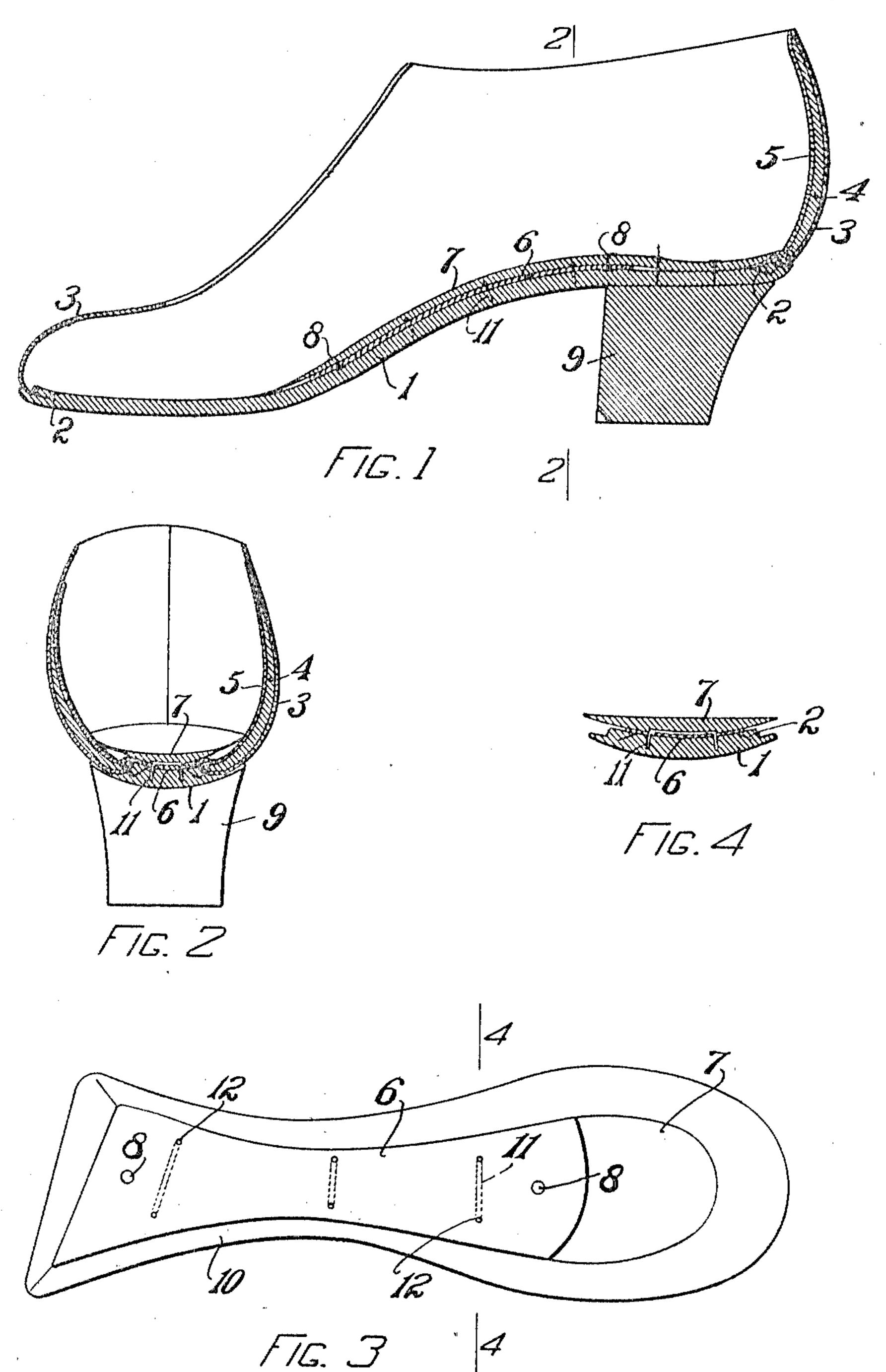
## E. ANDERSON:

SHOE.

APPLICATION FILED JAN, 31, 1910.

974,010.

Patented Oct. 25, 1910.



WITNESSES

A. T. Palmer

Horold S. Syon

INVENTOR EMERIK ANDERSON BY HIS ATTORNEYS Mutchell, Chadwick Hent

## UNITED STATES PATENT OFFICE.

EMERIK ANDERSON, OF NEWBURYPORT, MASSACHUSETTS.

## SHOE.

974,010.

Specification of Letters Patent.

Patented Oct. 25, 1910.

Application filed January 31, 1910. Serial No. 540,980.

To all whom it may concern:

Be it known that I, Emerik Anderson, a citizen of Sweden, residing at Newburyport, in the county of Essex and State of 5 Massachusetts, have invented new and useful Improvements in Shoes, of which the following is a specification.

This invention relates to improvements in

shoes.

More particularly it relates to improvements in shank plates for shoes and in the general structure of that part of the shoe known as the shank, especially having reference to the shank of a turned shoe.

. 15 It is customary now to make shoes with the underside of the shank rounded and this is considered very desirable because of its finished appearance. This has heretofore been obtainable only in hand work by repeated pounding and manipulation by the workman.

It is the object of the present invention to avoid this and to facilitate the construction 25 its appearance.

Other features hereinafter appear.

An embodiment of the invention is illustrated in the drawings, in which:

Figure 1 is a side elevation of a turned 30 shoe, in section; Fig. 2 is a cross section on the line 2-2 of Fig. 1; Fig. 3 is a bottom. view of the shank plate and the inner sole before being affixed to the shoe; and Fig. 4 is a cross section on the line 4-4 of Fig. 35 3 showing the outer sole added.

Referring to the drawings: 1 is an outer sole provided with channels 2 in order to enable the upper 3, the counter 4 and the lining 5 to be sewed or secured thereto as in the ordinary turned shoe. 6 is the shank plate of my improved construction. It is made of thin sheet metal and is secured to the inner sole 7 by tacks 8. It is made convex upon its lower side from the 45 heel 9 forward to such point as it is desired | the shoe shall cease. The convexity is made to conform to the amount of rounding desired; and in general the shape of the plate 50 is made to conform to the desired shape of the under side of the outer sole which is to lie beneath it. The inner sole 7 is skived at its edges 10 to conform to the convexity of the plate and the desired rounding of the 55 under side of the outer sole. In construc-

tion, rivets, staples, clenches, or other fasteners 11, hereinafter generically referred to as "pins" are inserted loosely through holes 12 in the plate 6, before the plate is tacked to the inner sole 7. The inner sole and the 60 shank are then assembled with the outer sole and fastened to it by merely pounding the same together, the pins 11 piercing and engaging in the outer sole. The outer sole, conforming to the convex shape of the shank 65 and inner sole to which it is fastened, thus assumes immediately the desired roundfinish shape, and it is unnecessary to manipulate the outer sole in the manner heretofore customary in order to give it the de- 70 sired appearance. The holes 12 are preferably so placed, that the ends of the pins will pass through the plate near its edges and thus most effectively secure the outer sole and prevent twisting or turning after the 75 heel has become worn.

I claim:

1. In a shoe the combination, at its shank, of the shank and to add to the neatness of | of an outer sole, an inner sole and a thin sheet of metal between them, the metal com- 80 prising a plate concave inward and convex outward in transverse cross section, the outer sole being bent around the convex side thereof, pins having heads between the inner sole and the metal, running into the outer 85 sole on the sides of the curve and securing it on the plate; the inner sole filling the concavity of the metal and gradually becoming thinner from its middle toward its edges, the shank thus constructed having a 90 shape in transverse section conforming interiorly to a foot and rounded exteriorly.

2. In a shoe, the combination of a shank plate concave inward and convex outward in fransyerse cross section, an outer sole bent 95 around the convex side thereof, and pins running from the inner side of the plate into the outer sole, securing the latter in said bended form parallel with the plate's convex side; combined with an inner sole having a 100 that the rounding of the lower surface of | thick middle filling the concavity in the plate and gradually becoming thinner toward its edges.

· Signed by me at Newburyport, Mass., this 27th day of January, 1910.

## EMERIK ANDERSON.

Witnesses:

EDWARD H. ROWELL, BLANCHE B. KIMBALL,