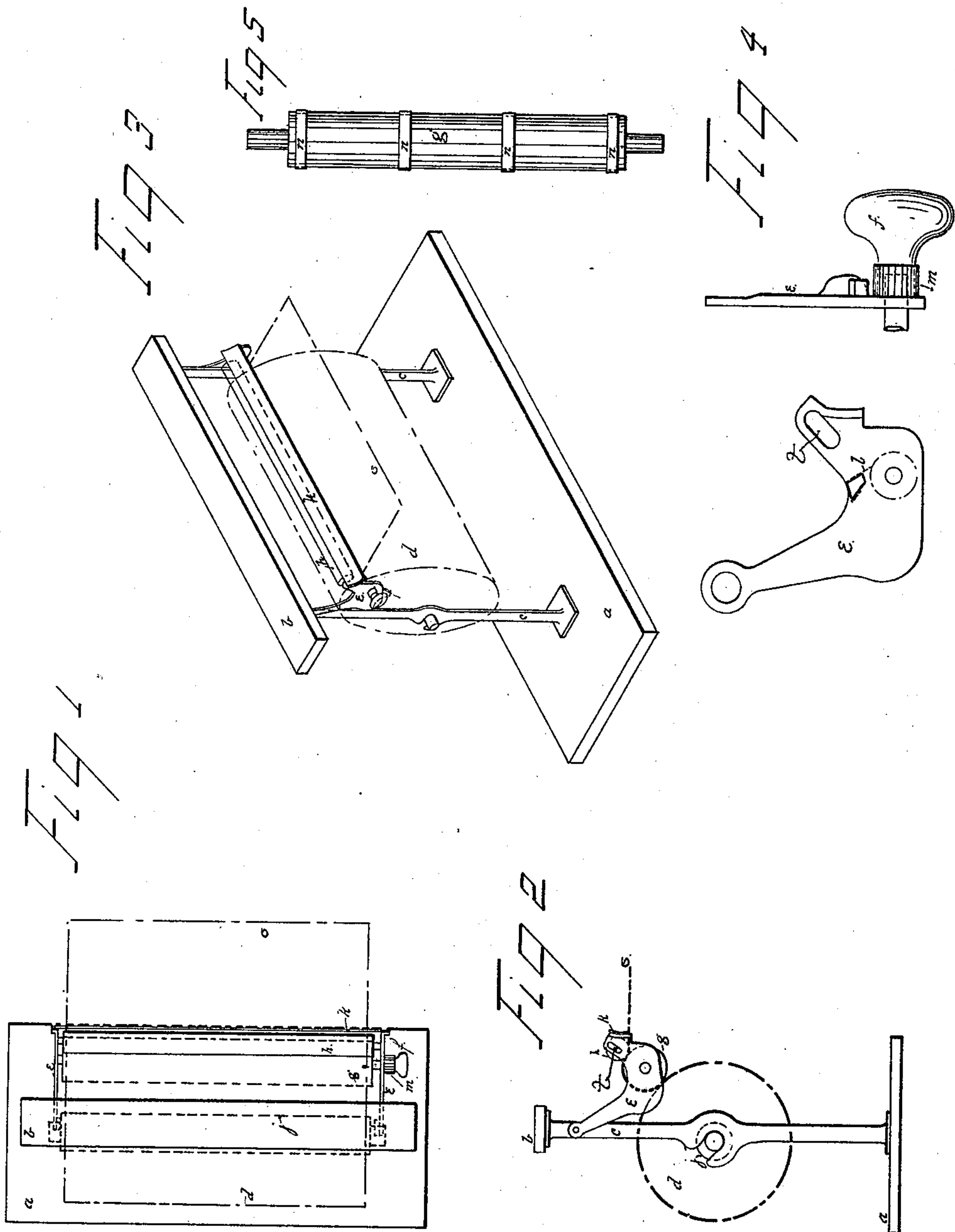


(No Model.)

J. REYNOLDS.
ROLL PAPER CUTTER.

No. 434,466.

Patented Aug. 19, 1890.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN REYNOLDS, OF CHICAGO, ILLINOIS.

ROLL-PAPER CUTTER.

SPECIFICATION forming part of Letters Patent No. 434,466, dated August 19, 1890.

Application filed November 30, 1889. Serial No. 332,104. (No model.)

To all whom it may concern:

Be it known that I, JOHN REYNOLDS, a citizen of the United States, residing in the city of Chicago, in the county of Cook and State of Illinois, have made certain new and useful Improvements in Paper-Cutters, of which the following is a specification.

Figure 1 is a plan view. Fig. 2 is an end elevation. Fig. 3 is a perspective view. Fig. 4 shows details of one of the swinging brackets used, the knob, dog, and ratchet employed. Fig. 5 is a detail of lower roller used with rubber friction-bands thereon.

The nature of this invention is to provide a paper-cutter working and constructed as will hereinafter appear.

a is the base and *c c* are posts resting thereon, as far apart as the paper forming the roll is wide. The roll of paper rests in sockets *j* in the posts.

b is a cross-beam at top of posts.

E E are swinging brackets, loosely attached at one end to the posts *c c*. There are two of these brackets—one at each post. These brackets support the two rollers *g* and *h*. The roller *g* is provided with friction-bands *n* and lies down against the roll of paper *d*. It is slightly larger than the roller *h*. This roller *h* is above and slightly in advance of the roller *g* and works in the slots *t* in the bracket. In front of the roller *h* and attached to the brackets at each end is the knife *k*. At one end of roller *g* and outside of the bracket is the knob *f* and ratchet *m*, (see Fig. 4,) and against this ratchet is the dog-spring *l*, which, when it engages with the ratchet *m*, prevents the roll *g* from turning one way.

In unwinding the paper from the roll *g* the end of the paper is passed up under the roll *g*, over it and under the upper roller *h*, and under the knife *k*, which has an edge on its lower part, and by a sudden movement of the projecting end of the paper upwardly and at an angle with the cutting-edge of the knife the paper is cut off. By turning the knob *f* forward the end of the paper is again thrust under and forward the knife, ready to be cut

off again. The ratchet *m* and dog-spring prevent the roll *g* being turned backward, which would withdraw the end of the paper from under the edge of the knife. The brackets *e e* being loosely attached to the posts *c c* enables them to swing up and down, according as the roll of paper *d* is large or small. It will be observed that these brackets support the two rollers *g* and *h* and the knife *k*. These are not rigidly attached to the brackets at their respective ends, but are loosely attached thereto, so that if one end of the roll of paper *d* should be larger than the other, or if it should be irregular in shape, the roll *g* would adjust itself to the surface of the roll of paper. The friction-bands *n* on roller *g*, Fig. 5, always insure a speedy movement of the roll *g* whenever the knob *f* is turned.

It will be observed that there is no spring to act against the roll of paper to arrest its movement when a sufficient amount has been unreel from the roll. This is accomplished by the combined weight of the brackets, rolls, and knife, aided by the special course the paper takes, as shown by the dotted lines in Fig. 2, which is up under, then over the roll *g*, and under the roll *h*. The roll *g* is the friction-roll and the roll *h* is the delivery-roll. The roller *g* conforms to the inequalities of the surface of the roll of paper *d* automatically by the force of gravity.

I claim—

1. In a paper-cutter, the combination of the swing-brackets loosely attached to the posts, a friction-roll, a delivery-roll, and a knife, all loosely attached together and capable of allowing the friction-roller to automatically adjust itself to the inequalities of the roll of paper.

2. The combination of the ratchet-spring dog and friction and delivery rollers, substantially as shown.

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Witnesses:

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