

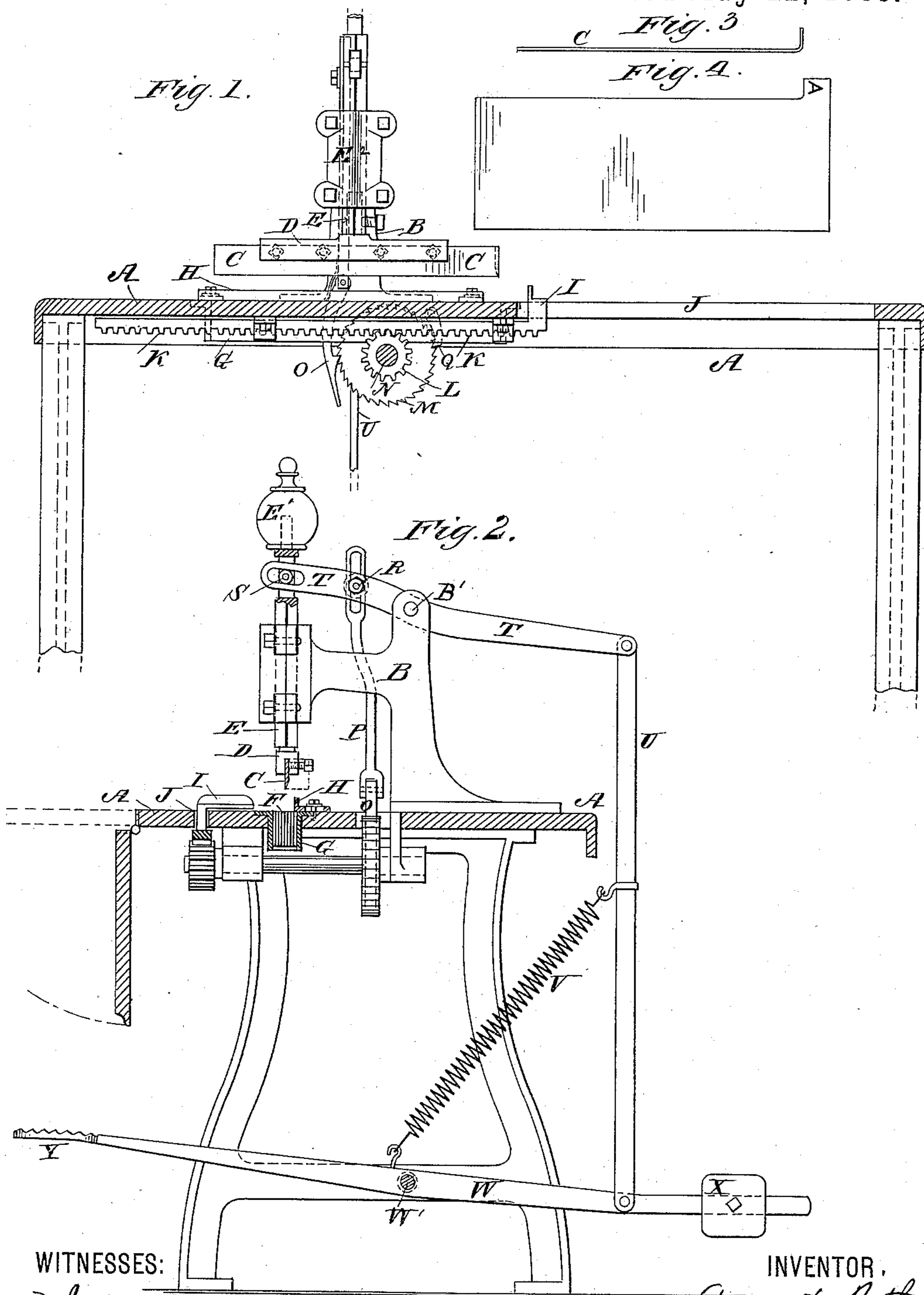
(No Model.)

A. ROTHE.

BOOK INDEX CUTTING MACHINE.

No. 383,252.

Patented May 22, 1888.



WITNESSES:

Phil H. Vandewerken.  
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# UNITED STATES PATENT OFFICE.

AUGUST ROTHE, OF NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO  
WILLIAM W. COTTON AND CLIFTON H. COTTON, BOTH OF BROOKLYN,  
NEW YORK.

## BOOK-INDEX-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 383,252, dated May 22, 1888.

Application filed June 23, 1887. Serial No. 242,274. (No model.)

*To all whom it may concern:*

Be known that I, AUGUST ROTHE, a citizen of the United States, and a resident of New York, in the county and State of New York, have invented certain new and useful Improvements in Book-Index-Cutting Machines, of which the following is a specification.

This invention relates to a machine adapted to automatically cut out index-blanks in a book or series of sheets of paper; and it consists in the construction and arrangement of parts hereinafter set forth.

In the drawings, Figure 1 is a central vertical longitudinal section of the machine, and Fig. 2 is a central vertical transverse section of the machine. Fig. 3 is a view in detail of my cutting-knife, and Fig. 4 is a plan view of the first index-blank as cut by my machine.

Similar letters refer to similar parts throughout the various views.

Referring to the drawings, A represents a table constructed of wood and suitably supported, and also provided upon its upper surface with an iron frame, B, adapted to support the pivoted lever T at B', and also to provide a guide for the vertical reciprocating bar E, to the lower extremity of which is rigidly attached the knife-holding plates D containing the cutting-knife C.

The reciprocating bar E is operated by means of a pin traveling in the shorter arm of the lever T, and is provided at its upper extremity with a weight, E'.

The knife C may be varied in shape, but is preferably a straight one provided at one end with a short right-angled extension, as shown in Fig. 3.

In a pocket, G, inserted in the table A, is placed a strip of any suitable material—as, for example, a strip of maple set edgewise—F, in order to form a surface for the knife to cut against. The table A is also provided with two guides placed at right angles to each other, one, H, adjustably attached to the table, and the other, I, adapted when moved to travel through a slot, J, formed in the table A.

Lying beneath the table A and attached to the guide I is the rack-bar K, engaging with the pinion N, which is rigidly attached to and

moved by the ratchet-wheel M. This ratchet-wheel M, which is prevented from moving in a backward direction by the dog Q, is pulled forward by the upward movement of the pawl O, attached to the lower extremity of the bar P, a slot in the top of which serves, in connection with the screw R, to adjustably but rigidly attach together the lever T and the bar P.

A weighted pedal lever or treadle, W, pivoted at W' to the lower portion of the frame-work supporting the table A, serves to impart motion to the lever T by means of the connecting rod U, which is held in a normal position by means of the spring V, as shown.

The operation of parts is as follows: The guide H is adjusted so that it will conform to the width of the index desired, and the feed of the bar K is regulated by means of the screw R and the slot in the bar P, so as to make the depth or length of the indices to be cut, and consequently the advance movement of the guide I the required distance. Then inserting the book or paper sheets so that they will rest against the guides H and I, and depressing the treadle W, the sheet or sheets of paper will be cut out, as is indicated in Fig. 4. Upon allowing the treadle to rise again the bar P will move up and the ratchet M will be pulled forward by means of the pawl O, and the consequent movement of the pinion N will cause the rack-bar K and the guide I to advance. Upon inserting another sheet or series of sheets of paper and again depressing the treadle the second index-blank will be formed, a longer flap being left upon the sheet of paper than before, and upon repeating the operation, by the simple consecutive insertion of the sheets of paper and the proper operation of the machine, the required number of indices will be automatically cut or formed in the sheets of paper or book required to be indexed.

Formerly after a book was completed the paper had to be cut by hand to form the index, but by my machine the same may be automatically and more expeditiously cut out.

It is obvious that any operating power may be substituted in place of that described, and that the paper sheet may be supplied to my

machine by any approved means, and also that changes may be made in the construction of my machine without departing from the spirit and scope of my invention.

5 What I claim is—

10 In a book-index-cutting machine, the combination, with the table A, provided with the stationary adjustable guide H, the frame B, the pivoted lever T, the adjustable feed-bar P, the screw R, the weighted reciprocating bar E, the knife-holder D, the knife C, and with the weighted treadle W, adapted to operate the parts, substantially as described, of the

movable adjustable guide I, the rack-bar K, the pinion N, the ratchet-wheel M, the dog Q, 15 and the pawl O, as and for the uses and purpose set forth.

In testimony of the foregoing specification I do hereby sign the same, in the city of New York, county of New York, and State of New 20 York, this 10th day of June, A. D. 1887.

AUGUST ROTHE.

Witnesses:

VICTOR MILLER,  
WM. H. MOTT.