

(No Model.)

W. CRONER.
BASE BALL SHOE.

No. 412,472.

Patented Oct. 8, 1889.

Fig. 1.

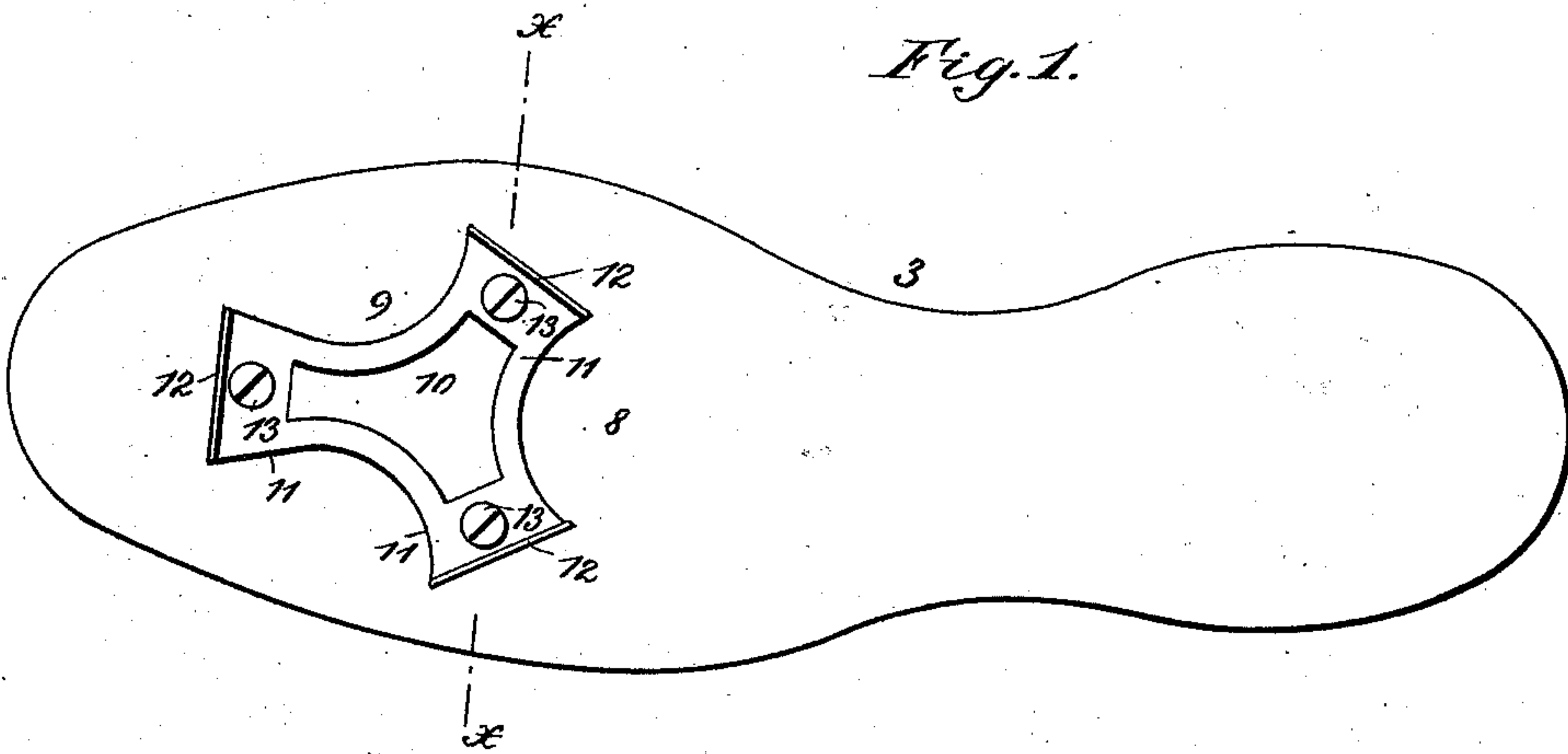


Fig. 2.

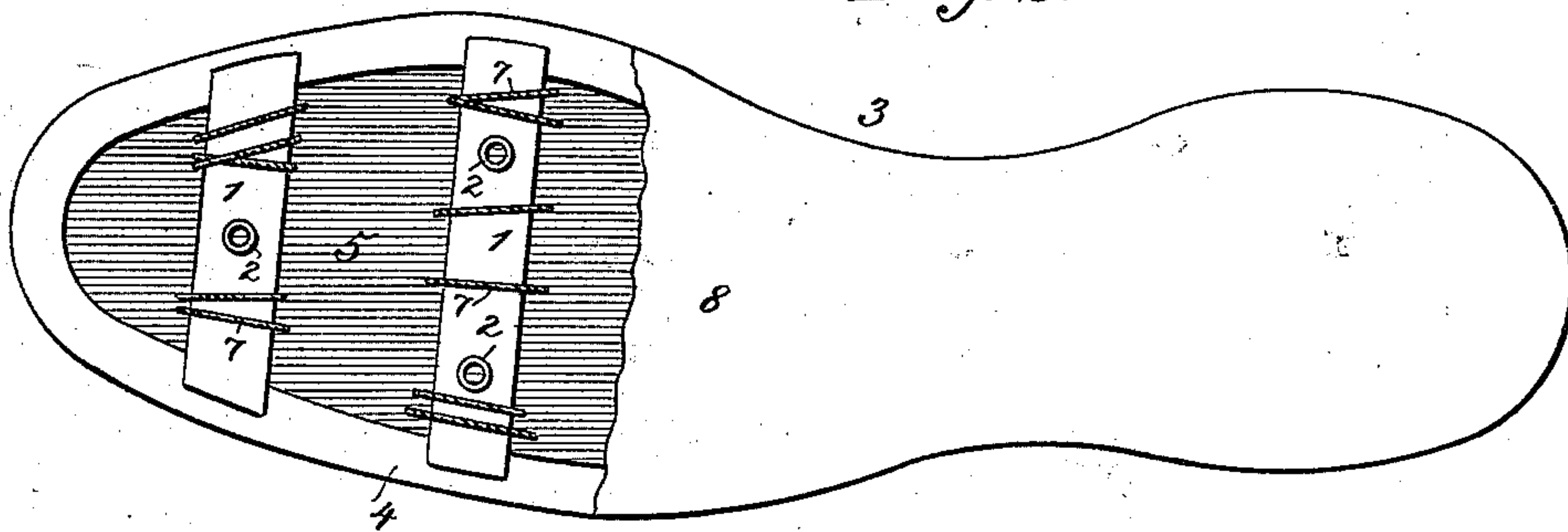


Fig. 3.

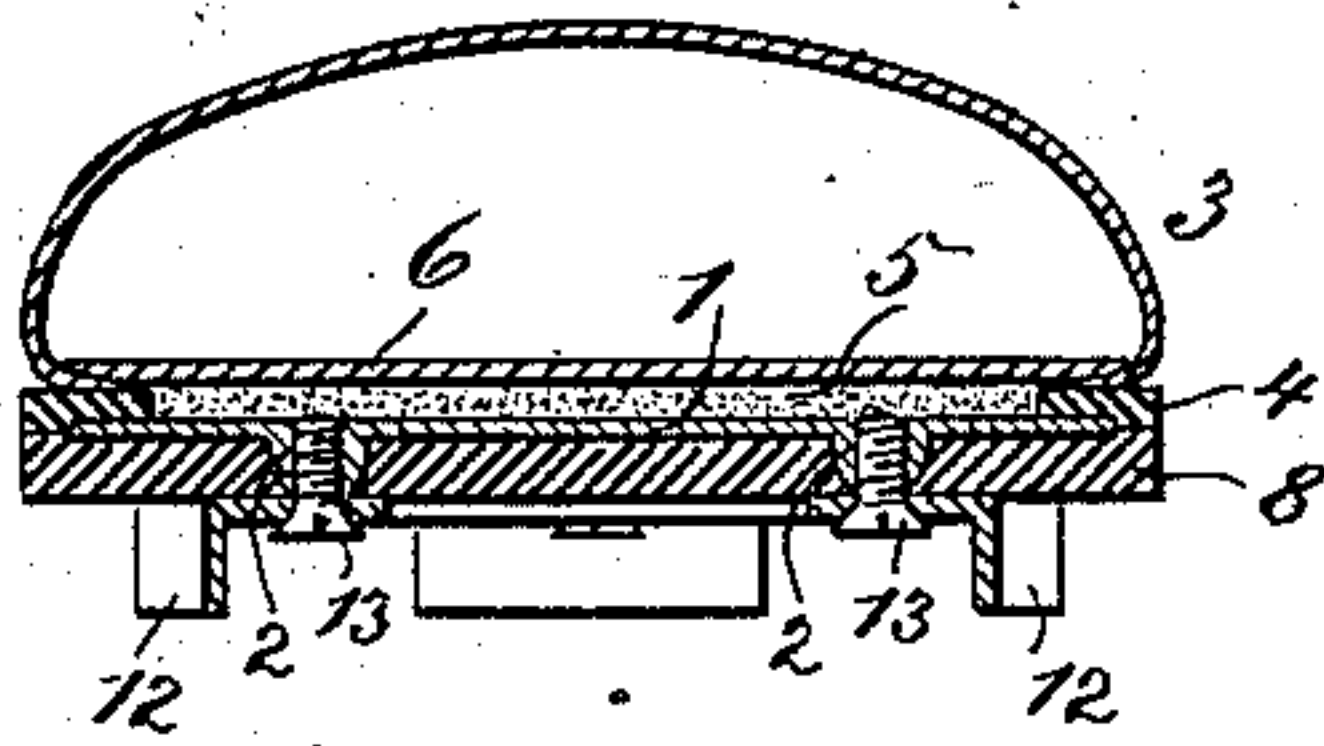
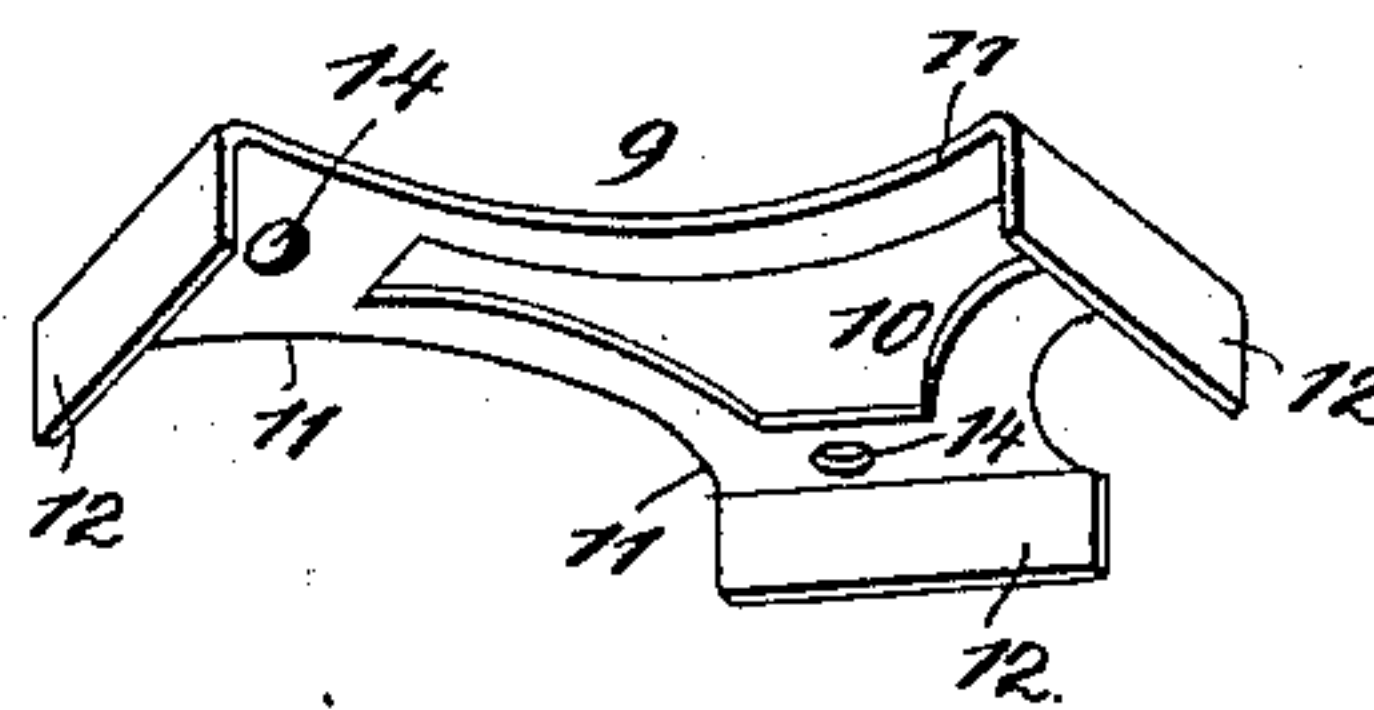


Fig. 4.



WITNESSES:

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WILLIAM CRONER, OF BROOKLYN, NEW YORK.

BASE-BALL SHOE.

SPECIFICATION forming part of Letters Patent No. 412,472, dated October 8, 1889.

Application filed February 7, 1889. Serial No. 298,939. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CRONER, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Base-Ball Shoe, of which the following is a full, clear, and exact description.

This invention relates to an improvement in base-ball shoes, and has especial reference to the means for securing the spikes to the sole of the shoe.

The invention has for its object to provide a base-ball shoe by means of which the spikes may have a firm and steady bearing on the sole of the shoe and all lumps on the insole of the shoe to press against the ball of the foot be avoided.

Heretofore in base-ball shoes the spikes at first were formed with screw-threaded pointed inner ends, which were screwed directly into the sole of the shoe, and besides forming lumps or projections on the insole had such play in the sole as to soon wear loose. Later on spikes were secured to the sole by copper rivets; but these also formed lumps or projections on the insole, besides having no stability or firm bearing on the sole, as in the former instance, and necessitating their being cut off by a shoe-maker when required to be removed.

This invention consists in a base-ball shoe constructed and arranged as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a view of the bottom of a base-ball shoe with spikes secured to the sole in accordance with this invention. Fig. 2 is a view of the bottom of the shoe shown in Fig. 1, with the sole broken away, showing the means for supporting the spikes, and to which they are secured. Fig. 3 is a cross-section of the shoe on the line $x x$, Fig. 1; and Fig. 4 represents the spikes detached.

In carrying out this invention I provide a couple of narrow metallic plates 1, formed with internally-screw-threaded lugs 2, into which fit the screws for fastening the spikes. The plates 1 are of a length to extend across the bottom of a shoe 3, with their ends rest-

ing on the welt 4, thereby preventing the plates from pressing up through the tar felt 5 or other filling against the insole 6. The plates 1 are arranged in suitable position to bring the lugs 2 in proper place to register with the screw-holes of the plate carrying the spikes, and are secured in position, preferably, by threads 7, passing over the plates and through the under surface of the insole. The sole 8 is then secured in place, the ends of the plates 1 being clamped in place between the welt 4 and sole 8, and the lugs 2 projecting into holes prepared in the sole 8.

In employing spikes for base-ball shoes the three spikes for the sole are formed on a single metallic plate, as shown in Figs. 1 and 4, in which 9 indicates the plate cut away, as at 10, for the sake of lightness, and formed with the branches or arms 11, terminating in the depending projections 12, serving as the spikes. The spikes are secured to the shoe by placing the plate 9 against the sole of the shoe and fastening it thereto by means of screws 13, passing through holes 14 in plate 9 and screwing into the threaded lugs 2. It will thus be seen that the spikes may be readily attached to or detached from the shoe by means of the screws 13.

By means of the construction and arrangement of shoe as hereinbefore described there will be no lumps or projections against the insole 6; the plates 1 cannot press against the insole; the plate 9 will have a steady bearing against the sole of the shoe, owing to the fact of the ends of the plates 1 resting against the welt 4; there will be little or no strain on the screws 13, owing to their being located in the lugs 2, embedded in the sole 8, and the flexibility of the sole of the shoe will not be affected by the narrow plates 1.

Any form of spike-plate desired may be employed, and any number of screw-holes and lugs in connection therewith and with the plates 1.

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

1. A base-ball shoe constructed with metallic plates located between the insole and the sole of the shoe, with their ends resting beneath the welt, and having internally-

screw-threaded lugs projecting through the sole of the shoe for attachment of the screws of the spike-plate, substantially as shown and described.

5 2. A base-ball shoe constructed with the narrow metallic plates 1, formed with internally-threaded lugs 2, the plates 1 extending across the sole of the shoe, with their ends resting against the welt 4 and secured by
10 threads 7 to the insole 6 of the shoe, and the lugs 2, projecting through the sole 8 of the shoe, substantially as shown and described.

3. The combination, with a shoe 3, con-

structed with narrow metallic plates 1, secured between the insole 6 and sole 8, with 15 their ends resting against the welt 4, and internally-threaded lugs 2, projecting through the sole 8, of a spike-plate 9, formed with the arms 11, having spikes 12, and secured to shoe 3 by screws 13 engaging the lugs 2, sub- 20 stantially as shown and described.

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Witnesses:

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