H. A. Gage,

Paper Cutter.

No. 100391. Patented. Mar. 1. 1870.

Fig. 1.

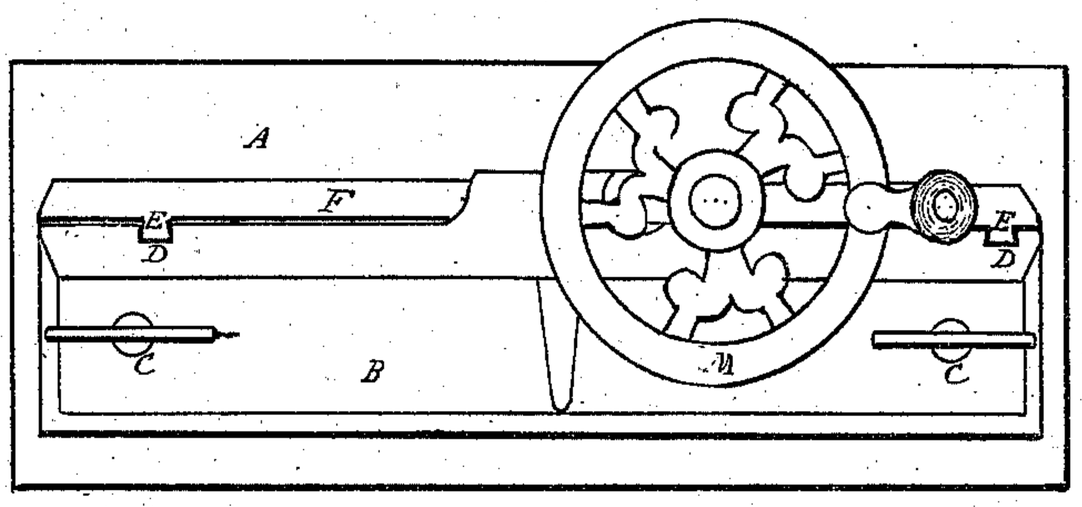


Fig. 2.

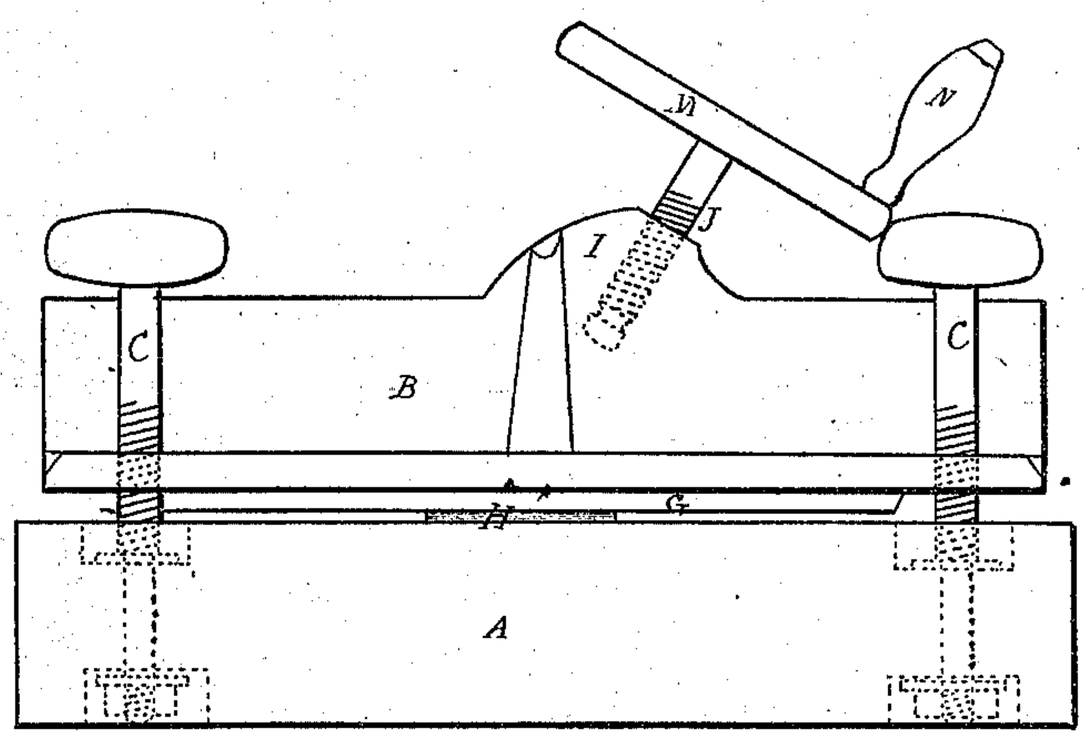
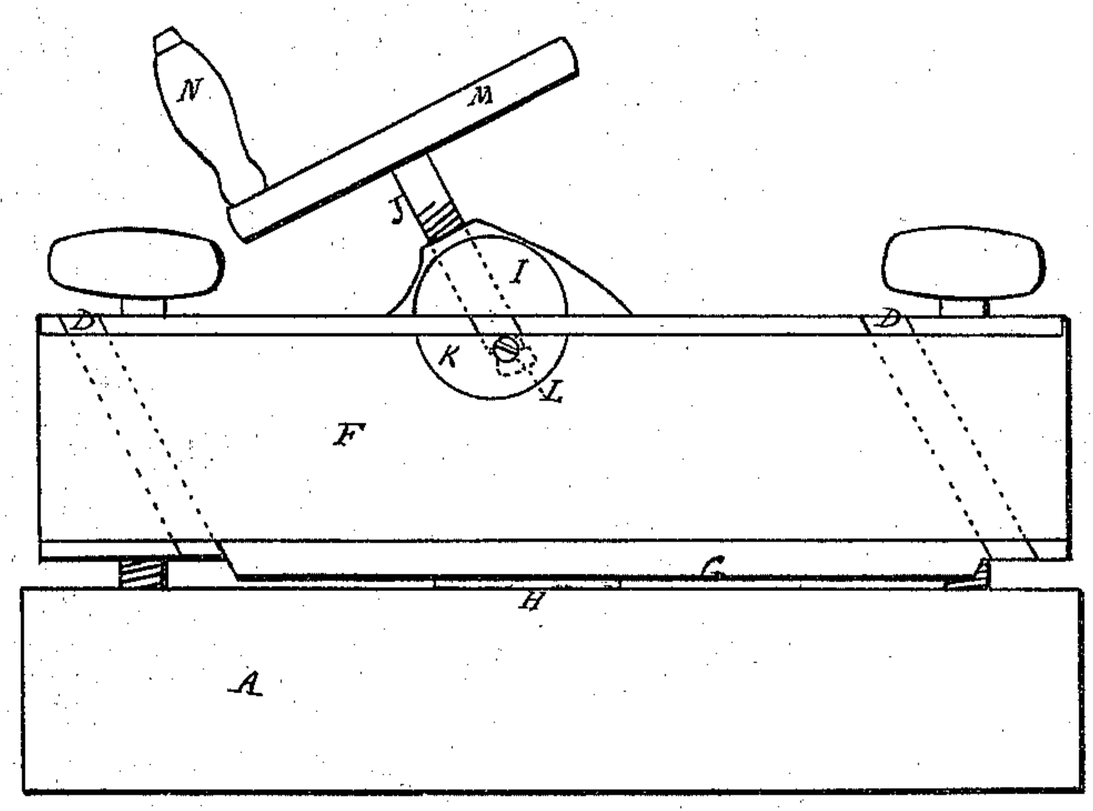


Fig. 3.



Witnesses:
Wm. Dennis
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United States Patent Office.

HENRY A. GAGE. OF MANCHESTER, NEW HAMPSHIRE.

Letters Patent No. 100,391, *dated March* 1, 1870.

IMPROVEMENT IN PAPER-CUTTING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HENRY A. GAGE, of Manchester, Hillsborough county, in the State of New Hampshire, have invented certain new and useful Improvements in Paper-Cutting Machines; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings forming part of this specification.

The nature or essence of my invention consists in giving the cutting knife a drawing cut, by means of the inclined dovetailed ribs on the plate that carries the knife, working in inclined dovetailed scores in the stationary or clamping plate, by means of an inclined screw arranged parallel to the inclined ribs on and scores in the plates above mentioned.

Figure 1 is a plan or top view of a paper-cutting machine with my improvements.

Figure 2 is an elevation of the rear of the machine.

Figure 3 is an elevation of the front of the machine.

In the accompanying drawings—

A is the table or base of the press-part of the cutting machine.

B is the clamping plate, which may be made of cast-iron in the form shown, and perforated for the screws C C which work in female screws in the perforations to press the paper to be cut on the base, and hold it while it is being cut, and then release it so that it may be taken away.

The base A is perforated for the screws C C, which are made smaller where they pass through the base, so as to form a shoulder on the screws and make them lift the clamping plate, and the lower ends of the screws are provided with nuts, as shown by dotted lines in fig. 2, so arranged that the screws turn freely in the base A without traversing when they are turned to raise or lower the clamping plate B.

The clamping plate B, or the perpendicular part of it, is provided with two inclined dovetailed scores D D to receive the dovetailed inclined ribs E E on the plate F that carries the knife G to cut the paper H on the base A clamped by the plate B.

The ribs E E are fitted to work freely in the scores D D to guide the plate F and knife G so that it will cut the paper H with a drawing cut or stroke, according to the inclination of the ribs and grooves.

The knife G may be fastened to the plate F by screws or rivets.

To traverse the knife and cut the paper, I make a protuberance, I, on the plate B to extend over the knife-plate F, and make a female screw in the protuberance for the screw J to work in, which screw is inclined to correspond or be parallel with the scores and ribs, and the lower end of the screw steps in a protuberance, K, on the plate F, and the lower end of the screw J has a groove around it for the shaft of the screw L in the protuberance K, so that the screw will draw up the plate F and knife G after the paper has been cut.

To turn the screw J, I fasten the hand-wheel M upon its upper end with a crank-pin, N, in it, so that it may be turned with facility.

Having described my improvements in paper-cutting machines,

I claim—

Working the knife G and plate F by an inclined screw arranged parallel to the inclined ribs E and scores D in a protuberance on the clamping plate of the machine.

H. A. GAGE.

Witnesses:

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