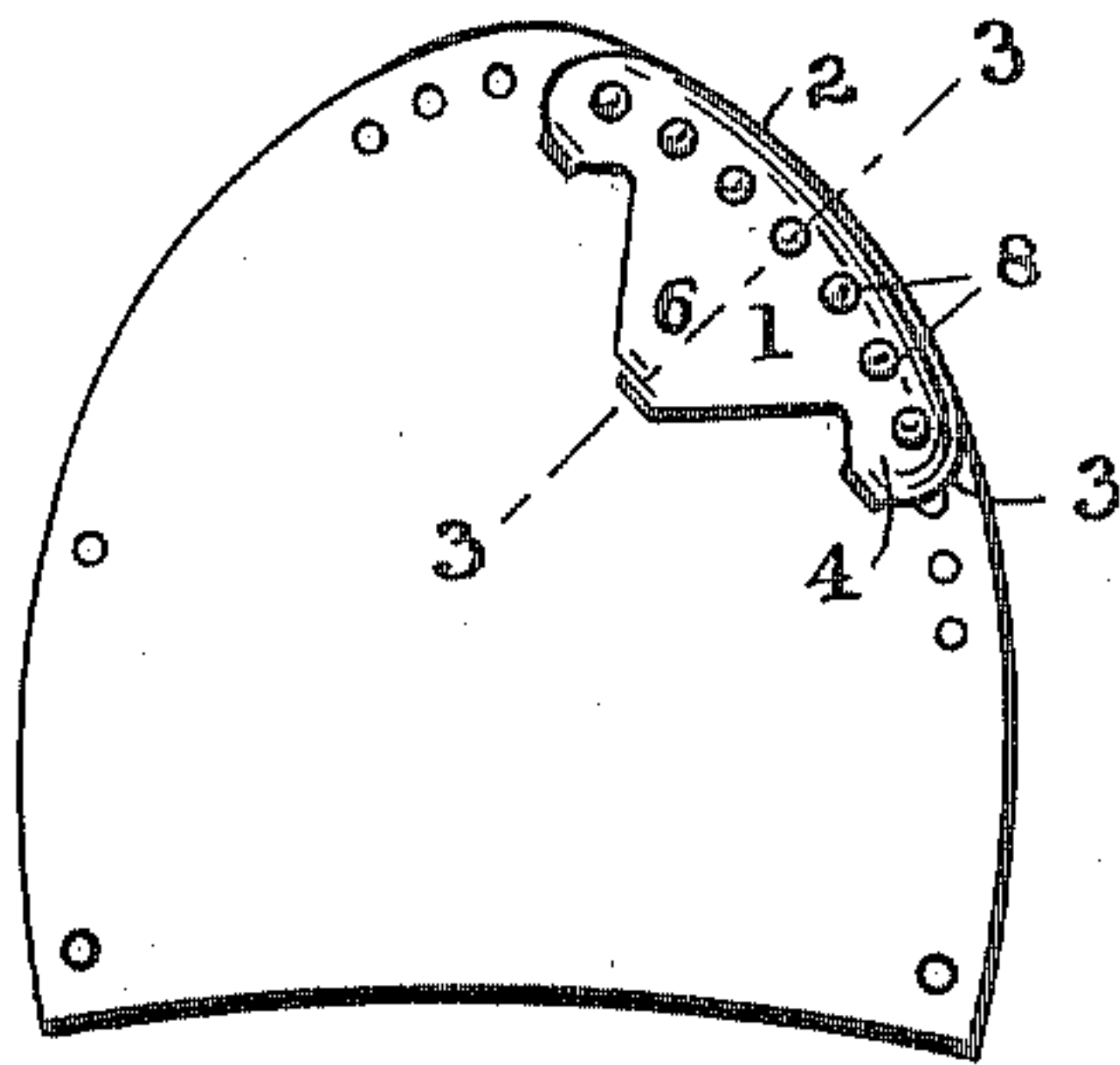


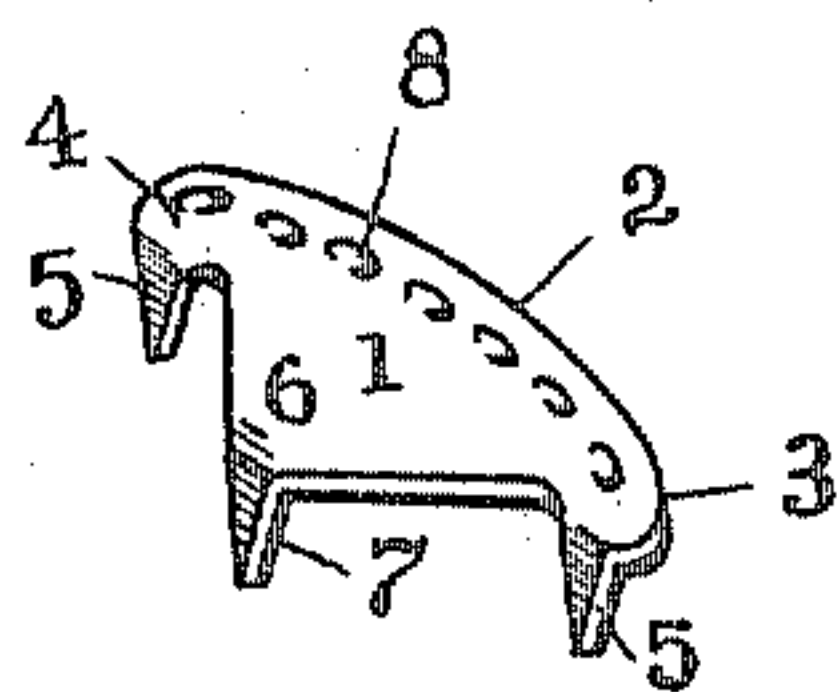
No. 811,605.

PATENTED FEB. 6, 1906.

M. M. WEST.  
PLATE FOR SOLES AND HEELS OF SHOES.  
APPLICATION FILED OCT. 19, 1904.

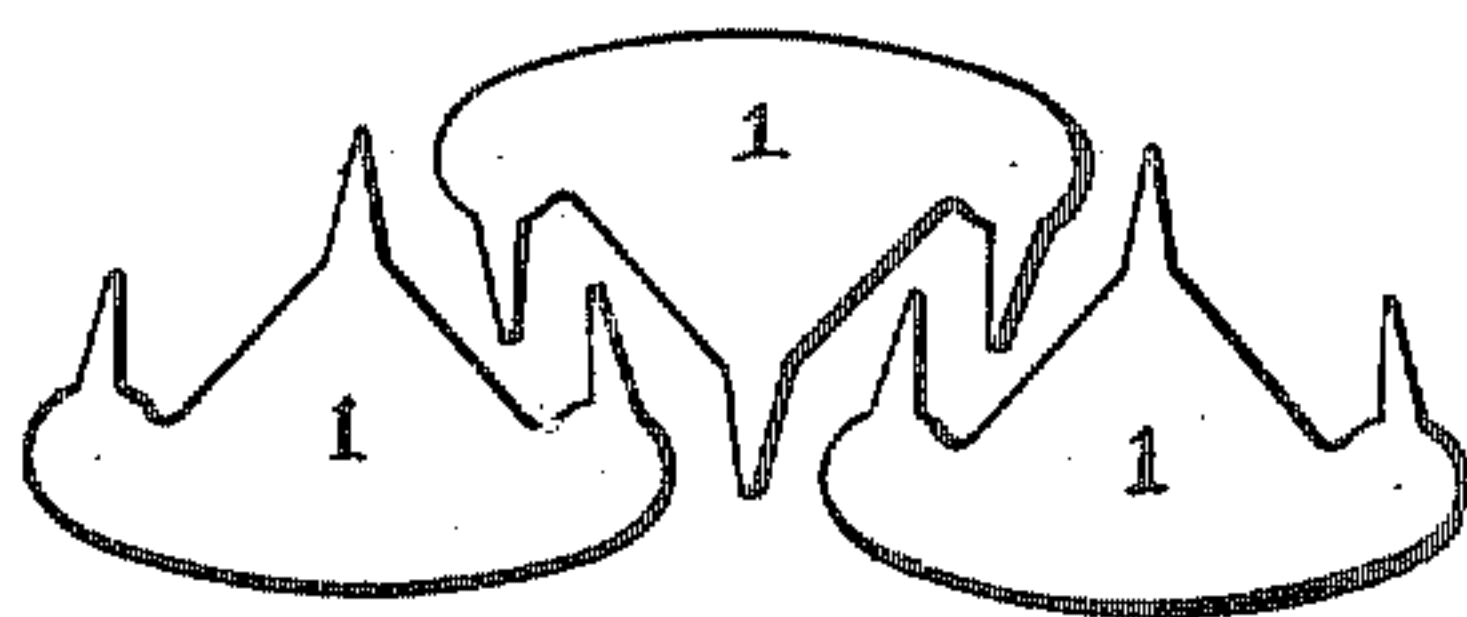
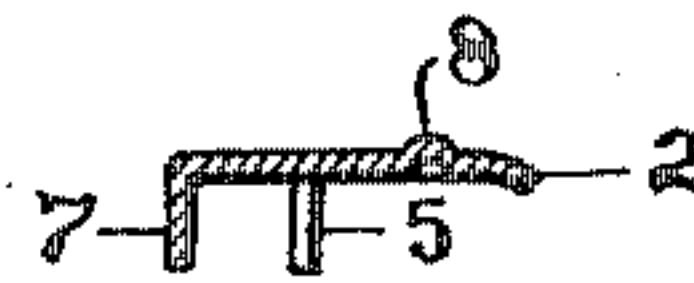


*Fig. 1.*



*Fig. 2.*

*Fig. 3.*



*Fig. 4.*

WITNESSES:

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S. Hollister.

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ATTORNEYS.



# UNITED STATES PATENT OFFICE.

MANSFIELD M. WEST, OF CLEVELAND, OHIO.

## PLATE FOR SOLES AND HEELS OF SHOES.

No. 811,605.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed October 19, 1904. Serial No. 229,080.

*To all whom it may concern:*

Be it known that I, MANSFIELD M. WEST, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Plates for Soles and Heels of Shoes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

My invention relates to plates for the heels and soles of shoes, and has for its object the construction of a plate of this character that may be readily applied to the heel or sole of the shoe, that when so applied will not cut the edge of the sole or heel, that when so applied the prongs by which the plate is secured will be so positioned as to prevent them from becoming detached from the plate through the wear on the same and from being interfered with by the row of nails adjacent the edge of the heel, that for a given length of plate will provide a maximum wearing-surface adjacent the edge of the heel or sole, and that may be constructed with comparatively small waste of material.

The invention is embodied in the drawings hereto annexed, wherein—

Figure 1 represents a bottom plan view of the heel of a shoe, showing my plate applied thereto. Fig. 2 represents a perspective view of the plate. Fig. 3 represents a sectional view of said plate, taken on the line 3 3 of Fig. 1; and Fig. 4 represents a plurality of said plates as they are stamped out from a sheet-metal plate before the prongs are bent into position for insertion into the heel or sole of the shoe.

Describing the parts by reference-numerals, 1 represents a plate constructed in accordance with my invention, said plate being of sheet-steel, generally triangular in shape, and having a rounded outer edge 2, corresponding in contour to the part to which it is applied, in this case the edge of the heel adjacent the rear central portion thereof. This curved edge 2 extends along the edge of the heel or sole a sufficient distance to protect that portion of the same which is subjected to the most wear, the lateral ends of the plate being curved in abruptly at 3 to form the shoulders or projections 4. These shoulders or projections are of sufficient width to bring the inner surfaces well within the row of nails which is generally applied to the outer edge of the heel, and each inner edge has depending therefrom the prong 5, said prong

being bent at substantially right angles to the plane of the plate, as clearly shown in Figs. 2 and 3. The abrupt curvature at the points where the shoulders are formed provides a wearing portion for the plate which is substantially the full length of the same.

In order to afford a sufficient bearing for the plate and to retain the same in place, a central triangular portion 6 is provided, said portion extending inwardly from the projections or shoulders 4 toward the heel and being provided with a prong 7 at the inner end thereof. Should the row of nails ordinarily provided in the heel be inset farther than is customary from the outer edge of the heel or should nails additional to the ordinary row of nails be present, the location of the prongs permits of convenient inspection of all the prongs and enables the operator to apply the plate in such manner as to avoid all such nails.

The plate may be provided with a row of projections 8 parallel with the edge of the sole or heel, said projections being preferably formed by striking up the metal, as shown in Fig. 3. These projections take the initial wear on the plate, prevent slipping, and protect the extreme edge 2 for a considerable time. This edge, as shown in Fig. 3, is curved or deflected downwardly from the region of the projections 8 to the extreme outer edge thereof. This curving or deflecting of the plate adjacent the edge enables it to conform to the outer edge of a worn heel or sole. In applying the plate to an unworn heel or sole the outer edge will be countersunk in such heel or sole, thereby assisting to secure the plate rigidly in place. The outer portion being curved or deflected from the plane of the main bearing-surface of the plate greatly prolongs the life of the plate, as the impact on the heel in walking is distributed along such curved or deflected surface to the edge of the plate instead of being received by the extreme edge of the plate, as is the case in other constructions with which I am familiar. In service the projections 8 are first worn down, then the curved or deflected portion receives the wear, the result being that the plates wear longer than any other plate with which I am familiar.

Owing to the peculiar shape of the plates as stamped out, there is very little loss of material in so stamping them from the stock. In Fig. 4 I have indicated the manner in which these plates are stamped out from the



stock, exaggerating the distances between the plates for clearness of illustration.

As will appear from the foregoing description, it will be apparent that I have produced  
 5 a plate which may be readily applied to the heel or sole of a shoe and that by the peculiar location of the prongs the cutting of the edge of the heel or sole is prevented. The prongs may be readily driven into the heel without  
 10 hindrance by the row of nails usually provided in said heel. By the location of the prongs the part of the plate immediately thereabove is protected from wearing through, thereby enabling the plate to be retained in  
 15 place until the outer portion of the same is completely worn out. Moreover, the provision of the inward extension 6 and the shoulders 4 gives a stable support for the plate, preventing the same from being easily disengaged from the heel or sole. At the same  
 20 time the shape of the extensions or shoulders 3 gives with a plate of small area a long wearing-surface at the place where such surface is necessary, adjacent the edge of the sole or  
 25 heel.

While I have described my invention in detail, it is obvious that such details may be departed from more or less without avoiding the spirit of my invention, and consequently  
 30 I do not propose to be limited to such details except as they may be embodied in the claims or rendered necessary by the prior state of the art.

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

1. A plate for heels and soles of shoes, said plate comprising an elongated continuous outer edge portion curved to correspond to  
 40 the contour of the heel or sole to which the plate is to be applied, a rounded shoulder or

extension at each end of such outer portion, said shoulder extending inwardly a sufficient distance to clear the row of nails adjacent the edge of the heel or sole and having at the inner edge thereof a prong, and a portion intermediate of said shoulders and extending inwardly a greater distance than said shoulders and having at the inner extremity thereof a prong, substantially as specified. 45 50

2. A sheet-metal plate for heels and soles of shoes, said plate comprising a continuous curved outer portion corresponding in contour to the edge of the heel or sole to which the plate is to be applied, said plate being curved or deflected at the outer edge thereof from the plane of the main bearing-surface and being provided with a rounded shoulder at each end thereof projecting inwardly and provided with a prong for securing the same to the heel or sole, substantially as specified. 55 60

3. A plate for heels and soles of shoes, said plate comprising a continuous curved portion corresponding in contour to the edge of the heel or sole to which the plate is to be applied and having adjacent each end thereof a prong set in from the outer edge of the plate and a row of projections parallel with the outer curved edge of the plate and between the said prongs and said outer edge, the plate being curved or deflected from the plane of the main bearing-surface, such curve or deflection extending from said row of projections to the outer edge of the plate, substantially as specified. 65 70 75

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

MANSFIELD M. WEST.

Witnesses:

C. McELROY,  
 J. B. HULL.