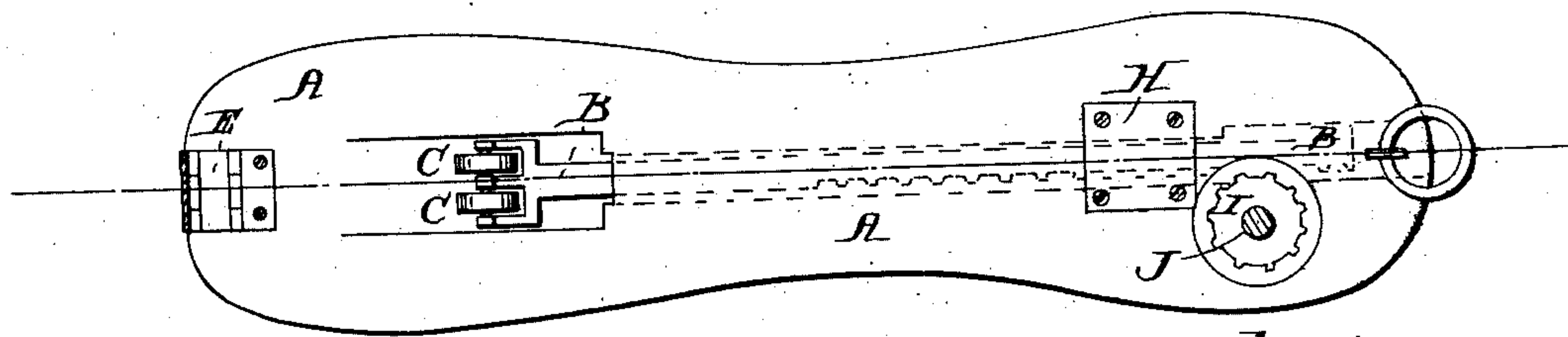
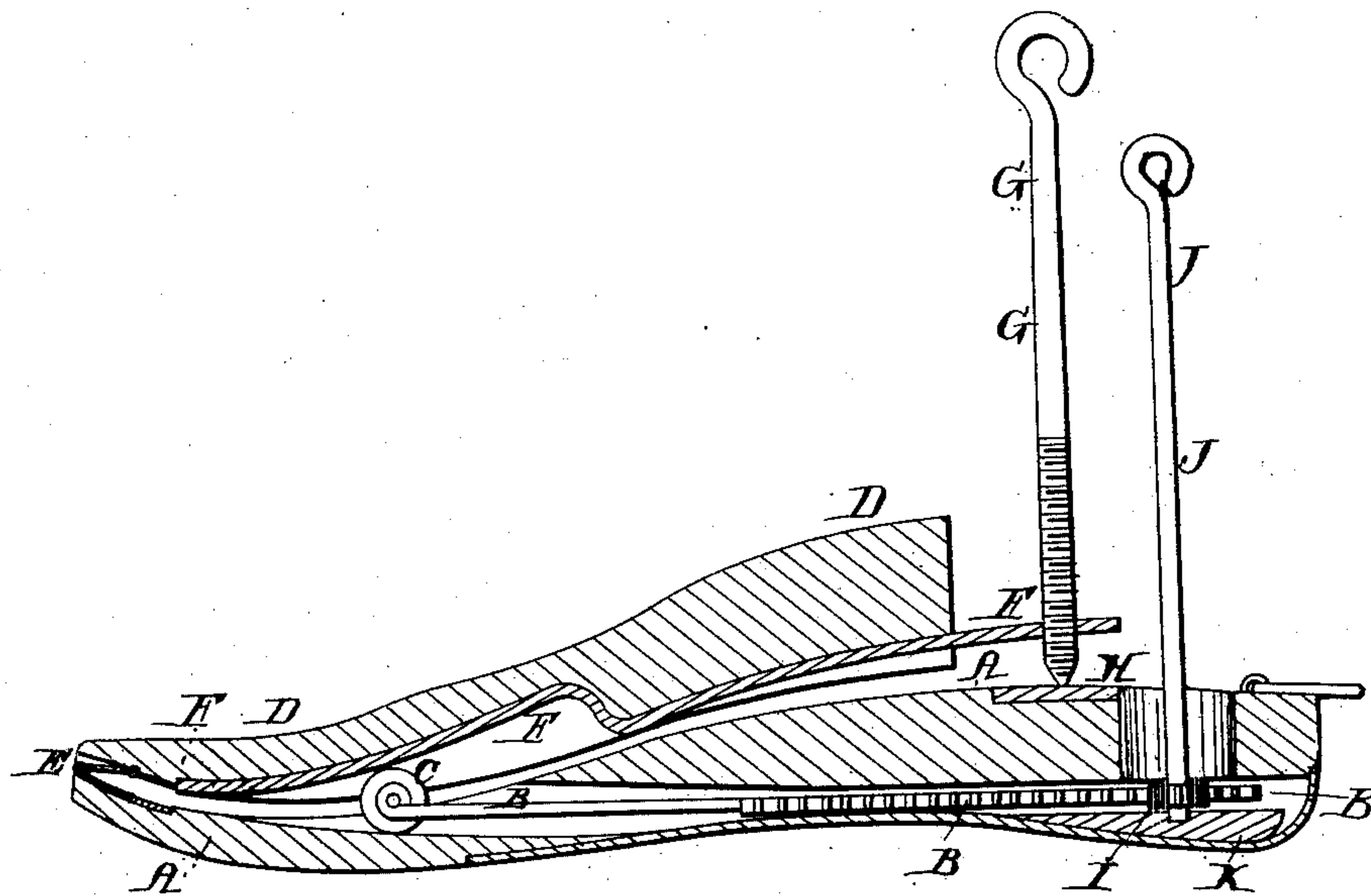


W. Frederick,

Boot Tree,

N^o 55,637.

Patented June 19, 1866.



Inventor;

Witnesses;

Wm. Blainington
Wm. Green

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UNITED STATES PATENT OFFICE.

WILLIAM FREDERICK, OF ASHLAND, PENNSYLVANIA.

IMPROVED BOOT AND SHOE STRETCHER.

Specification forming part of Letters Patent No. 55,637, dated June 19, 1866.

To all whom it may concern:

Be it known that I, WILLIAM FREDERICK, of Ashland, Schuylkill county, State of Pennsylvania, have invented a new and useful Improvement in Boot and Shoe Stretchers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical longitudinal section of my improved boot and shoe stretcher, taken through the line *xx*, Fig. 2. Fig. 2 is a top view of the lower part of the same, the upper part being removed.

Similar letters of reference indicate like parts.

My invention has for its object to furnish an instrument by means of which boots and shoes may be stretched either at the toe or instep or in both places at the same time; and it consists, first, of a stretching-last formed in two parts, hinged together at the toe by a treble-jointed hinge; second, in the combination, with the parts of the last, of a screw-rod and bar, by means of which the rear end of the upper part of the last is elevated and the instep of the boot or shoe stretched; and, third, in the combination of a rod, pinion-wheel, rack, and pulley or pulleys with each other and with the parts of the last, for the purpose of stretching the toe of the boot or shoe, the various parts of the instrument being constructed and arranged as hereinafter more fully described.

The lower part, A, has the general outward form of the lower part of an ordinary last, and it is channeled longitudinally from the heel to near the toe for the reception of the rack-bar B, as shown in Figs. 1 and 2. This bar carries upon its forward end one or more pulleys, C, which, when the rear end of the rack B has been drawn back to the heel of the last, rest in the cavity between the parts A and D. The upper part, D, is hinged to the lower part, A, at the toe, as shown in Figs. 1 and 2, by a treble-jointed hinge, E, so that the said parts may separate vertically in stretching the toes of boots and shoes. In the under side of the forward

part of the part D is formed a cavity gradually decreasing in depth from its rear to its front end. The depth of this cavity at its rear end is such that when the rack B is drawn back the part D may rest upon the part A; but when the rack B is pushed forward the rollers C push the forward ends of the parts A and D apart, stretching the toe of the boot or shoe to any desired extent.

F is a bar or plate attached to the under side of the part D, as shown in Fig. 1, and projecting at the end of said part, as shown. This projecting end of the bar F is perforated and a screw-thread cut in the sides of the hole thus formed.

G is a rod, upon the lower end of which is cut a screw-thread fitting into the screw-thread formed in the bar F. By turning this screw forward the bar is raised along the screw, raising the rear end of the part D and stretching the instep of the boot to any desired extent.

H is a small plate attached to the upper side of the part A, as shown in Figs. 1 and 2, for the end of the screw G to work against when operated.

The rack B is moved forward and back by the pinion-wheel I attached to the rod J, and held forward against said rack by the lower projecting end of the rod J entering a socket formed in the plate K, as shown in Fig. 1.

I claim as new and desire to secure by Letters Patent—

1. An improved boot and shoe stretcher formed in two parts, A and D, hinged together at their forward ends by a treble-jointed hinge, E, substantially as described, and for the purpose set forth.

2. The combination of the rod J, pinion-wheel I, rack B, and roller or rollers C with each other and with the parts A and D of the last, substantially as described, and for the purpose set forth.

The above specification of my invention signed by me this 29th day of March, 1866.

WILLIAM FREDERICK.

Witnesses:

ALEX. F. ROBERTS,
JAMES T. GRAHAM.