

T. C. WALES.
MANUFACTURE OF WATERPROOF VULCANIZED RUBBER AND CLOTH
GAITER SHOES.

No. 19,269.

Patented Feb. 2, 1858.

Fig. 1.

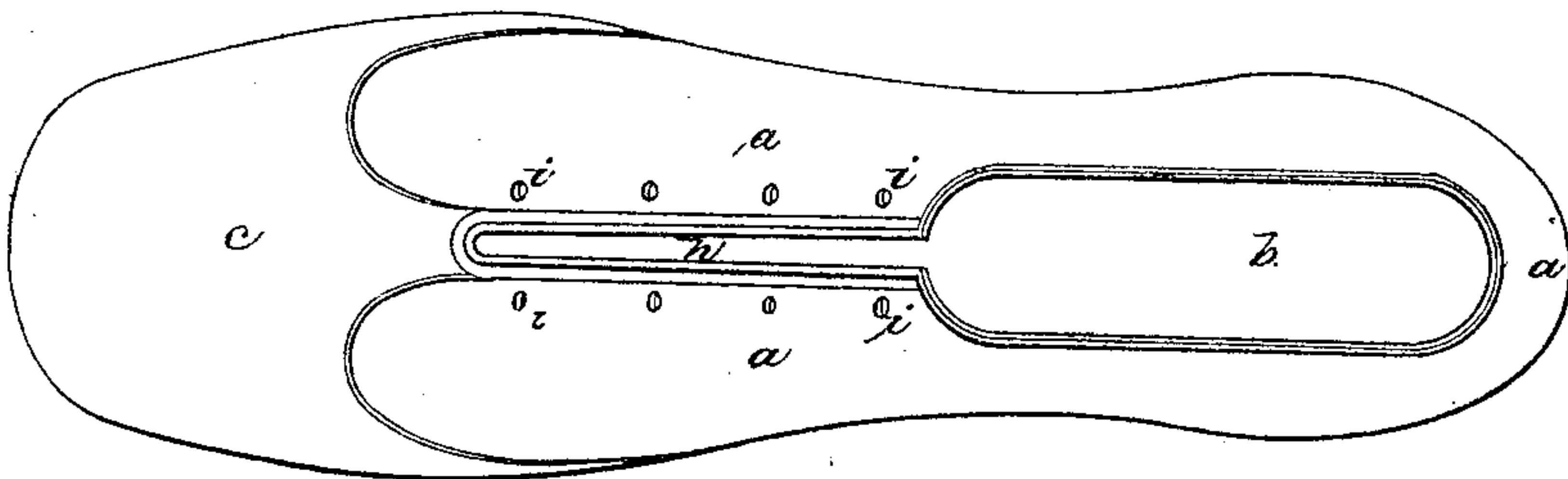


Fig. 2.

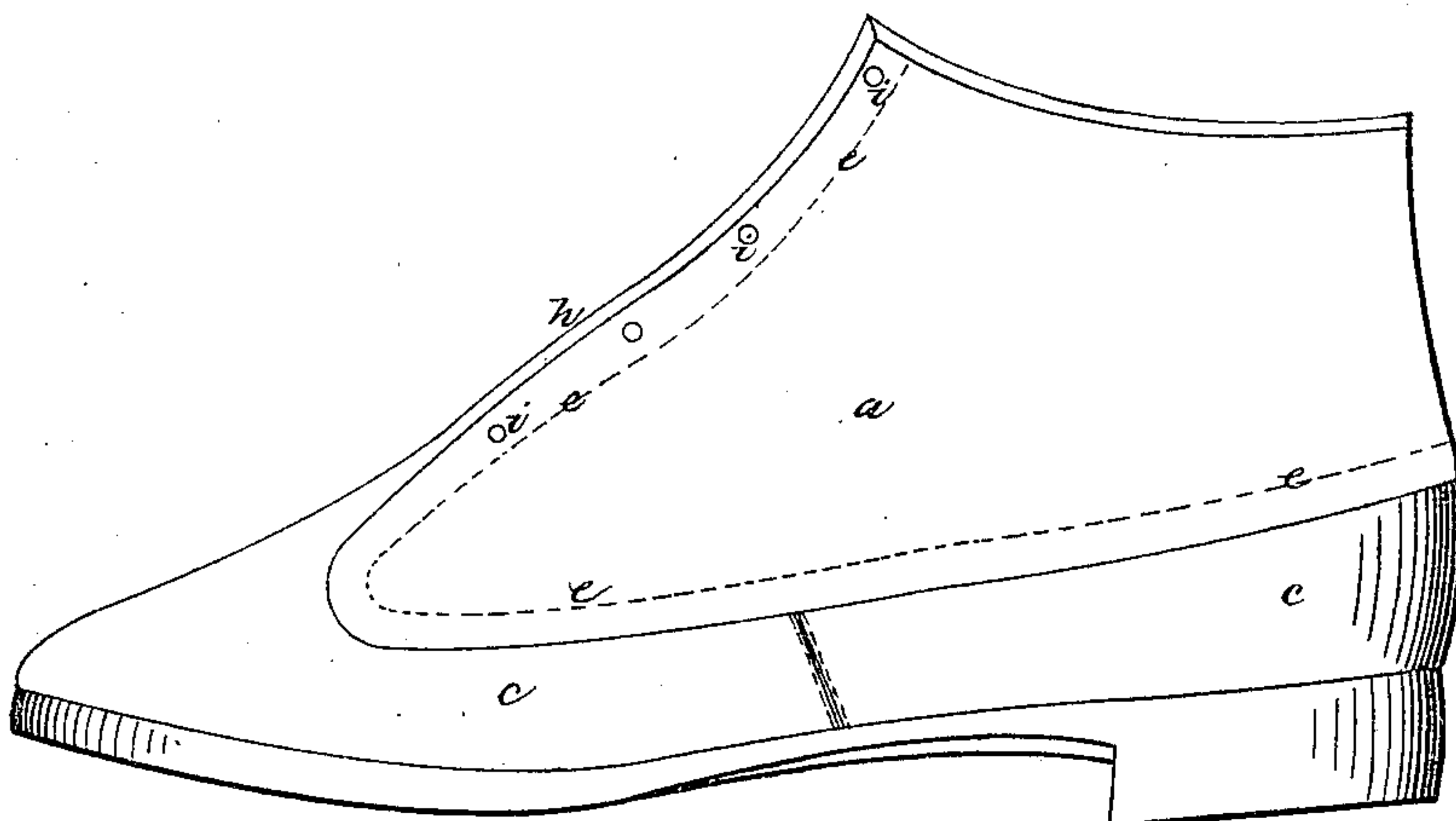


Fig. 3.

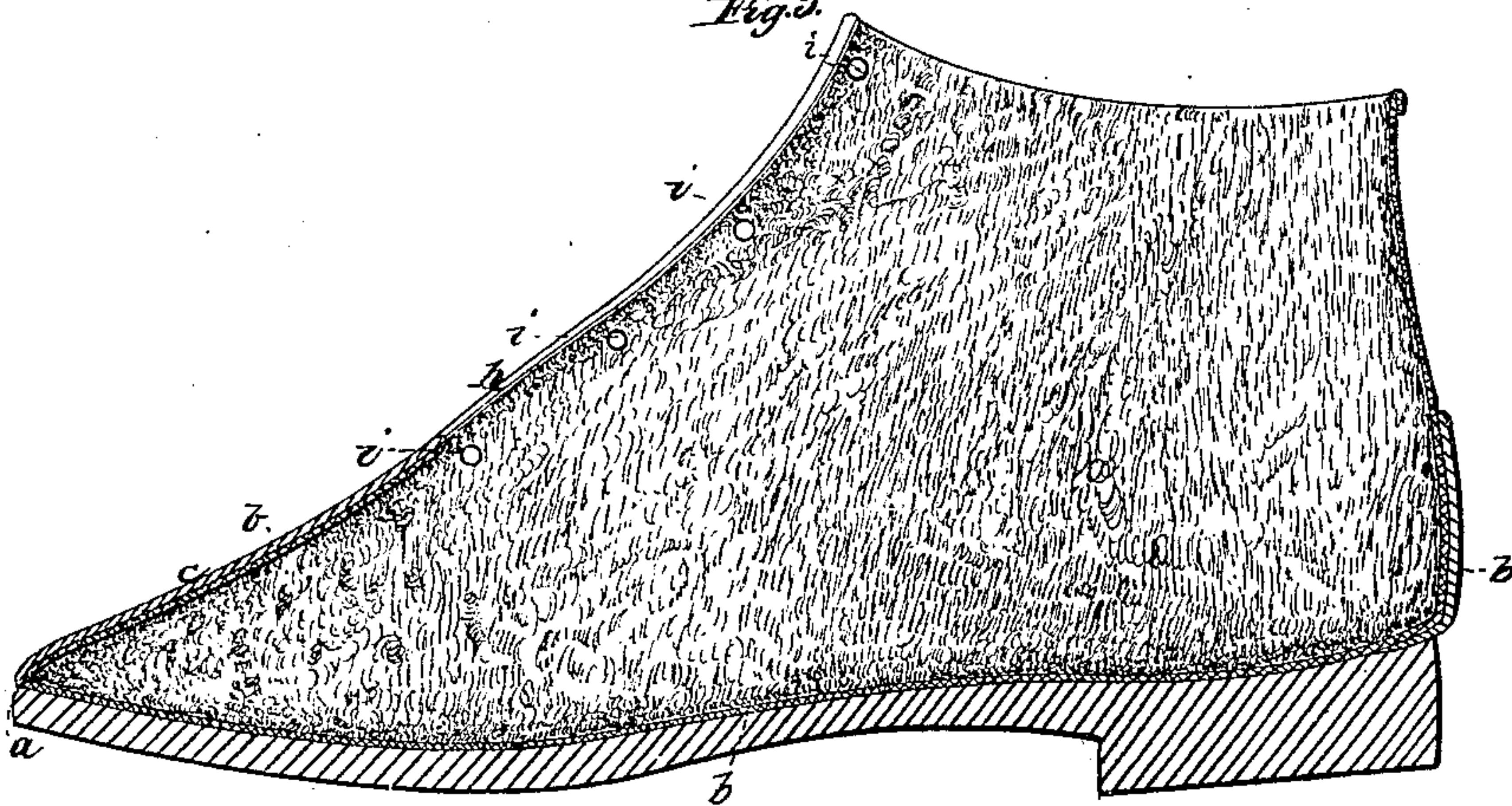
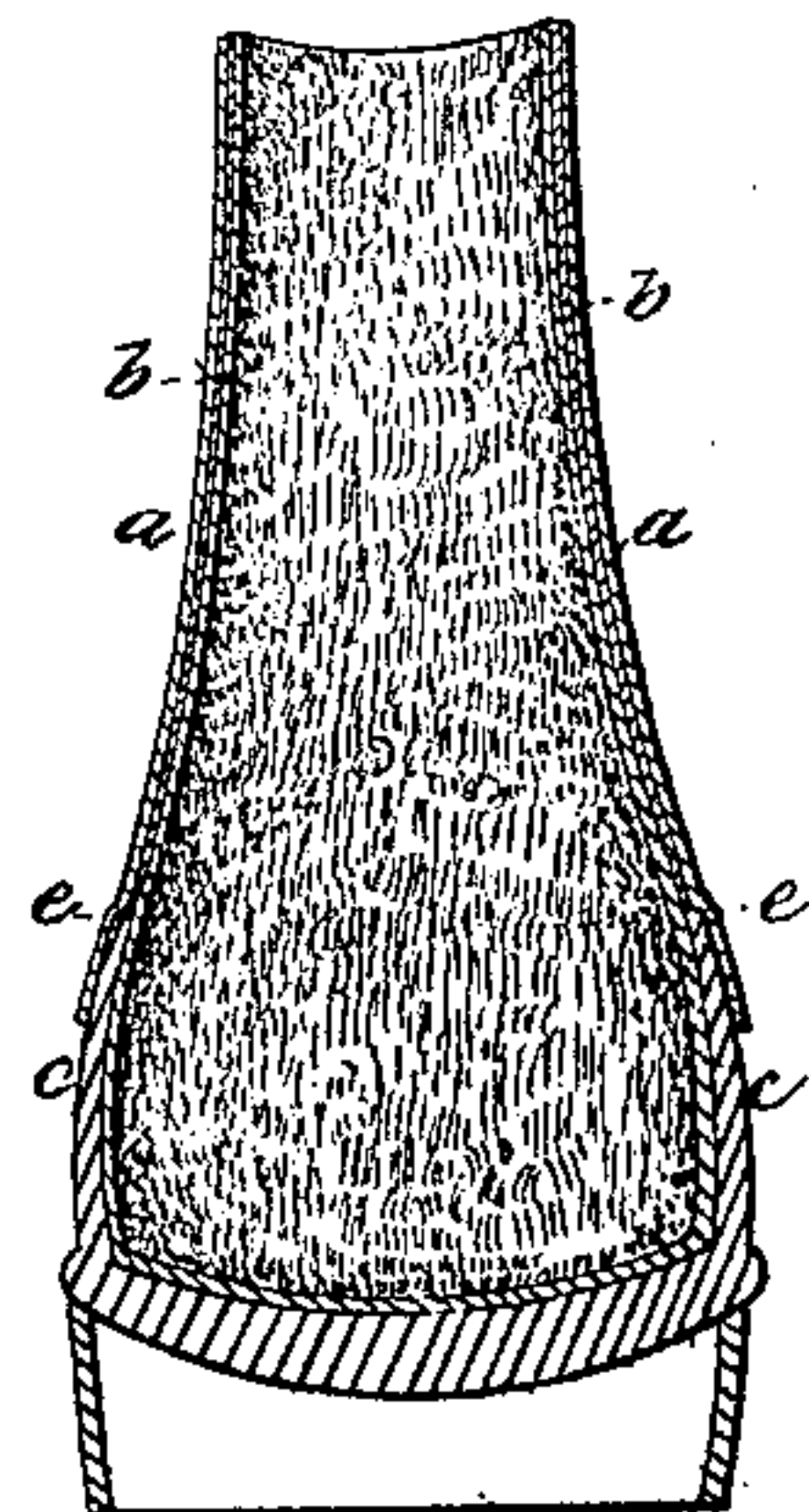


Fig. 4.



UNITED STATES PATENT OFFICE.

THOMAS C. WALES, OF DORCHESTER, MASSACHUSETTS.

WATERPROOF GAITER SHOE AND BOOT.

Specification of Letters Patent No. 19,269, dated February 2, 1858.

To all whom it may concern:

Be it known that I, THOMAS C. WALES, residing in Dorchester, in the county of Norfolk, but engaged in business in Boston, in the county of Suffolk, State of Massachusetts, have invented a new and useful or Improved Manufacture of Waterproof Vulcanized-Rubber and Cloth Gaiter Shoe or Boot; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figures 1, and 2, are top and side views of it. Figs. 3, and 4, longitudinal and transverse sections of it.

The mode of constructing this shoe differs materially from others generally followed in making water proof gaiter shoes, as in the operation of making it, the whole shoe, composed of cloth and rubber arranged as will be herein after described, is subjected to the vulcanizing process or to a heat of about 270° Fahrenheit. Thus the india rubber cement, used to connect the cloth lining and the instep or ankle parts or quarters becomes vulcanized with the rest of the shoe and at the same time the cement between the layers of cloth becomes protected by the vulcanizing process. Furthermore, the shoe made as a water proof shoe, to be worn either on the foot or over another shoe placed thereon is a close imitation of the common leather and cloth gaiter shoe or boot, as an outside facing of cloth is extended down from the mouth of the shoe and on the quarters to the usual depth to which the cloth is generally carried on the cloth and leather gaiter boot as generally made. The body of the shoe or foxing and sole, as it may be termed, does not extend entirely between the outer and inner layers of cloth, but is only connected to the inner layer or lining and to the edges of the outer layer, so as to permit nearly the whole outer layer to be cemented directly to the inner layer. The outer layer of cloth may be broadcloth or any fancy stuff and may be of a drab or any other color or combination of colors, while the

inner layer or lining may be of napped cloth, having a fuzzy or raised nap on its inner surface. The fuzzy nap while it keeps the foot warm, furnishes ventilation of the shoe or permits the moisture or perspiration of the foot to escape between its fibers.

In the drawings *a* denotes the outer layer of cloth; *b*, the lining of napped cloth; *c* the foxing or body part of the shoe.—The dotted line *e*, in Fig. 2, shows the distance to which the foxing is carried between the lining and outer layer of cloth, all that part of the outer layer of cloth, which is circumscribed by such boundary line, *e*, being cemented directly to the lining which is extended down below the boundary and so as to cover the entire internal surface of the rubber shoe. The foxing and sole are made of rubber in the usual manner, and the front of the instep is slit open and provided with lacing holes as shown at *h* and *i i i*.

I do not claim the vulcanizing process; nor do I claim making articles of cloth cemented together with rubber cement and afterward vulcanizing them; nor do I claim making shoes partly of leather and partly of cloth, the same being made by connecting the leather and cloth together by water proof caoutchouc cement, as such when made partly of leather cannot be vulcanized owing to the fact that the great heat required in the vulcanizing process injures or destroys the leather.

I claim—

A new or improved manufacture, or waterproof vulcanized rubber and cloth gaiter shoe made in manner and with its external layer of cloth and its lining of cloth arranged together and with respect to the remainder or rubber parts or foxing substantially as specified.

In testimony whereof I have hereunto set my signature this 20th day of May 1857.

THOS. C. WALES.

Witnesses:

R. H. EDDY,
F. P. HALE, Jr.