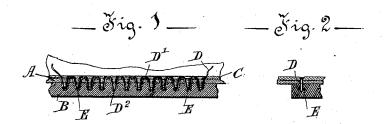
(No Model.)

W. CAREY.

STITCH SEAM CONNECTING LEATHER OR EQUIVALENT STOCK.

No. 422,182.

Patented Feb. 25, 1890.



William Carey
Soy his attorney
Ruskykeruslee,

## UNITED STATES PATENT OFFICE.

WILLIAM CAREY, OF MONTREAL, QUEBEC, CANADA.

## STITCH-SEAM CONNECTING LEATHER OR EQUIVALENT STOCK.

SPECIFICATION forming part of Letters Patent No. 422,182, dated February 25, 1890.

Application filed June 5, 1889, Serial No. 313,243. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CAREY, of the city of Montreal, in the district of Montreal and Province of Quebec, Canada, have invented a certain new and useful Improved Stitch-Seam Connecting Leather or Equivalent Stock, of which the following is a speci-

My invention is designed, mainly, for boots 10 and shoes, but it is applicable to other articles—such as leather harness or garments of thick fabric and to rubber goods—where one piece of the stock is placed upon and joined to another of equal or less thickness, or where 15 more than two pieces of stock of the same or of different kinds are laid one upon another and united. It is an improvement upon the construction shown in Letters Patent of the United States No. 85,891, granted on the 12th 20 day of January, 1869, in which patent the successive stitches are secured on the outside on one face by short pieces of wire or other material drawn against the leather or fabric and embedded therein by the stitch-forming 25 mechanism.

My invention consists in the combination, with two or more layers of stock—such as leather, fabric, or the like—as indicated above, of a line of stitching in alternate loops, one 30 passing through the layer on one outside and the next passing into but not through the layer on the other outside, and of short pieces of stiff linear material—such as wire or bristle—inserted transversely through and 35 wholly within the body of the material and across and within the bight of the loops, whereby the loops are securely held and one face of the stock on the outside is left perfectly unbroken. This is especially desirable 40 in the soles of boots and shoes, to which in the following more particular description I have specially referred, the sole, inner sole, and upper of the boot representing the layers of

stock placed one upon another, and while three of these layers are shown it will be un- 45 derstood that the invention is the same whether used with two or any number of layers, the thread going through the outside layer on one side and into but not through the outside layer on the other.

In the drawings hereto annexed and forming part of this specification, Figure 1 is a section through a boot sole and upper, showing the line of stitching, and Fig. 2 a section taken transversely to the line of stitching.

A is the turned-up edge of the upper, B the sole, and C the inner sole.

D is the continuous thread or wire formed into loops D' D2, passing alternately over the upper or upper and inner sole and down into 60 the sole B, and E E are short lengths of stiff material—such as wire—driven in from the outside through the loops  ${
m D^2}$   ${
m D^2}$ .

It will be seen that by this form of stitch the surface of the sole is left perfectly smooth, 65 and, further, the bit of wire or bristle E, as will appear in Fig. 2, is arranged wholly within the stock B, and the outside face of B, which in this case forms the sole, is not marred by stitching, nor is the stitching or the wire or 70 bristle exposed.

I claim-

In combination with two layers of stock, as C and B, a line of stitches of continuous thread in loops D' D², one D' passing through 75 and over the surface of one of the layers, and the other D2 into but not through the other layer, and stiff pieces of linear material, as E, arranged wholly within the material of the layer B and through the loops D<sup>2</sup>, all sub- 80 stantially as described.
Montreal, 29th day of May, A. D. 1889.

WILLIAM CAREY.

In presence of— OWENN EVANS. FRED. J. SEARS.