

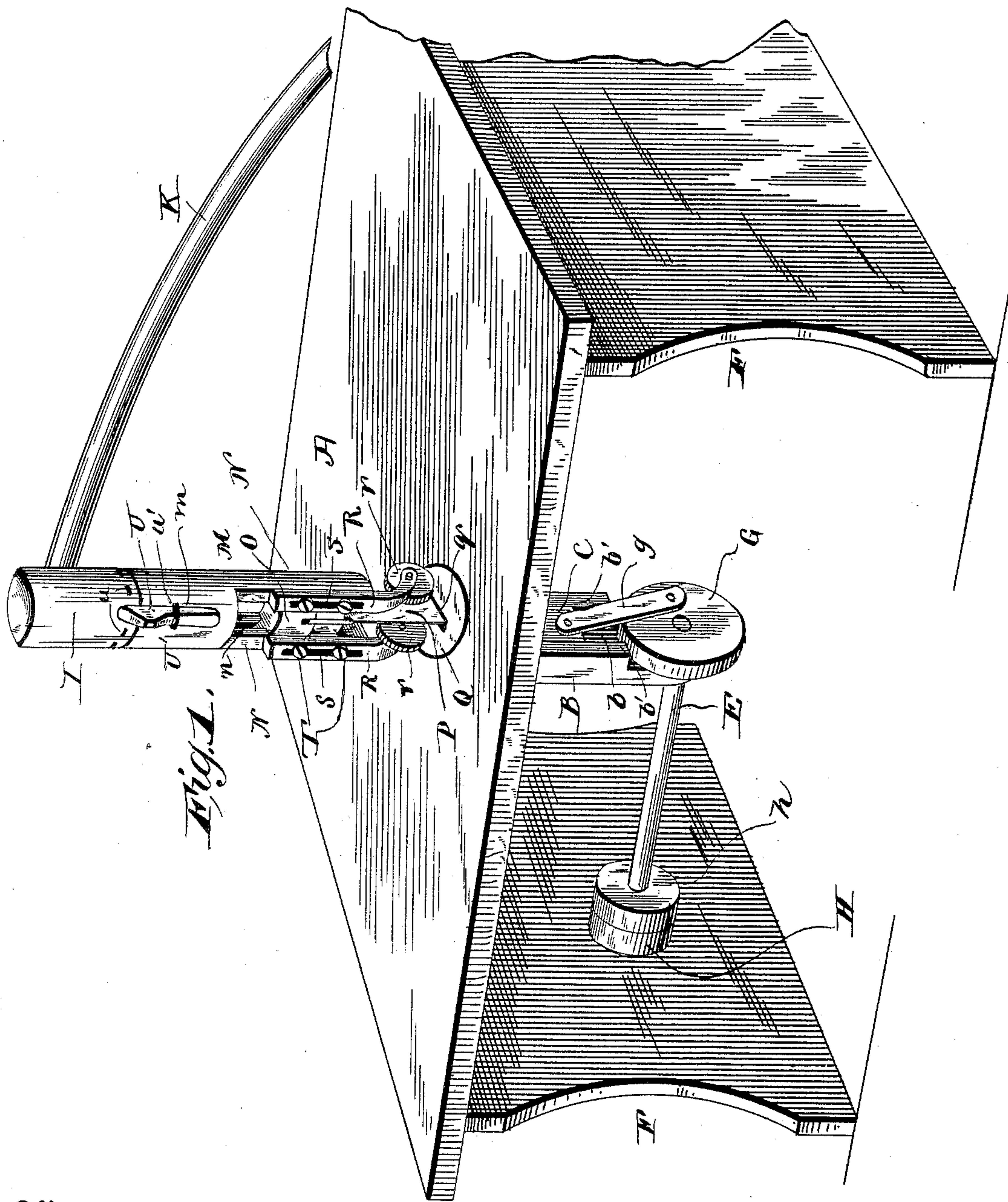
(No Model.)

2 Sheets—Sheet 1.

C. A. YOST.  
CLOTH CUTTING MACHINE.

No. 393,495.

Patented Nov. 27, 1888.



Witnesses.

Frank S. Oberlin  
Cleary.

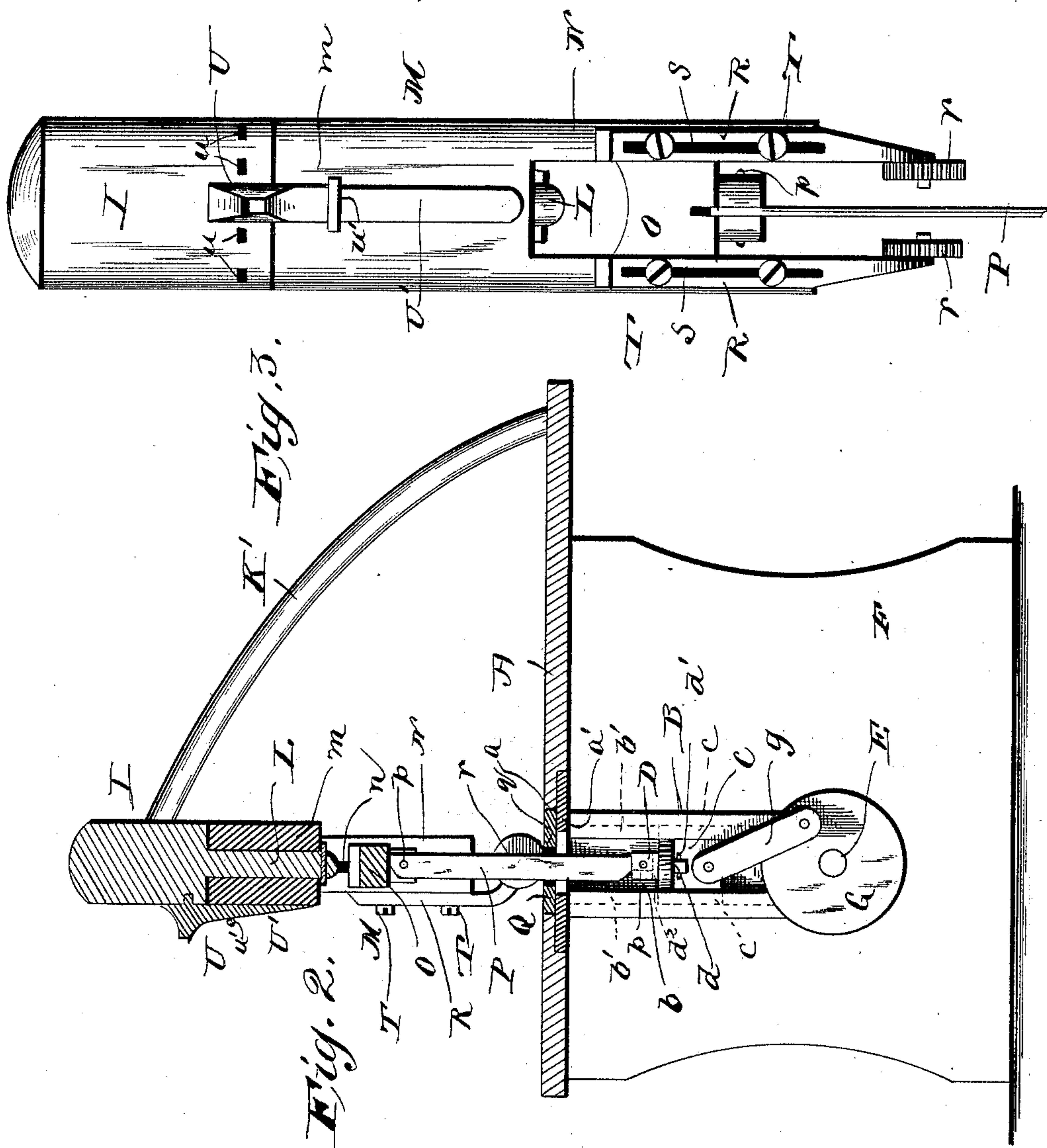
Charles A. Yost, Inventor.

By his Attorneys  
C. Brown & Co.

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Frank S. Covert  
C. E. Doyle

Inventor.  
Charles A. Yost.

By J. W. Snow & Co. Attorneys



# UNITED STATES PATENT OFFICE.

CHARLES A. YOST, OF NEW YORK, N. Y.

## CLOTH-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 393,495, dated November 27, 1888.

Application filed August 29, 1888. Serial No. 284,063. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES A. YOST, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a new and useful Improvement in Cloth-Cutting Machines, of which the following is a specification.

My invention relates to cloth-cutting machines designed to be employed in cutting out clothing; and it consists in a certain novel construction and combination of devices, fully set forth hereinafter, in connection with the accompanying drawings, and specifically pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of the cutting-machine embodying my improvements. Fig. 2 is a transverse central sectional view thereof. Fig. 3 is a detail view of the revoluble frame.

Referring by letter to the drawings, A designates the cutting-board, which is suitably supported, and in its center is formed an opening, *a*, having an inward-projecting flange, *a'*, at the lower side of the cutting-board. A frame, B, depends from the lower side of the cutting-board adjacent to the opening therein, and in a guide or way, *b*, in the said frame operates the guide-block C, which is provided with lateral webs *c c*, which enter extensions *b'* of the guide or way *b*. This guide-block is provided on its outer side with the bearing *d*, in which is mounted the socket-piece D, held in place by the pin *d'*, and provided with a bifurcated or slotted upper end, *d''*.

E represents a horizontal shaft, which is mounted at one end in the lower end of the depending frame, and at the other end in one of the supports F F of the cutting-board and the free or outer end of this shaft may, if desired, be provided with a crank to enable the shaft to be rotated. The inner end of the horizontal shaft is provided with a wheel, G, to which the guide-block is connected by means of the connecting-rod *g*.

H represents a band-pulley, which is attached rigidly to a suitable portion of the shaft E, and adjacent to the band-pulley is the loose or idle pulley *h*, to which the driving-belt (not shown) may be transferred when the motion of the machine is to be stopped temporarily.

I represents a head, which is attached firmly to the meeting ends of the convergent support-

ing-arms K K', which are arranged on the cutting-board, and this head is provided with a depending spindle, L, on which is mounted the socket *m* at the upper end of the revoluble frame M. The revoluble frame is provided with the depending parallel arms N N, which are provided in their sides with the registering guide-grooves *n n*; and O represents a guide-block, which is arranged between the parallel arms, and is provided with the lateral webs, which slide in the guide-grooves *n n*. In the lower slotted end of this guide-block is arranged the upper end of the cutting-blade P, and the lower end of the blade is inserted in the slotted upper end of the revoluble socket-piece D. The ends of the blade are secured in place by transverse screws or pins *p p*, whereby a broken or injured blade may be readily replaced by a new blade. An intermediate point of the cutting-blade passes through a guide-opening, *q*, in the revoluble disk Q, which is arranged in the opening in the cutting-board, and rests on the inward-projecting flange *a'*, before described.

R R represent vertically-adjustable legs, which are connected to the depending arms of the revoluble frame and are provided at their lower ends with the roughened friction-rollers *r r*, which are adapted to be adjusted close to the cutting-board, so as to bear on the cloth which is being cut and hold the same down firmly on opposite sides of the blade. These legs are provided with longitudinal slots S S, through which pass the adjusting-screws T T, which engage in suitable threaded openings in the arms N N, whereby the friction-rollers may be vertically adjusted to suit various thicknesses of cloth.

The operation of the improved cutting-machine will be readily understood from the foregoing description. When the horizontal shaft is rotated, either by a belt connecting with a suitable motive power or by means of a crank, the guide-block in the depending frame is vertically reciprocated, and the blade is thereby similarly operated, thus cutting the cloth which passes over the cutting-board under the rollers. When it is desired to cut around curves, it is simply necessary to turn the revoluble frame, thereby turning the blade, the socket-piece, and the guide-disk Q. It will be obvious that the said disk is designed to prevent



lateral movement of the blade and cause it to operate in a true vertical plane.

To hold the revoluble frame in any desired position I provide a catch, U, which is attached to the said frame near its upper end, and is adapted to engage sockets *u u* in the side of the head. The catch is provided with a spring arm, U', which is held against the side of the frame by means of keepers *u'*.

Having thus described the invention, I claim—

1. The combination, with the cutting-board provided with an opening, *a*, of the head I, suitably supported above the board and provided with a depending spindle, the revoluble frame mounted on the said spindle and provided with depending grooved arms N N, the sliding guide-block O, mounted at its edges in the grooves of the said arms, the depending frame B under the cutting-board, provided with a way or groove, *b*, the guide-block *c*, mounted in the said groove or way, the revoluble socket-piece D, mounted on the guide-block, the pulley G, connected by a rod, *g*, to the guide-blocks C, and the knife secured at its ends, respectively, to the block O and socket-piece C, and passing through the opening in the cutting-board, substantially as specified.

2. The combination, with the cutting-board provided with the opening *a*, the depending slotted frame B under the cutting-board, the head supported above the cutting-board and provided with a depending spindle, and the revoluble frame mounted on the spindle, of the guide-block C, mounted in the frame B and provided with a revoluble socket-piece, D, the guide-frame O, mounted on the revoluble frame above the cutting-board, the blade attached at its ends to the guide-block O and the socket-piece D, the vertically-adjustable legs R R on the revoluble frame and provided with longitudinal slots, through which pass set-screws T T, and the rollers mounted on the lower ends of the legs and bearing on the cutting-board on opposite sides of the opening therein, substantially as specified.

3. The combination, with the cutting-board provided with an opening, *a*, the depending frame B below the cutting-board and provided with the guide or way *b*, the head I, connected

to the adjacent ends of the convergent supports K K', and provided with a depending spindle, and the revoluble frame M, mounted on the said spindle and provided with the depending grooved arms N N, of the guide-block O, mounted between the arms N N, the guide-block C, mounted in the guide or way *b* and provided with a socket-piece, D, the blade connected to the guide-block O and socket-piece D, and extending through the opening *a*, the horizontal shaft provided with a band-pulley and an idler-pulley, and the wheel on the end of the said shaft, connected to the block C by the rod *g*, substantially as specified.

4. The cutting board, the head supported above the board, the revoluble frame mounted on the head, and the frame B, depending from the board, in combination with the guide-block C, mounted on the frame B, and provided with a socket-piece, D, the guide-block O, mounted on the revoluble frame, the blade connected to the block O and the socket-piece D, and the catch U on the revoluble frame, adapted to engage sockets *u u* in the head, as and for the purpose substantially as specified.

5. The combination, with the cutting-board provided with an opening, *a*, having an inward-extending flange, *a'*, of the guide-disk Q, mounted in the said opening and bearing on the flange therein, the head I, supported above the cutting-board and having a revoluble frame provided with grooved arms mounted thereon, the guide-block O, mounted on the grooved arms, the guide-block C, mounted in a frame beneath the cutting-board and having a revoluble socket-piece mounted thereon, and the blade secured at its ends to the socket-piece and the block O, and passing through a central elongated opening, *q*, in the guide-disk, whereby as the blade turns by the rotation of the revoluble frame and the socket-piece the guide-disk is also turned, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CHARLES A. YOST.

Witnesses:

R. F. SLOCUM,  
G. P. HENKEL.