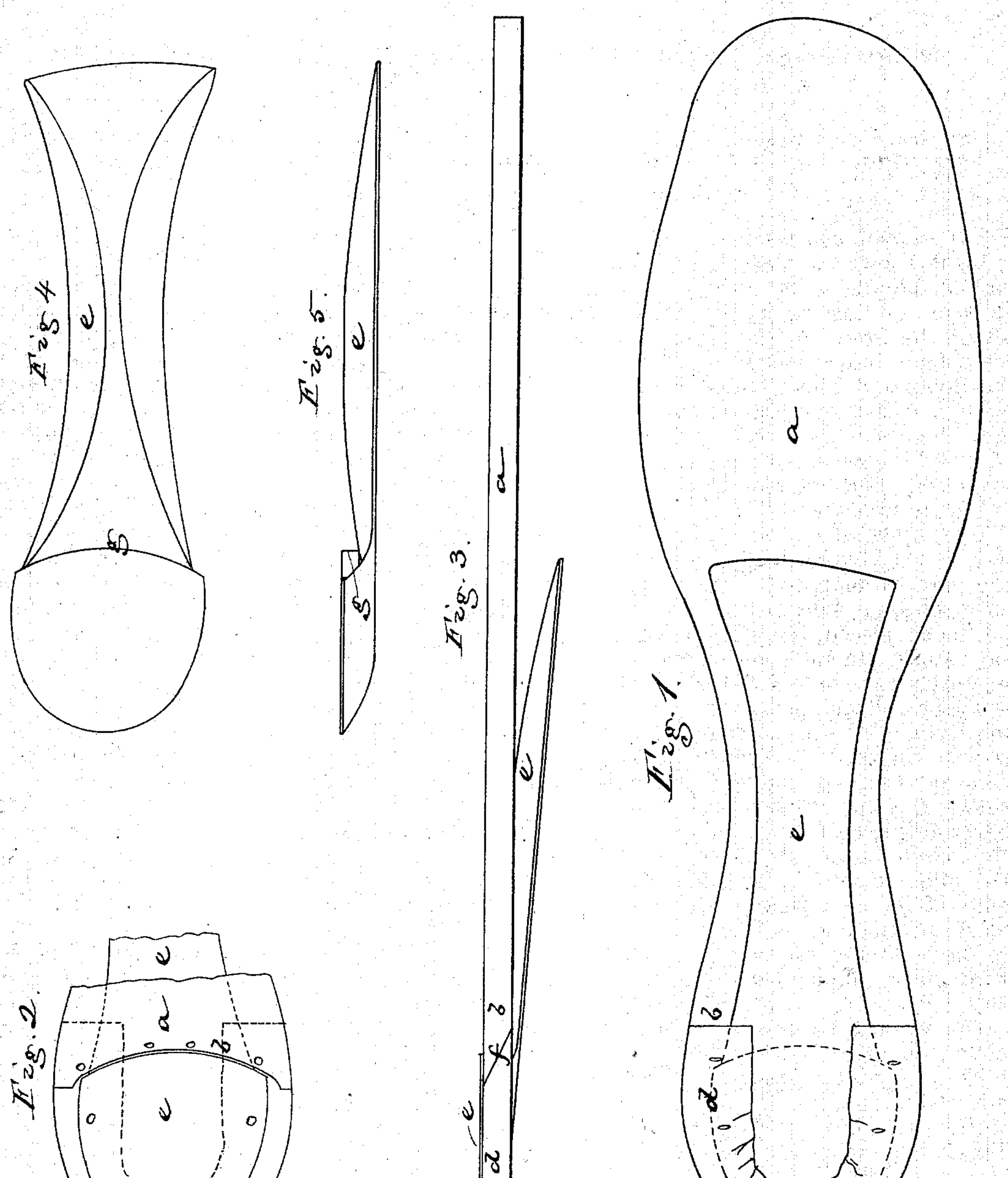
R. PEBBLES & W. H. COWING.

Shortened Soles for Boots and Shoes.

No. 146,276. Patented Jan. 6, 1874.



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UNITED STATES PATENT OFFICE.

RILEY PEBBLES, OF NATICK, AND WALTER H. COWING, OF BOSTON, ASSIGNORS TO THEMSELVES AND GEORGE E. HATCH, OF BOSTON, MASS.

IMPROVEMENT IN SHORTENED SOLES FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **146,276**, dated January 6, 1874; application filed May 6, 1873.

To all whom it may concern:

Be it known that we, RILEY PEBBLES, of Natick, Middlesex county, and WALTER H. COWING, of Boston, in the county of Suffolk, all in the State of Massachusetts, have invented an Improvement in Shortened Soles for Boots and Shoes; and we do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of our invention sufficient to enable those skilled in the art to practice it.

In the manufacture of boots and shoes it has, to some extent, become customary to cut the soles without heel portions, or heel-shortened soles, the soles between the heel and upper being pieced, the soles being thus cut to save stock. In such construction, however, it is always more or less difficult to piece out the sole, and it is an open question as to there being much saving in the end; but in our invention we use the heel-shortened sole for attachment of the rand, and for application of the shank or shank-stiffener, the rand and shank effecting the heel extension, the rand making the contour and adjacent portion and the shank the filling inside of the rand. The opposite ends of the bent rand we tack to the shortened-sole end and the outer end of the shank to the bottom of the rand, the shank passing through the rand-opening to the top of the sole.

Our invention consists in the shortened sole having the rand and the shank thus united.

The drawing represents a sole embodying our construction.

Figure 1 shows the upper side of the sole; Fig. 2, a bottom view thereof. Fig. 3 shows the sole in edge view. Figs. 4 and 5 show, in top and edge view, the shank-stiffener.

a denotes the sole; *b*, the heel end thereof. *d* is the rand; *e*, the shank or shank stiffener or filler. The rand is an ordinary rand, and, being bent and its thin edge crimped in the usual manner, the opposite ends are tacked to the sole by tacks, the sole embracing the rand, being then of the ordinary form of a sole cut in full shape. The rand having been thus applied, the outer end of the shank *e* is tacked to the bottom surface of the rand, as seen in Fig. 2, the shank forming the filling to the rand as well as the stiffening and filling to the shank of the sole. The ends of the rand, and the surface of the sole to which such ends are united, are scarfed, as seen at *f*.

By this construction, we not only effect the saving due to the shortened sole, but we use the sole to attach and hold the rand, and effect the filling by the shank, and connect these respective parts, so that the sole, rand, and shank-stiffener form one complete whole.

For filling the rand and bringing the surface to the plane of the bottom of the sole, the heel end of the shank-stiffener is preferably made approximately semicircular in shape, and with a shoulder, *g*, as seen in Figs. 4 and 5.

We claim—

A shortened sole having shank-stiffener *e*, shouldered to form the rand-filling, and applied as set forth.

Executed this 23d day of April, A. D. 1873.

RILEY PEBBLES.
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Witnesses:
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