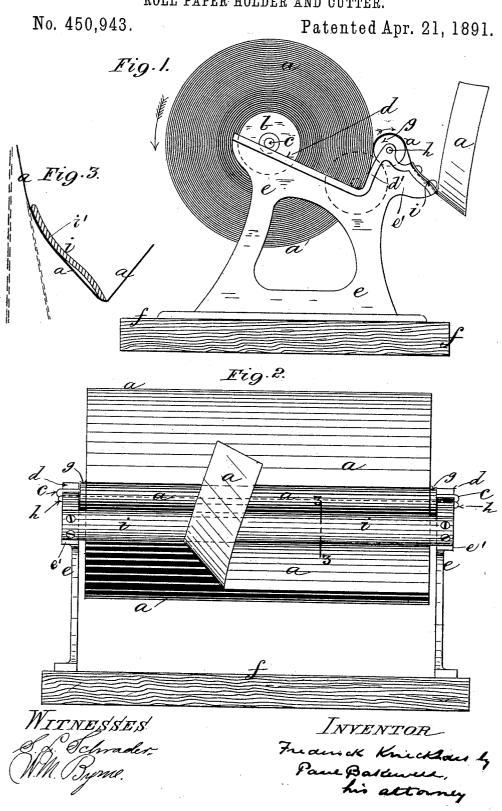
(No Model.)

F. KRIECKHAUS. ROLL PAPER HOLDER AND CUTTER.



UNITED STATES PATENT OFFICE.

FREDERICK KRIECKHAUS, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE AMERICAN ROLL PAPER COMPANY, OF SAME PLACE.

ROLL-PAPER HOLDER AND CUTTER.

SPECIFICATION forming part of Letters Patent No. 450,943, dated April 21, 1891.

Application filed May 16, 1889. Serial No. 311,027. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK KRIECK-HAUS, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Roll-Paper Holders and Cutters, of which the following is a full, clear, and exact description.

My invention relates to an improvement in roll-paper holders and cutters, and has for its object to simplify construction by utilizing in the most advantageous manner the weight of the paper roll for producing the necessary tension on the paper while being cut and to facilitate the seizure and unrolling of the paper from the roll after a portion has been cut therefrom.

It consists in features of novelty, as hereinafter claimed.

on the accompanying drawings, Figure 1 represents a side elevation of my improved roll-paper holder and cutter; Fig. 2, a front elevation thereof; and Fig. 3 a cross-section through the cutter on line 3 3 in Fig. 2, to an enlarged scale.

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

a represents a paper roll having the usual core-rollers b and central spindle c. The pro-30 jecting ends of the spindle bear upon the upper surfaces d of two opposite upright side frames e, fixed to the base f. The bearingsurfaces d incline downward at a suitable angle from their rear ends toward the front abut-35 ment or upwardly-extending wall d' of the holder, whereat is provided, above the latter, a roller g, which is mounted horizontally on its spindle h, between the side frames e at a suitable distance forward from the front ends of 40 the inclines d and at a distance axially from the said ends somewhat less than the radius of the rollers b of the paper roll a plus the radius of the spindle c (or journals of the rollers b, as may be arranged) plus the radius of the roller g. The roller g provides a rounded bearing-surface for the roll at the front thereof above and at the inner edge of the cutter-bar.

Below and at a suitable distance in front of the roller g is arranged horizontally between forming, wi end of the sition to the projections e' of the side frames and shown.

a cutter-bar *i*, which in transverse section is preferably thin and of ogee form, inclined downward and forward from the roller *g* toward its cutting-edge; but, if preferred, the 55 cutter *i* may be of any other desirable section similarly arranged with respect to the roller *g*. When of ogee form, the cutter-bar presents a convex friction-surface *i*, on which the paper binds when a piece is severed.

In operation, the paper roll a, with its corerollers b and spindle c, being placed on the inclines d, and thereby normally gravitating along the latter toward their front ends, the circumference of the paper roll a presses 65 against the roller g, around the upper surface of which the paper from the roll a is passed, as indicated by the arrows in Fig. 1, and thence downward across the back and beneath the cutting-edge of the cutter i forward to the 70 required extent for cutting. A portion of the paper a having been cut off by pulling upward thereon against the cutter i, the free end of the paper roll a falls backward in the space or inverted pocket between the cutter-bar and 75 the roll from the cutter i into the position indicated by the dotted lines in Fig. 3, so as to leave a portion of the paper exposed and available for being readily seized by the thumb and finger for unrolling the paper from the 80 roll a, ready for a fresh cut. As the paper roll a diminishes in diameter its weight, acting along the inclines d, maintains the tension on the paper between the roll a and roller gby the lapping of the paper more and more 85 around the latter until the roll a is exhausted and its spindle c reaches the lower front ends of the inclines d, so that the core-rollers b press against and are stopped by the roller g, as shown by dotted lines in Fig. 1.

I claim as my invention—

1. The combination of the upright side frames, each side frame having an inclined surface d, an abutment or upwardly-extending wall d', and a projection e', a roll journaled on the inclined surfaces, a roller g, journaled in the upper ends of the abutments or upwardly-extending walls, and a cutter-bar secured to the projections in inverted position, forming, with the roll, a pocket for the free end of the paper, substantially as described

2. The combination of the upright side frames, each side frame having an inclined surface d and a projection e', a roll journaled on the inclined surfaces, a roller g, journaled in the side frames, and a cutter-bar i, of ogee form in cross-section, secured in inverted and inclined position to the projections, substantially as described and shown.

form in cross-section, secured in inverted and inclined position to the projections, substantially as described and shown.

3. The combination of the upright side frames e, each side frame having an inclined surface d, an abutment d', and a projection e', a roll journaled on the inclined surfaces,

a roller g, journaled in the upper ends of the abutments, and a cutter-bar i, of ogee form in cross-section, secured in inverted and inclined 15 position to the projections, substantially as described and shown.

In testimony whereof I affix my signature, in presence of two witnesses, this 8th day of

May, 1889.

FREDERICK KRIECKHAUS.

Witnesses:

S. L. SCHRADER, PAUL BAKEWELL.