C. Cropper.
Paper Cutting Mack.
Patented Mar. 5, 1867. JY402,530.

Inventor.

Anited States Patent Effice.

CYRUS CROPPER, OF CINCINNATI, OHIO.

Letters Patent No. 62,530, dated March 5, 1867.

PAPER CUTTER

The Schedule reserked to in ihrese Aetters Potent and making part of the same.

TO AIL WHOM IT MAY CONCERN:

Be it known that I, CYRUS CROPPER, of the city of Cincinnati, county of Hamilton, and State of Ohio, have invented a new Improved Paper-Cutting Machine; and I do declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure I is a perspective view.

Figure 2 is a longitudinal elevation.

Figure 3 is a detail front view of cam for oscillating the knife.

A, fig. 1, represents the table of machine. B B the sides or legs. C the knife-bar. D the pressure-bar, for holding the paper firm. E the screw operating the pressure-bar. F is a slotted end of the knife-bar, in which the cam or eccentric G works to produce the oscillating motion of the knife. H is a pair of bevelled pinions, meshing into each other and upon the opposite end of the shaft. M is a pair of similar wheels, communicating the motion from the shaft K, upon the end of which are the fly-wheel and crank J. P P are the slots or guides in the upright sides L L, in which the knife-bar slides N is a rack attached to the end of a rod, O with a small pinion meshing in it; this is to draw the knife-bar down, and while it is being drawn down the bar is moved laterally to and fro by means of the bevelled pinions and the eccentric or cam G. I I Z are spur-wheels and pinions, so arranged as to gain power in operating the knife. Fig. 2, a is an extension-joint or swivel, for the purpose of regulating the position of the knife should the knife be ground or set unevenly in the machine, viz, one end higher than the other. This extension-joint admits of its adjustment, a, being made with a screw-thread cut in each end, and the rod O being in two pieces, with screw-thread on the ends, which threads must be right and left, so that by turning the joint A the length of the rod is extended or contracted. Fig. 3, G is the cam or eccentric that produces lateral motion of the knife.

To operate the machine, the pressure-bar is raised by means of the screw E. Material to be cut is then placed in the proper position on the table A, and the pressure-bar brought down upon it to hold it firm. By turning the fly-wheel J, the knife is then brought down upon and through the paper with a lateral to-and-fro motion, cutting the paper readily. The motion of the knife is indicated with dotted lines x x.

What I claim as new, and desire to secure by Letters Patent, is-

1. The knife, operated laterally to and fro, at the same time it is descending, by means of a cam or eccentric working in a slot in one end of the knife-bar, substantially and for the purpose herein set forth.

2. The rack and pinion, for the purpose of drawing down and raising the knife, substantially as herein set forth.

3. The adjustable joint a in the rod O, for the purpose of regulating the position of the knife C, substantially as herein set forth:

In testimony of which I hereunto set my hand.

Witnesses:

R. D. O. Sмітн,

J. D. PATTEN.

CYRUS CROPPER.