(No Model.)

W. R. McCUTCHEON & W. E. CHILCOTE.

INDEX CUTTER.

No. 263,932. Patented Sept. 5, 1882.

Fig. 1.

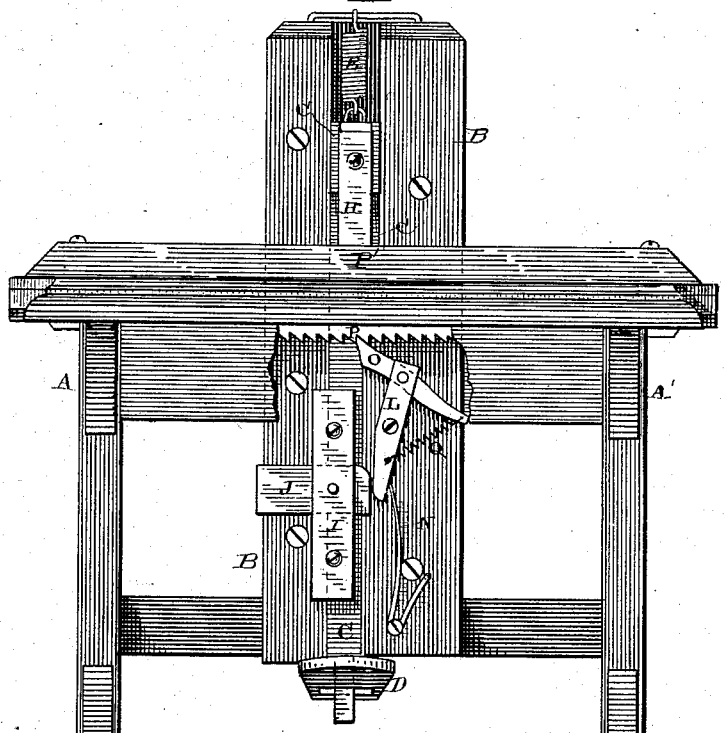
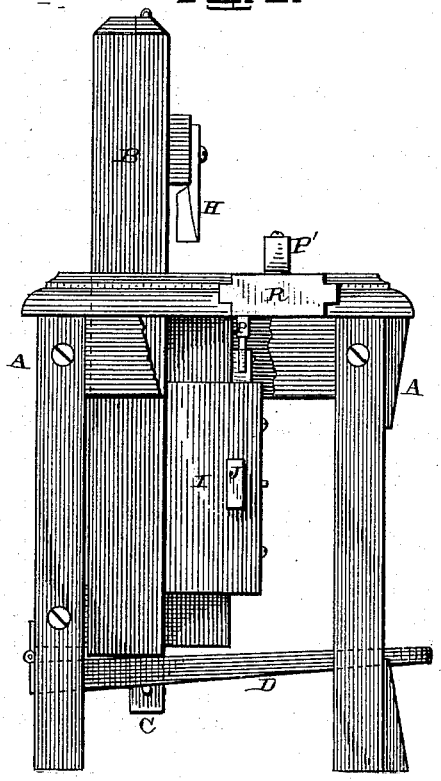


Fig. 2.



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UNITED STATES PATENT OFFICE.

WILLIAM R. McCUTCHEON AND WILLIAM E. CHILCOTE, OF WASHINGTON, IOWA.

INDEX-CUTTER.

SPECIFICATION forming part of Letters Patent No. 263,932, dated September 5, 1882.

Application filed September 24, 1881. (No model.)

To all whom it may concern:

Be it known that we, W. R. McCUTCHEON and WILLIAM E. CHILCOTE, of Washington, in the county of Washington and State of Iowa, have invented certain new and useful Improvements in Index-Cutters; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in index-cutters; and it consists in the combination of the vertically-moving rod to which the cutter is attached, a spring that is secured to the upper end of the rod for the purpose of raising it after the cutter has been depressed upon the paper, a treadle, and a suitable spring-lever, by means of which the slide or carriage is moved forward each time that the treadle rises upward after having been depressed.

The object of our invention is to simplify the construction of machines which are used for cutting the indexes in books, and to render the operating parts as few and simple as possible.

Figure 1 is a front elevation of our invention complete, partly in section. Fig. 2 is an end view of the same, also partly in section.

A represents a suitable frame or table, to the rear part of which is secured the grooved guide or standard B. This standard is grooved its entire length, and in this groove is placed the sliding bar C, which has the treadle D secured to its lower end and the spring E secured to its upper end for the purpose of drawing the bar upward again after it has been depressed upon the paper. This treadle is hinged at its rear end to a cross-bar near the bottom of the table or frame A, and is attached to the lower end of the sliding bar in any suitable manner; also secured to the upper end of this sliding bar is the cutter H, by means of which the index is cut. To the lower end of the bar is secured the block I, which moves vertically with the bar, and through which is passed the cross-piece J, which has one of its ends projecting a suitable distance beyond the inner side of the block. The upper corner of this projecting end of the cross-piece is rounded or beveled away, as shown, so that each time the bar is drawn upward by the coiled spring at its top this cross-piece will force the lower beveled end of the lever L backward. This lever L is pivoted upon the front part of the standard, which is made suitably thicker at this point than any other, and has the spring N bearing constantly against its lower end, so as to keep it pressed always against the inner side of the block. To the upper end of this pivoted lever is pivoted the ratchet O, which has its upper end made to engage with the ratchet-bar P by means of the spiral spring Q. This ratchet-bar is secured to the under side of the slide or carriage R, upon which the paper is placed and secured in position by means of the clamp P′.

The operation of our machine is as follows: The paper is first placed upon the carriage and clamped in such a position that its edge will be made to pass under the cutter as the carriage is moved along. The operator, after adjusting the paper, bears down upon the treadle, which causes the slide-bar to descend and the cutter to cut the first index. As soon as the treadle is released the spiral spring, which is attached to the upper end of the bar, causes the bar to rise up, so as to have the cutter ready for the next cut. As the sliding bar is drawn upward by the spring at its top the beveled corner of the cross-piece strikes against the lower end of the pivoted lever and forces the lever from an inclined to almost a vertical position. In thus forcing backward the lower end of the pivoted lever the upper end carrying the pivoted pawl is forced forward, and this forward movement forces the carriage along so as to prepare the paper for the second cut. As the treadle is again depressed the spring forces the lower end of the pivoted lever forward again, and thus draws the upper end backward, and this backward movement of the upper end of the lever causes the pawl to move backward one or more ratchets on the

ratchet-bar. As the spring draws the sliding bar upward after the second cut the carriage and the paper are again moved forward.

Having thus described our invention, we claim—

In an index-cutter, the combination of the treadle D, the vertically-moving rod or bar C, having the cutter secured to its upper end, the spring E, the block I, cross-piece J, pivoted lever L, dog O, springs N Q, and table or carriage provided with the ratchet-bar, substantially as shown.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM R. McCUTCHEON.
WILLIAM E. CHILCOTE.

Witnesses:
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