

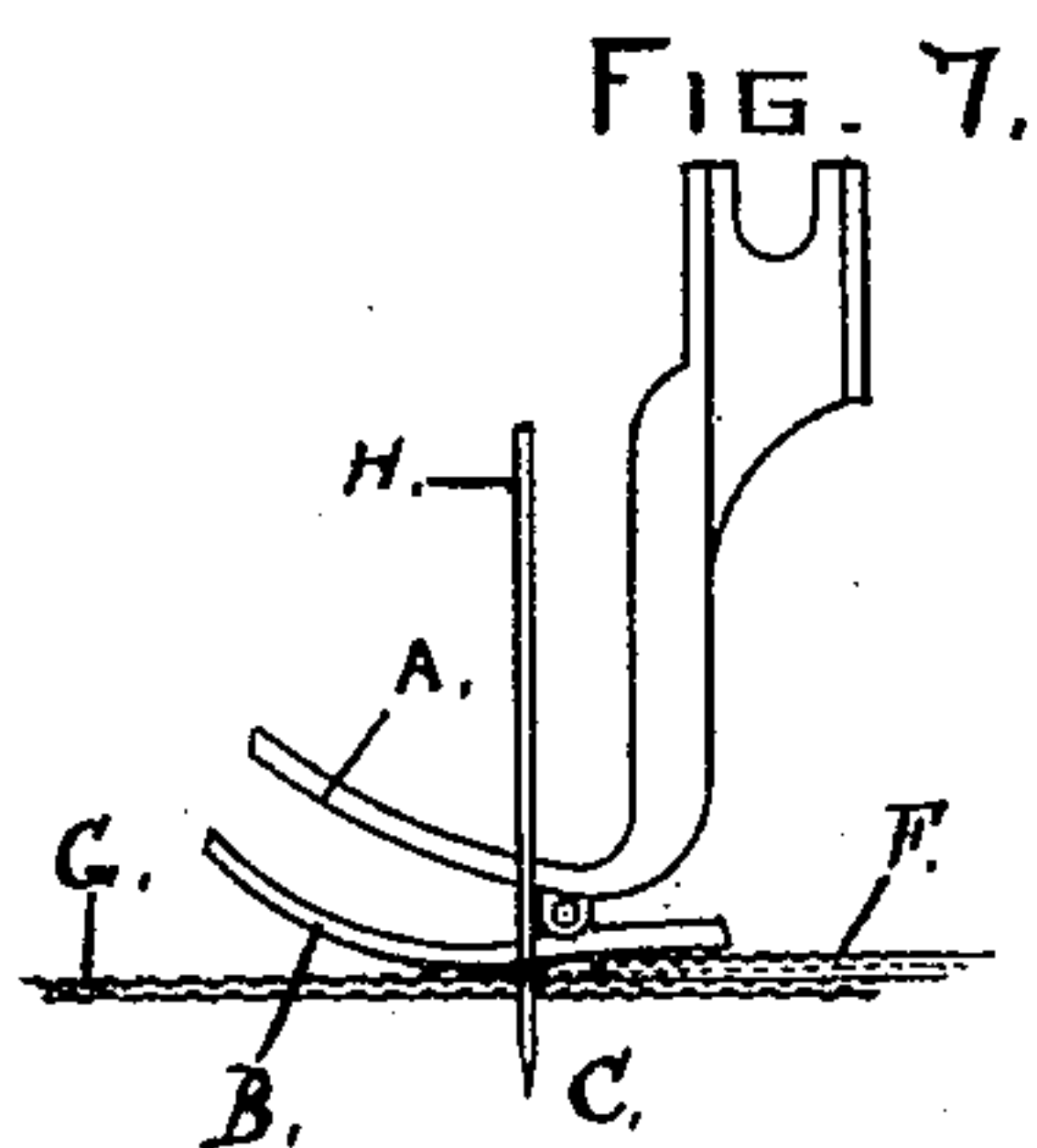
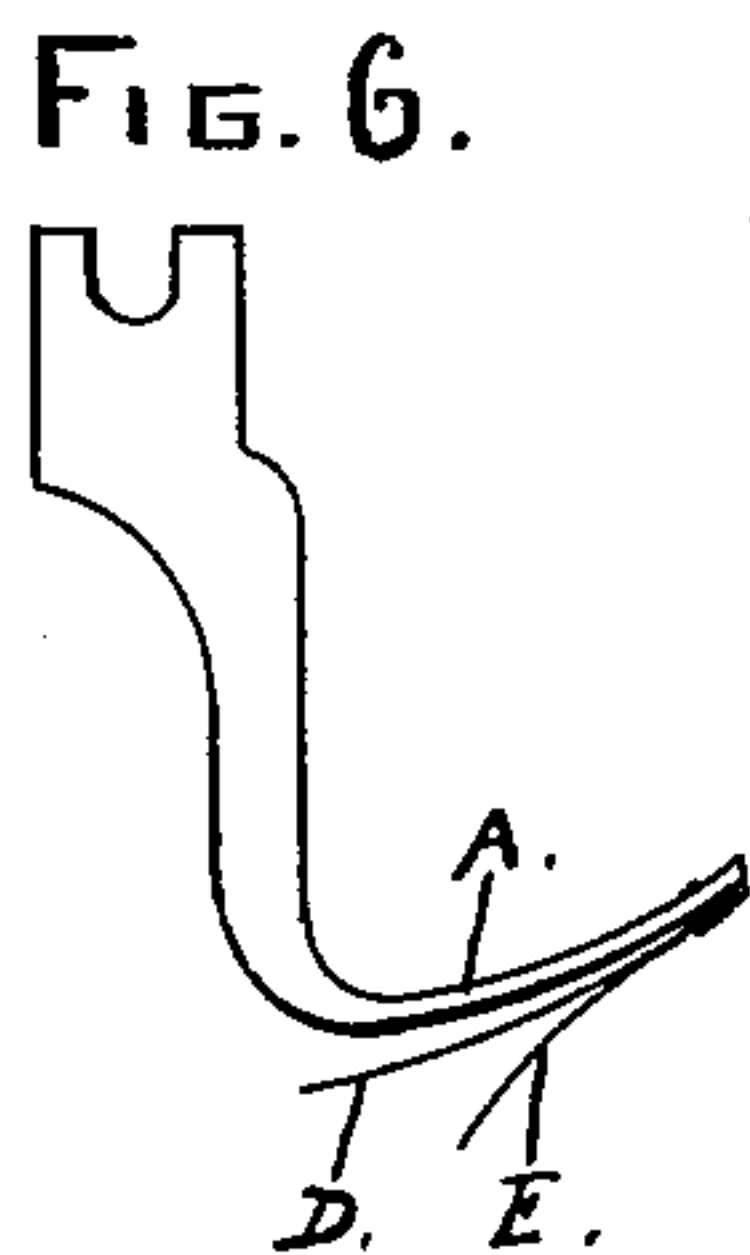
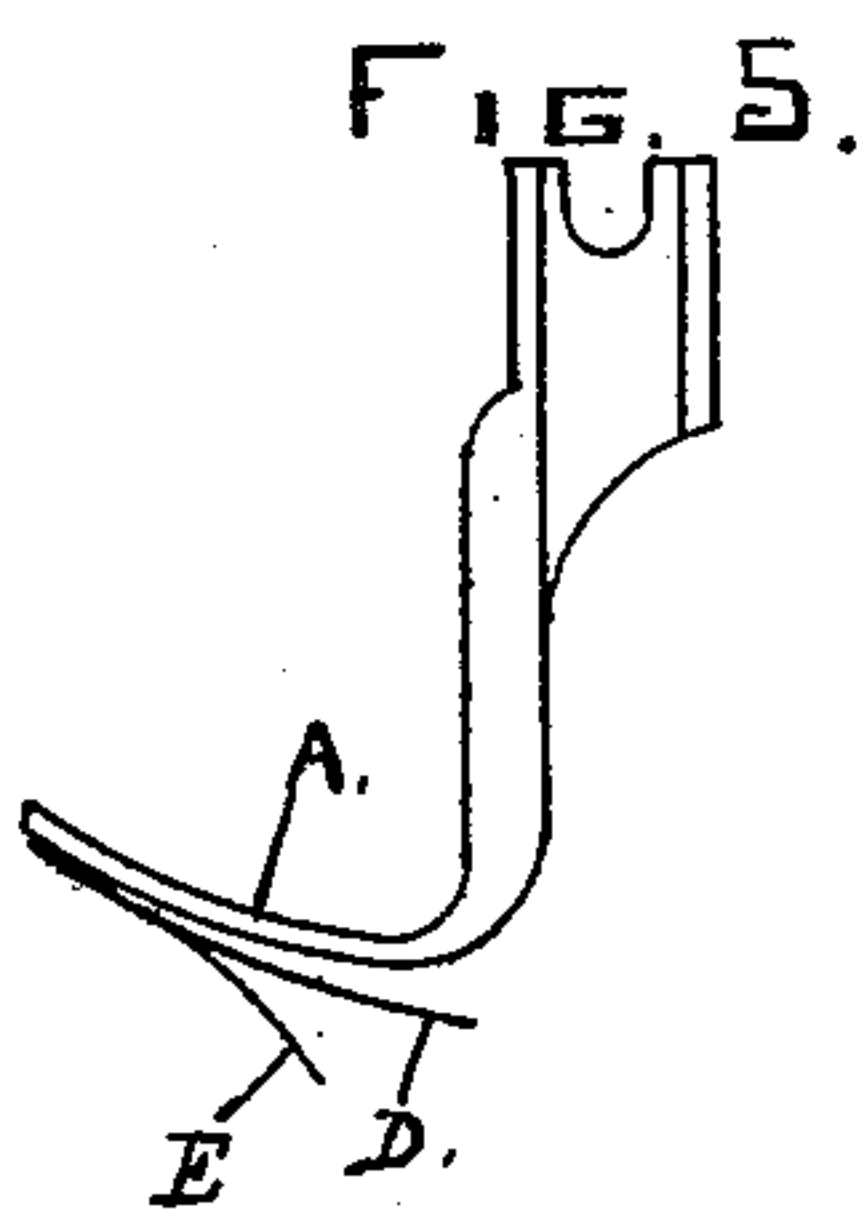
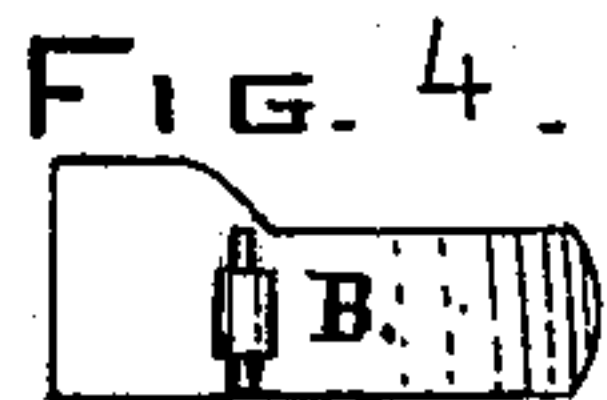
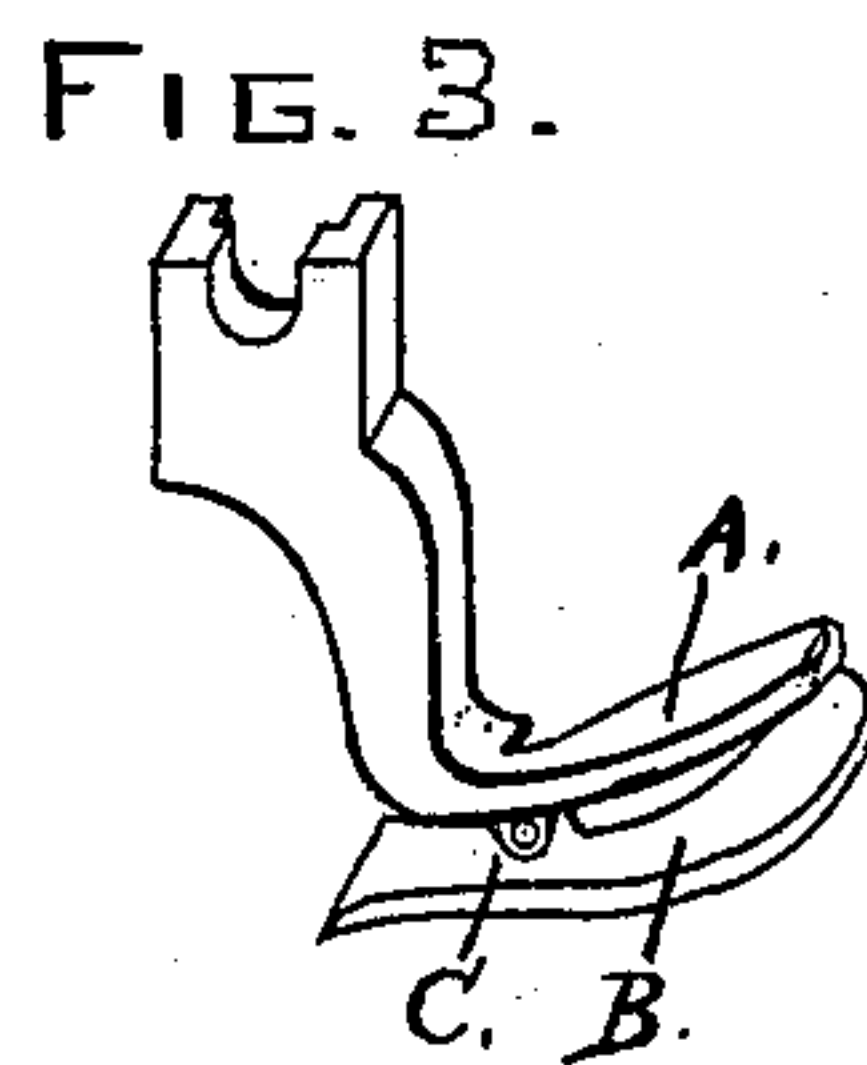
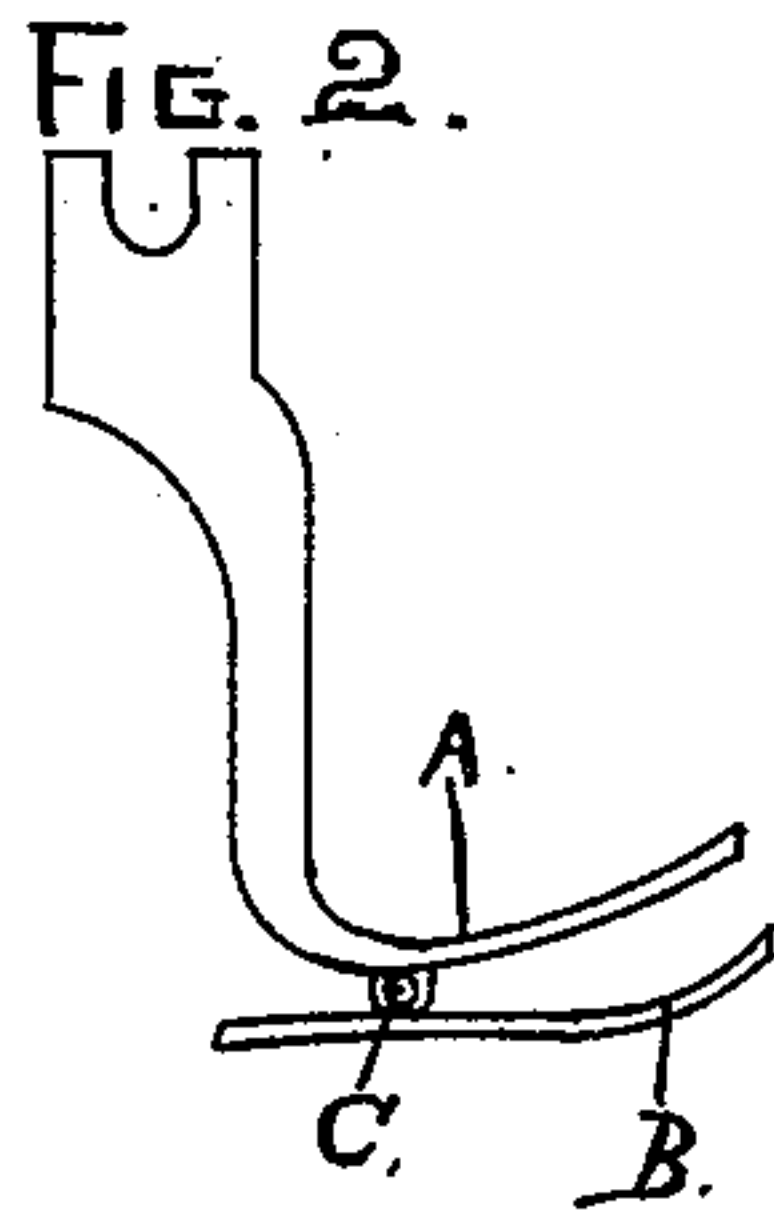
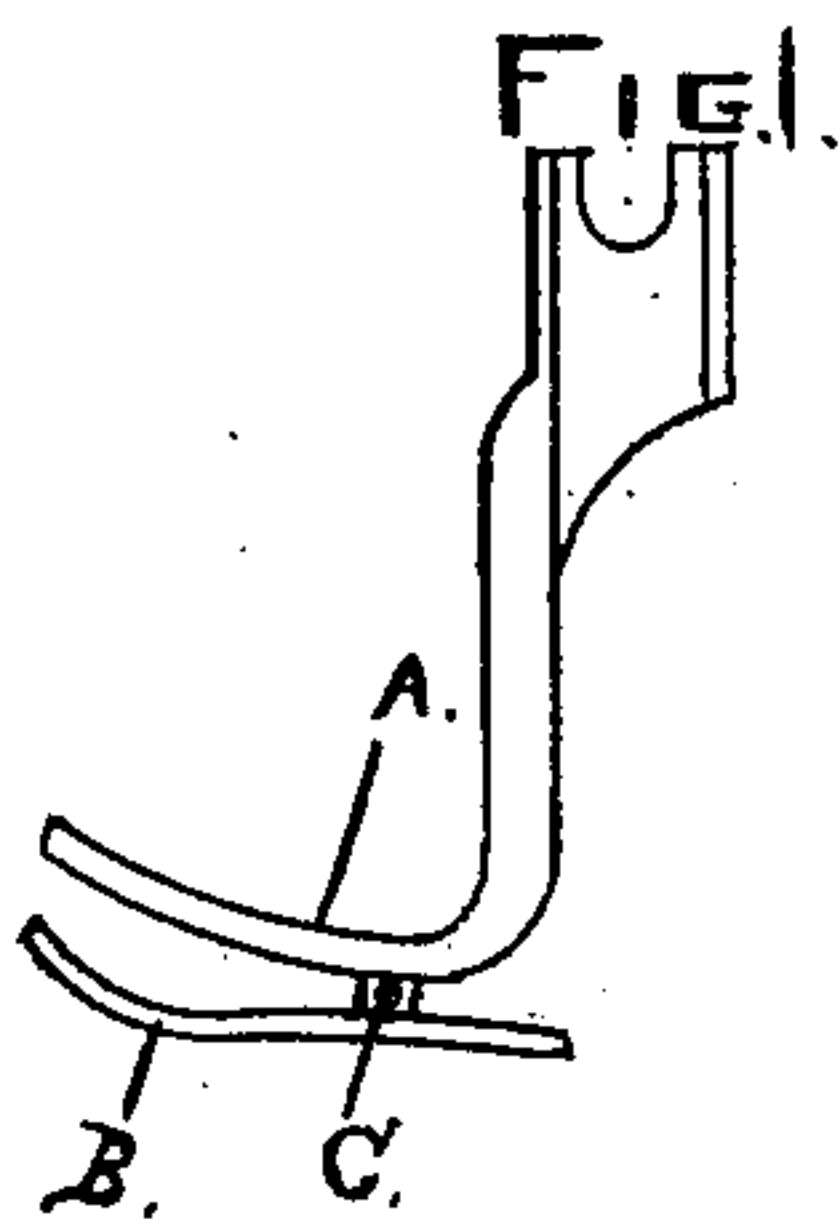
(No Model.)

C. LEAK.

PRESSER FOOT FOR SEWING MACHINES.

No. 390,606.

Patented Oct. 2, 1888.



INVENTOR,

*C. Leak*

ATTEST,

*John H. Redstone*  
*L. E. Redstone*

# UNITED STATES PATENT OFFICE.

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

## PRESSER-FOOT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 390,606, dated October 2, 1888.

Application filed June 15, 1887. Serial No. 241,342. (No model.)

*To all whom it may concern:*

Be it known that I, CRAPO LEAK, a citizen of the United States, residing in the city and county of San Francisco, and State of California, have invented a new and useful Double-Adjusting-Spring Sewing-Machine Foot, of which the following is a specification.

My invention relates to improvements in presser-feet for sewing-machine feed. It will be understood by reference to the accompanying drawings.

Figure 1 is a side elevation of a Singer presser-foot with my improvement attached. Fig. 2 is a reversed view of the same. Fig. 3 is a perspective view of the same, and Fig. 4 is a plan view of my improved attachment detached from the presser-foot. Figs. 5 and 6 are similar views to Figs. 1 and 2, with the foot B substituted by the springs D and E. Fig. 7 is a side elevation showing the operation of my attachment when passing from a thicker to a thinner surface.

The following is the construction and operation of my improvement:

A represents an ordinary presser-foot, such as is employed by the Singer machine; B, my subsidiary self-adjusting presser-foot; C, the pivot or hinge of my self-adjusting presser-foot.

D and E show spring attachments designed to effect the self-adjustment by the elasticity of the springs, thus producing a partial effect which will answer in most cases.

F represents several thicknesses of fabric, and G represents but a single thickness.

As the fabric is passed along under the

presser-foot from a greater number of thicknesses to a single thickness, the hinge C allows the front of the foot to drop down to a bearing upon the lesser thickness of fabric, as shown in Fig. 7, thus securing a holding of the fabric both in front and back of the needle, and in moving in the opposite direction, or from a thinner to a thicker fabric, the heel of the presser-foot remains down upon the thinner until the needle has passed to the thicker amount of fabric, when it returns to a level bearing upon the thicker fabric.

I am aware that it is not new to employ a single spring bifurcated, the branch of the bifurcation serving as a passage for the needle and both branches stop on the same line or point; but I am not aware that any one has heretofore provided a presser-foot with two flat springs, one being of greater length than the other. By this means I am enabled to produce a device at a minimum expense, being able to utilize small pieces of material and avoid the time and labor of slotting them.

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

In presser-feet for sewing-machine feed, the combination, with a presser-foot of a sewing-machine, of two independent springs, D and E, respectively secured thereto upon its under surface, one directly above the other and of unequal lengths, substantially as specified.

CRAPO LEAK.

Witnesses:

JOHN H. REDSTONE,  
L. E. REDSTONE.