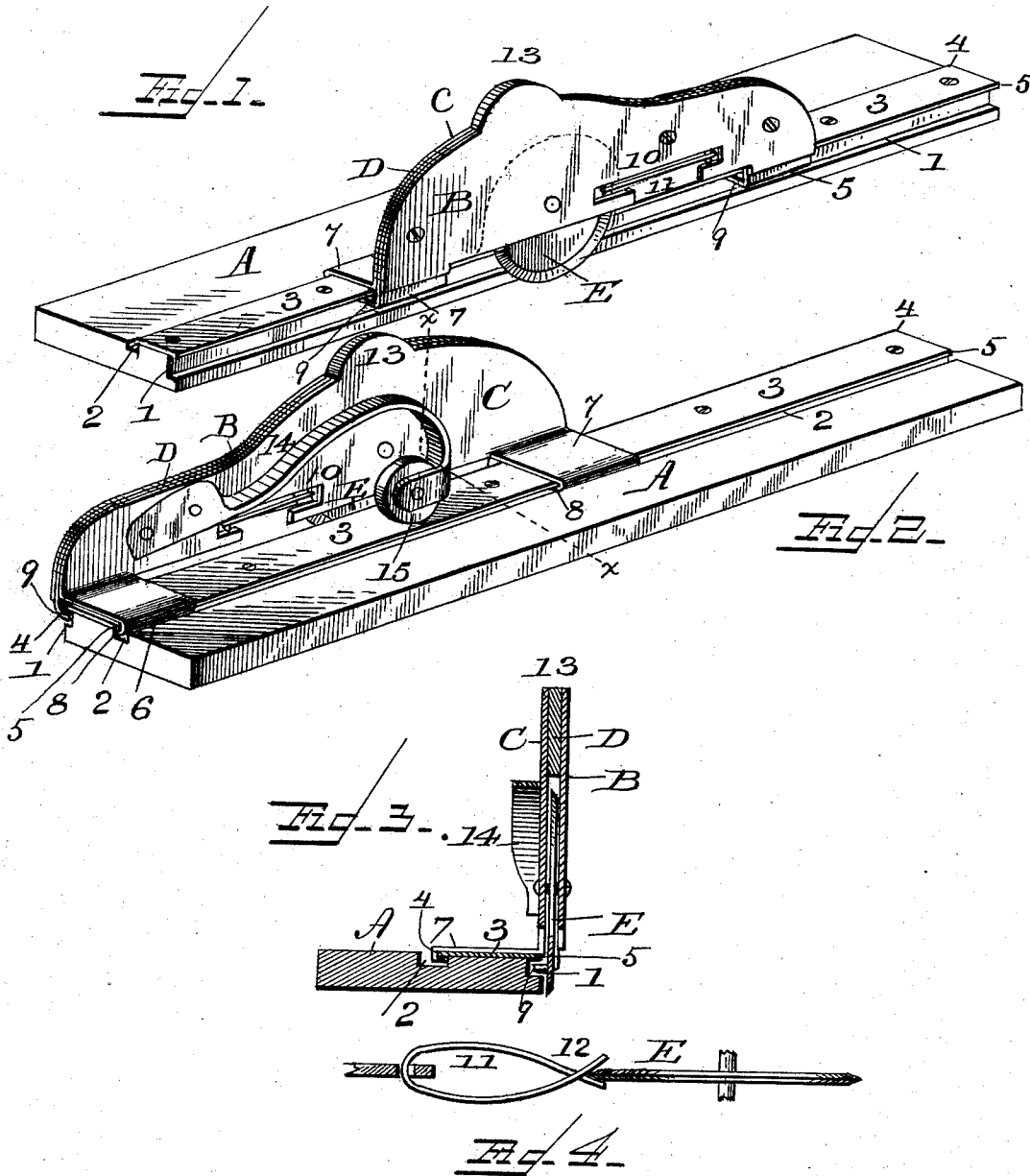


(No Model.)

J. S. FLOWERS.
PAPER CUTTER.

No. 502,415.

Patented Aug. 1, 1893.



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JOHN S. FLOWERS, OF THREE OAKS, MICHIGAN, ASSIGNOR OF ONE-HALF TO
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PAPER-CUTTER.

SPECIFICATION forming part of Letters Patent No. 502,415, dated August 1, 1893.

Application filed September 17, 1892. Serial No. 446,143. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. FLOWERS, a citizen of the United States of America, residing in Three Oaks, in the county of Berrien and State of Michigan, have invented a new and useful Rotary Paper-Cutter, of which the following is a specification.

My invention has relation to improvements in paper-cutters specially conducted and adapted for trimming wall paper preliminary to putting it upon the wall; and the object is to provide a cutting mechanism for the purpose named, which is simple in construction, convenient to manipulate, and accurate in operation.

In the business of hanging or placing paper on the walls, it is necessary to trim the edges or margins straight, so that the opposite edges of two pieces of paper may accurately align and abut without being lapped: ordinarily this is done by a knife and straight edge; and I am aware that tools or implements to effect the purpose have been made, but I believe that my invention embodies advantages which make the operation essentially certain, speedy and accurate.

My invention consists in the novel construction of parts and their combinations, as will be fully described, and particularly pointed out in the claims.

In the accompanying drawings, illustrating my invention: Figure 1 is a perspective of the complete device, the bottom plate and straight edge being broken off at the ends. Fig. 2 is a perspective taken from the reverse side to that shown in Fig. 1. Fig. 3 is a transverse vertical section taken on the line $x-x$ of Fig. 2, and Fig. 4 is a detail view of the sharpening and cleaning device and knife.

A designates a straight-edge of the desired length, usually six feet long. In the side of this straight-edge is formed a rabbet 1, extending for the entire length thereof; and in the middle of the straight-edge is a longitudinally arranged groove 2, also extending the entire length thereof. On the face of the straight-edge between the groove 2 and rabbet 1 is secured a metal plate 3, having its edges overhanging the groove and rabbet, substantially as shown in the drawings, at 4 and 5; the overhanging edges of the plate constituting flanges for holding and guiding

the frame or carriage of the cutter, they being engaged by the turned edges of the plates of the carriage, as hereinafter more fully specified.

B and C designate the plates constituting the sides of the carriage. These are of the contour, substantially as seen in the drawings, being curved or arched on their upper edges. The ends of the plate C are struck outward at right angles to the face of the plate as seen at 6, and 7, and have their ends turned down and under as at 8, to engage over and slide upon the edge of the plate 3, as seen in Fig. 2 of the drawings. The plate B is of the shape seen in Fig. 2 of the drawings. Between the plates B and C is arranged a plate D, the outer contour of which is that of the side-plates B and C. The under central portion of the plate D is cut out, as indicated in dotted lines in Fig. 1 of the drawings, to provide and afford space between the side-plates for the circular rotary knife. The ends of the intermediate plate D, are extended down to the line of the shoulder of the rabbet, and turned in as at 9, to have play on the flange of the plate 3 so that the carriage may be lifted sidewise by the force of the spring on the opposite side of the carriage until the rotary-cutter is lifted from engagement with the paper. The plates of the carriage are cut away, as at 10, and in the recess thus formed, is arranged and fixed a spring of steel wire 11, having the ends crossed as at 12, the angle at the crossing of the wire setting against the edges of the rotary-cutter E, as shown in Fig. 4 of the drawings, serving as a sharpener to the rotary cutter, and also as a cleaner to take off the material which may adhere to the cutter. The rotary cutter E is journaled between the side-plates of the carriage, with its lower edge flush or extending slightly below the bottom of the straight-edge. On the top of the carriage is a hand-piece 13, by which the manipulation of the carriage to and fro on the straight-edge is effected. On the side of the plate C is secured a spring 14, carrying in its free-end a roller 15, which bears on the surface of the straight-edge and when the device is not in cutting operation, lifts or tilts the carriage and frees the edge of the cutter from engagement with the material cut or to be cut. In normal position or condition, the carriage

stands with the turned-in flanges of the plate D drawn into contact or engagement with the flange of the plate 3, with the cutting edge of the rotary cutter above the paper or material to be cut, being held in this position by the force of the spring 14. Now, when it is desired to use the device, the paper to be cut is arranged under the straight-edge with the part intended to be cut aligned with the edge of the straight-edge, and the hand is put on the carriage and pressure is applied to bring the knife down and the carriage pushed along on the straight edge as far as desired or until the cut is completed.

It will be observed that the device will cut in either direction of movement.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with the straight-edge formed with a rabbet on one edge and a longitudinal groove in its body, a plate secured on the straight-edge with its edges overhanging the rabbet and the groove, a shiftable carriage on the straight-edge, having end-pieces turned to engage the overhanging edges of the plate on the straight-edge, a rotary-cutter journaled in the carriage, and a cleaner and sharpener in the carriage to engage and clean the cutter, substantially as described.

2. The combination with a straight-edge

formed with a rabbet on one edge and a longitudinal groove in its body, a plate secured on the straight-edge with its edges overhanging the rabbet and the grooves, a shiftable carriage having end pieces turned to engage the overhanging edges of the plate on the straight-edge, a rotary-cutter journaled in the carriage, and a spring to tilt the carriage sidewise, substantially as set forth.

3. In a paper-cutter and trimmer, the combination with a shifting carriage, and a rotary cutter journaled therein, of the cleaner and sharpener consisting of a wire bent with its free ends crossing each other and arranged to engage and clean the edge of the cutter, substantially as described.

4. In a paper-cutter the combination with a straight-edge and a shiftable carriage thereon, adapted to tilt sidewise, of a spring secured to the carriage, and a roller in the free-end of the spring arranged to bear on the straight-edge, whereby the carriage is tilted sidewise and the cutter lifted from engagement, as set forth.

In witness whereof I have hereto set my hand in the presence of two attesting witnesses.

JOHN S. FLOWERS.

Attest:

JAMES A. WARNER,
DIX H. BEESON.