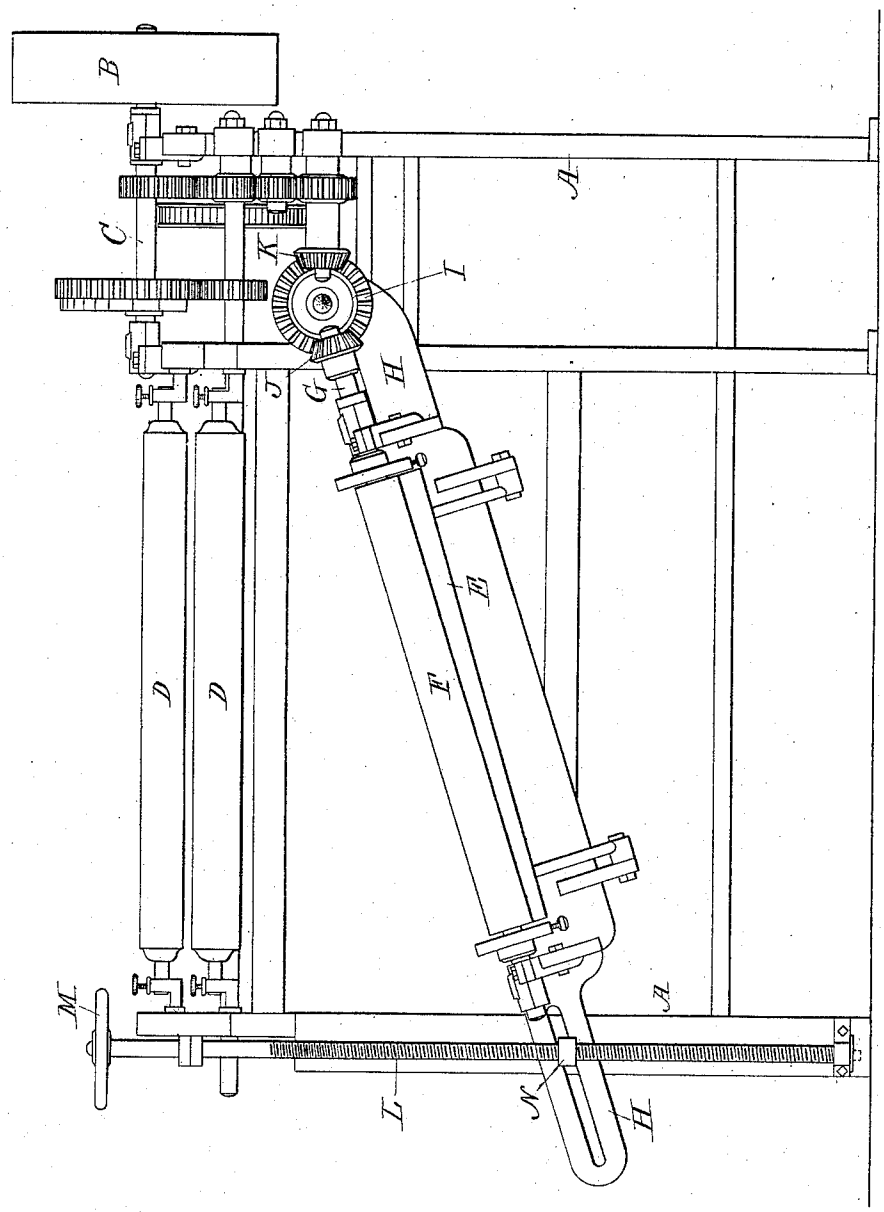
(No Model.)

C. S. BARTON.

PAPER CUTTING MACHINE.

No. 317,612. Patented May 12, 1885.



Witnesses;
John C. Dewey
George T. Dewey

Inventor;
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UNITED STATES PATENT OFFICE.

CHARLES S. BARTON, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO THE RICE, BARTON & FALES MACHINE AND IRON COMPANY, OF SAME PLACE.

PAPER-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 317,612, dated May 12, 1885.

Application filed April 24, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. BARTON, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented new and useful Improvements in Paper-Cutting Machines, of which the following is a specification, reference being had to the accompanying drawing, making a part thereof, and which represents an elevation of a paper-cutting machine with my improvements attached thereto.

My invention relates to a machine for cutting paper as it is unwound from the roll, and is intended to be applied to machines in which the paper is cut diagonally or on an angle. Said invention is to be used upon paper-cutting machines of the usual and well-known construction; and it consists in certain novel features of construction of certain parts of the machine, as will be hereinafter fully described, so that the angle or slant upon which it is desired to cut the paper may be varied at the will of the operator without removing or changing any parts of the machine and while the machine is in operation.

In the drawing is represented a paper-cutting machine of the ordinary and well-known construction with my improvements applied thereto, in which the paper is conducted from the drum upon which it is wound between two small friction-rolls to the knives, a bed-knife and revolving fly-knife, by which it is cut off in suitable lengths, and upon any angle desired.

The parts marked A are the frame of the machine upon which the other parts are mounted, the machine being operated by power applied to the fixed pulley B, secured upon the shaft C, turning in suitable bearings on the frame of the machine. D D are friction-rolls between which the paper passes, operated in the usual manner. Upon the shaft C are secured segment-gears for operating the drum upon which the paper is wound, and, also, by the system of small pinions mounted on studs secured to the frame of the machine, as shown in the drawing, the fly-knife for cutting off the paper, the fly-knife E being attached to the roller F, secured upon shaft G, turning in suitable bearings upon the movable frame H, pivoted at one end to the frame A, and operated by means of bevel-gears, as shown in the drawing, in connection with the system of small pinions before mentioned, the bed-knife being also secured to the movable frame part H to operate in connection with the revolving knife E.

Previous to my present invention it has been the custom to operate the fly-knife E by means of a small bevel-gear upon the end of the shaft G, meshing directly with another small bevel-gear on a short stud driven by a system of small pinions or gears. I introduce an additional large bevel-gear, I, journaled upon a short stud secured to the frame part of the machine, and which meshes with the two small bevel-gears J and K, and turns the fly-knife E in the manner shown in the drawing, and for the purpose to be hereinafter stated. On the other end of the machine I have a threaded rod, L, turning in suitable bearings upon the frame of the machine, and provided with a hand-wheel, M. By means of said rod L the movable end of the frame part H (upon which are mounted the fly-knife and the bed-knife, as before stated) is raised or lowered through the nut or stud N, moving up and down in a slot in the frame part of the machine to change the angle or slant upon which the paper is to be cut, the other end of the frame part H being pivoted at a fixed point to the frame of the machine, as before stated. It will be readily seen that the small bevel-gear J will continue to mesh with the large bevel-gear I when the movable frame part H and the cutters mounted thereon are in a horizontal position, or when the movable end of said frame part H is lowered down until it touches the floor, thus enabling the operator to cut the paper off square or at any angle desired without stopping the machine to vary the angle by turning the hand-wheel M, and without changing any of the parts of the machine.

Having described my improvements in paper-cutting machines, what I claim therein as

my invention, and desire to secure by Letters Patent, is—

The combination, with the frame of the machine, threaded rod L, and nut N, of the adjustable frame H, pivoted at one end, for supporting the cutter-knives, and the gears J and K, with the gear I, interposed between them, for the purpose stated, and means for operating the same, substantially as shown and described.

CHARLES S. BARTON.

Witnesses:
JOHN C. DEWEY,
GEORGE T. DEWEY.