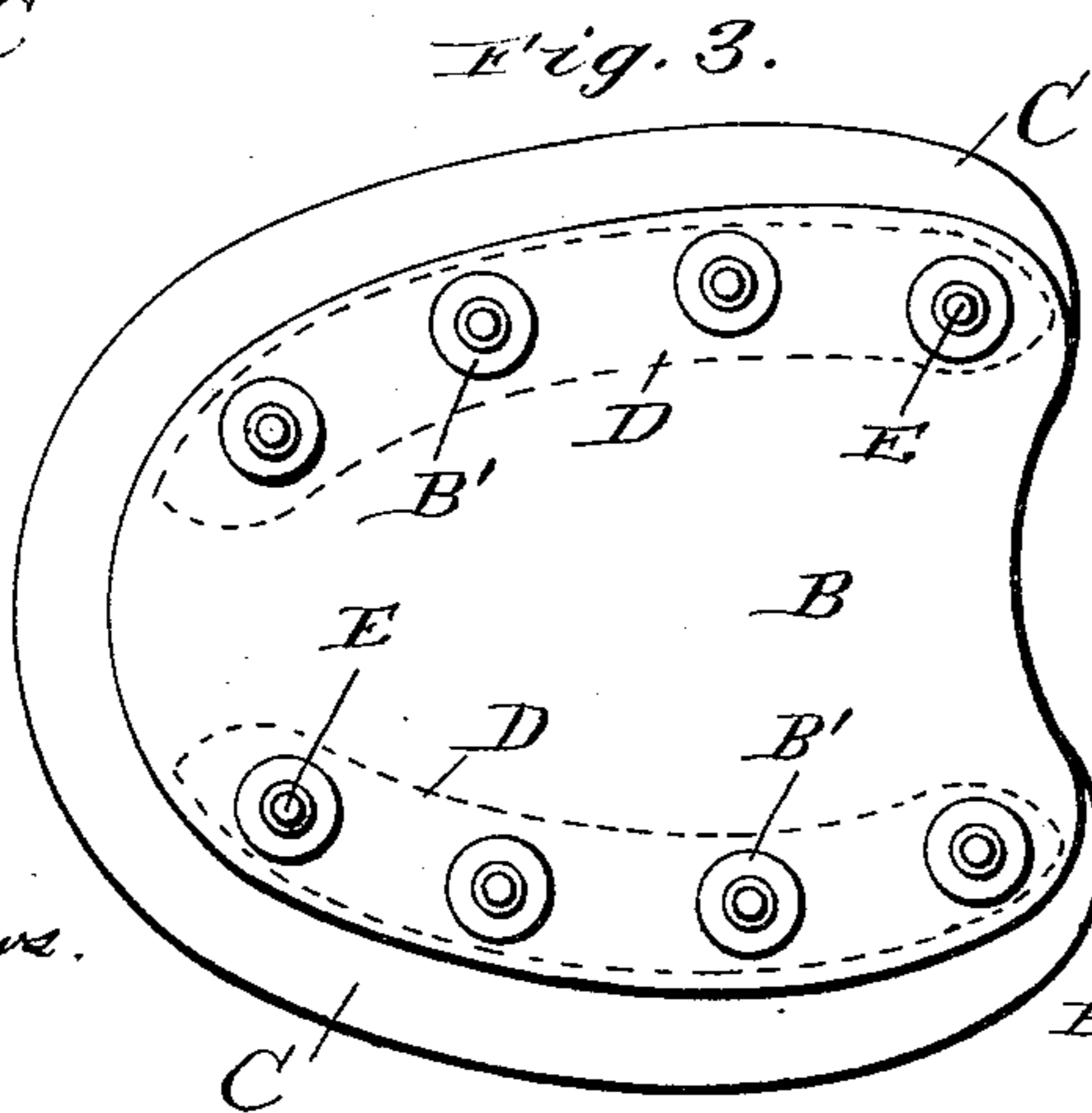
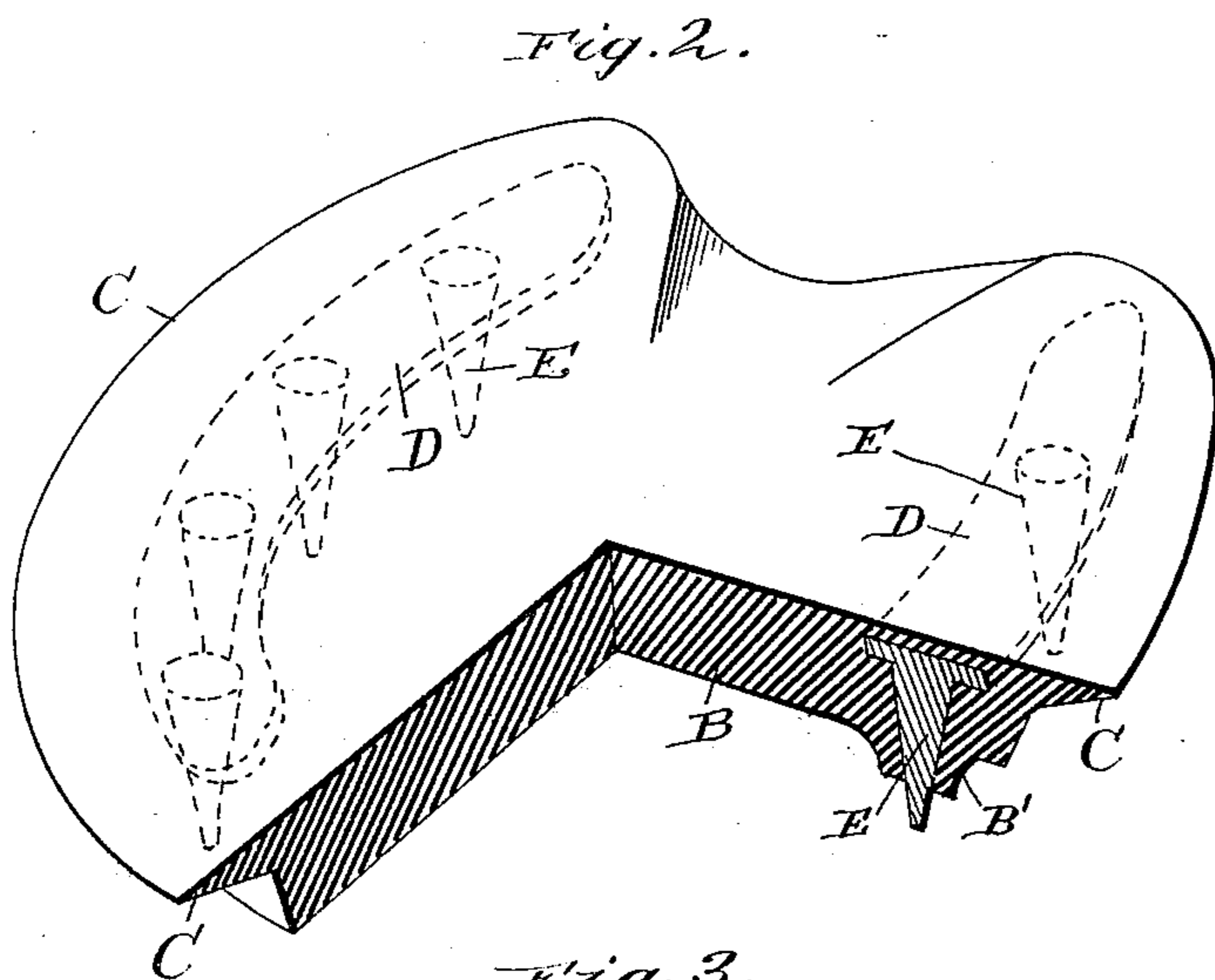
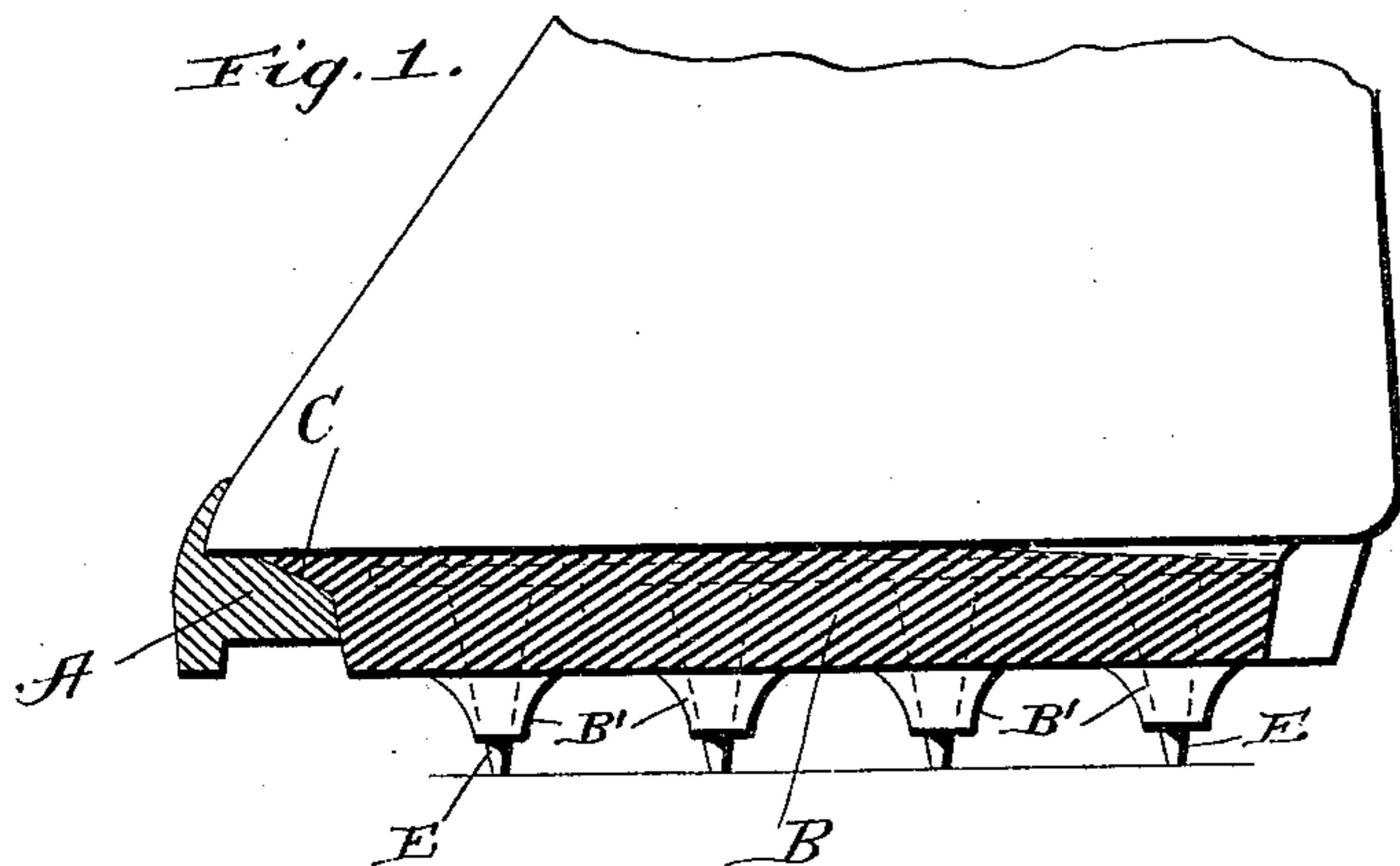


(No Model.)

A. L. GRANT.
HORSESHOE PAD.

No. 521,609.

Patented June 19, 1894.



Witnesses:
W. P. Mather
W. P. Matthews

Inventor
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UNITED STATES PATENT OFFICE.

ALBERT L. GRANT, OF PHILADELPHIA, PENNSYLVANIA.

HORSESHOE-PAD.

SPECIFICATION forming part of Letters Patent No. 521,609, dated June 19, 1894.

Application filed January 12, 1894. Serial No. 496,647. (No model.)

To all whom it may concern:

Be it known that I, ALBERT L. GRANT, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Horseshoe-Pads; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to improvements in pads or cushions for horses' hoofs to prevent slipping of the animals and injury by jar or the like during travel. An important desideratum in this class of devices has been to provide a pad which will not become loose or fall off after use or during the speeding of the animal, and which may be quickly applied to the hoof without necessitating the removal of the shoe. Another important desideratum has been to keep or preserve the metallic points or calks in such a condition that they will always project sufficiently beyond the pad, but will not be allowed to penetrate too deeply into a soft road such as asphalt, in warm weather.

To accomplish these objects at a comparatively small expense is the prime object of my invention; and before describing the details of construction I wish to say that I am well aware that pads have been placed on the feet of animals without necessitating the removal of the shoe. I am also aware that metal plates have been used in connection with rubber pads, and I am aware that sandals have been constructed with a metal plate interposed between two soles or heel layers, and armed with points projecting from the outer sole.

My improvements will be fully understood from the following description and claim when taken in connection with the annexed drawings, in which—

Figure 1, is a vertical, sectional view of my improved pad in position upon a horse's hoof. Fig. 2, is a perspective view partly in section, of the pad removed. Fig. 3, is an inverted plan view of the pad.

Referring by letter to said drawings:—A, indicates a horse shoe applied to the hoof and which horse shoe may be of any ordinary or approved construction, having the usual bevel

on its inner side, as shown, and B, indicates my improved pad, which is formed of rubber vulcanized sufficiently and yet possessing a suitable amount of elasticity for the purposes hereinafter set forth.

D, indicates two metallic plates which are preferably formed of malleable iron or steel, although they may be formed of other suitable metal, and are each provided on one side, with a suitable number of conical or tapering points or barbs E. These plates are of a curvilinear form in outline, and approximate the longitudinal curvature of the pad, and are of a length slightly less than that of the pad.

The pad B, for the sake of cheapness in manufacture, is molded from rubber, and formed with a marginal flange C, on the upper side. This flange C, is beveled on its under side to conform to the bevel on the upper side of the shoe so as to fit snugly thereon and be interposed between said beveled part of the shoe, and the under side of the hoof.

In practice, after letting a sufficient quantity of the rubber or other material used in the pad into a suitable mold, I place plates D, down upon the material thus let in the mold, with the points or barbs uppermost, and the plates arranged one adjacent to each longitudinal edge, and within the point of the beveled flange, and care should be taken to keep such plates out of the longitudinal center and have their forward ends as well as their rear ends, sufficiently separated, so as to permit the pad when formed and grasped by the operator, to be bowed or bent, and thus easily slipped under the shoe. I then continue to run the material into the mold so as to entirely cover the metallic plates, leaving the barbs or points projected, and continuing, I form the conical projections B', around the steel points or calks. By the employment of these projections B', I can use very long calks or points and prevent the same from penetrating too deeply into a soft road bed, while the projections will serve this purpose, they will also wear faster than the metallic points and thereby at all times keep said points projected sufficiently to give a firm footing to the animal and prevent slipping. I therefore attach importance to the arrangement of the metallic plates within the pad as

they permit the latter being quickly and conveniently placed on the foot without removing the shoe and when once placed in position, they will serve to retain the pad, necessitating the employment of an instrument to remove it.

Having described my invention, what I claim is—

10 The pad formed from rubber and having the beveled marginal flange and the metallic plates embedded in the rubber and carrying projected calks or points, said plates being separated from each other and arranged one

on each side of the longitudinal center of the pad throughout its length and close to the margin of the body, in combination with a shoe having its upper face shaped to retain and support the pad, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT L. GRANT.

Witnesses:

THEO. F. SCOTT,
JOHN E. ROBERTS.