

(No Model.)

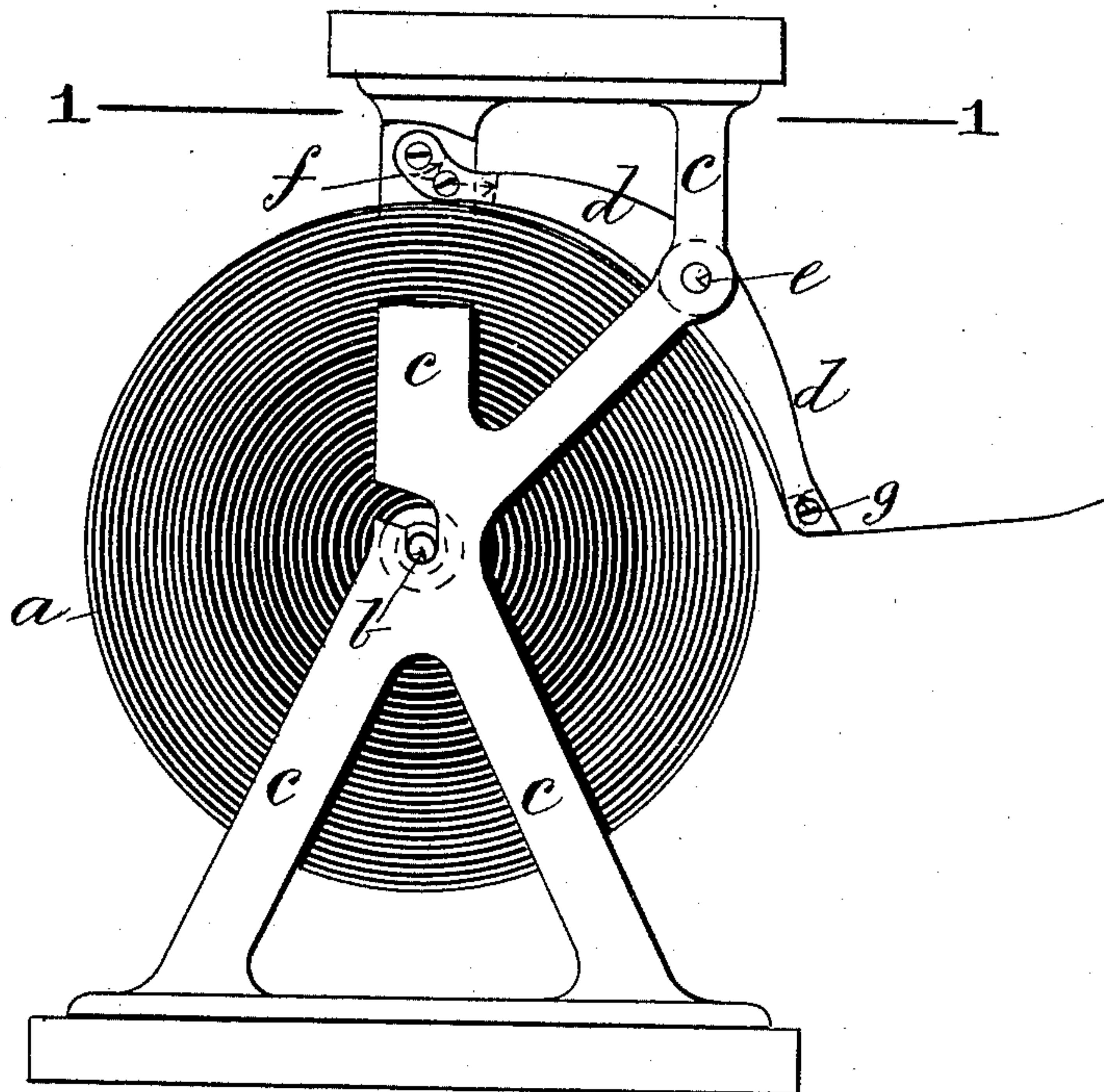
P. BAKEWELL.

ROLL PAPER HOLDER AND CUTTER.

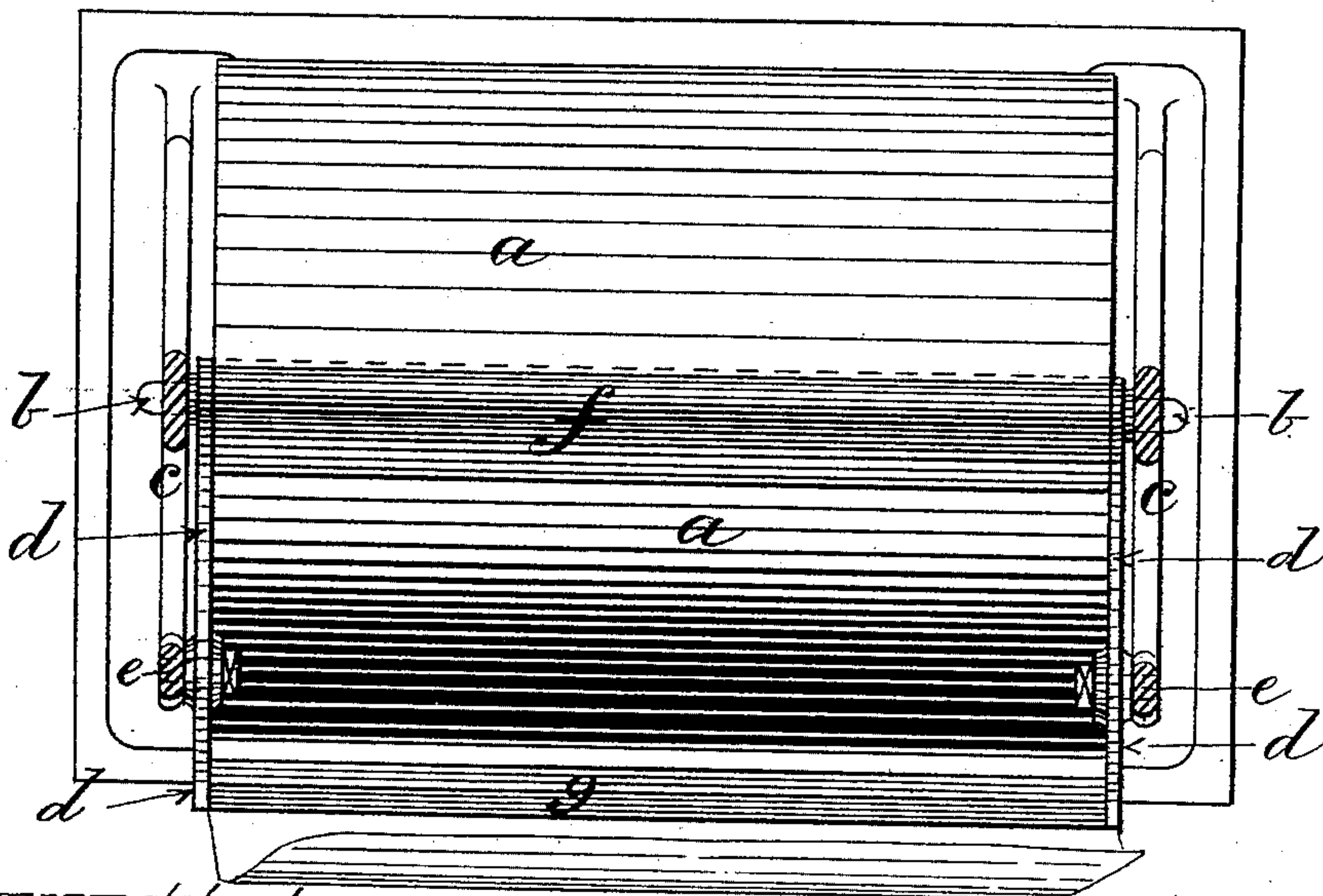
No. 390,334.

Patented Oct. 2, 1888.

*Fig. 1.*



*Fig. 2.*



WITNESSES  
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INVENTOR  
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# UNITED STATES PATENT OFFICE.

PAUL BAKEWELL, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE ACME ROLL PAPER COMPANY, OF SAME PLACE.

## ROLL-PAPER HOLDER AND CUTTER.

SPECIFICATION forming part of Letters Patent No. 390,334, dated October 2, 1888.

Application filed May 11, 1888. Serial No. 273,611. (No model.)

*To all whom it may concern:*

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

My invention relates to improvements in roll-paper holders and cutters, and has for its object to obviate undue and irregular pressure on the paper roll while being unwound, to regulate the holding-pressure on the paper roll according to the cutting-resistance of the paper, and to simplify the construction and arrangement of the parts.

It consists in two specially-shaped levers of the first kind fulcrumed to the side frames, respectively, between which the paper roll is mounted, the inner arms of the levers being connected together by a horizontal bar, cam-shaped on its under side, which bears at all times upon the paper roll, and their outer arms by the horizontal cutter bar or knife, the whole operating to check the paper roll while being unwound and to hold the same when being cut, as hereinafter particularly described.

On the accompanying drawings, Figure 1 represents a side elevation of my improved paper holder and cutter, partly broken away, and Fig. 2 a sectional plan thereof on line 1 1 in Fig. 1.

Like letters of reference denote like parts in both figures.

*a* represents the paper roll, which is mounted horizontally on its spindle *b*, between the side frames, *c*, in the usual manner. To the inside of each side frame, *c*, is fulcrumed vertically, as to its plane of vibration, a specially-shaped lever, *d*, of the first kind, which in the present case is located above and adjacent to the front portion of the circumferential edge of the paper roll *a*. The upper inner arms of the levers *d* are curved upward and rearward from the fulcrums *e*, conformably to the shape of the paper roll *a*, toward the vertical center line of the latter, and are connected together at their ends by a horizontal bar, *f*, which extends across and bears upon the upper surface of the paper roll *a* at all times. The lower outer arms of the levers *d* are extended downward and forward from the fulcrums *e*, and are connected at their ends in

front of the paper roll *a* by the horizontal cutter bar or knife *g*.

In operation the momentum of the paper roll *a* while being unwound is checked by the dead-weight of the bar *f*, which, carrying with it the levers *d* about their fulcrum *e*, adjusts itself to the varying diameter of the paper roll *a*. The ends of the inner arms of the levers *d* and the under side of the bar *f* are cam shaped, so that the horizontal distance of the line of contact by the bar *f* with the paper roll *a* from the fulcrums *e* will be constant, or thereabout, whatever the diameter of the paper roll *a* may be.

In directing the paper for the purpose of cutting against the knife *g* the outward pressure thereby imparted to the outer arms of the levers *d* causes the latter to be constrained on their fulcrums *e*, so that the bar *f* is forced downward to a corresponding extent against the paper roll *a*, and thereby holds the latter while being cut.

By this invention the pressure on the paper roll *a* while being unwound is constant under varying diameters of roll, which is not the case where a spring-holder is used, and the pressure imparted to the paper roll *a* for holding the same while cutting the paper therefrom is proportional to the cutting resistance offered by the paper—or, in other words, the tougher the paper is the more firmly will the roll be held while being cut.

I claim—

1. In a roll-paper holder and cutter, the combination of levers *d*, fulcrumed to the side frames, *c*, and connected together by a horizontal bar, *f*, and knife *g*, with the paper roll *a*, substantially as shown, and for the purpose described.

2. The combination of the levers *d*, fulcrumed to the side frames, *c*, and connected together by horizontal bar *f*, having its under side cam-shaped, with the paper roll *a*, substantially as shown, and for the purpose described.

In testimony whereof I have affixed my signature, in presence of two witnesses, this 1st day of May, 1888.

PAUL BAKEWELL.

Witnesses:

S. L. SCHRADER,  
W. BYRNE.