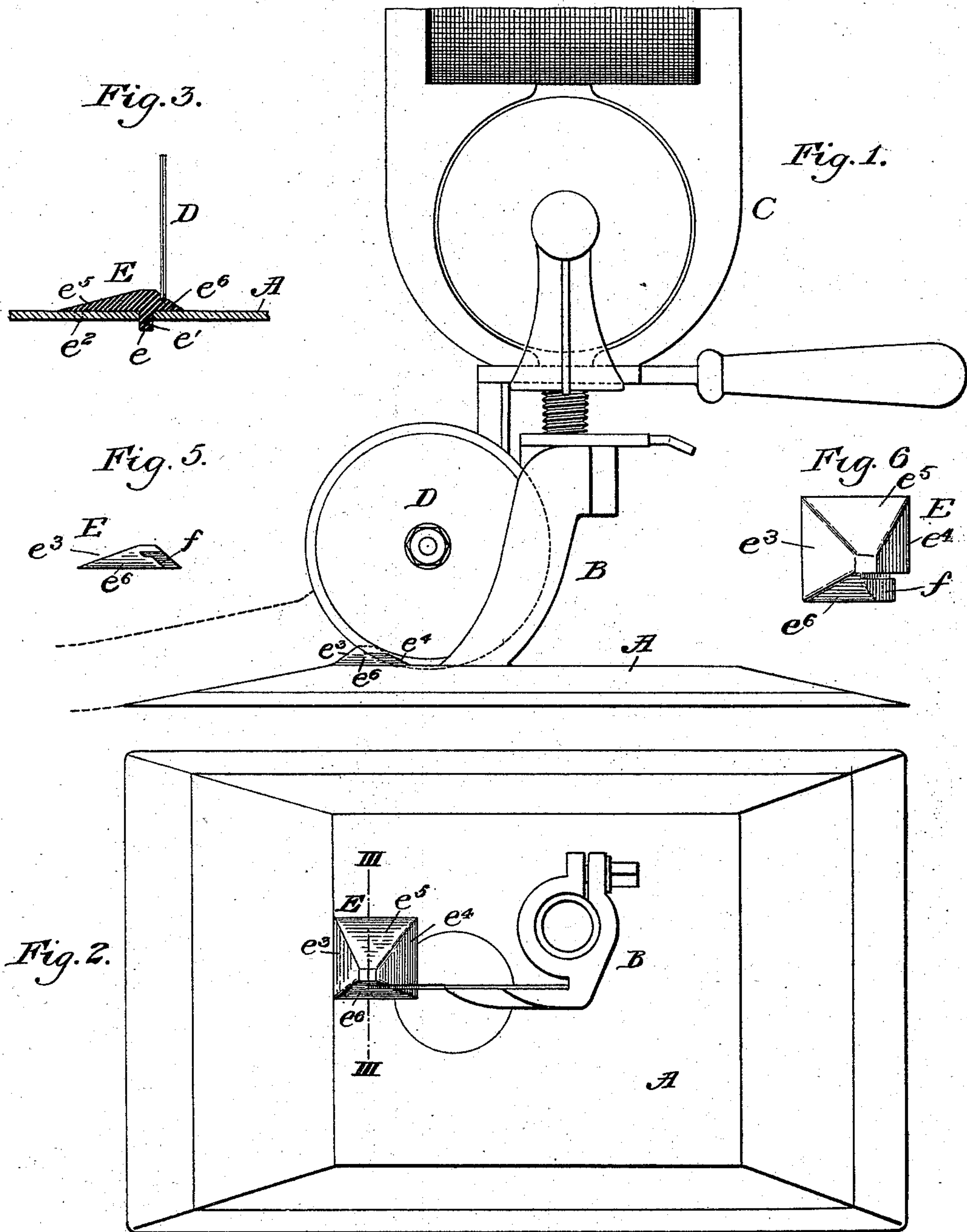


(No Model.)

J. BLOCH.  
CLOTH CUTTING MACHINE.

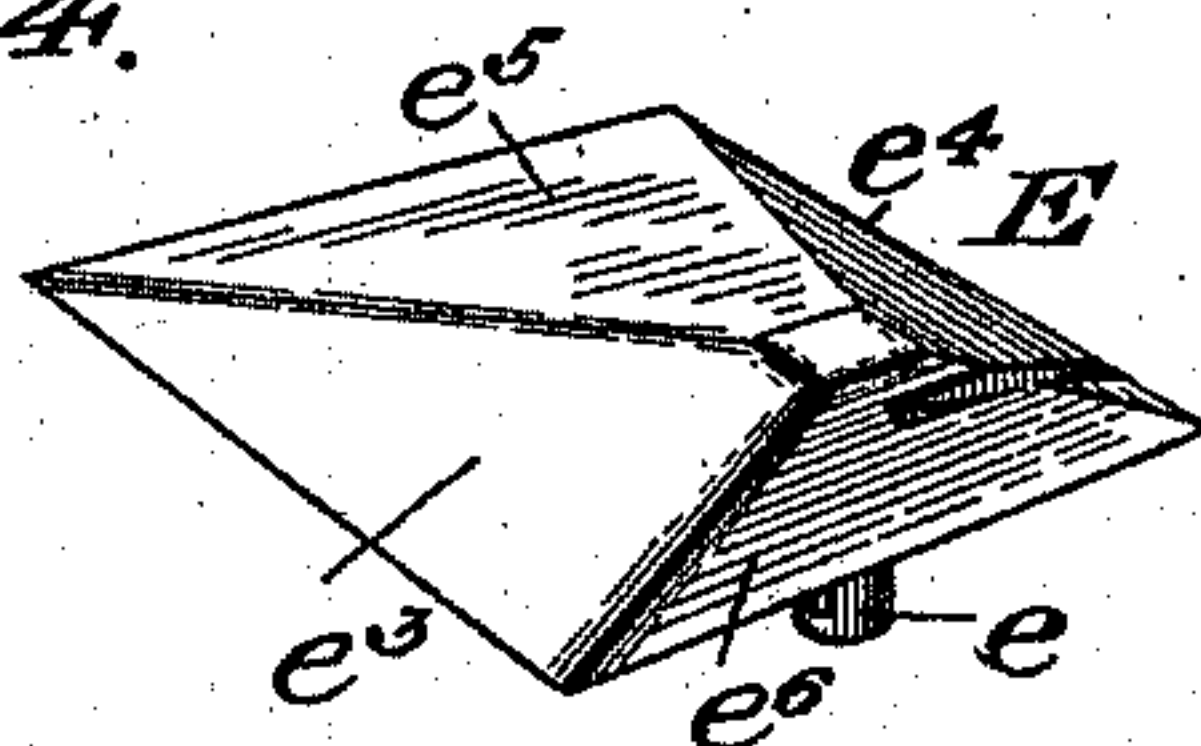
No. 528,220.

Patented Oct. 30, 1894.



Witnesses  
T. A. Corning.  
Chas. E. Riordan.

Fig. 4.



Inventor  
Jacob Bloch  
By Butterworth  
Dewell  
his Attorneys.



# UNITED STATES PATENT OFFICE.

JACOB BLOCH, OF CINCINNATI, OHIO, ASSIGNOR TO THE WOLF ELECTRICAL PROMOTING COMPANY, OF SAME PLACE.

## CLOTH-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 528,220, dated October 30, 1894.

Application filed June 9, 1894. Serial No. 513,999. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB BLOCH, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Attachments for Cloth-Cutting Machines; and I 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 appertains to make and use the same.

This invention relates to a lifting device for machines for cutting flexible goods, but particularly to a class of machines employing a rotary cutter for the purpose of cutting out cloth suits or other wearing apparel from a series of superposed layers of material. In machines of this character a very objectionable feature arises from the fact that in cutting curves, such as arm holes, in a series of superposed layers, the upper layer being cut in advance of the lower layer results in said lower layers being somewhat larger than the upper layers. This difference in size is due to the fact that in turning a point or in cutting a more or less sharp curve, the lower edge of the cutter, where it enters the lower layer, being nearer the pivotal point of the machine as it is advanced along the table, will not travel the distance or cut with the same radius as the cutting edge of the cutter which enters the upper layer. Consequently the curve cut in said upper layer would be larger than that of the lower layer making the upper layers of material smaller than the lower layers, as above stated, the difference varying according to the size of the curve, the number of layers and the size of the cutter employed.

The primary object of my invention is to overcome this difficulty, by providing a simple and inexpensive device which in operation will produce an easy running cut, and which will arrange the material in such relative position to the cutting edge of the cutter as to practically cut the upper and lower layer of the superposed material in a plane at right angles to the disposition of said material.

With these and other objects in view, the invention consists in certain features of con-

struction and combination of parts as will be hereinafter described and particularly pointed out in the claims at the end of the description.

Reference being had to the accompanying drawings forming a part of this specification, Figure 1 is a side elevation of the invention arranged upon a preferred form of machine, illustrating the position the material assumes with relation to the cutter as the same is advanced. Fig. 2 is a plan view with a part of the cutting machine removed. Fig. 3 is a fragmentary sectional view on the line III—III of Fig. 2, showing how the lifting device may be removably connected to the foot-plate of a cutting machine. Fig. 4 is a perspective view of the invention; and Figs. 5 and 6 are a side elevation and a plan view, respectively, of a modified form.

In the drawings I have shown the invention as applied to a machine of a preferred construction, though it is obvious I may apply the same to this or other machines.

In the machine illustrated A is a foot-plate having a standard B extending upwardly therefrom upon which is properly journaled an electric motor C arranged in a suitable frame work supported upon said standard; the said motor serving to give motion to a rotary cutter D carried in the frame work.

The foot-rest A is of any suitable construction and has located thereon a lifting device or block E arranged in advance of a vertical plane through the axis of the cutter; the said device being formed integral with the foot-rest or removably connected thereto, as shown in Fig. 3, in which a stem *e* is provided which passes through an aperture in said foot-plate, and has passed through said stem a retaining pin *e'* or its equivalent. The device or block E is further provided with a dowel pin *e<sup>2</sup>* to retain same in its proper position. This device E, is substantially rectangular and has sides slanting toward a truncated point. The front side *e<sup>3</sup>* of the block as the cutter advances adjusts the cloth in a plane practically tangential to the cutting edge of the cutter, as shown in dotted lines in Fig. 1, thereby forming the kerf at right angles to the plane of the layers of material. The rear sloping



side  $e^4$  permits the material to assume a horizontal position after being cut, while the sides  $e^5$  and  $e^6$  which extend on opposite sides of the cutter tend to separate or spread said material apart as the same is cut, for the purpose of giving free movement to said cutter.

It is obvious that the slant of the sides of the lifting device may be varied as desired and that its exact form, and its arrangement with respect to the cutting edge of the cutter may be varied without departing from the character of my invention.

I may, if desired, make the cloth-lifting device adjustable for the purpose of compensating for the wear of the knife or cutter, by providing a slot in the foot-plate A for the passage of the stem  $e$  of the block, which stem has a nut engaging the end of the same so as to rigidly bind the block to the foot-plate; or I might vary the inclination of the block, for instance, by simply inserting a beveled washer under the block. These constructions will be readily understood by those skilled in the art and further illustration thereof is not thought necessary. I may also make the blocks in such form as shown in Figs. 5 and 6, in which the side  $e^6$  of the block is somewhat shortened as indicated at  $f$ .

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a cloth cutting machine, the combination with a foot-plate and cutter and means for rotating said cutter, of a cloth-lifting device consisting of a block having a substantially rectangular base, mounted upon the upper surface of the foot-plate in advance of and adjacent to the cutter, said block being provided with slanting or inclined sides each inclining upwardly from the base toward a common point, substantially as described.

2. The combination with a foot-plate, a cutter and means for rotating said cutter, of a cloth lifting device provided with a rectangular base and having the sides thereof slanting or inclined toward a common point and at an angle to the base, one of the said sides having a greater inclination than the others, and provided with a slot for the passage of the cutter, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB BLOCH.

Witnesses:

MORRIS LIEBENSTEIN,  
HENRY COHN.