding the usage to which it is put in service. Many novel constructive features for the attainment of these ends will appear as understanding of the invention is had from the following description, taken in connection with the accompanying drawings, in which,

Fig. 1 is a front elevation, with parts broken away and in section, of the roll holder and cutter of my invention.

Fig. 2 is a perspective view showing the disassembled parts of the device as the same are packed in a carton for storage and shipment.

Fig. 3 shows in perspective, the elements at one end of the device separated from each other.

Fig. 4 is a fragmentary transverse vertical section through the upper part of the roll holder and cutter.

Fig. 5 is a fragmentary vertical transverse section through a cutter knife of slightly different form from that shown in Fig. 4.

Fig. 6 is a fragmentary vertical longitudinal section at a lower corner of the device, and

Fig. 7 is a like view of a slightly modified form of construction used.

Like reference characters refer to like parts in the different figures of the drawings.

In the construction of the device, vertical side supports or legs 1 are used, made of channel form, the upper portion of each of which is set outwardly in a different plane from the lower portion, there being an off-set bend in the leg at 2. At the lower end upper ends of each leg, inwardly turned integral flanges 3 and 4 are provided, and the web portion of each leg is formed with two spaced apart vertical slots 5 at a point just below the off-set 2 in the leg, as shown best in Fig. 3, for a purpose later described.

An arm 6 of flat metal has an off-set portion, indicated at 7 beyond which a short end section extends in which a diagonally positioned slot 8 is cut, a pin 9 passing through the slot to permanently connect the arm to the leg 1 near its upper end. At its free lower end, the arm is formed with a reduced projecting tongue 10, there being shoulders 11 in alinement with each other at the end of the arm above and below the tongue. One of these arms is thus connected to each leg 1 at the factory, and in shipment the arm may be placed alongside the arm to occupy the least possible space.

An upper bar 6, preferably of wood is used, in the assembled structure lying between and over the upper ends of two of the legs spaced apart, bolts 13 passing through the bar and the upper flanges 4 of the legs for securely connecting the parts. At the lower end of each leg, a base 14 of sheet metal is used, the same being adapted to be detachably connected to the lower end of the leg by bolts 15 passing through the lower flange 3 and the base. An opening, as shown at 16 is cut in the upper side of the base 14 at one side thereof, leaving an upwardly projecting tongue from the depending inner side of the base. A base being connected to the lower end of each leg, a tie bar 18 of flat metal is provided with openings 19 in its ends so that the tongues

may extend upwardly through the openings to tie the bases together. As shown in Fig. 6, the flange 3 extends over the adjacent end of the tie bar 18 holding it from dis-connection with the base. In the slightly modified form shown in Fig. 7, the tie bar is located in a slightly lower plane, its end portion projecting under the upper side of the base 14 instead of under the flange 3.

In either case the tie bar is securely held.

A holder for each end of the rod on which the roll of paper is wound is made as a separate member and adapted to be attached one on the inner side of each leg 1. This holder comprises a piece of sheet metal bent into substantially semicircular form making a socket 20, the ends 21 of which are turned outwardly to make ledges 21. At the edge of the socket where it contacts with the inner side of the leg 1, two hooks 22 are formed to pass through the slots 5 and hook over the lower ends of said slots, and a lip 23 is extended downwardly from the lower portion of the socket to bear against the inner side of the leg to which the socket is attached. With one of these holders connected at the inner side of each leg, a rod 24 on which the roll of paper is mounted may be carried in the same, projecting ends of the rod seating in the sockets 20; and the ledges 21 serve as guides to entering the ends of the rod into the sockets, obviating against likelihood of the rod dropping on the outside of the socket, rather than into the socket. This is a desirable feature as the roll of paper is heavy and it is important that the ends of the rod supporting the same shall enter the sockets.

Between the outer ends of the arms 6, a cutter is mounted. In the preferred form, a plate 25 of metal is formed with openings 26 adjacent the ends thereof and at its lower edge portion with a concaved bead 27 to bear against the roll of paper. Back of the cutter plate 25 a backing bar 28 is designed to be placed, it having openings 29 adjacent its ends which come into conjunction with the openings 26 in the plate, and through said alined openings the tongues 10 on the arms may be passed, and then bent over to clinch the parts in place with the back side of the bar 28 bearing against the shoulders of the arms 6, shown at 11. These shoulders make a firm bearing for the bar and when the tongues 10 are bent over, a secure connection of the cutter plate and backing bar to the arms is made. The bar 28 may be omitted, as shown in Fig. 5, and the plate 25 brought directly against the shoulders 11 and the tongues 10 bent over and clinched thereagainst, though the former construction is preferred.

A roll holder and cutter made as described may be manufactured in the factory and all of the assembling that has to be done

is to attach the arms 6 to the legs 1. These legs with attached arms, the upper bar 12, bases 14, tie bar 18 rod 24, cutter plate 25 and backing bar 28, with the smaller parts such as the socket holders 20 and the bolts 13 and 15 may be readily placed in disassembled state in a carton, indicated at 30 in Fig. 2 for storage and shipment, the parts being made to occupy the smallest possible space, the two legs 1 in alinement being no longer than the bars 12 of 18 or the rod 24. When the ultimate user of the device receives it, the assembly is made by him by connecting the parts in the manner heretofore described, and the complete paper roll holder and cutter is attached to the counter by screws or like fastening devices passing through the openings at the ends of the base members 14 into the top of the counter. All this tends to economy in production, storage and shipping.

The parts of the device are readily and easily formed chiefly from sheet metal at low cost. Simplicity of construction coupled with novel constructions of parts to make a readily collapsible structure which may be packaged in the smallest space combine to make the invention one of practical value. The appended claims define the invention and all modifications in construction from those specifically shown and described which come within the scope of the claims are to be considered as comprehended by my invention.

I claim:

1. In a device of the class described a pair of spaced, vertical legs consisting of channel bars and provided in the channels between the walls thereof with spaced slots, socket members arranged in the said channels and each formed of a single piece of metal bent into substantially semicircular form and provided at opposite sides with lugs secured in the said slots and a rod disposed between the legs and seated in the socket members.

2. In a device of the class described, a pair of spaced, vertical legs consisting of channel bars and provided in the channels between the walls thereof with spaced slots, socket members arranged in the channels and each consisting of a single piece of metal curved into substantially semicircular form and provided at opposite sides with projecting approximately hook shaped lugs engaged in the slots, the terminals of the semicircular piece being bent horizontally into engagement with the walls of the channel.

3. In a device of the class described, a pair of spaced apart legs, base members formed from a single piece of metal detachably connected one to the lower end of each leg, each of said base members at its inner side having an opening cut therein to

leave an upwardly projecting tongue in
alinement with the side of the base, a tie
bar formed with openings adjacent its ends
positioned between the base members, said
5 tongues passing through the openings in the
tie bar and interlocking the latter with the
base, and the ends of the tie bar being held
against upward movement and maintained
in said interlocked relation by the lower
10 ends of the legs lying thereover, a roll hold-
ing rod carried by and between the legs, an
upper bar detachably connected to and ly-
ing between the upper ends of the legs,
arms pivotally connected one to each leg,
15 and a cutter member detachably secured to
and lying between the outer ends of the
arms, substantially as described.

4. The combination with a roll paper
holder having two spaced apart legs, of two
20 base members adapted to be detachably at-
tached, one under each leg, a tongue pro-
jecting upwardly from each base member
abutment, and means operative to yield-

respective ends, said tie bar being adapted
to extend between the base members and to 25
receive the respective tongues in the re-
spective holes thereof to interlock the tied
bar with the base, the tie bar being re-
tained on the tongues in said interlocked
relation by its ends extending under the 30
said legs.

5. In a device of the character described,
a pair of spaced base members having de-
pending marginal flanges and cut away at
the inner side to expose a portion of the 35
marginal flange, the exposed portions of
the marginal flanges of the base members
being provided with upwardly projecting
tongues, a tie bar connecting the base mem-
bers and interlocked with the said tongue, 40
and legs mounted on the base members and
retaining the tie bar in interlocked rela-
tion with the tongues of the base members.

In testimony whereof I affix my signature.

ELVAH O. BULMAN.

Certificate of Correction.

It is hereby certified that in Letters Patent No. 1,573,141, granted February 16, 1926, upon the application of Elvah O. Bulman, of Grand Rapids, Michigan, for an improvement in "Paper-Roll Holders and Cutters," an error appears in the printed specification requiring correction as follows: Page 3, line 23, claim 4, strike out the words "abutment, and means operated to yield-" and insert instead *and a tie bar having a hole near each of its*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 22d day of June, A. D. 1926.

[SEAL.]

M. J. MOORE,
Acting Commissioner of Patents.