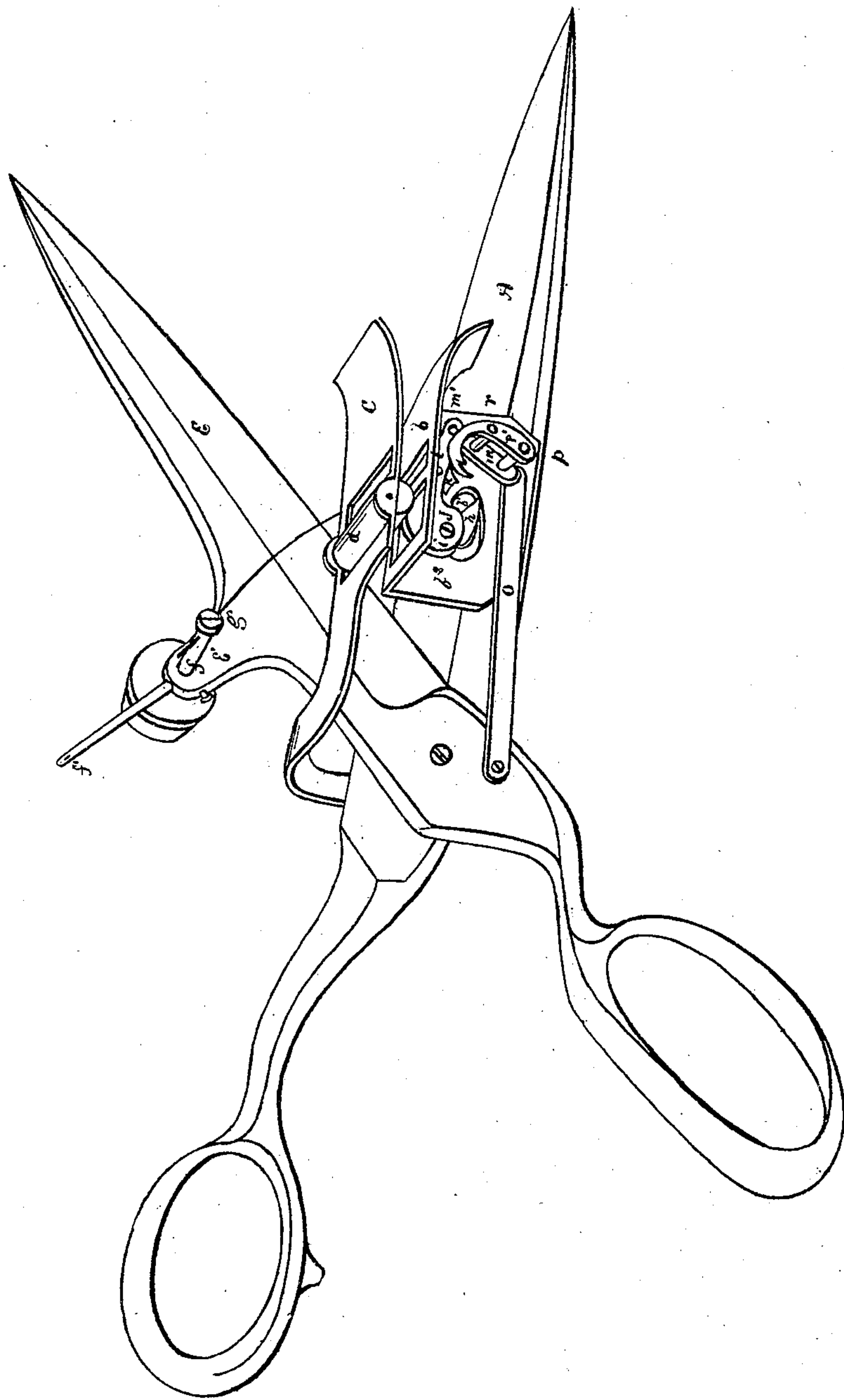


J. L. YOUNG.
SEWING MECHANISM.

No. 109,705.

Patented Nov. 29, 1870.



Witnesses

C. W. Smith
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JOSIAH L. YOUNG, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN SEWING MECHANISM.

Specification forming part of Letters Patent No. 109,705, dated November 29, 1870; antedated November 18, 1870.

To all whom it may concern:

Be it known that I, JOSIAH L. YOUNG, of the city and county of San Francisco, State of California, have invented a certain new and useful Combined Sewing-Machine and Shears; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

My invention relates to sewing devices attached to shear or scissor like blades, and which are operated by the movement of the blades, cuts the fabric and sews or bastes it at once; and my invention consists in certain details of construction, which will hereinafter more fully appear.

In the drawing the figure here represented is in perspective.

To enable others skilled in the art or science to which it most nearly appertains to make and use my invention, I will proceed to describe fully its construction and method of operation.

To the lower arm or blade, A, of the shears I attach plates b b' , between which and the blade I place washers or other plates to provide room for the working of the cam-bar and other mechanism of the machine. The inner plate, b' , is bent at right angles, and is provided with transverse slots for the movement of the needle and a friction-roller. The upper plate, c , is attached to the handle of the lower blade, and is provided with slots corresponding to those of the lower plate and carries the friction-roller d .

I construct the upper blade, e , of less width than that of the lower one, and to it is attached the part e' , which carries the needle and spool for the thread upon an arm, f , which passes through the post which is attached to the edge of the upper blade of the shears. The thread passes through an eye in the pin f' , and the needle and spool arm are movable by turning the set-screw g . A guide-cam, b , is pivoted to the inner plate, b' , around which the pin i , which is attached to the end of the cam-bar J, passes as the machine is operated, and thereby gives a rotary motion to the cam-bar, which latter, by friction, revolves the feed-roller as it

passes the highest point in the cam-circle, a slot being made in the plate b^2 for that purpose. The cam-bar does not feed the cloth, but simply actuates the roller d for that purpose.

Back of this slot is another slot, k , in which a pin, l , with a washer at the end, works to keep the cam-bar in position. The cam-bar is jointed to a link, m , by a pin, m' , and a longer bar or arm, o , is connected to the lower end of this link, with the opposite end pivoted to the handle of the upper blade of the shears. The pin p , upon which the bar and link work, forms a support and working-rod for the looping-hook or lower needle, p' . The hook or needle also works on the pin r , which passes through the plates and lower blade of the shears. This rod, above described, is provided with a thread, which carries the hook to or from the blade or mechanism.

The construction and arrangement of the guide-cam, slotted opening in the plate, cam-arm, and jointed arms are such that the machine works automatically as the blades are moved by the hand of the operator, while the fabric is cut and sewed or fastened on the raw edge. The cloth passes between the upper and lower plates beneath the friction-roller, and the stitch is perfected at the same time the fabric is cut. The upper plate is designed to keep down the cloth and prevent it from being raised by the action of the needle as it passes through the fabric.

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

1. The reciprocating bar J, having pin i and pin l and washer, in combination with the slotted plate b^2 , the guide-cam b , and the roller d , for feeding the material, substantially as specified.

2. The combination, with the cutting-blades A E, of the needle and looper, operating to cut and baste at one operation, as set forth.

In testimony whereof I have hereunto set my hand and seal.

JOSIAH L. YOUNG. [L. S.]

Witnesses:

C. W. M. SMITH,

ISAAC T. MILLIKEN.