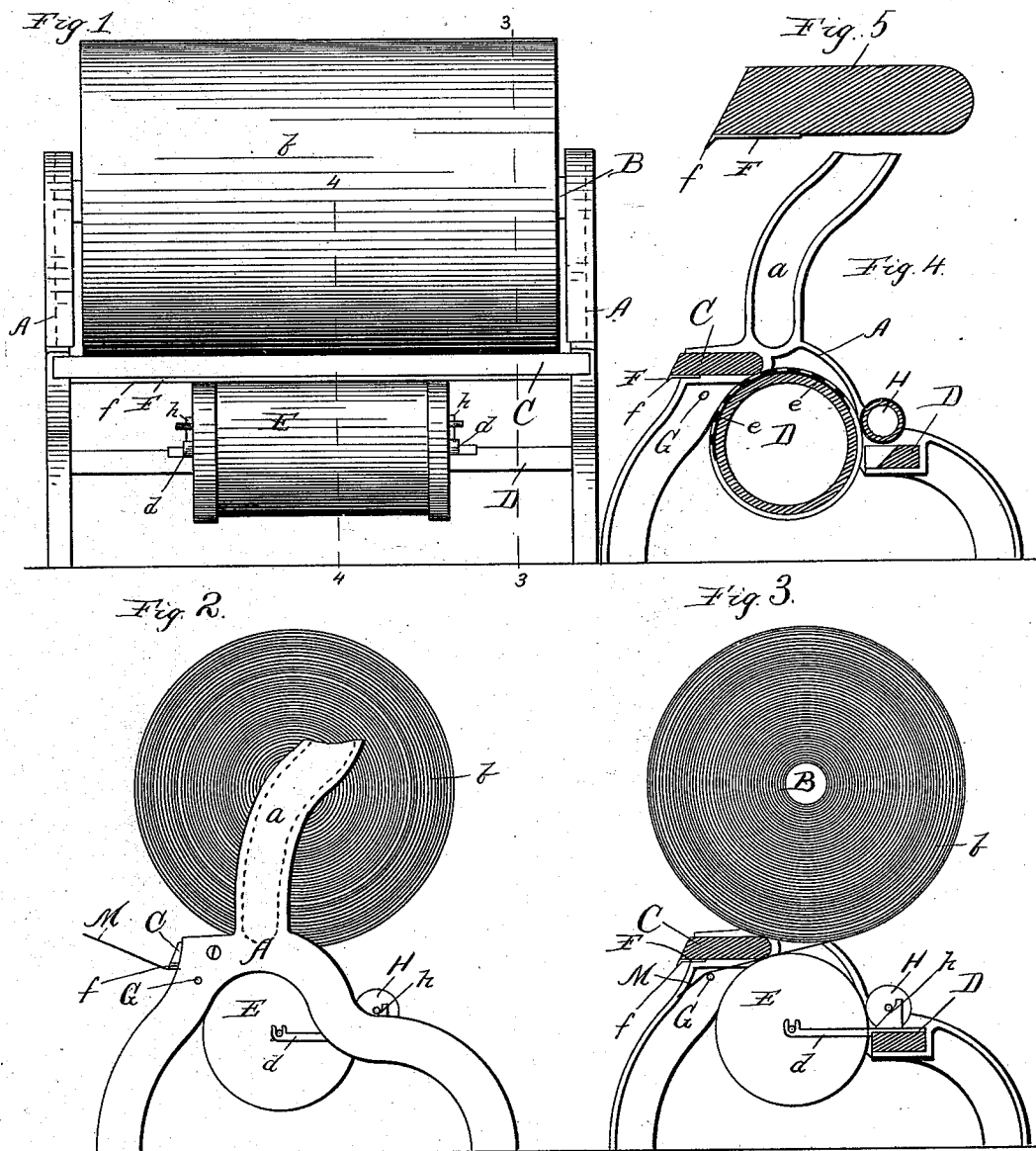


(No Model.)

G. L. KENNEDY.
PAPER PRINTING AND CUTTING HOLDER.

No. 413,803.

Patented Oct. 29, 1889.



Witnesses:
Sam. E. Curtis.
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UNITED STATES PATENT OFFICE.

GUY L. KENNEDY, OF CHICAGO, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS,
TO THE MERCHANTS ROLL PAPER SUPPLY COMPANY, OF SAME PLACE.

PAPER PRINTING AND CUTTING HOLDER.

SPECIFICATION forming part of Letters Patent No. 413,803, dated October 29, 1889.

Application filed May 3, 1889. Serial No. 309,446. (No model.)

To all whom it may concern:

Be it known that I, GUY L. KENNEDY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Paper Printing and Cutting Holders, of which the following is a specification.

My design in this invention is to simplify this class of machines to as large an extent as possible, and this I accomplish by the construction hereinafter set forth.

My improved machine consists of suitable side standards, a shaft or cylinder for the paper roll supported in long slot bearings in the side standards, a cross-bar upon which the roll of paper rests and which exerts the necessary friction upon the paper by reason of the gravity of the roll, a printing-roller so located as that the yielding type thereof shall pass in close contact with said bar and the bar be thus caused to impress the paper upon the type, and a knife, also secured to said bar. This and other features of my invention are fully shown in the accompanying drawings, and set forth in the subjoined description.

In said drawings, Figure 1 is a front elevation, and Fig. 2 a side elevation, of my machine. Fig. 3 is a section on the line 3 3 of Fig. 1. Fig. 4 is a partial section on the line 4 4 of Fig. 1, and Fig. 5 is an enlarged section of the cross-bar and knife.

In said drawings, A A are the side standards, which may be alike, except that they should be made in pairs. The upper extensions of these standards are provided with open end grooves *a*, (more particularly shown by the broken lines in Figs. 1 and 2 and full lines in Fig. 4,) for receiving the ends of the shaft B, supporting the roll of paper *b*. These grooves are inclined from the vertical at their upper ends, and preferably in a curved line, so that they will act to sustain some part of the weight of the paper when the roll is full and prevent too much pressure being exerted upon the cross-bar, as hereinafter explained. The inclination of the grooves gradually ceases toward their lower ends, so that by the time the roll has diminished to the extent of half or two-thirds its journals will have entered the vertical groove portions. The standards A are of course united by suitable ties or cross-

connections, and I employ for this purpose two cross-bars C and D, both of which I utilize for other purposes. The cross-bar C is so located as that the periphery of the roll will at all times rest upon it, so that it will cause such tension upon the roll as will prevent the paper unwinding or becoming loose any faster than it is drawn off in the ordinary use of the machine. The inclined grooves, in which the journals of the paper roll are held, as already stated, act in conjunction with this cross-bar to graduate the tension thus exerted upon the paper, the grooves taking some portion of the weight when the roll is full, and gradually devolving the entire weight of the roll upon the bar as the roll diminishes in size. The web of paper from the roll shown at M is drawn first under said cross-bar C, and as it passes the same is printed by the printing-roller E. This roller is stationarily journaled in arms *d*, attached to the cross-bar D, and it is provided with a type-plate *e*, which is preferably of yielding material—such as rubber—and of such height as will insure its being slightly depressed when it passes under the cross-bar. In this manner I insure sufficient pressure upon the paper at the point where the printing is made to secure clean and clear impressions. Said cross-bar is further made to serve as a support for the knife F, and this knife I prefer to make of sheet metal, with its operating-edge *f* turned down, as shown at Fig. 5, so that by pulling the paper upward against such upturned edge an easy severation is effected.

G is a cross-wire placed under the knife, to so support the end of the paper as to prevent its falling back against the type-cylinder and at the same time retain such end in convenient position to be taken hold of.

The inker (shown at H) is provided with journals which rotate upon the inclined faces of upward projections *h* upon the arms *d*.

The bearings of the type-cylinder being open at the top, it will be seen that both it and the inker are readily removed and inserted.

The cross-bar C, against which the periphery of the paper roll bears at all times, and which, while it supports the roll, acts also to produce a tension thereon, is located, it will be noticed, not directly under the slot *a* of the

standards, but at one side thereof. In this location the roll is crowded toward the farther side of the bearing-slots, and friction is thus produced between the axis of the roller and said side of the bearings even after the roll has become so reduced in size as to admit its axis within the vertical part of the bearings. The tension-support also acts better when thus located than when placed directly under the bearings.

I do not herein claim the combination, with the knife and type-cylinder, of the wire for supporting the end of the paper, as such combination is claimed by me in my application, Serial No. 297,549, filed January 25, 1889.

I claim—

1. The paper-holder wherein the paper-roll cylinder is provided with curved or inclined long slot bearings, and combined with a cross-bar against which the periphery of the paper rests, and which is located at that side of the bearings which is opposite the side upon which the bearings are inclined, substantially as set forth.

2. The paper-holder wherein are combined a paper-roll cylinder revolving in long slot bearings, a cross-bar upon which the paper rests, and a printing-roller, substantially as set forth.

3. The paper-holder wherein are combined the paper-roll cylinder revolving in long slot bearings, a cross-bar upon which the paper rests, and a printing-roller revolving in contact with said bar, substantially as set forth.

4. The printing-paper holder consisting of side standards having open slot bearings for the paper-cylinder, the paper-cylinder revolving in said bearings, the cross-bar carrying the knife, and a printing-roller rotating in contact with said cross-bar, substantially as set forth.

5. The combination, in a paper-roll holder, of a printing-roller having fixed bearings, and a stationary bar against which the roller rotates, the roller having a rubber type-plate, substantially as set forth.

6. The paper-holder wherein the paper-roll cylinder is provided with slotted bearings, and combined with a tension-producing support located below and wholly at one side of the bearings, substantially as specified.

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Witnesses:

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