(No Model.)

J. BAINES.

ROLL PAPER HOLDER AND CUTTER.

No. 421,225. Patented Feb. 11, 1890.

Fig. 3.

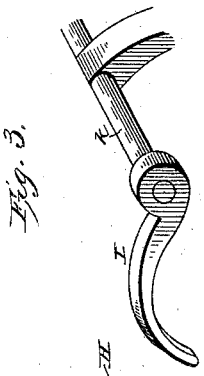


Fig. 2.

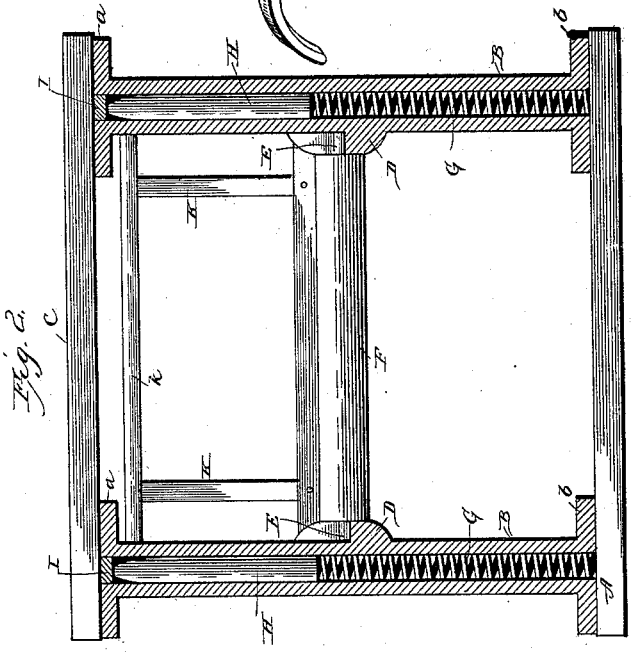
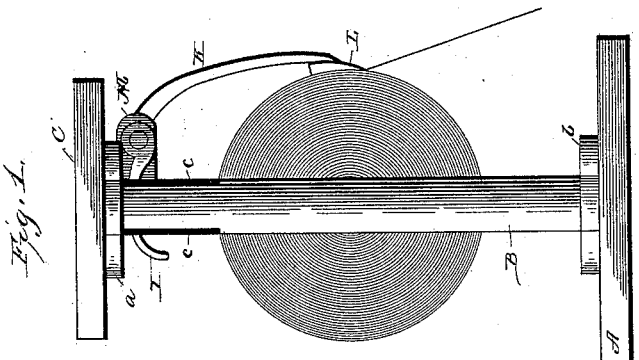


Fig. 1.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN BAINES, OF PIQUA, OHIO.

ROLL-PAPER HOLDER AND CUTTER.

SPECIFICATION forming part of Letters Patent No. 421,225, dated February 11, 1890.

Application filed August 17, 1889. Serial No. 321,055. (No model.)

To all whom it may concern:

Be it known that I, JOHN BAINES, a citizen of the United States, and a resident of Piqua, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Paper Holders and Cutters; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in roll-paper holders and cutters, and has for its object to construct a simple, efficient, and inexpensive device of this class, and one in which the pressure of the knife against the roll shall be as firm when the roll of paper has become small as when a large roll rests in the holder. I attain this object by the device illustrated in the accompanying drawings, in which—

Figure 1 is an end view of my device with a roll of paper in position. Fig. 2 is a vertical sectional view of the same with the paper removed, and Fig. 3 is a detail view of the cam shown in Figs. 1 and 2.

Like letters of reference denote corresponding parts in all the figures.

Referring to the drawings, the letter A designates the bed of the device, to which are removably fixed two upright hollow standards B, having suitable foot-pieces *b* and top rests *a*. To the top rests *a* is fastened the platform cross-brace C. At about half the vertical height of the standards B are the lugs D, which furnish bearings for the gudgeons E, which are fixed in the ends of the roller F. On the roller F is placed the roll of paper, and the roller may be removed from the frame at any time to put on a fresh roll, or for other purpose, by lifting it above its bearings. In the hollow standards are placed the coiled springs G. The bottom of the spring rests upon the bed A, and the top bears against the bottom of the vertical rod H, which in turn bears against the cam I. The cams I are fixed, one upon each end of the rod *k* of the yoke K, and play up and down in the slots *c*, cut through the standards. This yoke is provided with suitable bearings in the lips M, which project from the standards B, and with a knife L of the usual form adapted to bear against the roll of paper, and on the edge of which the paper is torn off.

The operation and advantages of my invention are, briefly stated, as follows:

The roller is slipped into the roll of paper and its gudgeons dropped into their bearings. The vertical rods press against the cams by the action of the coiled springs and press the knife against the roll of paper. It will be seen that the fulcrum of the lever formed by the yoke and the cams fixed thereto is always the same, that the power is always applied within the standards B, and that by this arrangement the knife will bear against the roll when small with the same force as when the roll is large.

It is desirable in a device of this class to be able to vary the pressure with which the knife bears against the roll, for if the paper be thick and strong it will require to be pulled against the edge of the knife with more force in order to tear it off, while if the paper be light it will be necessary for it to run easily under the knife, and in my device the pressure of the knife can be varied at will by putting in longer or shorter vertical rods H, thus changing the tension of the spring. These vertical rods H are of wood, and consequently there is no expense attached to having or making sets of any desired length. The hollow standards are open at the bottom, and by detaching them from the bed A the frame may be lifted and the vertical rods changed.

It may be found more desirable in many cases to dispense with the bed A and to fasten the standards directly to a counter, shelf, or table. The cam I may be diametrically reversed upon the rod *k*, a cord fastened to the outer end, slipped into the slot *c*, and fastened to a weight in the interior of the hollow standards. Said weights and cords will then serve the same purpose as the springs and vertical rods.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The herein-described roll-paper holder and cutter, having hollow standards provided

with springs and vertical rods, said rods being adapted to bear against cams fixed to the knife-yoke, substantially as shown.

2. The combination, in a roll-paper holder and cutter, of hollow and slotted standards having interior springs and rods, a yoke having a knife and cams adapted to receive the pressure of said springs, and a roller adapted to receive the rolls of paper, substantially as described.

3. The combination, in a roll-paper holder and cutter, of a base, a top brace, hollow and slotted standards having lugs and lips forming bearings, springs inserted in said hollow standards, changeable vertical rods inserted in said standards, a yoke bearing a knife and journaled in bearings formed by said lips, cams fixed to said yoke, and a roller adapted to receive a roll of paper and to be removably placed in the bearings formed by the lugs on said standards, all combined to co-operate substantially in the manner and for the purpose set forth.

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

JOHN BAINES.

Witnesses:
JOHN W. BAINS,
M. E. ROBISON.