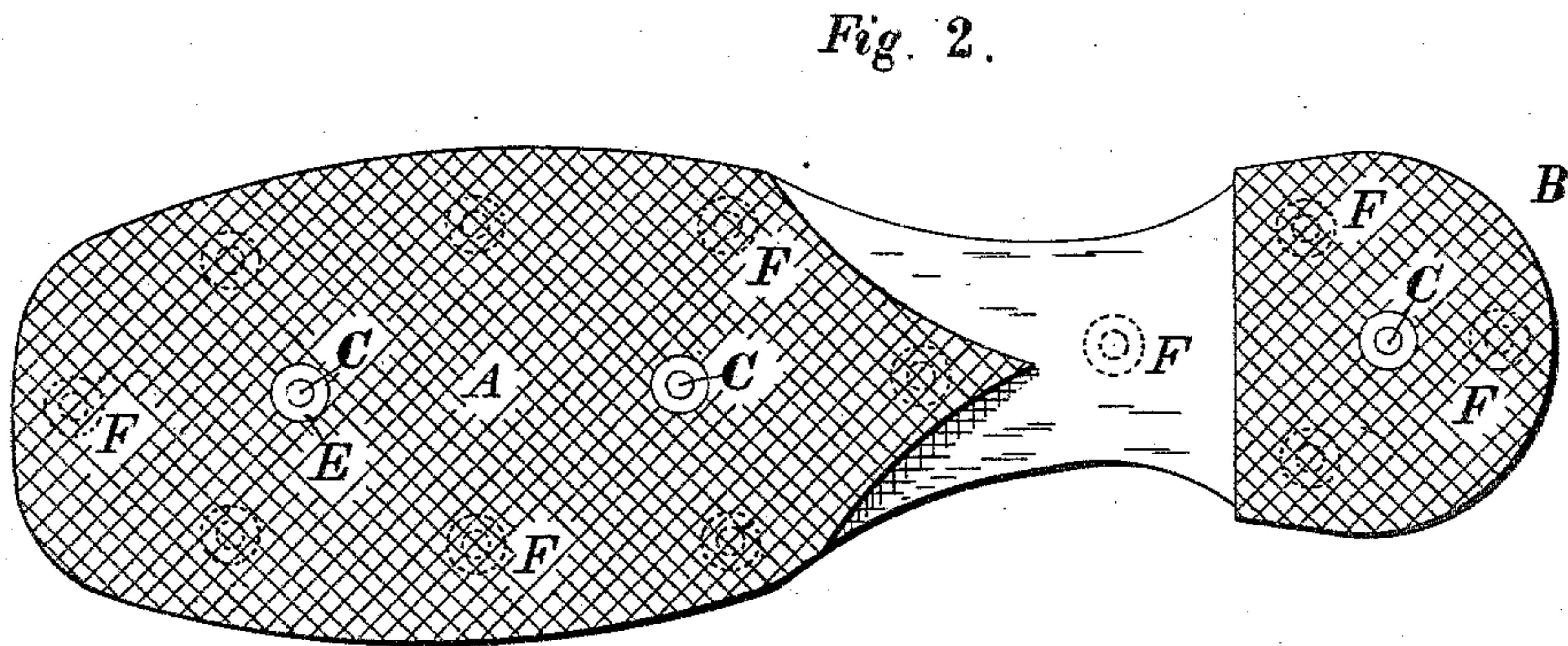
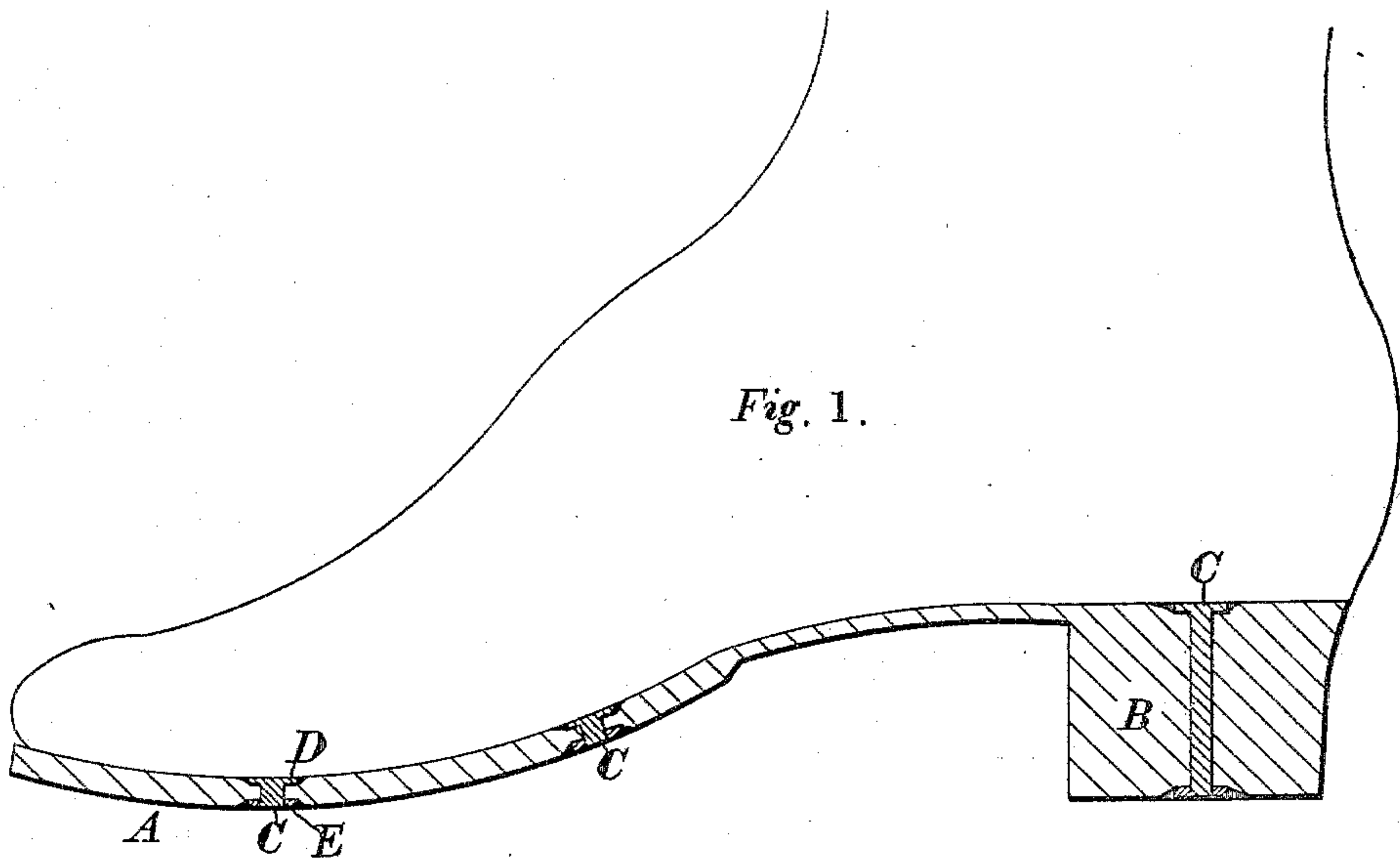


(No Model.)

C. S. UPTON.
RUBBER BOOT OR SHOE.

No. 304,050.

Patented Aug. 26, 1884.



WITNESSES=

H. G. Phillips,
H. H. Schleber.

INVENTOR=

Chas. S. Upton,
by Geo. B. Selden,
Atty-
[Signature]

UNITED STATES PATENT OFFICE.

CHARLES S. UPTON, OF ROCHESTER, NEW YORK, ASSIGNOR TO HIMSELF AND
JOHN H. GORDON, OF SAME PLACE.

RUBBER BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 304,050, dated August 26, 1884.

Application filed May 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. UPTON, of Rochester, Monroe county, New York, have invented certain Improvements in Rubber Boots and Shoes, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to certain improvements in rubber boots and shoes, which improvements are fully described in the following specification, and the novel features thereof specified in the claim annexed thereto.

My improvements in rubber boots and shoes are illustrated in the accompanying drawings, in which—

Figure 1 is a central longitudinal section of a rubber boot or shoe embodying my invention. Fig. 2 represents the sole.

One of the objections to the use of rubber boots and shoes which has been heretofore encountered, consists in the fact that the rubbers form, as it were, tight non-conducting jackets about the feet, and the radiation and dissipation of the heat being prevented, the feet become unduly or abnormally warm, and, consequently, there is excessive perspiration. The rubbers also confine the perspiration, so that many persons refuse entirely to wear rubbers during the most inclement weather.

My invention has for its object the prevention of the above difficulties; and it consists in providing the soles of rubber boots and shoes with metallic rivets or studs having enlarged ends at both the interior and exterior of the soles, so that a comparatively large surface is exposed for the absorption of heat from the interior of the shoe, and for its radiation or conduction at the exterior surface, thereby carrying away the excess of heat, reducing the temperature of the interior of the rubbers, and rendering the wearing of rubbers much more pleasant and healthful than it has been heretofore.

In the accompanying drawings, A is the sole of a rubber boot or shoe through which there

are inserted the metallic rivets C, having enlarged ends or flatted heads D, inside of the sole, and burrs or collars E on the outside, forming enlarged ends on each end by which the excess of heat is absorbed and dissipated. I prefer to make the rivets of copper on account of the high conductivity of this metal. The number of rivets may be proportioned to the size of the boot or shoe, according to the judgment of the manufacturer. The rivets through the heel of the boot or shoe prevent the heel from coming off, which is an accident of very frequent occurrence. The rivets may be arranged in different ways, as represented by the dotted circles in Fig. 2, to attain the desired end. The burrs or collars are preferably placed outside of the sole, as the operation of riveting is thereby facilitated. The rubber immediately around the rivet is more or less compressed, so that the surface of the enlarged ends of the conductors is brought flush or nearly flush with the inside and outside of the sole, thereby securing a tight joint about the rivets.

I have demonstrated by a prolonged trial the practical value of my invention. Rubber boots and shoes provided with my improvement are much more comfortable and agreeable to wear than those without it, and the objections to the ordinary rubbers arising from the confinement of the heat and the retention of the perspiration are entirely obviated.

I claim—

As an improved article of manufacture, a rubber boot or shoe having a single sole provided with a series of metallic rivets extending entirely through the sole, and having enlarged ends on the inside and outside thereof, adapted to conduct the heat from the interior to the exterior of the boot or shoe, substantially as and for the purposes set forth.

CHARLES S. UPTON.

Witnesses:

GEO. B. SELDEN,
H. G. PHILLIPS.