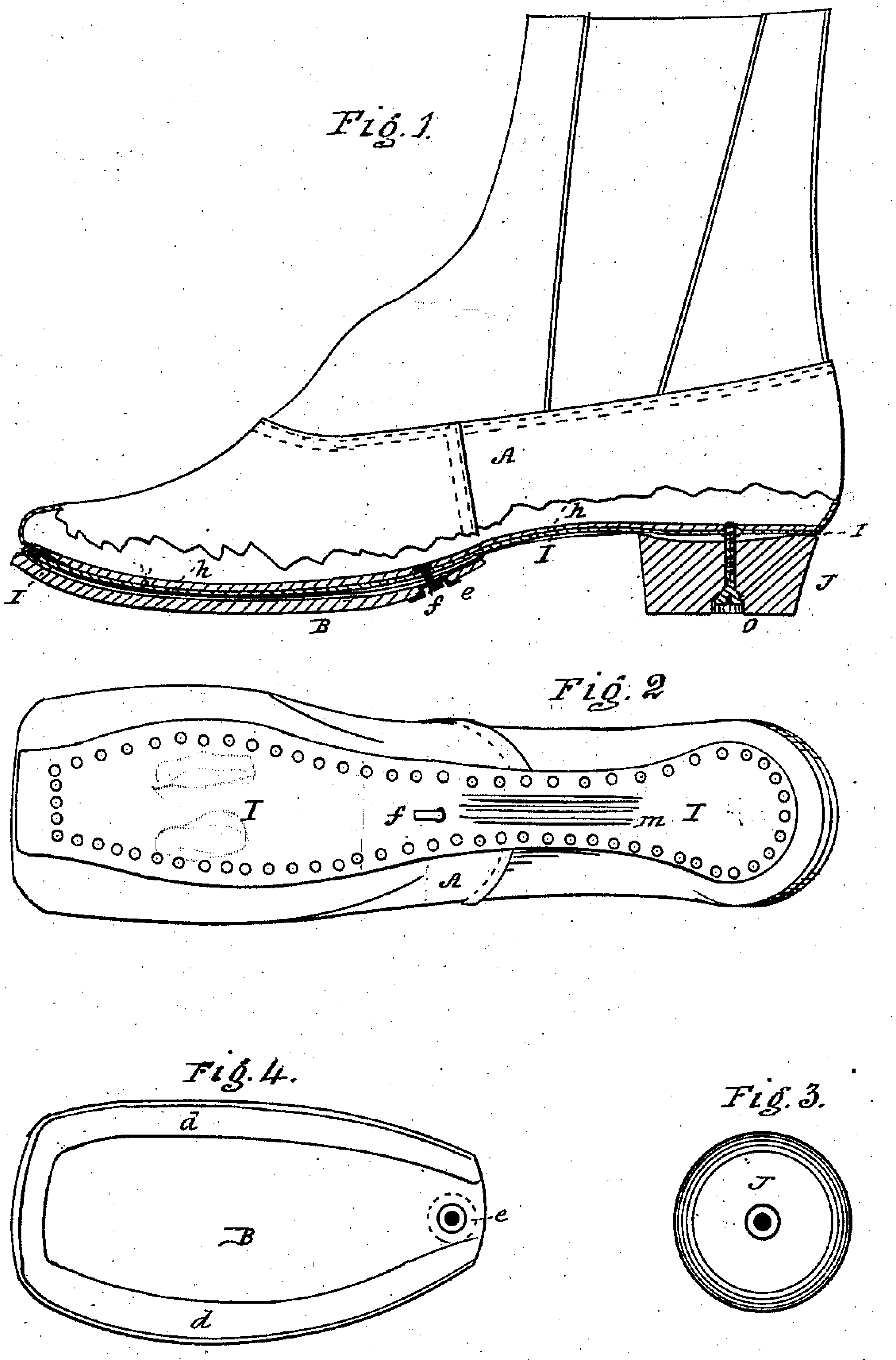
C. EDWARDS.

BOOTS AND SHOES.

No. 194,081. Patented Aug. 14, 1877.



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UNITED STATES PATENT OFFICE.

CHARLES EDWARDS, OF JAMAICA, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO C. A. BELDIN, OF SAME PLACE.

IMPROVEMENT IN BOOTS AND SHOES.

Specification forming part of Letters Patent No. **194,081**, dated August 14, 1877; application filed June 19, 1877.

To all whom it may concern:

Be it known that I, CHARLES EDWARDS, of Jamaica, in the county of Queens and State of New York, have invented certain new and useful Improvements in Shoes and Boots; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification.

My said improvements consist in making the outer sole detachable by providing the same with a rim or plate extending wholly or partly around its upper surface, which rim fits upon a metallic plate attached to the inner sole, so that whenever it is desirable, the said sole may be removed and replaced; also, in a novel combination of the said metallic plate with the inner and outer soles, as hereinafter described; and also in an improved means for securing the rear end of the outer sole in proper position, and in the combinations of the several parts, as hereinafter particularly described.

In the accompanying drawings, Figure 1 represents a vertical longitudinal sectional elevation of a shoe with my improvements; Fig. 2, a plan view of the bottom of the shoe with the heel and the outer sole removed; and in Figs. 3 and 4 are shown detached views of the heel and outer sole, respectively.

Similar letters of reference indicate the same parts in all the several figures.

A represents the upper leather or body of the shoe, and *h* the inner sole, both of which may be of the usual form, and constructed and joined together in the ordinary manner. B is my improved detachable outer sole, which may be of leather or rubber, or other suitable material. On the upper side or face of this sole I secure a rim or plate, *d*, of metal or other suitable material, which extends around the outer edges of the same. At or near the rear end of the sole, or of that portion of the same next to the instep, I secure a mortised and perforated plate, *e*, which receives the head of a pin, *f*, for the purpose of keeping the rear portion of the sole in position, and that portion of the rim or plate *d* which passes along the toe or front portion of the sole B is slightly raised, so that it will pass over the end of the metallic intermediate sole I, hereinafter described, and thus keep the toe or front portion of the said sole in position.

I is a metallic plate, forming an intermediate sole, which extends from underneath the heel-piece to the toe of the shoe, and which I secure to the inner sole *h* by tacks or other suitable means, with its side edges extending over the joining of the upper leather with the inner sole. That portion of this plate I which passes over the instep may be made thicker than the rest, or may be corrugated, as shown at *m*, for the purpose of imparting additional strength to the instep, thus preserving the proper form of the shoe, and preventing the displacement or breakage of the instep-sole, which often occurs in shoes of the ordinary construction; and at the same time imparting additional elasticity to that portion of the sole which is immediately under the ball of the foot. As before stated, the front end of this plate I passes underneath the rim or plate *d* when the sole B is placed in position.

The pin *f*, which is formed with a one-sided head, passes through a perforation in the plate I, and has a projection formed on its other end, so that it is kept in position by the said plate, and may be partially turned around within the mortised or countersunk portion of the plate *e*, by which means the outer sole is attached and kept in position at its rear end.

J is the detachable heel, which may be of leather or other suitable material, and which I prefer to make in circular form. A central perforation is made through the leather or other material forming the heel-piece, to receive a screw-nail, *o*, which, passing through the said perforation, enters and passes through the plate I, and thus keeps the heel-piece in position, and thus the heel is made removable. The head of the screw *o* is countersunk, as shown in the drawing.

If preferred, the inner edge of the metal rim *d* may be raised all around, as well as at the toe, and the edges of the plate I passed underneath the raised portion, for the purpose of attaching the sole more firmly.

By means of my improvements, as above described, both the heel and the sole may be removed at pleasure, and either of them easily and readily replaced by a new one when it has become worn; the shoe is rendered more elastic and stronger at the instep, so that it does not become misshaped by wear, but retains its proper form; and it is also rendered water-tight by the plate I, and may be made and repaired at less cost than a shoe of similar quality made in the ordinary manner.

What I claim as my invention is—

1. The detachable sole B, provided with a rim or plate, *d*, to fit upon a plate, I, attached to the inner sole of the shoe, substantially as shown and described.

2. The metallic plate I, in combination with the inner sole *h*, and detachable outer sole B, as shown and described, for the purpose of holding the said detachable sole B, as set forth.

3. The detachable sole B, provided with a countersunk plate, *e*, in combination with the pin *f*, as and for the purpose set forth.

4. The combination of the sole B, provided with a metallic rim or plate, *d*, extending around its edges, the plate I secured to the inner sole, and the plate *e*, and pin *f*, as and for the purposes set forth.

Signed at New York city this 16th day of June, 1877.

CHARLES EDWARDS.

In presence of—

JOHN S. THORNTON,

GEO. R. CARRINGTON.