

(No Model.)

L. EHRLICH.
ROLL PAPER HOLDER AND CUTTER.

No. 465,523.

Patented Dec. 22, 1891.

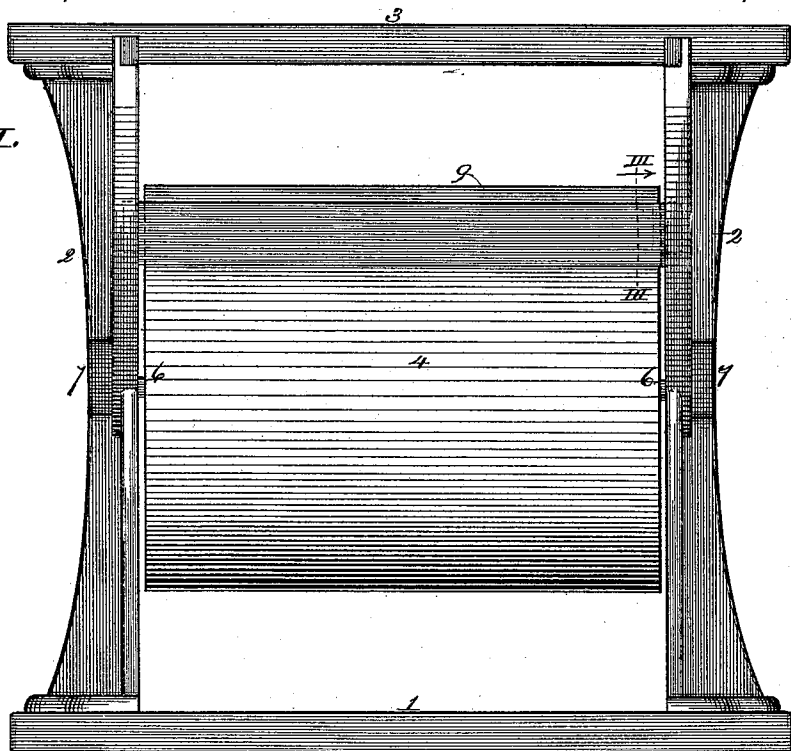


Fig. II.

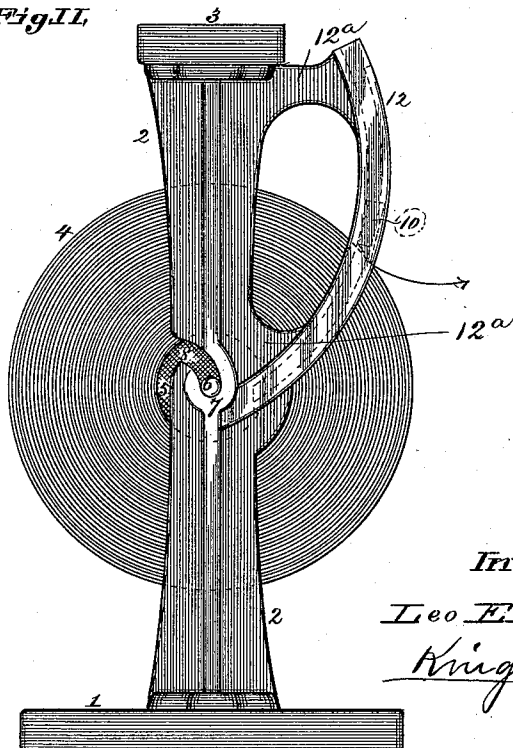
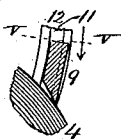


Fig. III,



E'g.IV.



Fig. V.

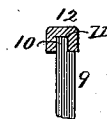


Fig. VI,



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LEO EHRLICH, 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. 465,523, dated December 22, 1891.

Application filed March 11, 1889. Serial No. 302,892. (No model.)

To all whom it may concern:

Be it known that I, LEO EHRLICH, of the city of St. Louis, in the 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, reference being had to the accompanying drawings, forming part of this specification.

This invention belongs to the class of roll-paper holders and cutters having a gravitating knife which rests upon the roll and descends as the diameter of the roll grows less.

Figure I is a front elevation. Fig. II is an end elevation. Fig. III is a detail transverse section at III III, Fig. I. Fig. IV is an end view of the knife. Fig. V is a detail horizontal section at IV IV, Fig. III. Fig. VI is a detail front side view of part of the knife.

1 is the base, 2 the standards, and 3 a rail connecting the upper end of the standards. This rail is not essential. The paper roll is shown at 4, supported on a roller 5, whose gudgeons 6 have bearing at 7 in the standards 2. The bearing is open at the rear 8 for the introduction or removal of the gudgeons to and from their bearings.

9 represents the knife which has ends 10, fitting in grooves 11 of the curved guides 12. The ends of the knife may be curved to correspond to the guide-grooves. The curved guides begin at a point near the axis of the roll and extend upwardly in an arc. The edge of the knife is in contact with the roll and acts as a brake, while it serves to sever the paper. The curved guides are preferably formed in an arc, substantially as shown, for in that case the knife will be above the horizontal diameter and will always make an acute angle with a tangent at the point of

contact. A further advantage of having the curve, as shown, is seen in the fact that as the plane in which the knife is moving is in rear of the radius drawn through the point of contact, and since the pressure of the tearing operation is exerted in the line of said radius, the tendency will be to bind the knife and avoid removing it from the roll. Another advantage of the curve is that by means of it the knife changes its position, but maintains a constant relation to the roll as the latter grows smaller, so that the knife will always be at the point of greatest efficiency. The knife may be readily removed from the grooves at their upper ends.

I claim herein as my invention—

1. The combination of the standards 2, having web 12^a, and segmental guides having curved grooves 11, a roll journaled in the standards, and a knife arranged at a tangent to the roll, with its edge resting on the latter, and having curved ends 10, fitting the curved grooves and sliding in the latter, substantially as described and shown.

2. In a roll-paper holder and cutter, the combination, with the standards and roll, of the knife bearing against the roll and supported in the guides 12, which are curved, substantially as and for the purpose herein described.

3. In a roll-paper holder and cutter, the combination, with the roll and its support, of a knife bearing on the roll and mounted in guides curved to an arc which retains the knife in a plane in rear of the radius at the point of contact.

LEO EHRLICH.

Witnesses:

SAML. KNIGHT,
EDW. S. KNIGHT.