

No. 631,236.

Patented Aug. 15, 1899.

F. W. STUART.  
LAST.

(Application filed Apr. 10, 1899.)

(No Model.)

Fig. 1.

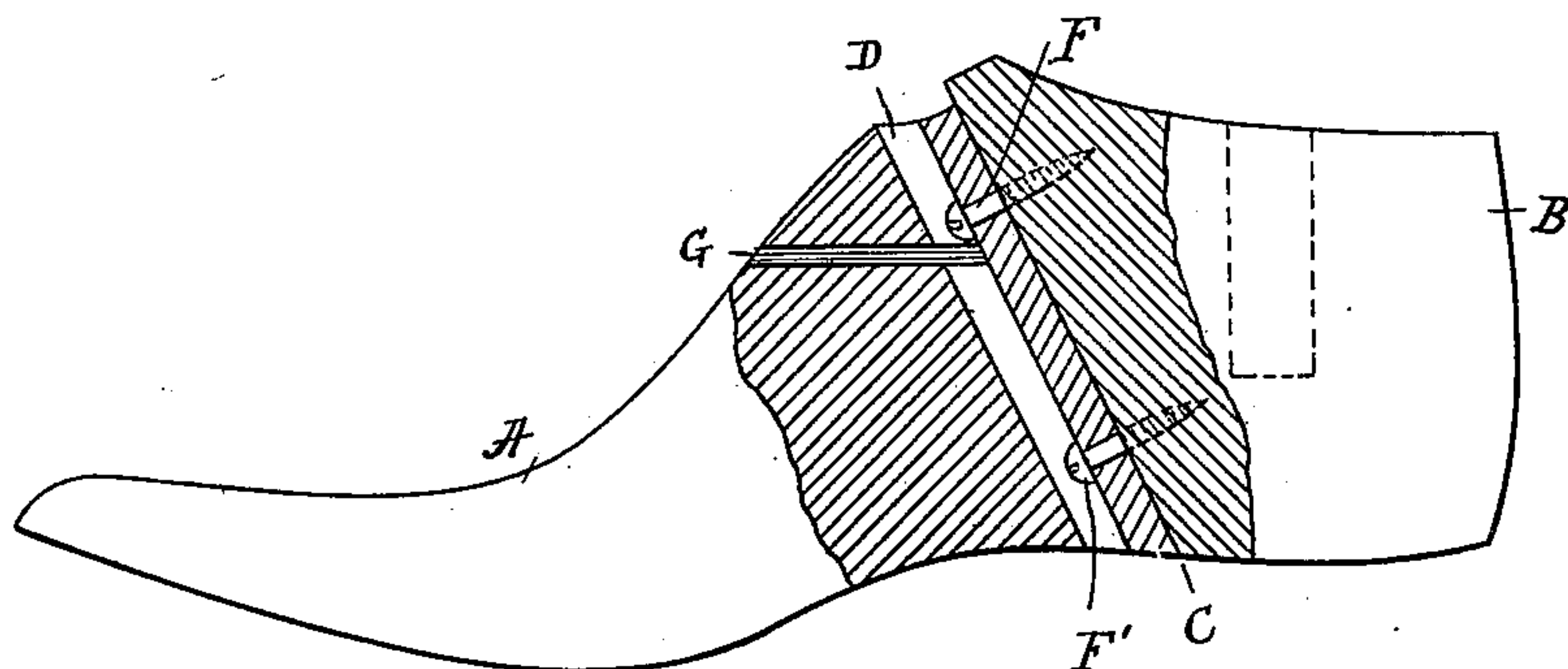


Fig. 2.

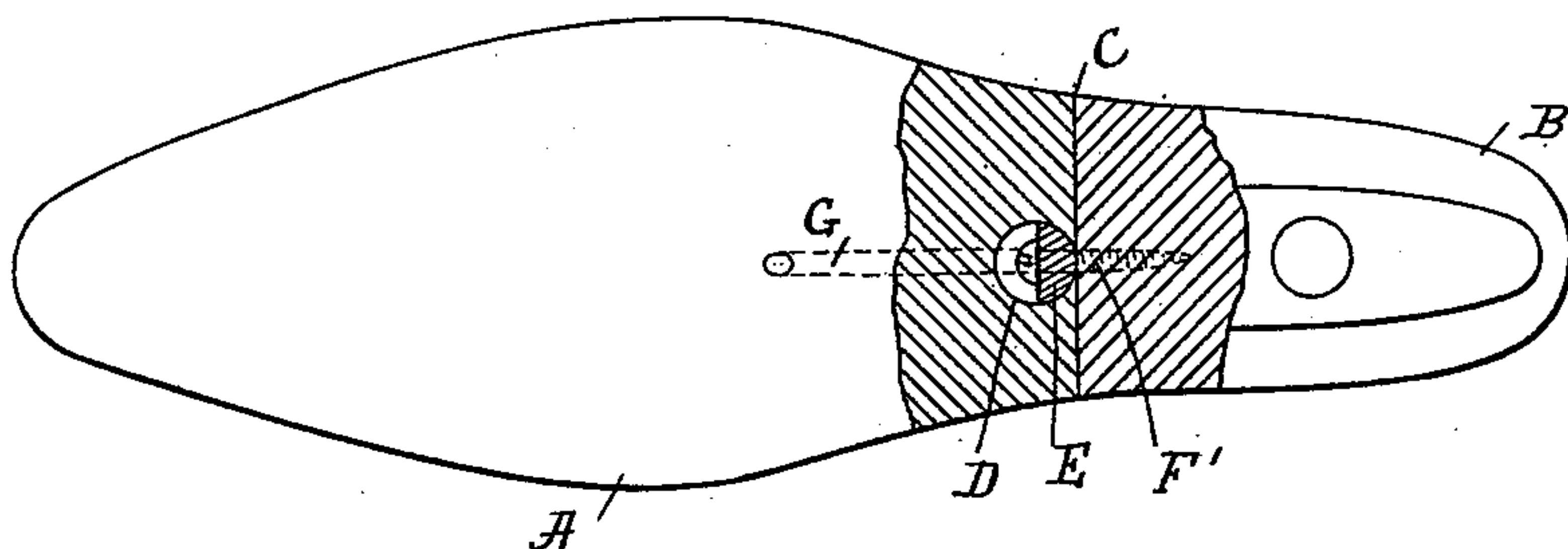
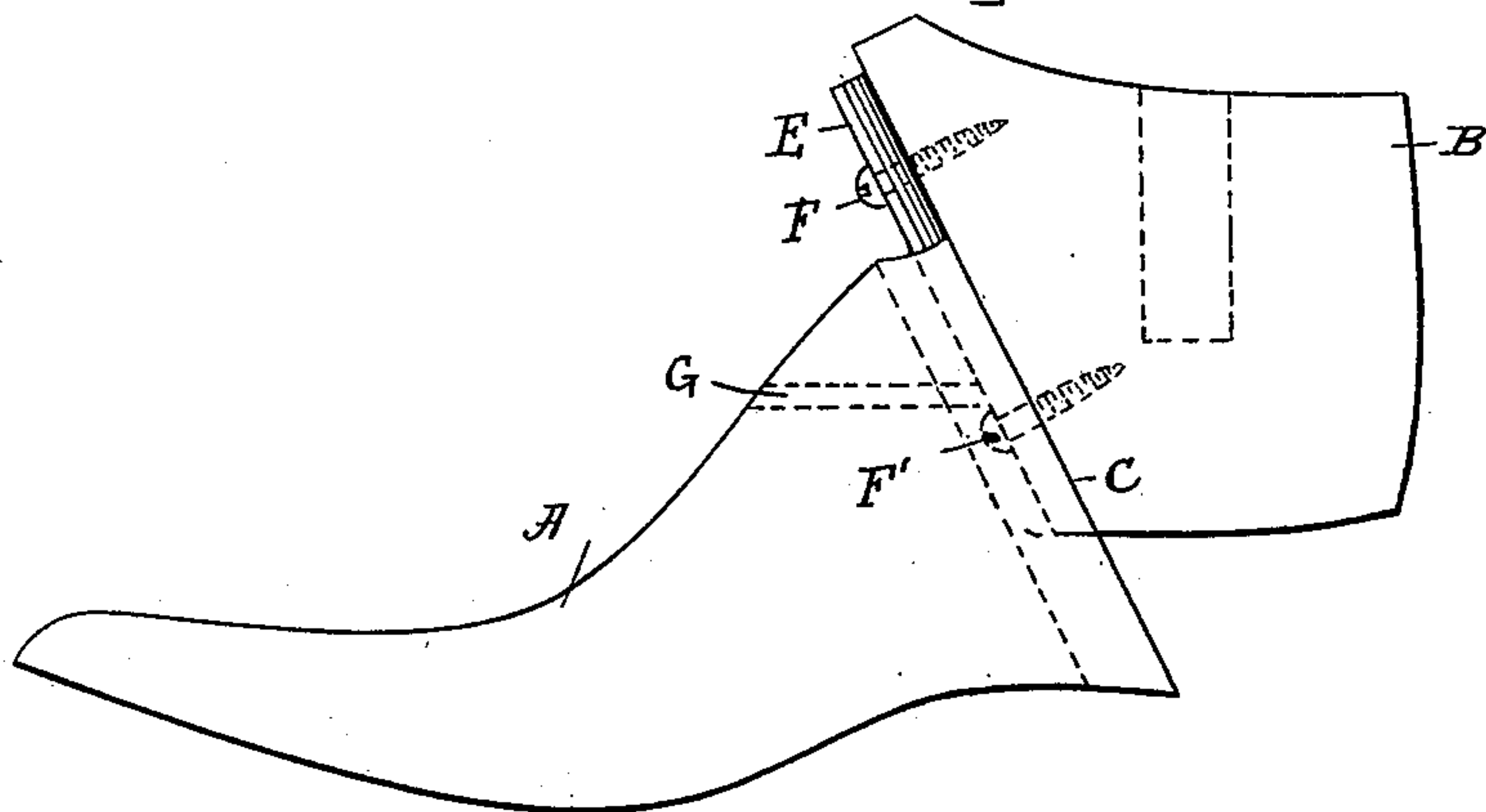


Fig. 3.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## LAST.

SPECIFICATION forming part of Letters Patent No. 631,236, dated August 15, 1899.

Application filed April 10, 1899. Serial No. 712,393. (No model.)

*To all whom it may concern:*

Be it known that I, FRED W. STUART, a citizen of the United States, residing at Beverly, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Lasts, of which the following is a specification.

This invention relates to transversely-divided lasts composed of a fore-part section and a heel section, one of which is movable on an inclined plane relative to the other, so as to cause the heel-section when moved upwardly to move forward sufficiently to shorten the last, and thus enable the boot or shoe to be readily removed from the last.

My present invention consists in a simple and effective device for holding the two parts of the last connected together and a device for limiting the motion of the heel-section relative to the fore-part section, as will hereinafter be more fully shown and described, reference being had to the accompanying drawings, wherein—

Figure 1 represents a partial section and partial side elevation of the last embodying my improvements. Fig. 2 represents a partial top plan and section of the same; and Fig. 3 represents a side elevation of my improved last, showing the heel-section moved upward relative to the fore-part section during the removal of the boot or shoe.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

In the drawings, A represents the fore-part section, and B represents the heel-section, said sections being divided on the inclined plane or bearing-surface C, as shown in the drawings, for the purpose as above set forth.

D is a cylindrical groove formed in the rear end of the fore-part section A and extending from the top to the bottom thereof. This cylindrical groove constitutes, in fact, a dovetail groove and receives a metal bar E, semicylindrical in section and which constitutes a dovetail bar. This bar is secured to the inclined front face of the heel-section B through the medium of the upper and lower pins or screws F F' passing through the bar near its

upper and lower ends and secured in the heel-section. The pins or screws have heads that project into the cylindrical dovetail groove and constitute upper and lower rigid stops adapted to strike the inner end of a fixed stop-pin G, inserted through a horizontal orifice in the top portion of the fore-part section A and having its inner end extending into the groove D between the upper and lower stops formed by the heads of the bar-attaching pins or screws. The said pin G serves as a stop against the upper stop F when the heel-section B is moved downward into its normal position, as represented in Fig. 1, and the said pin G serves as a stop against the lower stop F' when the heel-section B is moved upward to the position shown in Fig. 3, thus allowing adjustment of the said last-sections and preventing their being entirely disconnected from each other.

The invention is very simple in construction, is composed of a very few parts, and can be manufactured at a very small expense as compared with other devices for this purpose.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

1. A last, consisting of the fore-part section having an inclined rear end provided with a dovetail groove, the heel-section having a front inclined face, a dovetail bar on said face for engaging with the dovetail groove, bar-attaching pins passing through the end portions of the dovetail bar into the heel-section and having projecting heads extending into said dovetail groove and constituting upper and lower stops, and a stop-pin rigidly fixed in the fore-part section and extending into said dovetail groove between said upper and lower stops, substantially as described.

2. A last, consisting of a fore-part section having a cylindrical groove in its rear end and an orifice in its top portion, a heel-section, a bar semicylindrical in cross-section arranged on the front face of the heel-section to engage the cylindrical groove, bar-attaching pins passing through the end portions of the bar and having heads projecting into the



cylindrical groove and constituting upper and lower stops, and a pin rigidly fixed in the orifice in the top portion of the fore-part section and extending into said cylindrical groove  
5 between the upper and lower stops, substantially as described.

In testimony whereof I have hereunto set

my hand in presence of two subscribing witnesses.

FRED W. STUART.

Witnesses:

ALBAN ANDRÉN,  
LAURITZ N. MÖLLER.