

(No Model.)

C. SPRING.
Paper Cutting Machine.

No. 233,121.

Patented Oct. 12, 1880.

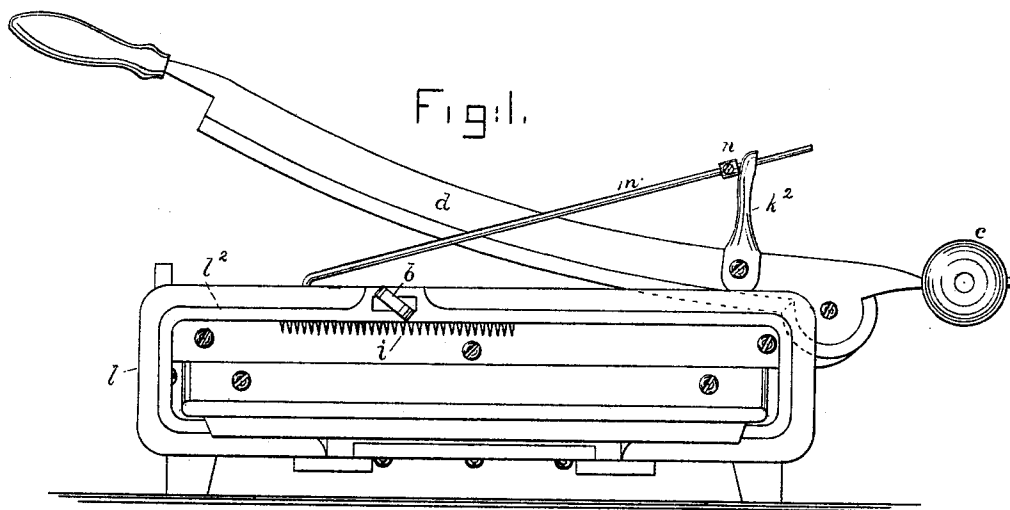
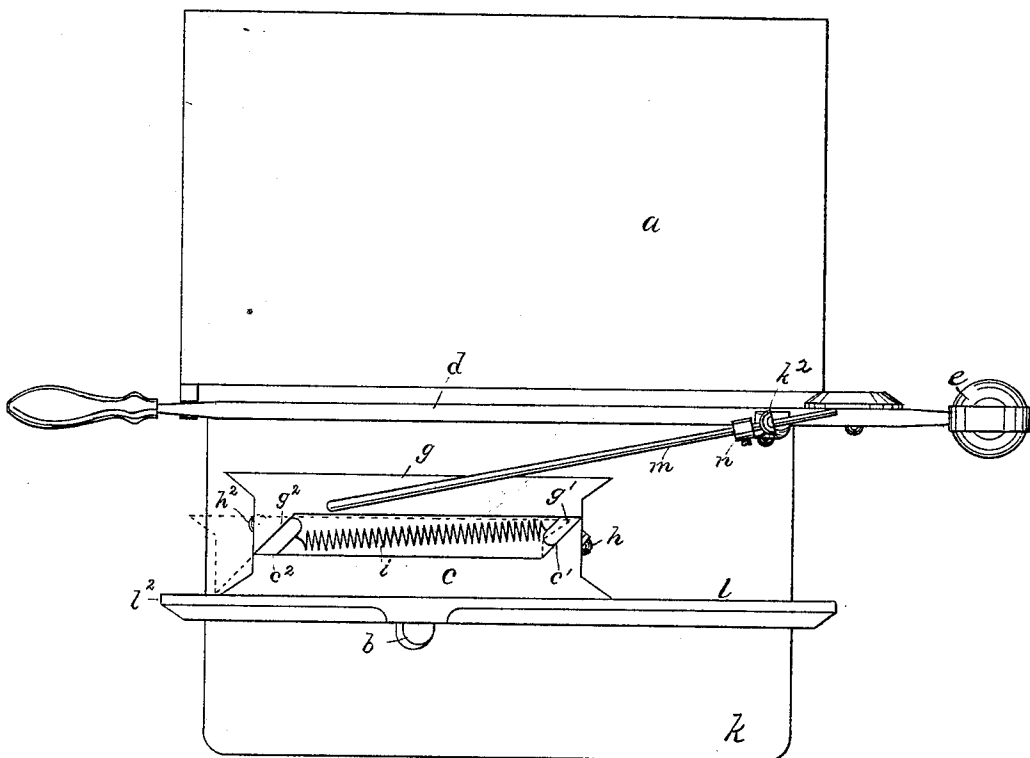
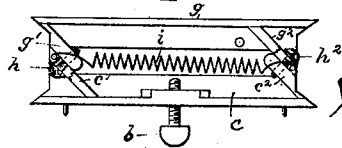


Fig: 2.



F. g: 3.



WITNESSES.
N. D. Dearborn.
Arthur Reynolds.

INVENTOR-
Charles Spring.
by Crosby & Gregory Attys.

UNITED STATES PATENT OFFICE.

CHARLES SPRING, OF HYDE PARK, MASSACHUSETTS, ASSIGNOR TO SPRING,
ROBINSON & CO., OF SAME PLACE.

PAPER-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 233,121, dated October 12, 1880.

Application filed July 16, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES SPRING, of Hyde Park, Norfolk county, State of Massachusetts, have invented an Improvement in Paper-Cutters, of which the following description, in connection with the accompanying drawings, is a specification.

This invention relates to paper-cutters, and has for its object an improvement in the gage for regulating the width of the strip cut by the shears.

To cut very narrow strips of paper the gage must be brought very close to the line of movement, or cutting-line, of the shears; but if the gage is fixed it cannot be nearer the line of cut than the thickness of the upper movable member or blade of the shears. A gage of this class, to enable it to present its face very near the cutting-line of the shears, has been pivoted upon two pivoted parallel links, operated in one direction by a spring and in the other direction by a connecting-rod held in a swiveling stud carried by the movable blade of the shears.

In this my invention the gage is also made in two parts, or as two bars; but instead of pivoting the face and making it move irregularly as to speed, I have beveled it at each end and fitted the said beveled parts to slide on correspondingly-beveled parts of the rear part of the gage, as the gage-face is moved by the link connecting it with the movable blade.

By moving the gage-face backward and forward along bevels or inclines, as herein described, I am enabled to start the gage upon its backward movement faster than when the gage-face is attached to pivoted parallel links, and I am enabled to make a more certain and uniformly-operating cutter, one more simple and durable, more easily operated, and cheaper to construct.

The paper-cutter herein shown, and to which my gaging devices will be applied, is substantially such as described in United States Patent No. 225,871, March 23, 1880, granted to J. T. Robinson, to which reference may be had.

Figure 1 is a front elevation of a paper-cutter containing my improved gage; Fig. 2, a side view of the main gage part *l* being the distance from the blade to

enable the auxiliary gage to be fully shown; and Fig. 3, an under-side view of the auxiliary gage.

The paper-supporting plate *a*, bed *k*, movable-gage portion *l* surrounding it, the blade *d*, and weight *e* are all as in the Robinson patent. To enable the gage to be brought nearer the blade or its cutting-line than possible in the said patent, I have applied to its upper cross-bar, *l'*, by a thumb-nut, *b*, the auxiliary-gage portion which constitutes this my invention. This auxiliary gage, for use in cutting narrow strips, is composed of a rear or back part, *c*, removably attached to the part *l'*, and a front part or face, *g*. The rear part, *c*, has two inclined or beveled portions, *c'* *c''*, against which fit and slide two correspondingly beveled or inclined portions, *g'* *g''*, of the face *g*.

The screw *h*, having a proper washer under its head, is connected with the inclined part *g'* of the gage-face *g*, and is extended loosely through a slot in the beveled part *c'*, while at the other end of the auxiliary gage a like screw, *h''*, is fixed in the part *c''* and extended through a slot in the part *g''*.

The spiral spring *i* is connected at its ends with the parts *g''* and *c'*, and its tendency is to keep the gage-face *g* in the position shown in full lines, Fig. 2, the said spring being permitted to throw the face *g* forward as the blade *d* is elevated. As the blade is depressed by hand, the lug *h''* thereon, through which the connecting-link *m* is extended, acts upon the adjustable collar *n* and causes the said link, suitably engaged at its other end with the face portion *g*, to move it backward into the dotted-line position.

The forward and backward movement of the gage-face *g* is the same from its commencement to its end, and when started back it travels quickly—more so than were it pivoted upon parallel links.

I claim—

1. In an auxiliary gage for paper-cutters, the face *g*, having the inclined portions *g'* *g''* at both ends, in combination with the rear portion *c*, having its ends inclined at *c'* *c''* to match the inclined portions of the face, the two parts being connected by a spring and screws, substantially as described.

2. The face part *g* and the rear part *c*, secured together by inclined matching ends *g'* *g*² and *c'* *c*², respectively, screws *h* *h*², and a spring, *i*, for connecting them, in combination with a link, *m*, attached directly to the moving part *g* and connected with the shears or moving blade, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES SPRING.

Witnesses:

G. W. GREGORY,
ARTHUR REYNOLDS.