No. 842,959. PATENTED FEB. 5, 1907.

F. KAUFMAN.

ROLL PAPER HOLDER AND CUTTER.

APPLICATION FILED APR. 27, 1906.

Fig. 1.

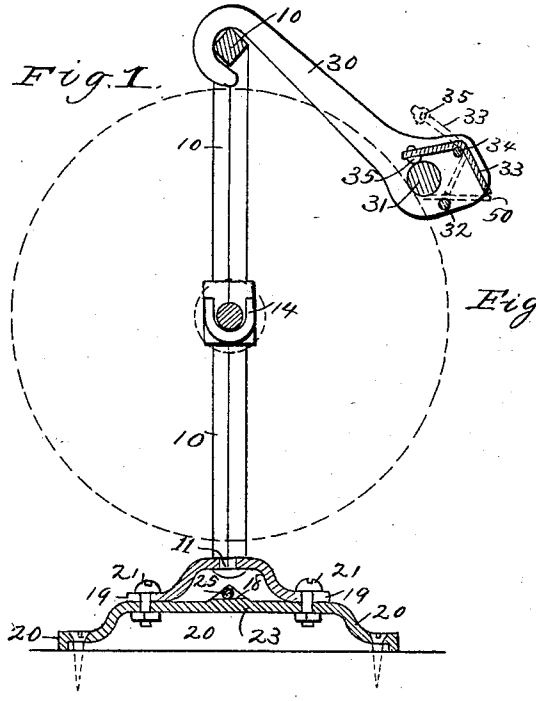


Fig. 3.

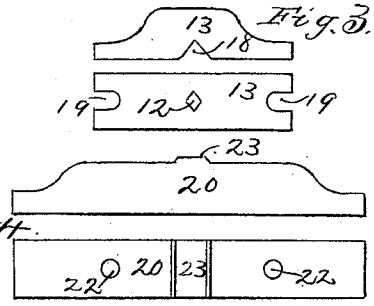


Fig. 4.

Fig. 5.

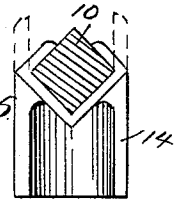


Fig. 2.

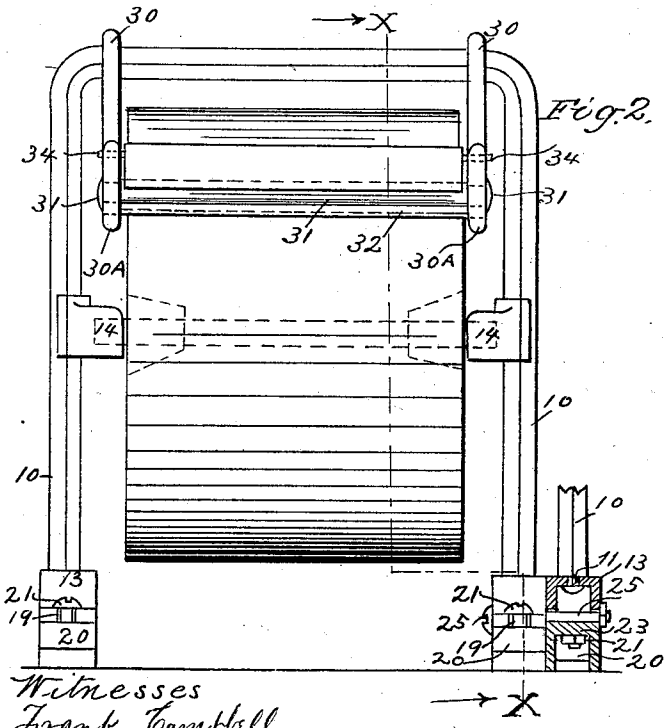


Fig. 6.

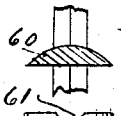
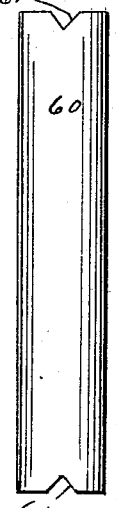


Fig. 7.



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UNITED STATES PATENT OFFICE.

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ROLL-PAPER HOLDER AND CUTTER.

No. 842,959. Specification of Letters Patent. Patented Feb. 5, 1907.

Application filed April 27, 1906. Serial No. 314,031.

To all whom it may concern:

Be it known that I, FRANK KAUFMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Roll-Paper Holders and Cutters, of which the following is a specification.

My present invention relates to roll-paper holders and cutters; and it particularly relates to the constructions, arrangements, and combinations of the various parts, as well as the apparatus as a whole, all of which will hereinafter be more fully described, as well as clearly specified in the appended claims.

In the drawings illustrating the best form of apparatus to me now known for embodying my invention, Figure 1 is a sectional side elevation view substantially on line *x x* of Fig. 2. Fig. 2 is a front elevation view thereof and showing a portion of a similar cutter bolted thereto, the foot of which is in central vertical section. Fig. 3 in its upper part is a side elevation view of one of the superfeet and the lower part thereof is a plan view thereof. Fig. 4 in its upper part is a side elevation view of one of the subfeet and the lower part thereof is a plan view thereof. Fig. 5 is an enlarged plan view of the bearing-cup, showing the frame-rod in cross-section. Fig. 6 is a sectional end view of a sliding knife and showing a portion of the frame-rod upon which it slides, and Fig. 7 is an enlarged plan view of said sliding knife.

In said drawings, 10 is a preferably square rod bent substantially U-shaped, with two of its diagonally opposite corners in the same vertical plane. This rod forms the frame of the device, and the lower ends of said frame are provided with preferably square shoulders 11, Figs. 1 and 2, each passing through similarly-shaped opening 12 in the top of the superfeet 13, and said shoulders 11 are riveted or otherwise secured to said feet 13. To each of the vertical members of said frame are secured bearing-cups 14, having a substantially V-shaped slot passing vertically through their outer ends, said cups being secured to said frame, preferably by clamping or pinching the walls of said slot against said frame, said cups being formed of malleable iron or brass to facilitate said clamping or pinching. The bottom face of each of said feet 13 is provided with a V-shaped recess 18 for the purpose of fitting the horizontal top portion of the frame-rod 10 in building cutter upon the top of another, in which case another foot 13, unattached to rod 10, is secured to the bottom of the foot 13, attached to the top cutter, said feet 13 clamping the horizontal portion of frame-rod 10 between their registering recesses 18, said feet 13 being thus secured together by bolts passing through openings 19 in the opposite ends of said feet 13.

The feet 13 are, as above described, specially adapted for pyramiding purposes, and if they were of sufficient length to enable the machine to stand upon them they would project an unsightly distance from the machine and interfere with the knife when feet of such length would be employed for pyramiding purposes. To this end the feet 13 are formed relatively short, and when used for supporting the machine upon the counter a subfoot 20 of greater length is employed intermediate said feet 13 and said counter, said feet 13 and 20 being secured together by bolts 21, Fig. 1, passing through said openings 22, Fig. 4, in feet 20. A lug 23 projects from each of the feet 20 and fits the recesses 18 in feet 13 in order to register said openings 19 and 22 in said feet. Said projection 23 does not fill said recesses 18, and enables a bolt 25 or other suitable fastening device, Figs. 1 and 2, to be passed through said recesses 18 in said fixtures when setting end to end, and thus secure them together in such position, which position is termed a flat "pyramid."

Hooked over or otherwise fulcrumed upon the horizontal portion of frame-rod 10 are two arms 30, one near each side of the frame. The lower ends of each of said arms 30 are rigidly connected together by rods 31 and 32, separated from each other, the former being adapted to rest upon the paper-roll to retard the movement of the paper-roll and to prevent the windings of the paper-roll from becoming loose and the rod 32 being adapted to deflect the loose unwinding end of the paper upward and toward the knife-edge by said end of the paper being passed between said rods. At a point above said rods is fulcrumed the knife 33 upon fulcrum-points 34,

said knife being preferably an angle-bar of thin material and said fulcrum-pins 4 being at the apex of said angle formed by said bar. One side of said angle-bar 33 terminates at a point in advance of the rod 32, which deflects the paper upward against said edge of said angle-bar 33, which edge is the cutting edge thereof. The other side of said angle-bar 33 projects over and normally rests upon the rod 31, a rubber or other buffer 56 being interposed between them to prevent noise caused by the contact thereof.

In operation the end 50 of the paper unwound from the paper-roll is directly under the edge of the knife, and with other forms of apparatus now on the market the paper-roll must be turned by hand to cause said end of the paper 50 to be projected a sufficient distance from under the knife to enable the thumb and fingers to grasp the paper and draw it from the roll the proper length before cutting the same. However, with my present invention all that is necessary is to advance the thumb and forefinger toward the cutting edge of the knife, separated ready to grasp the paper. The thumb contacting with the edge of the knife 33 will rock the knife upon its pivot-pins 34 and to the position shown in dotted lines in Fig. 1, in which position the end 50 of the paper will be between the thumb and finger ready to be grasped and unwound the desirable length from the roll and cut therefrom by shearing contact with the edge of said knife 33. As soon as the thumb is withdrawn from the knife 33 by drawing the paper from the roll or otherwise said knife by gravity assumes its normal position.

In companion applications, Serial Nos. 73,977 and 73,978, for roll-paper holder and cutter, filed August 31, 1901, I have shown, described, and claimed means for building one apparatus upon the top of another, which means specifically consists in arranging the recesses and their coöperating projections in parallel pairs near each end of the apparatus.

Having now so fully described my invention that others skilled in the art may freely make and use the same when this exclusive grant shall cease to operate, what I claim, and desire to secure by Letters Patent, is—

1. The combination with a frame having means for supporting the roll of paper, a knife-frame adapted to rest upon the periphery of said paper-roll, a knife fulcrumed in said frame at a point above its cutting edge, and a deflector for deflecting the end of the paper toward the edge of said knife, said knife being out of contact with said paper-roll and adapted to swing upon its fulcrum with its knife-edge movable past the loose end of said paper-roll substantially as specified.

2. The combination of a frame provided with means for supporting the roll of paper, a knife-frame adapted to rest upon the periphery of the paper-roll, a knife fulcrumed in said frame at a point above its edge, said knife being out of contact with said paper-roll and adapted to swing upon its fulcrum with its knife-edge movable past the loose end of said paper-roll and means for limiting the pivoted movement of said knife and returning it to initial position substantially as specified.

3. In a paper holder and cutter, the combination of a paper-supply, means for holding said paper-supply, a knife-frame adapted to float on said paper-supply and provided with a cross-rod 31, a knife fulcrumed in said frame at a point above its edge, a member extending at an angle from said knife for yieldingly maintaining said knife in its initial position, and a deflector for deflecting the end of the paper toward the edge of said knife, substantially as specified.

4. In a paper holder and cutter, the combination of a paper-supply, means for holding said paper-supply, a frame movably mounted in said means, said frame including a cross-rod, a knife fulcrumed to said frame beyond said cross-rod and extending on one side of said cross-rod, and a projection of said knife extending upon the opposite side of said cross-rod, substantially as specified.

5. In a paper holder and cutter, the combination of a paper-supply, means for holding said paper-supply, a frame movably mounted in said means, said frame including a cross-rod, a knife fulcrumed to said frame beyond said cross-rod and extending on one side of said cross-rod, a projection of said knife extending on the opposite side of said cross-rod, and a buffer carried by one of said two last-named members and contacting with the other for limiting the movement of said knife, substantially as specified.

6. In a paper holder and cutter the combination of a paper-supply, means for holding said paper-supply, a knife-frame consisting of knife-arms fulcrumed upon said means and cross-rods connecting said arms; said frame bearing upon said paper-supply, means whereby the loose end of said paper-supply may be led from said paper-supply, and a knife movably mounted in said knife-frame adjacent the loose end of said paper and having the cutting edge of said knife movable away from the end of said loose end of said paper-supply, substantially as specified.

7. In a paper holder and cutter the combination of the paper-supply, means for holding said paper-supply, a knife-frame movably mounted in said means and including cross-rods 31 and 32, said cross-rod 31 being adapted to contact with said paper-supply and a knife fulcrumed upon said knife-frame and having its cutting edge movable away from the loose end of said paper-supply substantially as specified.

8. In a paper-holder a bearing member consisting of a substantially U-shaped cup 14 having a back wall provided with a vertical rectangular recess having on opposite sides thereof walls formed of substantially soft material, said walls being adapted to be bent inward at an angle to the back wall of said rectangular recess as and for the purpose specified.

9. In a paper holder and cutter, the combination of a paper-roll, means for mounting said roll, a knife-frame movably mounted in said means and provided with a cross-bar adjacent to and parallel with said roll, a presser-bar disposed within a plane below said cross-bar and parallel therewith, a deflector-bar parallel with said presser-bar and disposed therebelow, and a knife formed of an angle-bar and pivotally supported at its apex upon said cross-bar, the rear end of said knife resting upon said presser-bar.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK KAUFMAN.

Witnesses:
MAURICE PULVER,
EDWIN J. PIERCE.