L. T. CURRAN & J. H. WIDENER.

PAPER CUTTING MACHINE.

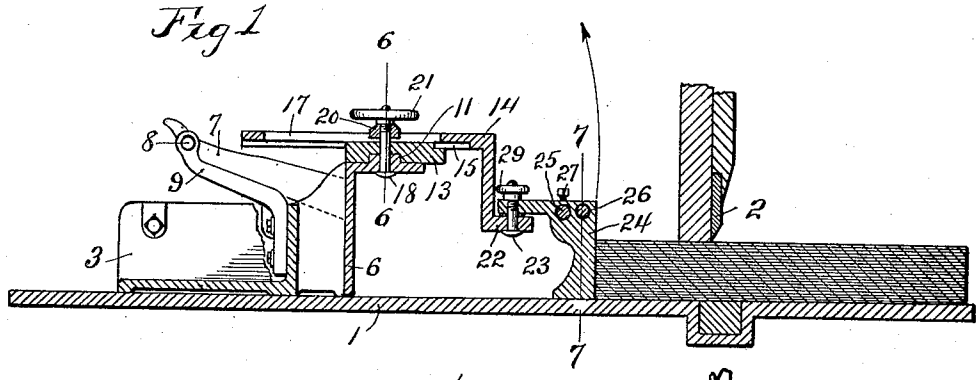
APPLICATION FILED MAR. 19, 1914.

1,162,343.

Patented Nov. 30, 1915.

2 SHEETS—SHEET 1.

Fig 1



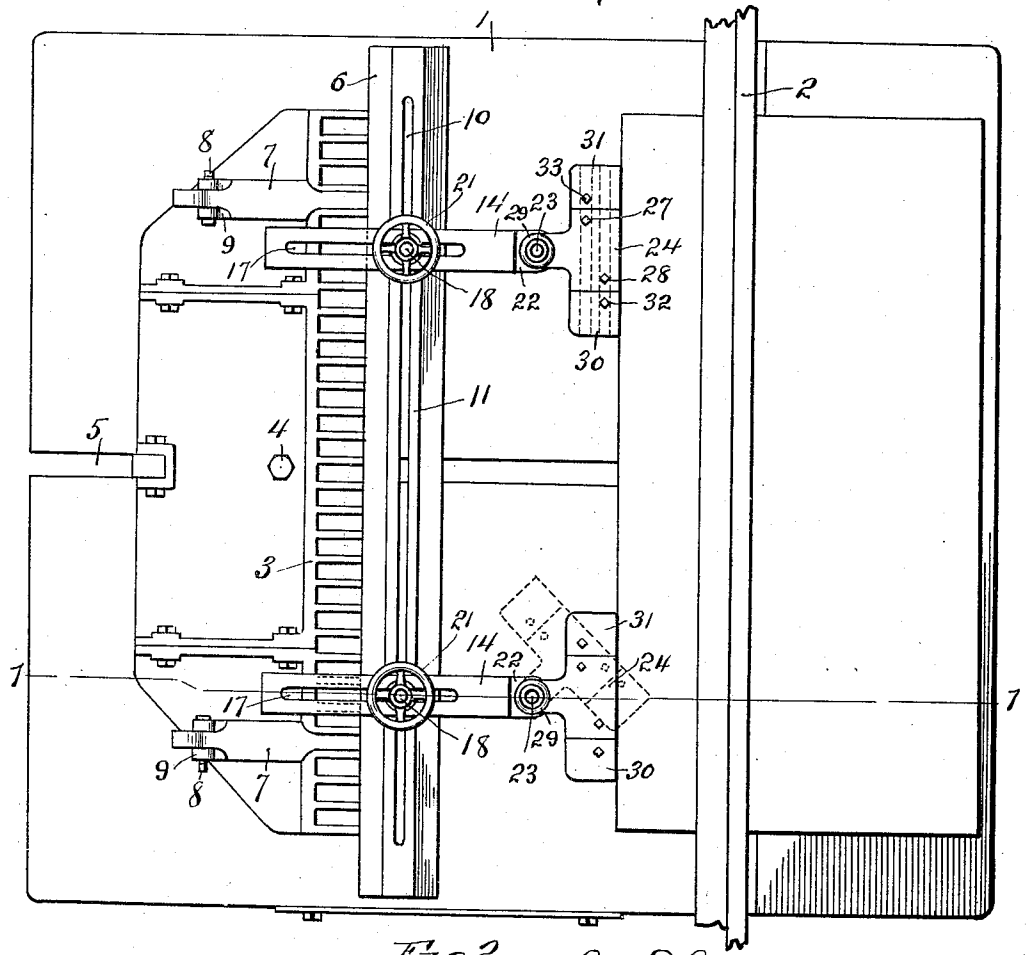


Fig 2

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2 SHEETS—SHEET 2.

Fig 3

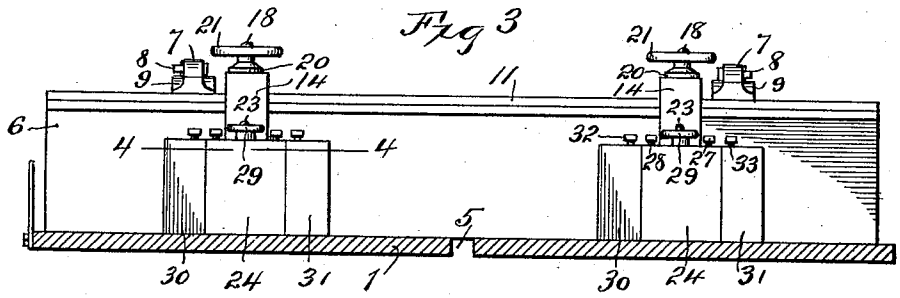


Fig 4

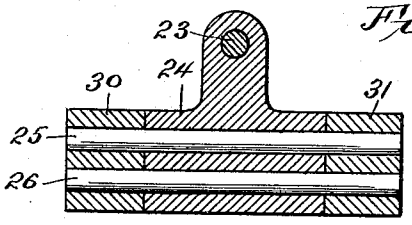


Fig 5

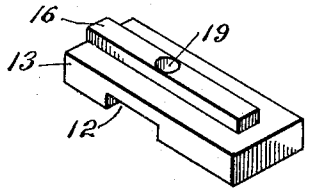


Fig 6

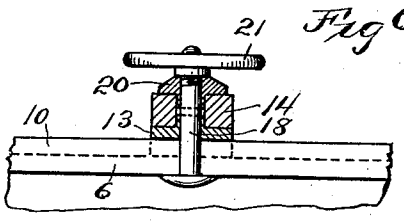
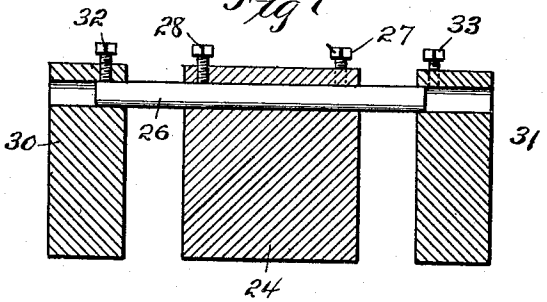


Fig 7



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UNITED STATES PATENT OFFICE.

LEO T. CURRAN AND JAMES H. WIDENER, OF KANSAS CITY, MISSOURI.

PAPER-CUTTING MACHINE.

1,162,343. Specification of Letters Patent. Patented Nov. 30, 1915.

Application filed March 19, 1914. Serial No. 825,909.

To all whom it may concern:

Be it known that we, LEO T. CURRAN and JAMES H. WIDENER, citizens of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a certain new and useful Improvement in Paper-Cutting Machines, of which the following is a specification.

Our invention relates to improvements in paper cutting machines.

The object of our invention is to provide a paper cutting machine with a gage mechanism which may be quickly adjusted to positions suitable for gaging sheets of paper of different sizes, and which may be quickly adjusted to positions in which the paper may be cut at various angles to its edges.

Our invention is adapted to be used in connection with the ordinary back gage of a paper cutting machine, and is arranged so as to be quickly swung into or out of operative position, so as to permit the use of the ordinary back gage when desired.

Other novel features of our invention are hereinafter fully described and claimed.

In the accompanying drawings which illustrate the preferred embodiment of our invention, Figure 1 is a vertical sectional view on the line 1—1 of Fig. 2, showing the pivoted gages resting upon the table. Fig. 2 is a plan view of our improved gage mechanism. Fig. 3 is a front elevation of the gage mechanism, the table being shown in vertical section. Fig. 4 is an enlarged horizontal section on the line 4—4 of Fig. 3. Fig. 5 is a perspective view of one of the slide blocks. Fig. 6 is an enlarged vertical sectional view on the line 6—6 of Fig. 1. Fig. 7 is an enlarged vertical sectional view on the plane of the line 7—7 of Fig. 1, the gage being shown in the extended position.

Similar reference characters designate similar parts in the different views.

1 designates the table of an ordinary paper cutting machine, 2 the knife and 3 the usual back gage.

4 designates the usual clamping bolt which is adjustable in the slot 5 of the table 1.

6 designates a right-angled supporting member provided with two rearwardly extending arms 7 which are respectively pivoted by transverse bolts 8 to two brackets 9 which are secured to and extend obliquely upwardly and rearwardly from the back gage 3. The horizontal portion of the right-angled supporting member 6 is provided with a longitudinal slot 10 which is disposed parallel with the knife 2. The upper side of the horizontal portion of the member 6 is provided with a longitudinal guide 11 which is slidably fitted in transverse grooves 12 which are provided respectively in the under sides of two blocks 13, one of which is shown in Fig. 5, which are slidably mounted on the member 6.

Two gage supporting members 14 are respectively mounted on the blocks 13 and are respectively provided on their under sides with longitudinal grooves 15, Fig. 1, in which are respectively slidably fitted raised portions 16, Fig. 5. The gage supporting members 14 are respectively provided with longitudinal slots 17 through which extend respectively vertical bolts 18, which also extend through the slot 10 and through two vertical holes 19 provided respectively in the blocks 13, as shown in Fig. 5.

Slidably mounted on the gage supporting members 14 respectively are two washers 20 mounted respectively on the bolts 18.

Two nuts 21, preferably in the form of hand wheels, are respectively fitted on the screw-threaded upper ends of the bolts 18, and are adapted to bear against the clamping washers 20 respectively. The lower ends of the bolts 18 are provided with heads which bear against the under side of the horizontal portion of the supporting member 6.

Each supporting member 14 at its forward end extends downwardly, the lower end being provided with a horizontal portion 22. Two vertical bolts 23 extend respectively through said horizontal portions 22, and have respectively pivoted to them two right-angled gage members 24, each of which is provided with two transverse holes in which are respectively mounted two horizontal parallel bars 25 and 26 which are disposed parallel with the knife 2.

Set screws 27 and 28 mounted in the member 24 serve to hold the bars 25 and 26 in said member 24.

Two nuts 29 are respectively mounted on the screw-threaded upper ends of the bolts 23, and are adapted to clampingly engage the members 24.

Adjustably mounted and longitudinally slidable on the bars 25 and 26 are two gage members 30 and 31 in which are mounted

respectively set screws 32 and 33 adapted to respectively bear against the rods 26 and 25.

By loosening the nuts 21, the supporting members 14 may be moved together with the gage members 24 parallel with and at right-angles to the knife 2. By loosening the nuts 29, the gage members 24, 30 and 31 may be swung to any desired angle within the limits of the mechanism.

When it is desired to use the gage members 24, 30 and 31, said members are disposed, as shown in the drawings, upon the table 1. When it is desired to use the back gage 3 for gaging paper, the supporting member 6 together with the parts carried thereby may be swung upwardly and rearwardly upon the pins 8, so as to leave a clear field in front of the back gage 3.

We do not limit our invention to the structure shown and described, as modifications, within the scope of the appended claims, may be made without departing from the spirit of our invention.

Having thus described our invention, what we claim and desire to secure by Letters Patent, is:—

1. In a paper cutting machine, a supporting member having a longitudinal slot, a block slidable on said supporting member parallel with said slot and having a vertical hole in alinement with said slot, a gage supporting member slidable on said block transversely to said slot, and provided with a longitudinal slot extending across and at right angles to the slot in said supporting member, and in alinement with said hole in said block, a clamping device extending through said slots and through said hole and having means for clamping together said block, said gage supporting device and said supporting member, and a gage pivoted on a vertical axis to said gage supporting member.

2. In a paper cutting machine, a back gage, a supporting member, a gage pivoted on a vertical axis to said supporting member, a member pivoted on a horizontal axis to said back gage and upon which said supporting member is movable forwardly and laterally, and means for releasably clamping said two members together.

In testimony whereof we have signed our names to this specification in presence of two subscribing witnesses.

LEO T. CURRAN.
JAMES H. WIDENER

Witnesses:
E. B. HOUSE,
WARREN D. HOUSE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."