

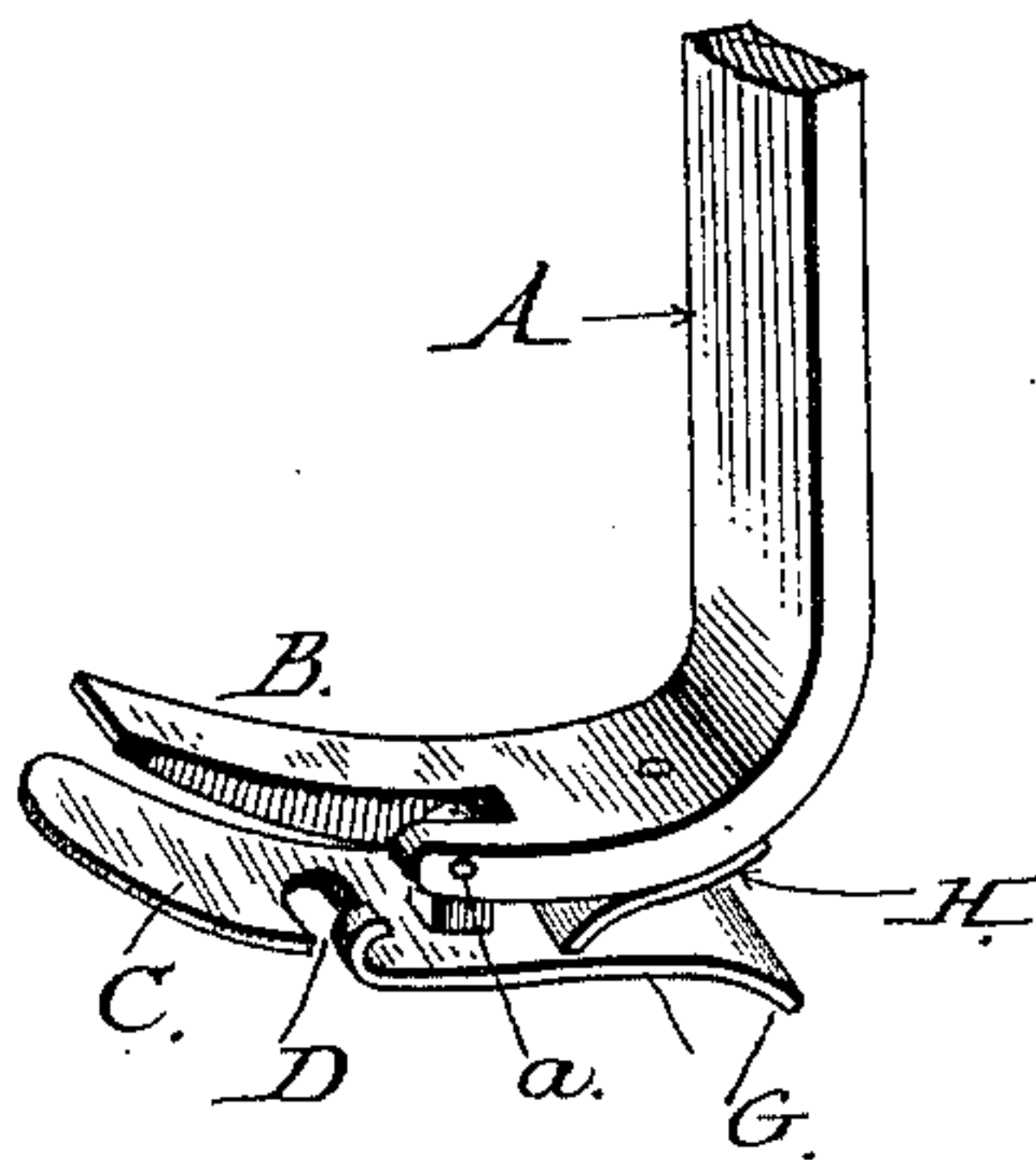
(No Model.)

C. LEAK.

SPRING PRESSER FOOT FOR SEWING MACHINES.

No. 433,130.

Patented July 29, 1890.



WITNESSES

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UNITED STATES PATENT OFFICE.

CRAPO LEAK, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF THREE-FOURTHS TO MONDULA LEAK AND DANIEL V. B. HENARIE, BOTH OF SAME PLACE.

SPRING PRESSER-FOOT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 433,130, dated July 29, 1890.

Application filed May 13, 1889. Serial No. 310,652. (No model.)

To all whom it may concern:

Be it known that I, CRAPO LEAK, of the city and county of San Francisco, State of California, have invented an Improvement in Presser-Feet for Sewing-Machines; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to certain improvements in presser-feet for sewing-machines; and it consists in the improved presser-foot hereinafter fully described and claimed.

Referring to the accompanying drawing for a more complete explanation of my invention, the figure is a view of the presser-foot, showing the improvement attached thereto.

A is the shank of the presser-foot of a sewing-machine, which shank is attached to the machine in any of the suitable or usual ways, and B is the foot projecting to one side from the lower end of the shank, as shown.

C is the attachment, which consists, preferably, of a thin plate of steel or other suitable material, which is attached to the bottom of the presser-foot near the center thereof by a hinge or pivot *a*, the said plate having a groove or notch at D, corresponding with a similar one in the presser-foot through which the needle reciprocates. The point of the extension C curves upward slightly beyond the toe of the presser-foot, and the rear of the plate C is slightly curved downward, as shown at G, so that it acts as a drag upon the goods which are passing beneath the presser-foot, and prevents their moving faster than the machine can stitch them, holding the material back slightly by reason of the downward curvature of the edge G. Interposed between the rear portions of the presser-foot and the plate C, and behind the pivot *a*, is a spring H, which serves to depress the heel portion of the plate and correspondingly elevate the front of the same.

When the presser-foot is resting upon the surface of the goods to be stitched, the operation will be as follows: The spring-actuated plate C presses upon the surface of the goods to be stitched, and whenever it moves from

a thicker to a thinner portion of the goods the spring H yields to enable the front of the plate to instantly follow the outline of the irregularity and continue the pressure upon the lower surface, thus holding it down while the needle continues stitching from the thicker to the thinner material, and keeping it pressed down in place until the body of the presser-foot has followed it off the thicker material. It will be seen that if the presser-foot is without this attachment it maintains the level of the thickest portion of the goods until the whole presser-foot has passed off of the seam or thicker portion, when it can then drop upon the thinner portion; but during this time, and while the needle is taking the few stitches in the thinner portion which is not being held down by the presser-foot, the material is liable to be lifted by the movements of the needle, stitches are dropped, and the needles are sometimes broken by this action, all of which is prevented by this supplemental piece which precedes and follows the needle and thus holds down the thicker and thinner surface at the same time, as above described. In passing from a thinner to a thicker surface a similar action takes place, the flexibility of the attachment serving to hold the goods in place and at the same time yielding sufficiently to allow the presser-foot to pass from the thinner to the thicker portion of the goods. The heel G being turned downwardly the edge presses upon the goods which are passing and holds back slightly against the action of the feed which is moving them forward, thus preventing the goods from being fed forward faster than the needle can stitch them.

The advantage of this device is very great, especially in sewing kid, leather, cloth, or goods of any description where seams, laps, or varying thickness of material occur in the line of the stitching.

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

The combination, with the presser-foot of

a sewing-machine, of the supplemental plate hinged beneath the presser-foot, said plate having the forward portion C, adapted to press upon the goods, and the heel G, the
5 edge of which is turned downwardly, and the intermediate spring, substantially as and for the purpose herein described.

In witness whereof I have hereunto set my hand.

CRAPO LEAK.

Witnesses:

S. H. NOURSE,

H. C. LEE.