L. F. Markham.

Book-binding Mach.

No. 12026. Patented Dec. 5. 1854.

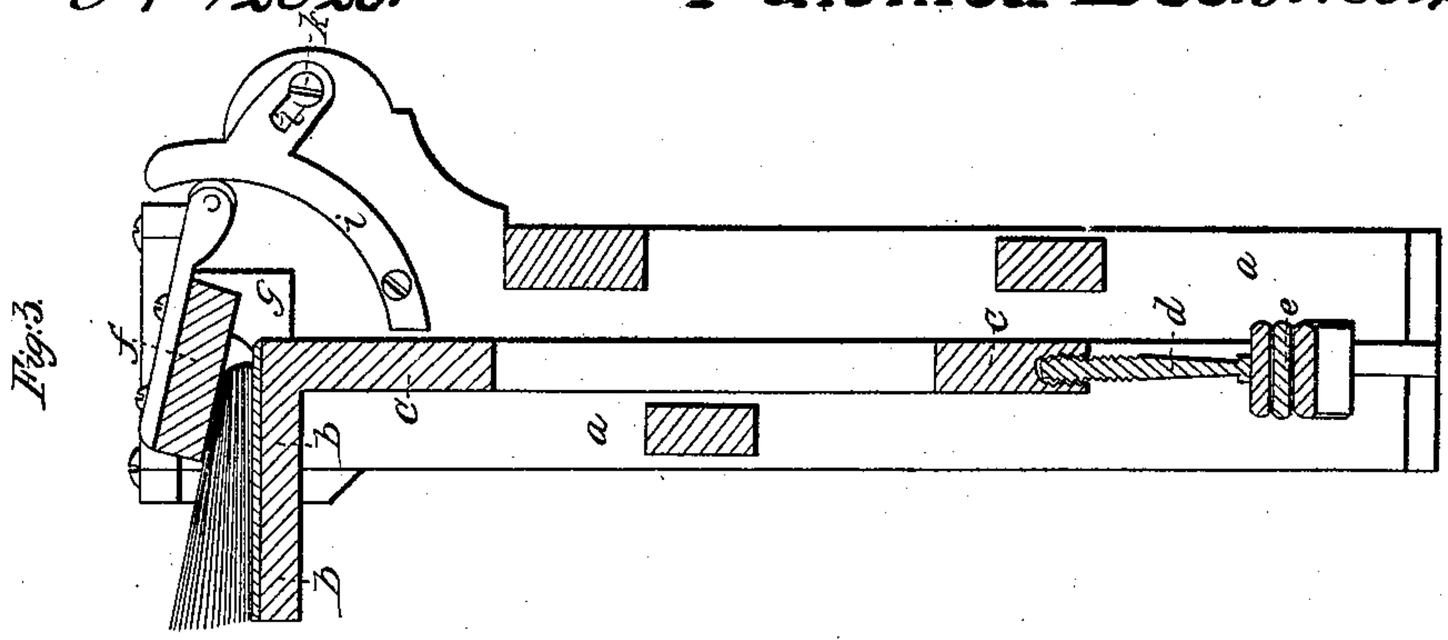

Fig. 3.

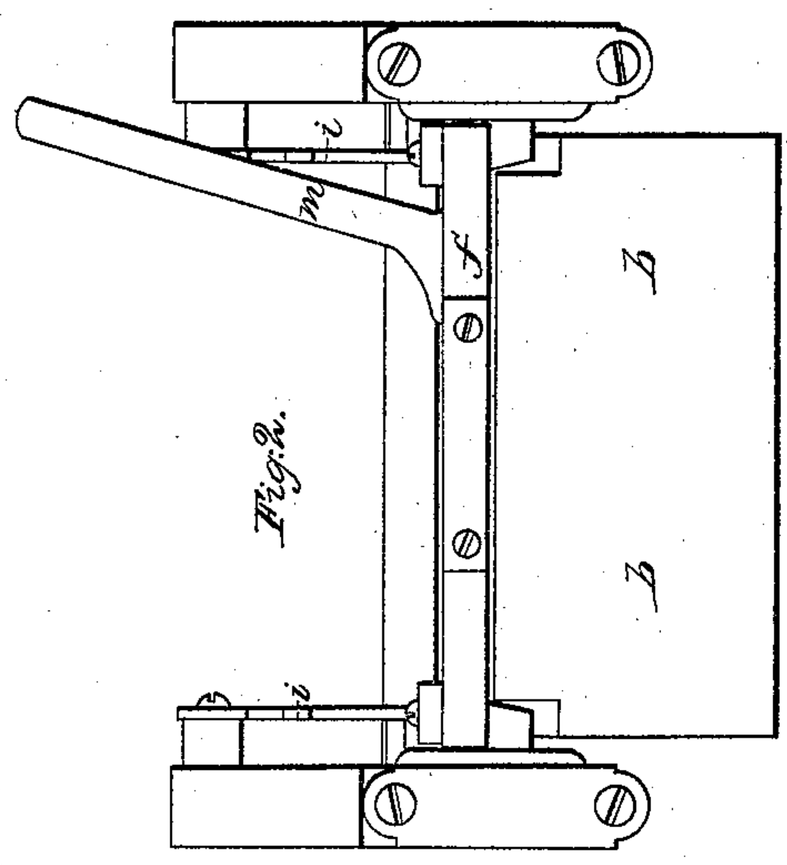

Fig. 2.

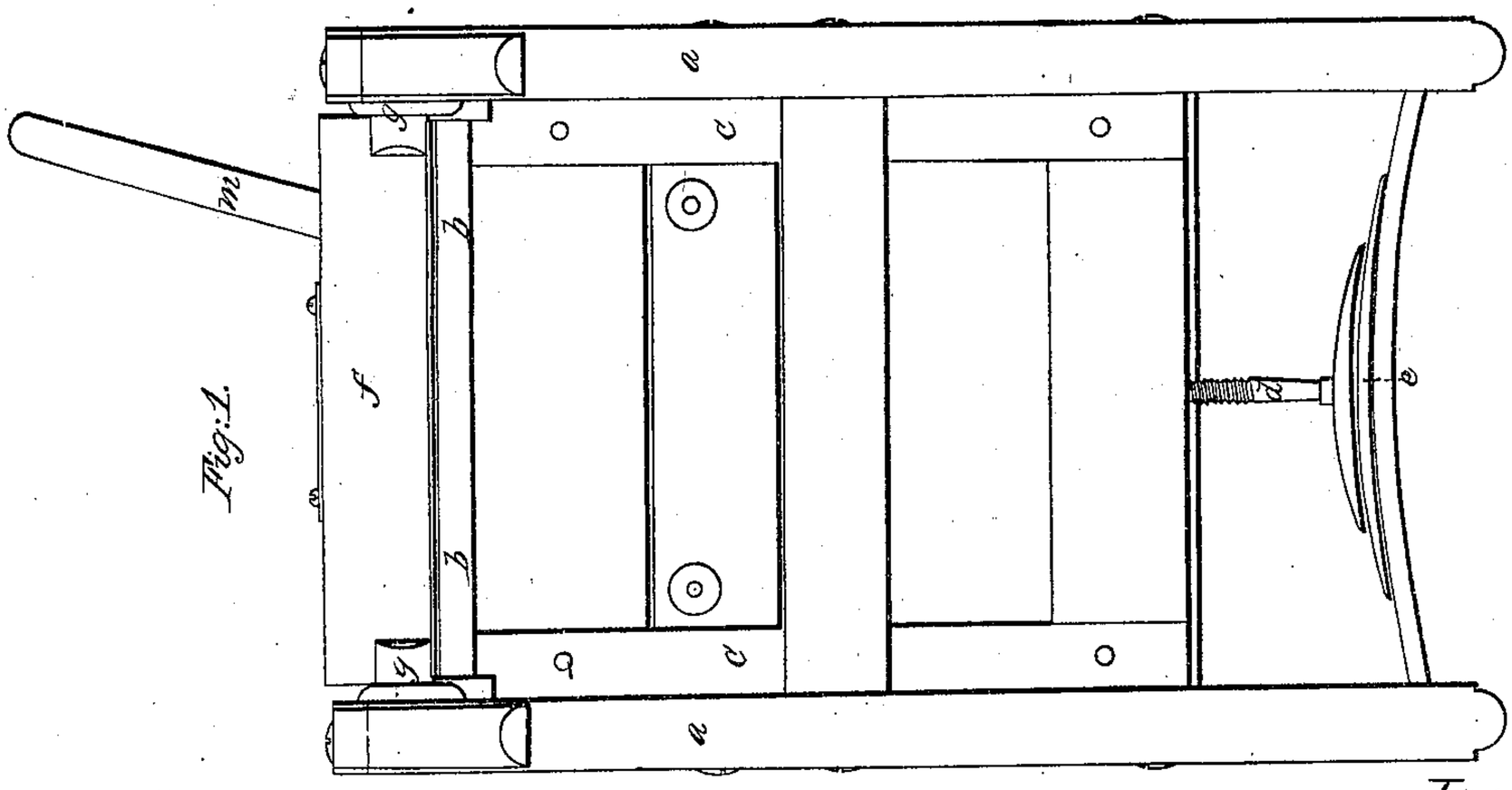

Fig. 1.

Witnesses:
Joseph Gaulett
F. R. Lincoln

Inventor:
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UNITED STATES PATENT OFFICE.

LEONARD F. MARKHAM, OF CAMBRIDGEPORT, MASSACHUSETTS.

MACHINE FOR ROUNDING THE BACKS OF BOOKS.

Specification of Letters Patent No. 12,026, dated December 5, 1854.

To all whom it may concern:

Be it known that I, L. F. MARKHAM, of Cambridgeport, in the county of Middlesex and State of Massachusetts, have invented a new and useful Machine for Rounding the Backs of Books, and that the following description, taken in connection with the accompanying drawings hereinafter referred to, forms a full and exact specification of the same wherein I have set forth the nature and principles of my said improvements by which my invention may be distinguished from others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

The figures of the accompanying plate of drawings represent my improvements.

Figure 1 is a front elevation of my machine. Fig. 2, is a plan or top view of the same. Fig. 3, is a central transverse vertical section.

My machine is designed to perform the operation of rounding over the backs of books which has hereto-fore been done by hand by hammering them until they attained the required shape.

The most esential elements of my machine consist of a pressure bar hung upon centers and a yielding table upon which the book is placed, the requisite form being given to the back of the book by the pressure of the said bar upon the table. In order to adapt the machine to the thickest kind of work, the pressure bar is hung, in sliding journals so that it may crowd forward as the pressure is given being actuated by small rollers attached to the bar traveling in adjustable curved guides.

a a in the drawings represents the frame work of the machine.

b b is the table attached to a sliding frame *c c* traveling in proper guides in the framework *a a* and resting upon a short shaft *d* which bears upon a spring *e*.

f is the pressure bar hung upon journals in the sliding boxes *g g*. To the back of the bar *f* are attached two small rollers *h h* which travel against the curved guides *i*, *i*, made adjustable by a screw *k* and slot *l*, as will readily be understood by inspection of the drawings.

The book the back of which is to be rounded is placed upon the table *b b*, which is covered with rubber to prevent the book from slipping, with its back resting against the pressure bar *f*. The book is held by the hand while the pressure bar is turned by the handle *m* and pressed down upon the book, the table yielding a little by the operation of the sliding frame *c c* and spring *e*. The upper edge of the back of the book is thus rounded over as shown in Fig. 3, the presure bar being crowded forward by the rollers *h h* traveling against the curved guides *i i*. The book is then reversed so as to bring its other face to bear upon the table when the other or lower edge of the back of the book is rounded, in the same manner as in the first instance. In rounding the backs of books which are thin the desired effect can be produced by a pressure bar hung on stationary bearings the sliding boxes and curved guides in that case being dispensed with as the back of the book will in that case be sufficiently rounded without giving the pressure bar a forward movement.

Having thus described my improvements I shall state my claims as follows:—

What I claim as my invention and desire to have secured to me by Letters Patent is—

1. The combination of a pressure bar hung upon proper journals with a yielding table upon which the book is placed, the back of the book being shaped by the action of the said pressure bar and table as set forth.

2. I also claim a pressure bar hung upon sliding journals and actuated by the friction rollers and curved guides so as to give a forward motion to the said pressure bar and thereby adapt the machine to rounding the backs of thick books as herein above described.

LEONARD F. MARKHAM.

Witnesses:

ESRA LINCOLN,

JOSEPH GAVETT.