

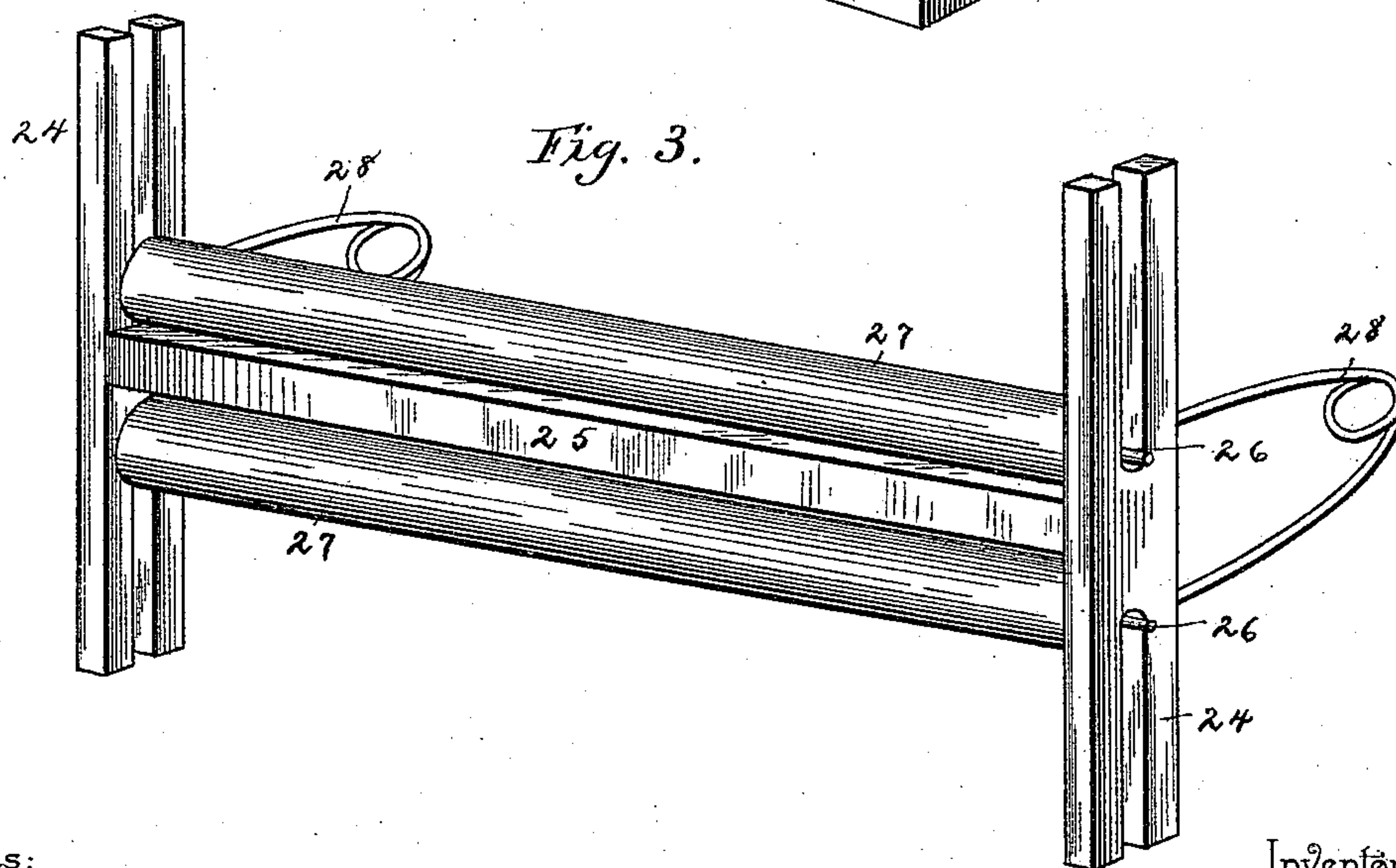
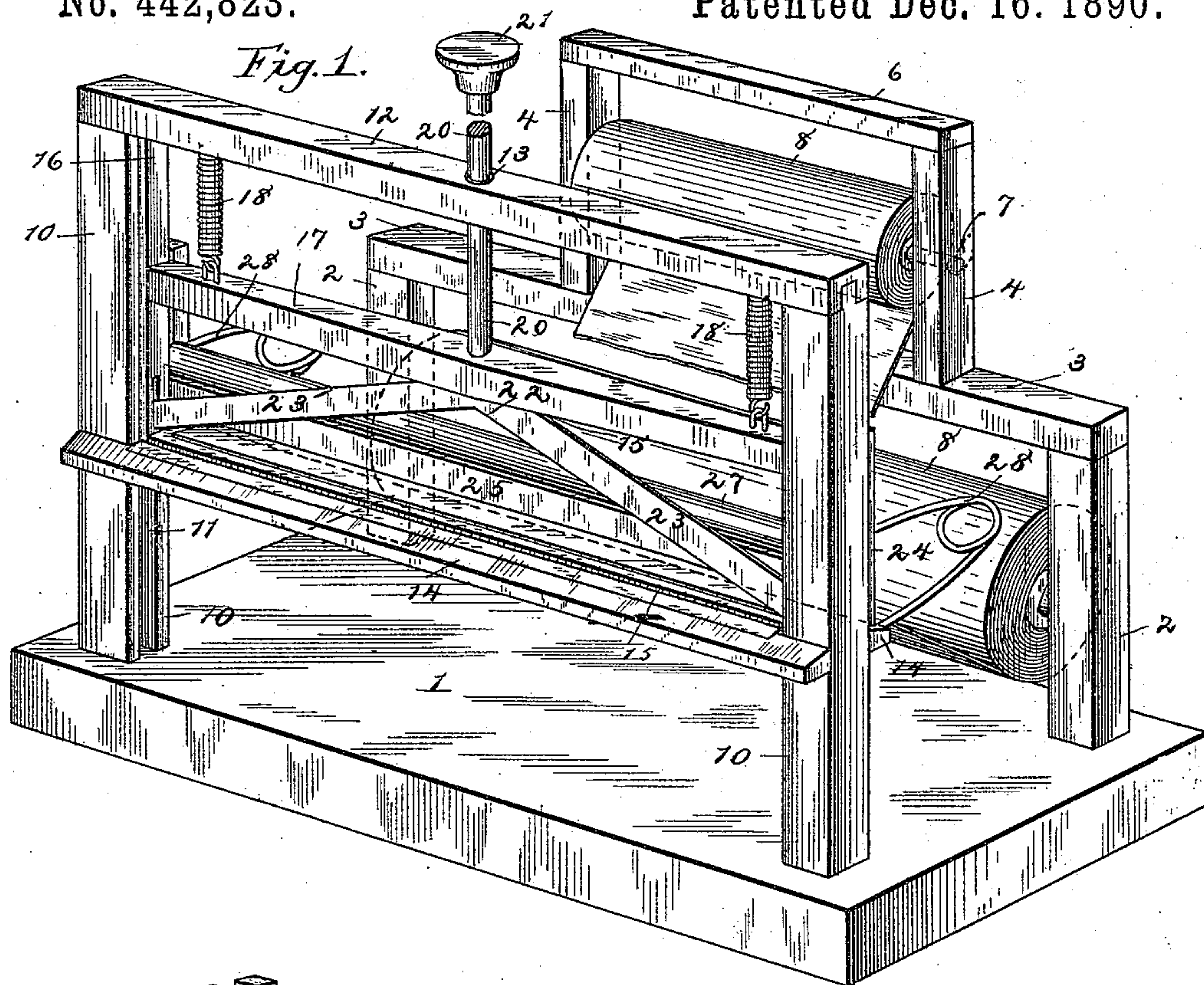
(No Model.)

2 Sheets—Sheet 1.

A. G. A. PALM.  
ROLL PAPER HOLDER AND CUTTER.

No. 442,823.

Patented Dec. 16. 1890.



Witnesses:

Harry L. Amer.

*W. L. Hall*

By his Attorneys,

Andrew G. A. Palm.

*C. A. Snow & Co.*

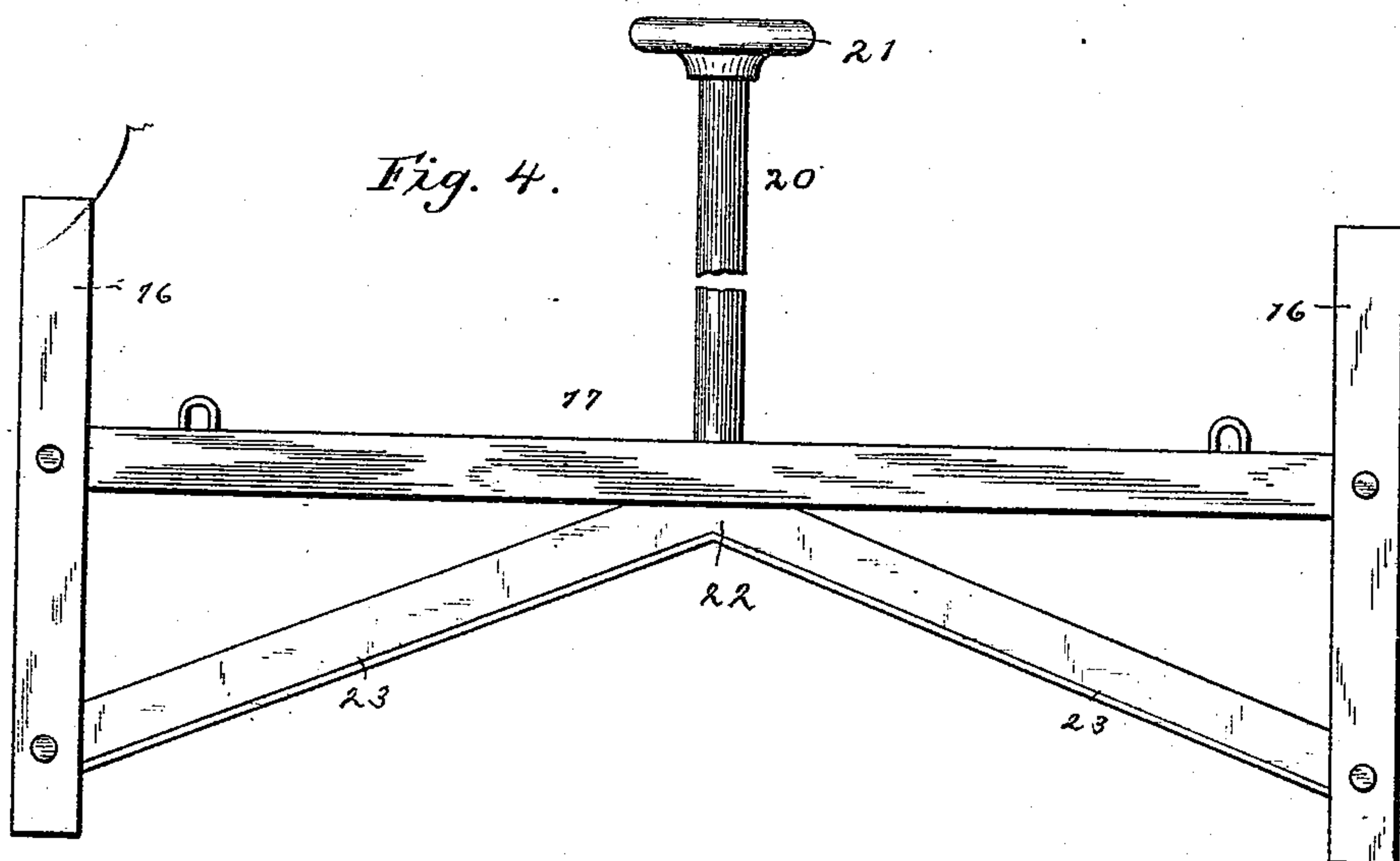
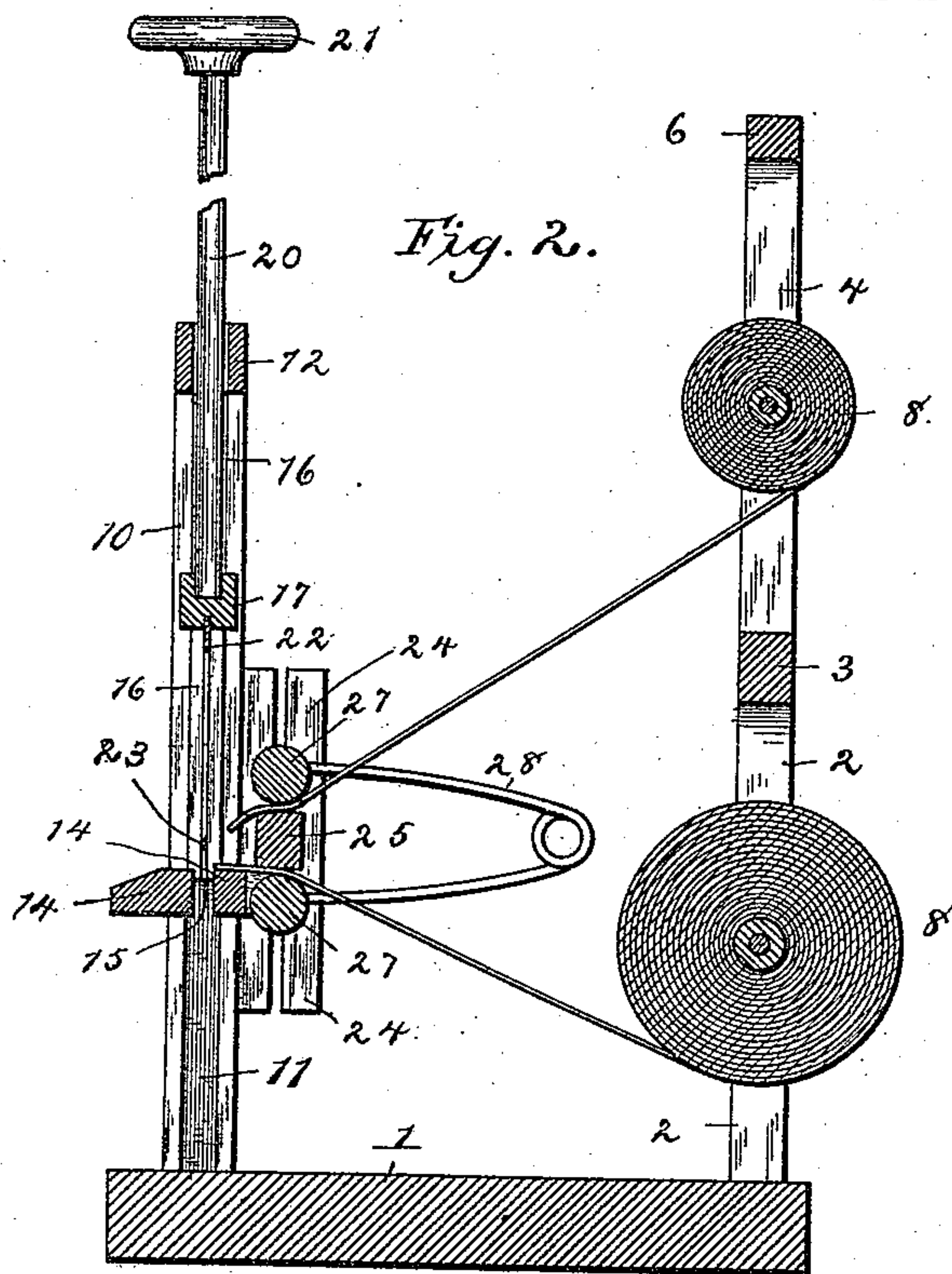
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2 Sheets—Sheet 2.

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Witnesses:

Inventor

Harry L. Amer.

By his Attorneys,

Andrew G. A. Palm

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# UNITED STATES PATENT OFFICE.

ANDREW G. A. PALM, OF AKRON, IOWA.

## ROLL-PAPER HOLDER AND CUTTER.

SPECIFICATION forming part of Letters Patent No. 442,823, dated December 16, 1890.

Application filed February 18, 1890. Serial No. 340,958. (No model.)

*To all whom it may concern:*

Be it known that I, ANDREW G. A. PALM, a citizen of the United States, residing at Akron, in the county of Plymouth and State of Iowa, have invented a new and useful Combined Stand and Cutter for Wrapping-Paper, of which the following is a specification.

This invention has relation to a combined stand and cutter for wrapping-paper for use in stores.

Among the objects of the invention are to provide a stand capable of supporting one or several rolls of various grades, widths, and styles of paper, to provide a knife which by its peculiar construction is adapted to impart a shear-cut upon the paper and to require a slight movement in its reciprocations in the act of cutting, and, furthermore, to support the leading ends of the paper within convenient reach of the operator of the knife.

With the above objects in view the invention consists in certain features of construction, hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a combined paper holder and cutter constructed in accordance with my invention. Fig. 2 is a transverse vertical section of the same. Fig. 3 is a perspective of the roller. Fig. 4 is an elevation of the knife and its frame.

Like numerals of reference indicate like parts in all the figures of the drawings.

The base 1 of the apparatus is provided at its rear edge with a paper-roll-supporting frame, the same comprising in this instance a pair of vertical bars 2, connected by a cross-bar 3, and upon the cross-bar is mounted a second pair of vertical bars 4, connected at their upper ends by a cross-bar 6. The upper vertical bars are in this instance arranged closer together than are the lower vertical bars, and each pair of vertical bars is provided at their inner rear edges with inclined slots 7, adapted to receive paper-rolls 8, said rolls being provided with webs of paper and removable from the bearings in which they rotate, as readily understood.

From the front end of the base there rises a pair of knife-standards 10, the adjacent or in-

ner faces of which are vertically grooved, as at 11, the upper ends of the standards being connected by a cross-bar 12, having a central perforation 13. The vertical knife-standards are connected by a table 14, extending transversely across the machine and provided with a central longitudinal knife-receiving slot 15. The knife-frame comprises opposite side standards 16, mounted for vertical movement in the grooves or guides 11 of the knife-standards, said sides being connected at about their centers by a head-block 17, which near its opposite ends is held suspended by a pair of coiled springs 18, the upper ends of the springs being connected to the cross-bar connecting the upper ends of the standards. From the head-block there rises a plunger-rod 20, which projects through the opening in the cross-bar just mentioned and at its upper end is provided with a knob 21. The knife comprises two oppositely-inclined integral blades 23, in this instance said blades converging toward the center and being of an inverted-V shape. The apex of the V is connected to the head-block and the outer ends of the knife to the lower ends of the side bars of the knife-frame. The springs supporting the knife-frame support the lower or advanced ends of the blade slightly above the ends of the table, and it will be apparent that any paper subjected to the cutting action of the knife will be cut from edges to center. In this manner the space for the movement of the knife is reduced one-half to what would be required were the blades at one continued inclination, and the machine is thus adapted to cut paper of extreme widths with a comparatively small knife.

A pair of short vertical standards 24 are located in rear of the knife upon the cutting-table, which standards are connected at their centers by a transverse strip 25. At each side of the strip the elongated bearings 26 are formed in the standards, and in each pair of the same is mounted a roller 27. The peripheries of the rollers are maintained in yielding contact with the adjacent faces of the cross-strip by means of a pair of V-shaped springs 28, the terminals of each being connected to the adjacent ends of the rolls and serving to



draw the rolls toward each other. The leading ends of the paper webs are passed between the rolls and the cross-strip and are maintained under tension by the springs.

5 Other forms of frictional or tension devices may be employed; but where but two styles of paper are employed the construction shown is deemed best.

10 The operation of my invention will be readily understood and may be briefly stated as follows: A salesman having approximated the length of paper to be severed and required to wrap up a parcel and selected the style or weight of paper best adapted to the  
15 same, the leading end of that roll forming the same is grasped and drawn under the knife a sufficient distance, after which the knife is depressed by the other hand of the operator pushing down upon the plunger. The cut  
20 begins at the edges of the paper, and by reason of the inclination of the opposite blades is shear-like and therefore clean. After the cut has been made, by removing the hand from the plunger the knife will be drawn up-  
25 ward by the springs and ready for another cut.

Having thus described my invention, what I claim is—

30 1. In a paper-holder, the combination, with the base and the paper-standards having there-  
movable shafts, of the knife-standards mounted at the opposite side of the machine and provided with vertical ways or grooves, the slot-  
35 ted table mounted between the standards, the connecting - bar for the standards, having a central opening, the knife-frame comprising the opposite side bars mounted in the guide of the standards, the connecting head-  
40 block connecting the sides, the suspension-springs connecting the head-block with the cross-bar, the plunger mounted in the opening of the cross-bar, the oppositely-inclined

knife-blades of inverted-V shape, having their extremities connected to the side bars, the friction-rods yieldingly supported in rear of  
45 the knife, and the slotted supports for the same, substantially as specified.

2. The combination, with the short standards 24, provided with opposite pairs of elongated bearing-slots, and a transverse connect-  
50 ing-strip, of opposite tension-rollers mounted in the bearings above and below the strip, and a pair of V-shaped springs, the terminals of each of which are connected to the adjacent ends of the rolls, whereby the rolls are  
55 maintained in contact with the strip, substantially as specified.

3. In combination with the base provided with standards having ways or guides, a vertically-reciprocating knife-frame mounted in  
60 the ways or guides, and the tension device mounted in rear of the same and consisting of the strip 25 and upper and lower spring-pressed rolls 27, resting upon the opposite  
65 sides of the said strip, as set forth.

4. In combination with the base provided with standards having ways or guides, a vertically-reciprocating knife-frame mounted  
70 in the ways or guides, the tension device mounted in rear of the same and consisting of the strip 25 and upper and lower pressed rolls 27, and the paper-roll standards mounted in rear of the tension device and having the  
75 leading ends of the rolls passing between the upper roll and the strip and the lower roll and the strip, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ANDREW G. A. PALM.

Witnesses:

CHAS. E. JOHNSON,  
E. GUST. ERICSON.