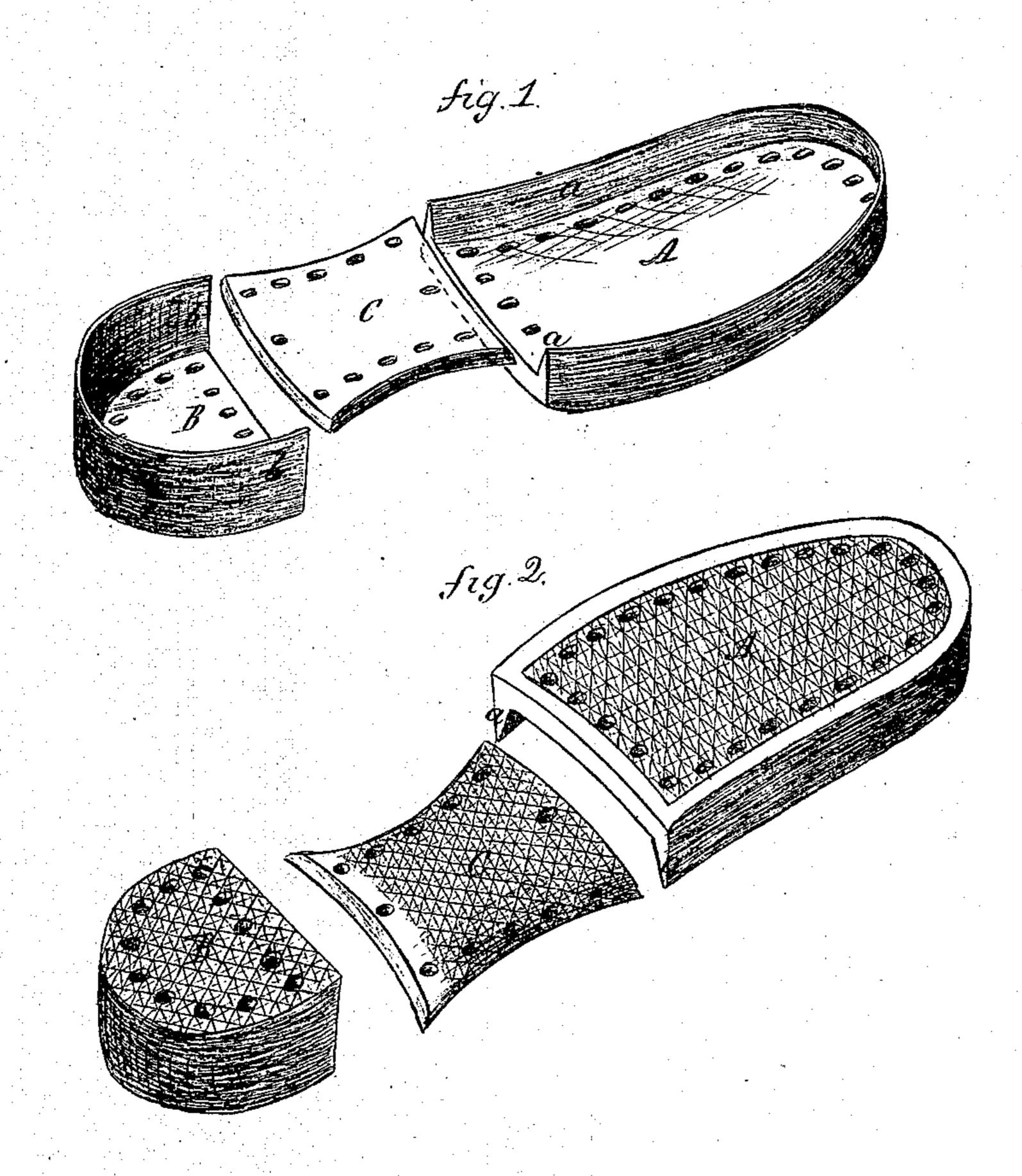
J. Phindelfold,

Stoe Sole.

NO. 104.643.

Fateriled Suite 21.1870.



Witnesses. D. Holhumory a. J. Tillet

James Tunderford
Inventor

By his Attorney

The Carl

Anited States Patent Office.

JAMES PUNDERFORD, OF NEW HAVEN, CONNECTICUT.

Letters Patent No. 104,643, dated June 21, 1870.

IMPROVED METAL SOLE FOR BOOTS AND SHOES.

The Schedule reserred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JAMES PUNDERFORD, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Metal Soles for Boots and Shoes; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in-

Figure 1, a perspective view of the sole, and in Figure 2, a perspective view of the same inverted.

This invention relates to an article of manufacture for the protection of soles for boots and shoes, especially for miners' use, but alike applicable for other laboring men, and consists in a metal sole with a flange extending up around the edge so as to close on the leather sole and protect the edge and the upper of the boot, and with or without a similar metal shank

and heel. A is the sole, formed of the shape required to correspond to the sole of the boot, and with a flange, a, -around its edge, so that the sole of the boot will fit into the metal sole, and the flange serve to protect the edge, and at the same time to sustain and prevent

the easy removal of the metal sole. The metal sole is secured by nails or screws through perforations in the metal sole, as shown in the drawing.

B is the heel, with a flange, b, of similar construction to the sole. It is applied to the heel and secured

in the same manner as described for the sole.

C is the shank, cast and fitted to the shank of the boot, and is particularly useful for such laborers as use the shank of the boot in shoveling.

While I prefer to make these soles from cast metal, first, because it is cheaper, and, second, because more durable, they may be struck up from sheet metal.

I do not wish to be understood as broadly claiming a metal sole for boots and shoes, as such, I am aware, is not new.

I claim as my invention—

As an article of manufacture, the metal sole A, provided with the flange a, and so as to be secured to the sole of the boot or shoe, substantially as described, and with or without the heel or shank. JAMES PUNDERFORD.

Witnesses:

A. J. TIBBITS, J. H. SHUMWAY.