

(No Model.)

B. BRADSHAW.  
Shoe.

No. 242,872.

Patented June 14, 1881.

Fig. 1

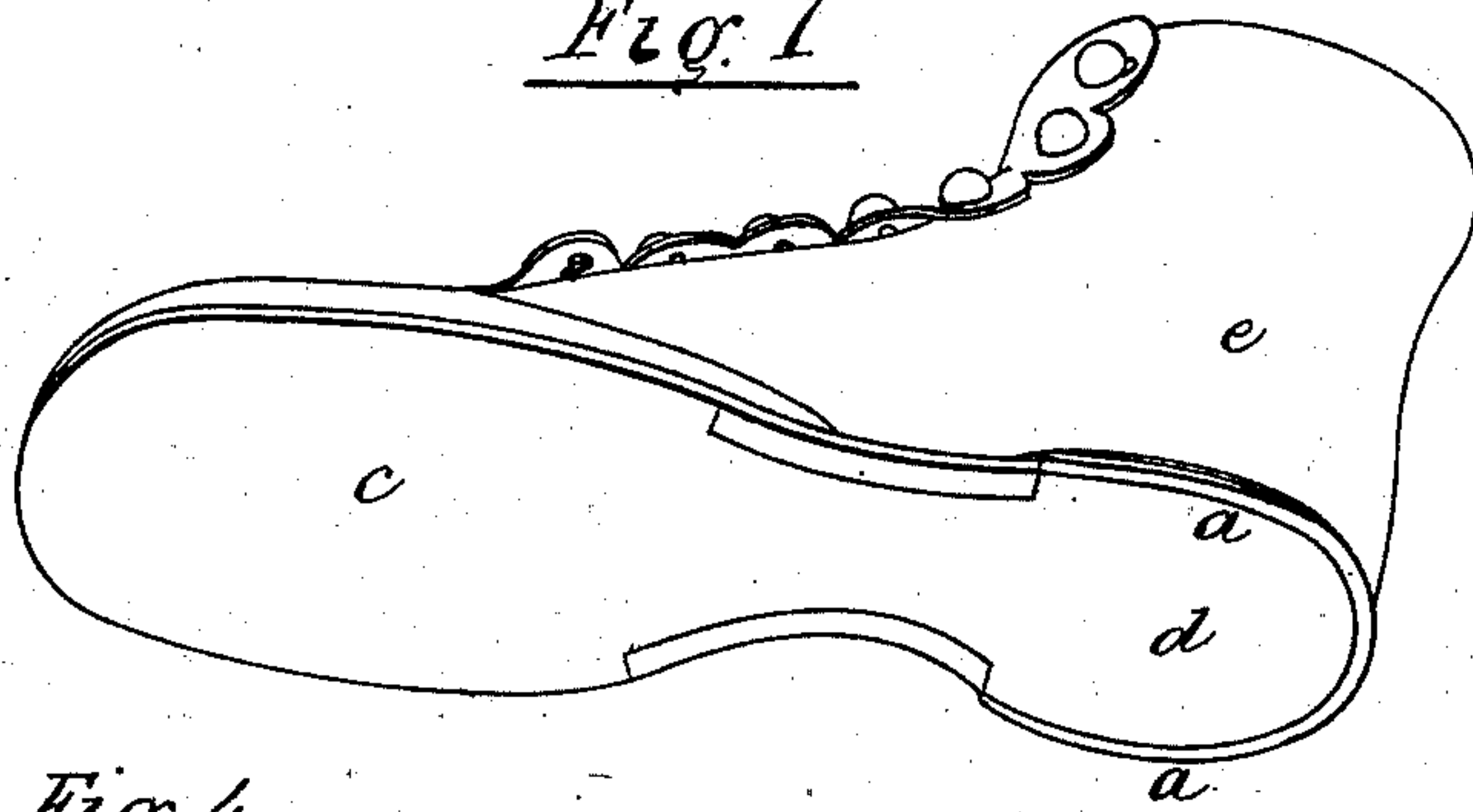


Fig. 4

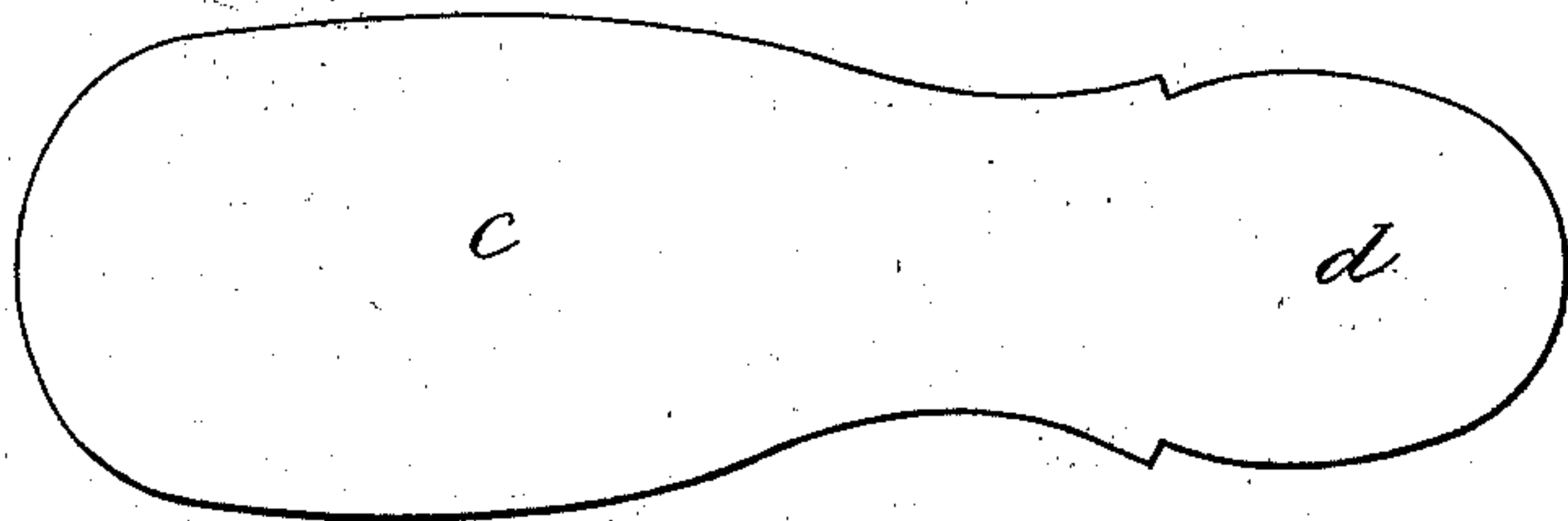


Fig. 3

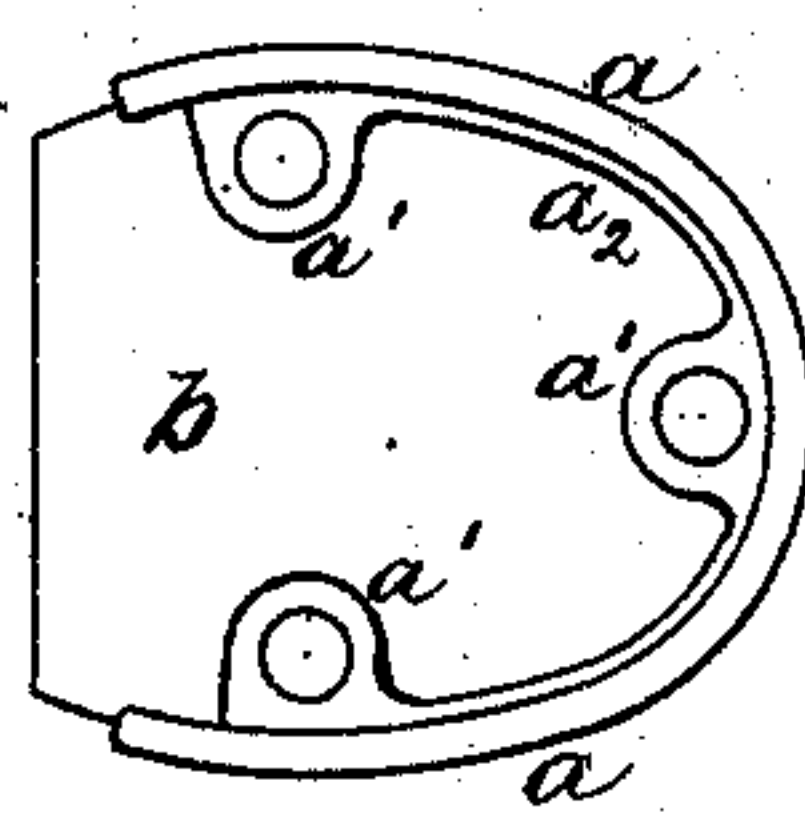


Fig. 2

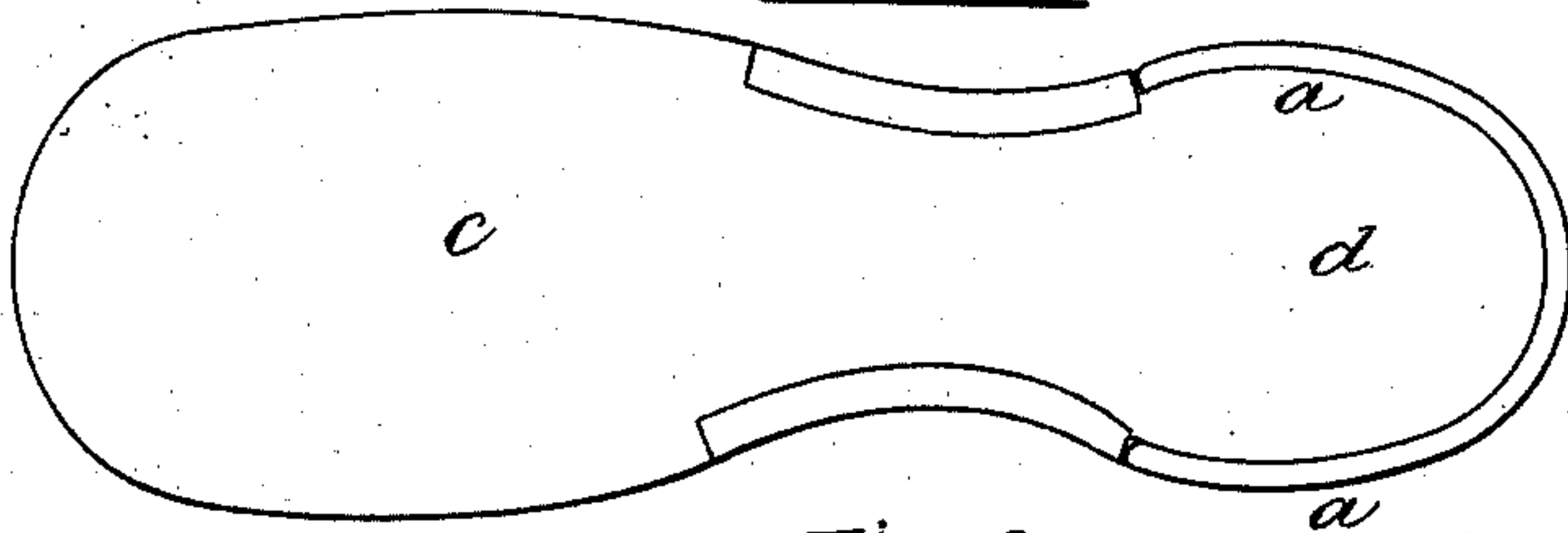


Fig. 5

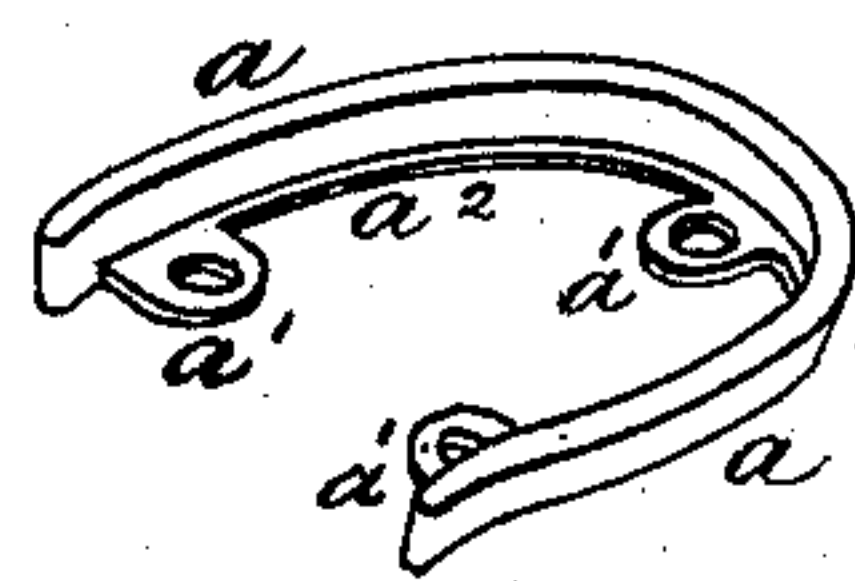


Fig. 6

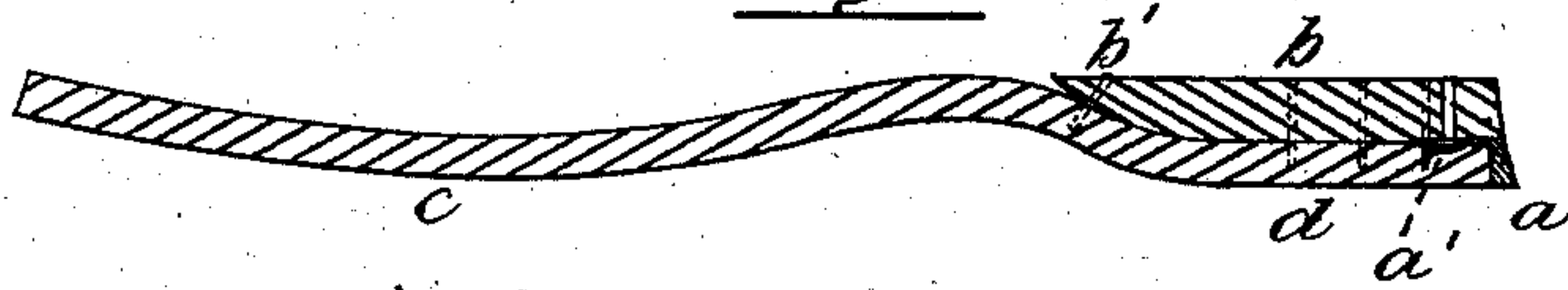


Fig. 7

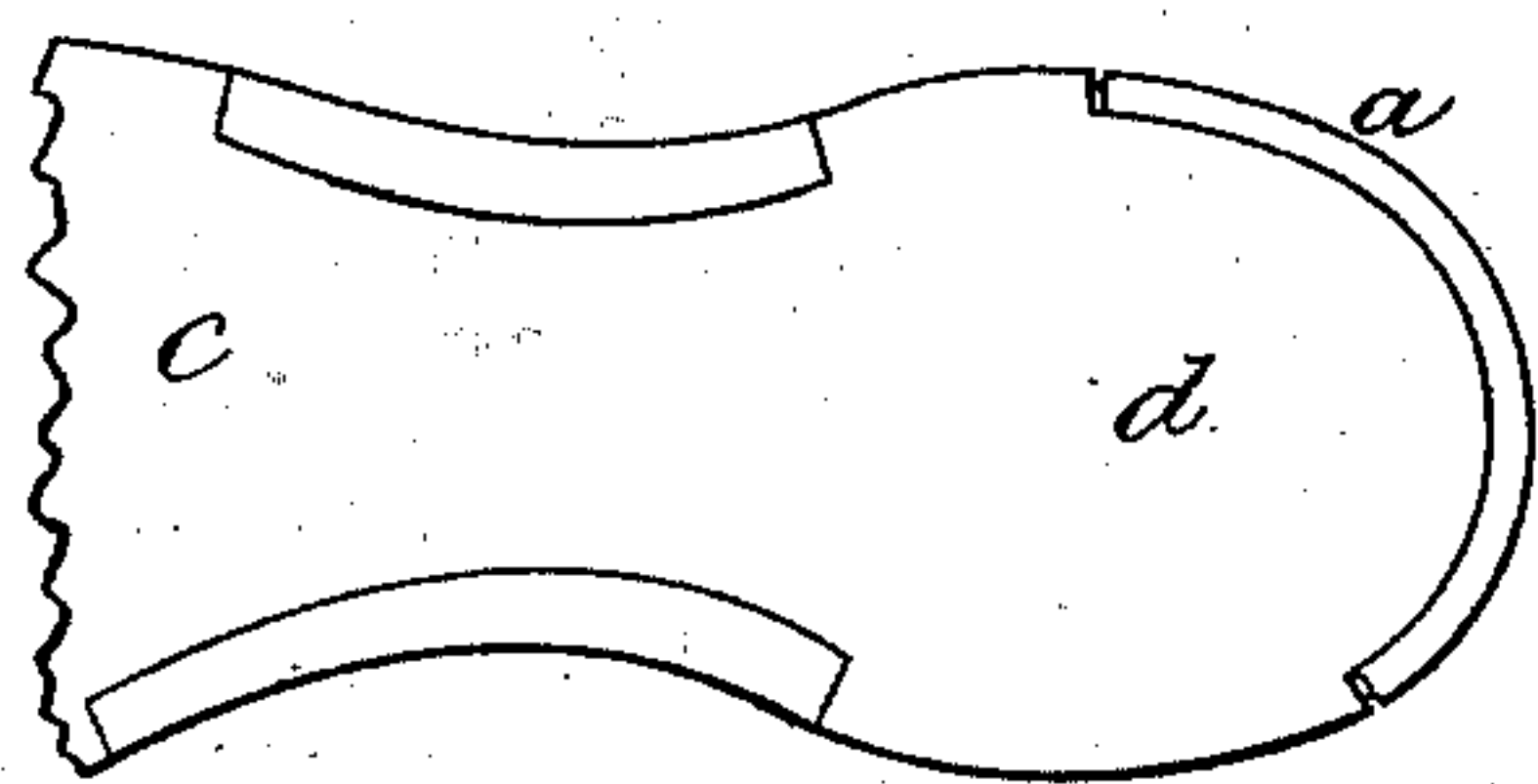
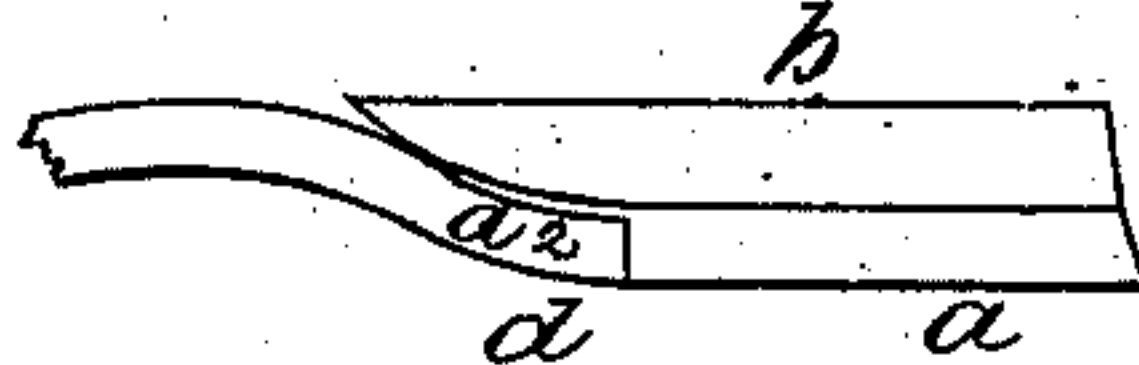


Fig. 8



Witnesses.

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# UNITED STATES PATENT OFFICE.

BENJAMIN BRADSHAW, OF PHILADELPHIA, PENNSYLVANIA.

## SHOE.

SPECIFICATION forming part of Letters Patent No. 242,872, dated June 14, 1881.

Application filed April 29, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN BRADSHAW, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented a certain new and useful Improvement in Shoes, of which the following is a specification.

This invention has for its object the improvement of that class of shoes known as "spring-heel" shoes, by the application thereto of a metal strengthening-frame or heel-guard in a simple and effective manner, and at little expense. This metal strengthening-frame or heel-guard consists of a flange shaped to surround the edge of the tread of the heel, and provided at its upper edge with internal ears, by which it is secured to the foundation of the heel by means of nails or screws, and the tread of the heel, which in this class of shoes is formed with the sole from a single piece of leather, is shaped to fit inside the flange of the guard and covers the internal ears of it, the bearing-surface of the heel-tread being then about even with the bottom edge of the metal flange. The heel is completed and the several parts further secured together by means of nails driven down through the foundation into the tread of the heel. The bottom of the shoe comprising the sole and heel, with the metal strengthening-frame or heel-guard complete, is then secured to the upper in the ordinary manner. These flange heel-guards I make sufficiently light to enable them to be readily bent to suit different forms of heels, and yet strong enough to stand all wear and rough usage they are liable to receive, thereby obviating the necessity of making patterns, &c., of them for every shape and size of heels.

The construction of my improved heel-guard and manner of attaching it to the heels of spring-heel shoes will be readily understood by reference had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an underneath perspective view of a spring-heel shoe with my improvements thereon. Fig. 2 is a plan of the under side of the finished shoe. Fig. 3 shows the flange heel-guard secured to the foundation of the heel. Fig. 4 represents the bottom bearing-piece comprising the sole and heel tread. Fig.

5 is a perspective view of a flange heel-guard detached and reversed in position to clearly show the internal flanges. Fig. 6 is a longitudinal section of spring-heel and sole complete. Fig. 7 is the plan of the under side of the finished heel, with the protecting metal flange partly around the same, and Fig. 8 is a side elevation of the same.

By referring to Figs. 3 and 5, it will be seen that the metal strengthening-frame or heel-guard *a* is simply a flange adapted to surround the outer edge of the tread of the heel, and provided with three internal ears, *a' a' a'*, by which it is secured to the foundation of the heel *b* by nails being driven through holes in the ears *a'*. The flange is also provided with a narrow internal rim, *a<sup>2</sup>*, for the purpose of making it sufficiently stiff to withstand the wear, &c.; but the flange may be bent, as desired, to conform to the shape of the heel to which it is to be attached.

The sole *c* and tread *d* are formed of one piece of leather, constituting what is known as a "spring-heel." The heel part *d* in this case is cut as shown at Fig. 4, to fit inside of the metal flange *a*, and it is secured to the foundation *b* of the heel by means of nails being driven through the foundation *b* into, but not entirely through, the heel-tread *d*, thereby firmly attaching the heel-guard to the heel. The flange *a* thereof, being the only part exposed, gives a finished appearance to the shoe, and its lower edge forms a substantial wearing-edge for the heel. The sole, with the whole of the heel, may now be finished by nailing the front edge of the foundation *b* to the spring bend of the heel *d*, by means of the nails *b'*, as shown at Figs. 2 and 6, in which condition it is ready to be attached to the upper *e* by any of the ordinary means.

Three connecting-ears, *a'*, only are shown. As many as are required may be formed on the inside of the flange *a*, to secure it properly to the foundation *b*; and the external sides of the flange may be straight, as shown, or may be rounded and flared outward at the bottom edge as much as is desired.

The modification shown at Figs. 7 and 8 consists simply in the flange *a* being cut away, excepting at such part of the heel at which

the most wear occurs, the internal rim,  $a^2$ , and ears being the same as before described. The principal advantage of this form is, that some saving of metal in the heel-guard is thereby effected.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. As an improvement in spring-heel shoes, in combination, the foundation  $b$ , the metal heel-guard consisting of the wearing-flange  $a$  and retaining-ears  $a'$ , and the heel-tread  $d$  and sole  $c$ , constructed and connected together

substantially as and for the purpose hereinbefore set forth.

2. As a new and improved article of manufacture, the combined sole and heel for spring-heel shoes, consisting of the bearing-surface  $c$ , the heel-foundation  $b$ , and the metal guard having the wearing-flange  $a$  and retaining-ears  $a'$ , as hereinbefore set forth.

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Witnesses:

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WILLIAM WILKINS.