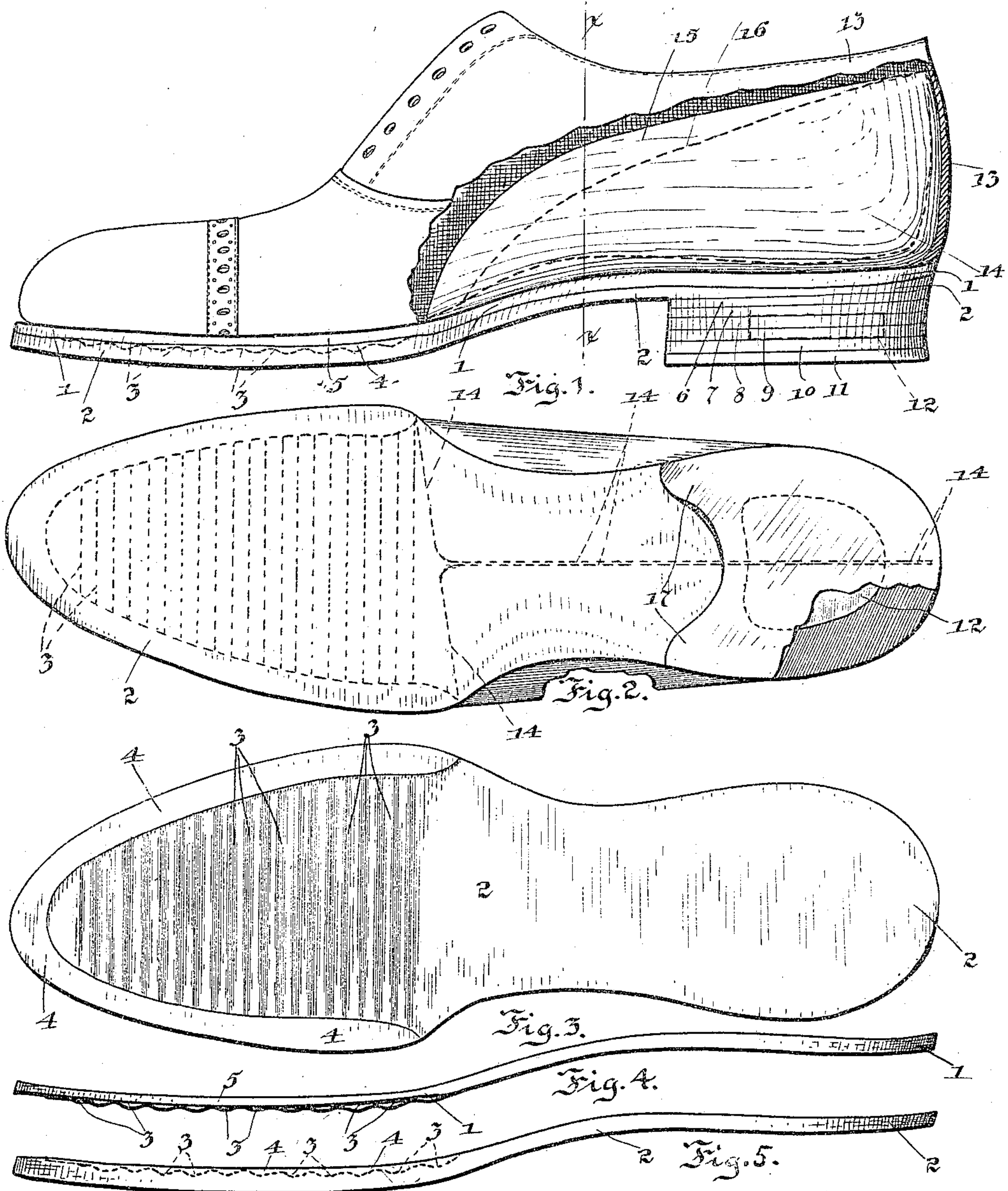


F. BEEBE.  
SHOE.

APPLICATION FILED JUNE 8, 1910.

993,496.

Patented May 30, 1911.



Witnesses

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# UNITED STATES PATENT OFFICE.

FRANK BEEBE, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-FOURTH TO FREDERICK W. KRECH AND ONE-FOURTH TO ALFRED BREWER, BOTH OF CHICAGO, ILLINOIS, AND ONE-FOURTH TO FRANK E. WILLIS.

## SHOE.

993,496.

Specification of Letters Patent.

Patented May 30, 1911.

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*To all whom it may concern:*

Be it known that I, FRANK BEEBE, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Shoes, of which the following is a specification.

My invention relates to improvements in shoes and has for its object the provision of a shoe which shall be comfortable for the wearer, and to this end my invention consists in a shoe which is so designed and constructed as to be flexible in the ball thereof and strong and durable in the arch, the latter forming a substantial support for the arch of the foot.

My invention further consists in the novel construction and arrangement of parts which will be hereinafter fully described and more particularly pointed out in the appended claims.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a side elevation of my improved shoe, a portion of the upper thereof being broken away to expose the novel form of counter employed in the shoe, Fig. 2 is a bottom plan view of the shoe, Fig. 3 is a detail top plan view showing the conformation of the outer sole, and Figs. 4 and 5 are detail side elevations.

The preferred form of my invention as illustrated in the accompanying drawings comprises a middle sole 1 and an outer sole 2, each of which is provided with a plurality of transverse ridges 3 as clearly shown in the several figures. The ridges of the sole 1 are formed to intermesh with the ridges of the sole 2, the object of the ridges being to render the soles more flexible, it being obvious that the portions between the ridges will bend more readily than the ridges themselves. As formed the middle sole constitutes a male member and an outer sole a female member, the latter being provided with a border flange 4, as shown in Figs. 3 and 5, which conceals and protects the ridges 3 and abuts the thin edge 5 of the middle sole. By making the ridges rounded in form the necessary movement between them is facilitated. The heel of the shoe comprises

lifts 6, 7, 8, 9, 10 and 11, the middle portions of two of which are cut away to form an air chamber 12, thus rendering the heel light, strong and resilient.

The upper 13 of the shoe incloses a counter 14 in the usual manner, but the latter is designed not only to support the upper above the heel of the shoe but to support the arch, and to this end the counter extends forwardly over the arch to the ball of the shoe, as shown in Fig. 1, the inner side 15 being somewhat higher than the outer side 16 as shown by dotted lines in Fig. 1, this difference in height being due to the fact that more clearance is necessary for the cuboid on the outer side of the tarsus of the foot than for the scaphoid on the inner side. The bottom of the counter extends over the sole until the longitudinal edges thereof meet, or substantially so, as indicated by dotted lines in Fig. 2. The counter 14 thus forms a reinforcement for the arch of the shoe which is rendered very strong and durable thereby, thus serving as a substantial support for the arch of the foot. The arch is further reinforced by the forwardly extending portions 17 of the heel as shown in Fig. 2.

It is apparent that the shoe as hereinbefore described comprises the properties of strength and flexibility to a marked degree, and that the same are so distributed as to secure durability in the shoe and comfort for the wearer.

While I have shown what I deem to be the preferable form of my improved shoe I do not wish to be limited thereto as there might be various changes and modifications made in the arrangement of parts and details of construction, and hence I desire to avail myself of such variations and modifications as will fairly fall within the spirit and scope of the appended claims.

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

1. A shoe comprising an outer sole having a central recess in its top portion thereof and a border flange, the bottom of said recess being provided with transverse ridges, and a superimposed middle sole having a central projection on its bottom fitting within said recess and having transverse ridges



intermeshing with said first mentioned ridges, substantially as described.

2. A shoe comprising an outer sole having a central recess in its top portion and a  
5 border flange, the bottom of said recess being provided with transverse rounded ridges; and a superimposed middle sole having a central projection on its bottom fitting within said recess and having transverse

rounded ridges intermeshing with said first 10 mentioned ridges, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK BEEBE.

Witnesses:

HELEN F. LILLIS,  
JANET E. HOGAN.