

(No Model.)

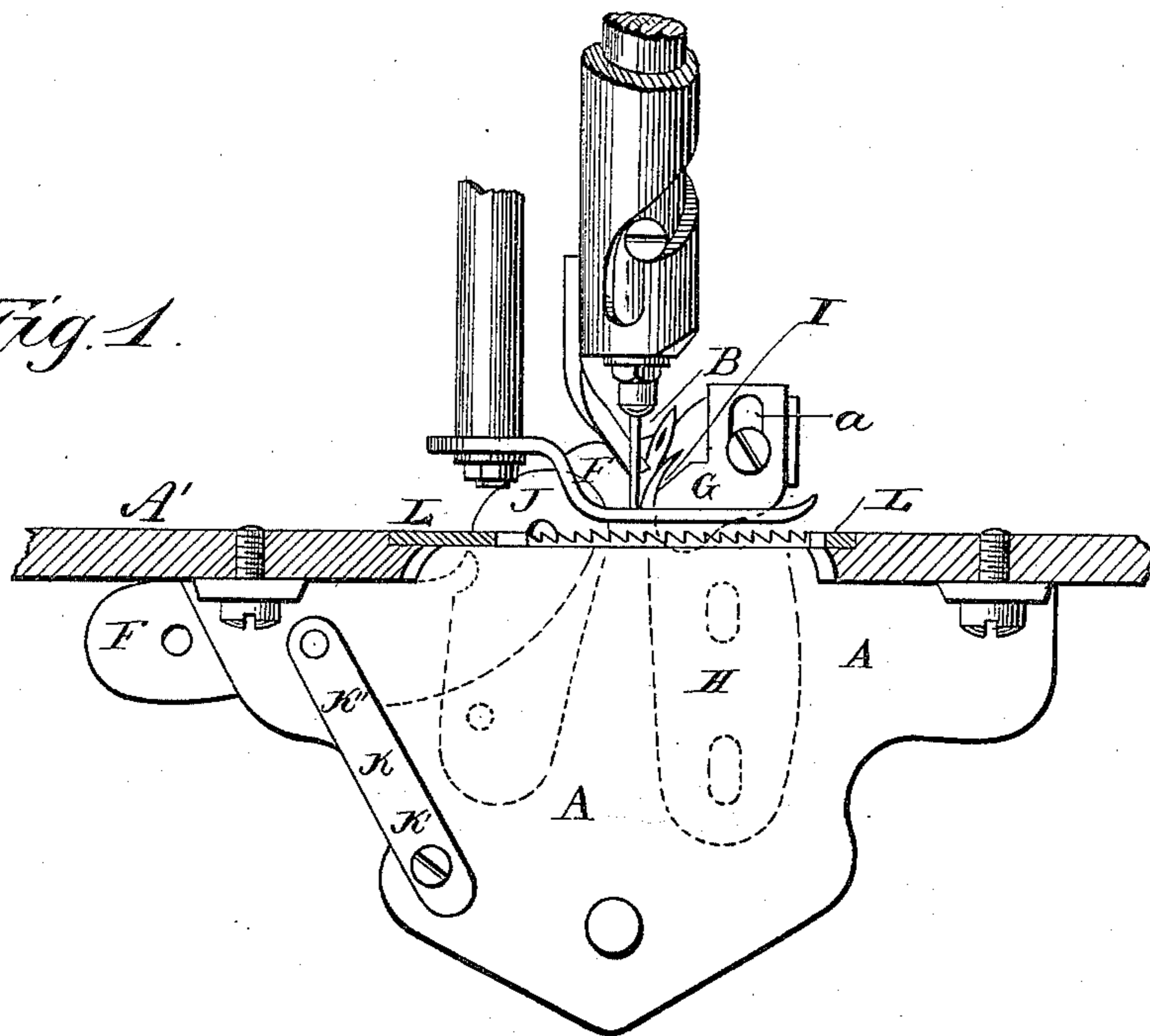
J. BIGELOW.

TRIMMING DEVICE FOR SEWING MACHINES.

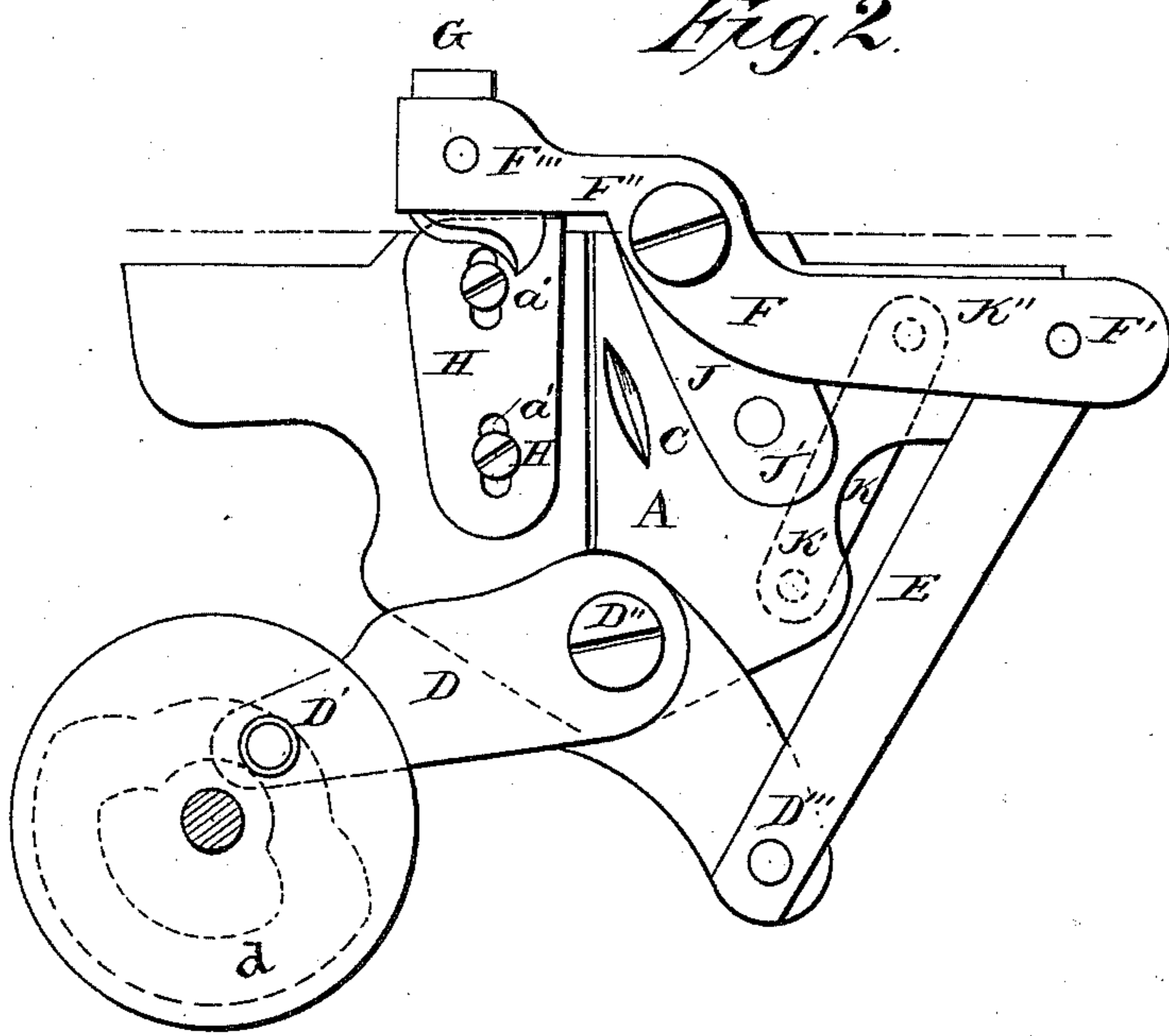
No. 341,790.

Patented May 11, 1886.

*Fig. 1.*



*Fig. 2.*



*Witnesses.*

*F. L. Ourand.*

*George Cornell.*

*Inventor*

*John Bigelow.*

*by L. Deane,*  
*his atty.*

# UNITED STATES PATENT OFFICE.

JOHN BIGELOW, OF PHILADELPHIA, PENNSYLVANIA.

## TRIMMING DEVICE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 341,790, dated May 11, 1886.

Original application filed June 5, 1879. Divided and this application filed November 8, 1881. Serial No. 45,391. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN BIGELOW, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Trimming Devices for Sewing-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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification, this application being a divisional application of original application filed June 5, 1879, and patented August 29, 1882, No. 263,467.

Figure 1 is a side view of the present invention as applied to use on an "American button-hole machine," so called. Fig. 2 is a like view from the opposite side.

This invention relates to trimming devices for sewing-machines, in which two shear-cutting edges—one stationary the other moving or movable—are employed; and the novelty consists, more particularly, in combining with the stitch-forming mechanism of a sewing-machine a shear-trimmer composed of a fixed and a movable cutter, the movable cutter being adjustable and devised to regulate the position of its cutting-edge to the sewing mechanism and to the cutting-edge of the co-operating cutter; and in combining with the stitch-forming mechanism of a sewing-machine a shear-trimmer having a movable blade or cutter and a stationary co-operating cutter, each adjustable independently of the other, so as to regulate the position of the cutting-point relative to the sewing mechanism, the two cutters having their edges held together by spring-pressure; and in combination with the stitch-forming mechanism of a sewing-machine and the movable cutter or blade of a trimming device, a stationary cutter adjustable lengthwise to regulate the position of its cutting-edge relative to the sewing mechanism and to the cutting-edge of the movable cutter; and in the combination, with the stitch-forming mechanism of a sewing-machine and a movable cutter, of a stationary co-operating cutter and a support below the work-plate of the sewing-machine, to which support the said cutter is

secured, said cutter also being adjustable lengthwise, so as to regulate the position of the said cutter to the work-plate and to the movable cutter, substantially as described.

For convenience in describing and explaining my said invention, I have used an American button-hole overseaming and sewing machine; but it is evident that my invention can readily be applied by the exercise of merely mechanical skill to any of the ordinary sewing-machines now in use, and that the adjustable stationary blade need not necessarily come up through the work-plate.

In the drawings, A is the plate which supports the shuttle attachment for plain sewing on an American button-hole machine, as before referred to.

A' is top of table, and L the work-plate. The lower blade, H, is a single and independent piece, and secured to plate A by means of screws which fit into the slots *a' a'* in the lower part of said blade, and is so adjusted that it will come up through the work-plate L just far enough to secure the best results in the operation of the machine. I have now shown this as accomplished by having the upper or cutting end of blade H very slightly above the face of the plate L, and I may thus move this blade H, as above described, from time to time toward the cutting-edge, as may be found necessary to allow for grinding and wear in use. The upper blade, G, is movably attached by means of slot *a* and a set-screw to the end F''' of lever F, which lever rocks at F'' on a stud set in the part J, by the movement of link E, which is jointed to said lever F at F' at one end, and to the rocking lever D at the other end. This lever D receives a rocking motion from cam *d*. By properly timing the movements of the upper blade with the needle-bar the two blades are open when the feeding takes place, and when closing cut or trim the fabric with the descending movement of the needle-bar. A spring, K, (shown as secured at K' to the plate A, and acting on the upper blade-arm at K''), will serve to keep the cutting-edges together and assist in making a draw cut, and cause them to have a shearing action suited to divide knit goods and other textile fabrics. The two blades can be readily adjusted to cut different thicknesses of fabric or be moved out of the way, if at any

time it is desirable to dispense with the cutting attachment.

In the drawings I have shown this machine as cutting in advance of the line of sewing, the two operations being performed almost at the same time; but I make no claim on that feature of this invention in this case, as all that is fully described and claimed in Division A of this same case.

10 Having thus described my invention, what I consider new, and desire to secure by Letters Patent, is—

1. In a sewing and trimming machine, and in combination with the stitch-forming mechanism thereof, a shear-trimmer comprising a fixed and movable cutter, having for its movable cutter a bar or plate provided with the cutting-edge at one end, and being adjustable lengthwise on its carrier, to regulate the position of said cutting-edge relatively to the sewing mechanism and to the cutting-edge of the co-operating cutter, substantially as described.

2. In a sewing and trimming machine, and in combination with the stitch-forming mechanism thereof, a shear-trimmer having a movable cutter or blade, and a stationary co-operating cutter or blade each adjustable independently of the other, to regulate the position of its cutting-edge relatively to the sewing-machine and to the edge of the co-operating cutter, the stationary cutter or blade being formed of a bar or plate with the cutting-edge at one end, and the two cutters having their edges held in contact by spring-pressure, substantially as described.

3. In a sewing and trimming machine, and in combination with the stitch-forming mechanism of the sewing-machine and the movable blade or cutter of the trimming device, a stationary cutter formed of a bar or plate provided with the cutting-edge at one end, and being adjustable lengthwise, to regulate the position of said cutting-edge relatively to the sewing mechanism and to the cutting-edge of the movable cutter, said cutters having their edges held in contact with each other by spring-pressure in cutting, and thereby having a shear action suited to divide knit goods and other textile fabrics, substantially as described.

4. In a sewing and trimming machine, and in combination with the work-plate and stitch-forming mechanism of the sewing-machine, and with the movable cutter of a shear-trimming device, a stationary co-operating cutter formed of a bar or plate and a support below the work-plate, to which support said bar is secured, said bar having the cutting-edge at its upper end and being adjustable lengthwise, to regulate the position of said cutting-edge relatively to the work-plate and stitch-forming mechanism and to the cutting-edge of the movable cutter, substantially as described.

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

JOHN BIGELOW.

Witnesses:

JAS. GREENWOOD,  
JOEL A. SEAL.