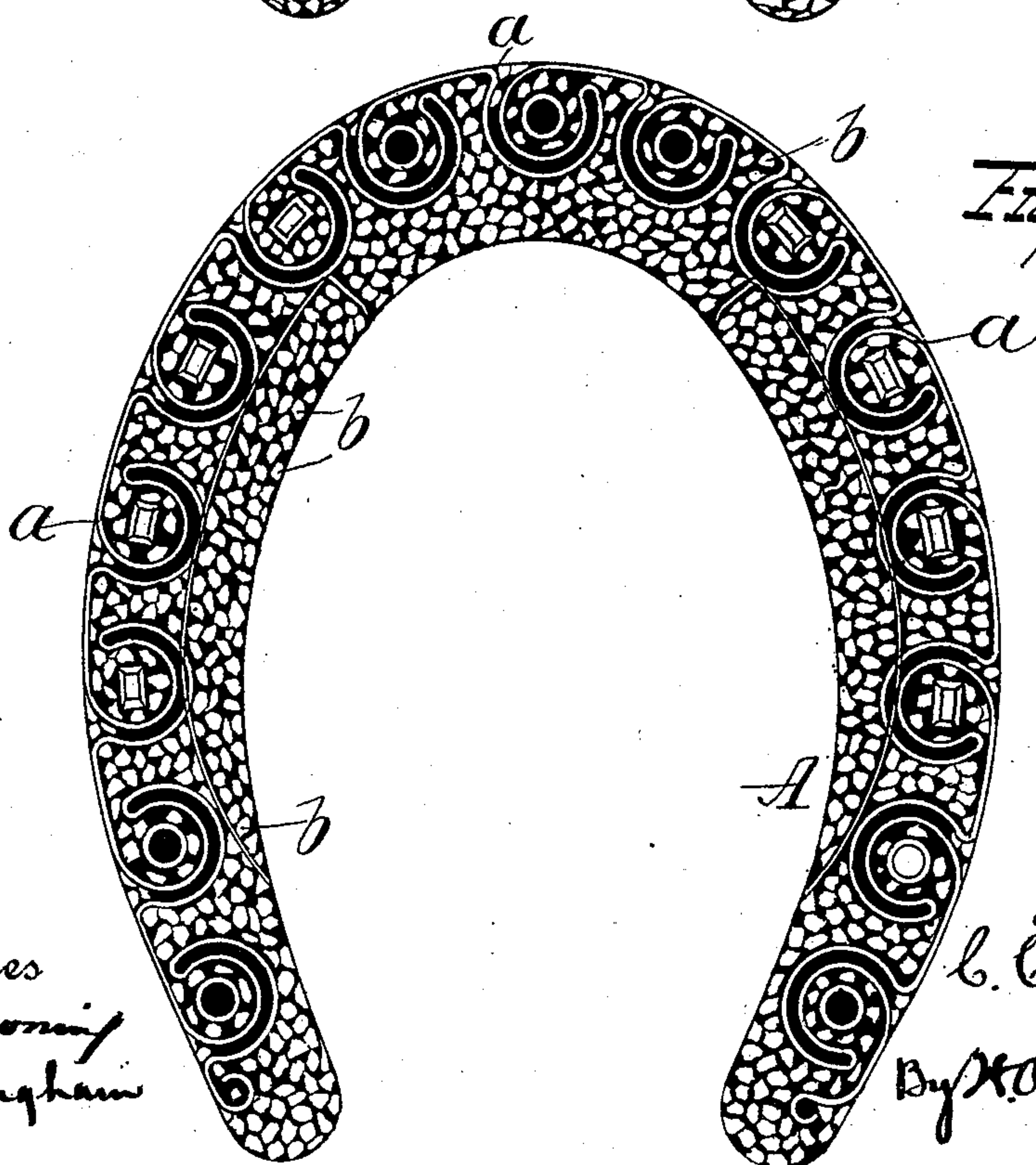
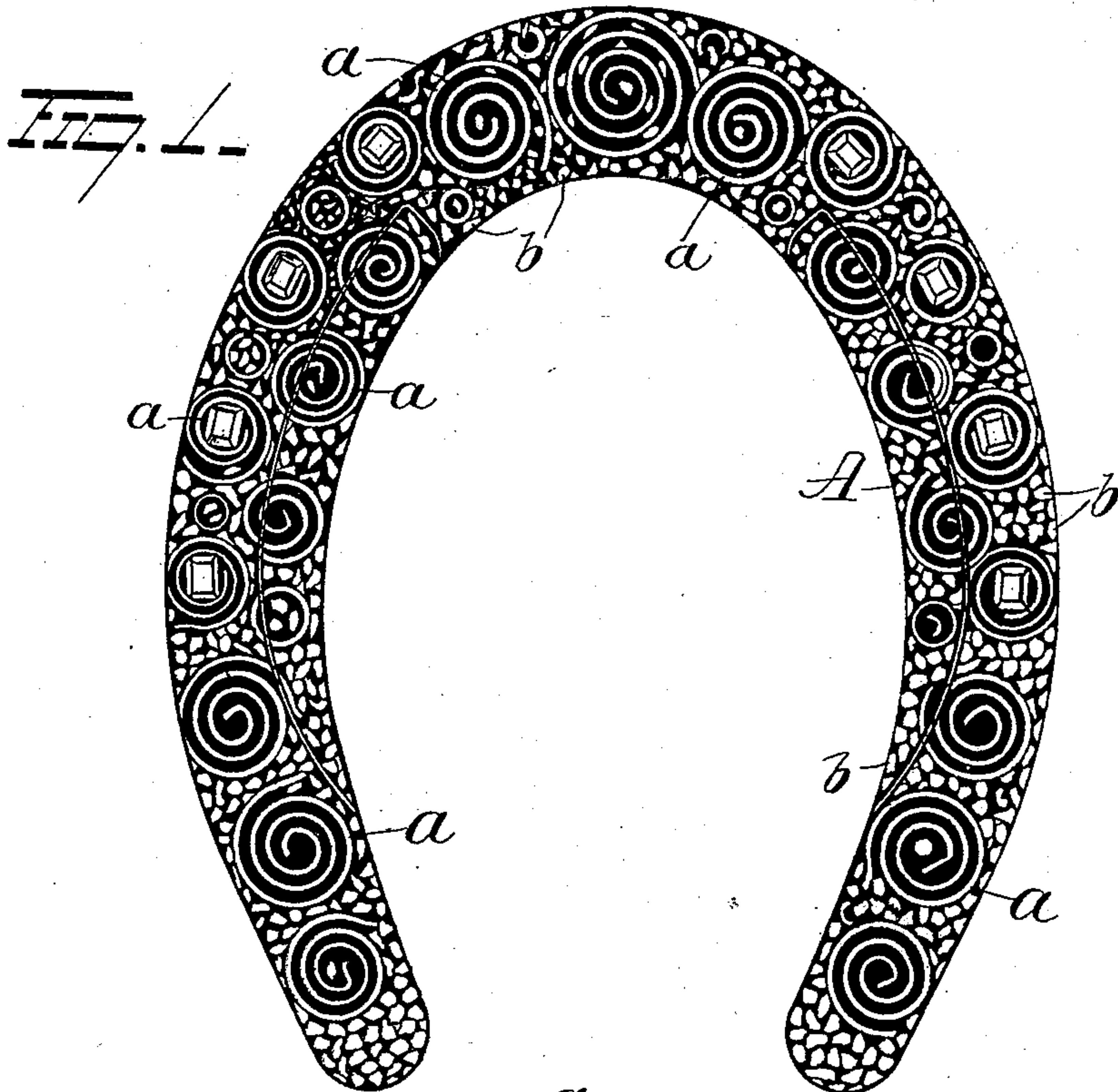


(Model.)

C. C. JEROME.  
HORSESHOE.

No. 539,058.

Patented May 14, 1895.



Witnesses  
*G. F. Downing*  
*S. G. Nottingham*

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Attorney



# UNITED STATES PATENT OFFICE.

CHARLES C. JEROME, OF CHICAGO, ILLINOIS.

## HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 539,058, dated May 14, 1895.

Application filed February 10, 1894. Serial No. 499,793. (Model.)

*To all whom it may concern:*

Be it known that I, CHARLES C. JEROME, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Horseshoes; and I do hereby 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.

My invention relates to an improvement in horse shoes.

Heretofore it has been proposed to provide a horse shoe with a solid wearing plate harder than the body of the shoe, this wearing plate being, in some cases made continuous and in other instances composed of more than one of such solid plates. I have found in practice that in bending the shoe (the body of which I make of aluminium), the aluminium is drawn away from the solid wearing plate (or plates) and the latter becomes loosened, and very frequently the shoe breaks where the corners of the steel plates are loosened from the aluminium by the shoe being bent. The object of my invention is to overcome these objections, and to provide a horse shoe of aluminium, with a hardened wearing face so constructed and applied to the body of the shoe that said shoe can be readily bent to conform to the hoof of the horse to which it is to be applied, without loosening or in any manner interfering with the condition of the hardened wearing face, or its relation to the body of the shoe.

A further object is to render the application of a hardened wearing surface to an aluminium horse shoe effectual and practicable in all respects.

A further object is to provide an aluminium horse shoe with a hardened wearing face which shall be so constructed and arranged that it shall be adapted when in use, to maintain the wearing face of the shoe at all times rough and thus prevent the horse to which the shoe shall be applied, from slipping.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of a horseshoe embodying my improve-

ments. Fig. 2 is a view showing another form of the invention.

A represents a horse shoe made of aluminium, having embedded or pressed into its bottom face, finely divided material (preferably hardened steel) harder than the material of which the body of the shoe is composed. This finely divided steel I prefer to make in two forms, viz., a number of spirals or coils *a*, and crushed steel particles *b*. The spirals or coils *a* will be produced in any suitable manner and preferably hardened afterward. These hardened steel spirals, coils, or bent or twisted strips, and the finely divided crushed steel particles will be pressed into the under face of the shoe, throughout the whole extent thereof, as shown in Fig. 1. It is not necessary that the spirals, coils, or strips be made separate, but they may be made of one continuous strip of steel and pressed into the bottom face of the shoe, as shown in Fig. 2,—this continuous series of spirals or coils thus forming a binding for the edge of the shoe as well (together with the particles of steel *b*) as a protection for the whole wearing face thereof. By making the spirals in a continuous series, they can be applied to the shoe quicker than can the separate spirals, and, this continuous series of spirals forming a binding for the outer edge of the shoe, will prevent any of the aluminium from being abraded by coming into contact with the ground, as would be the case should the aluminium come into contact with abrasive material on gravel roads.

A horse shoe made in the manner above described is very effectual in all respects in the performance of its functions; can be cheaply manufactured, and readily altered while cold to fit the hoof of any horse without disturbing, in any manner, the hardened wearing face; and again, by constructing the wearing face with finely divided material harder than the material of which the body of the shoe is composed, the wearing face will always remain rough, as the aluminium will wear away faster than the hardened steel, leaving the latter sharp and rough, which prevents slipping on roads, even asphalt or graphite pavements,—the steel being harder than any substance with which it will come into contact.

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

5 1. An aluminum horseshoe having finely divided particles of hard metal distributed over and permanently embedded in its wearing face, substantially as described.

10 2. An aluminum horseshoe having curved strips of hardened metal permanently embedded in its wearing face, substantially as described.

3. An aluminum horseshoe having spiral strips of hardened metal permanently embedded in its wearing face, said spiral strips be-

ing arranged so that their edges will be flush 15 with the wearing surface, substantially as described.

4. An aluminum horseshoe having spiral strips and finely divided particles of hardened metal permanently embedded in its wearing 20 face, substantially as described.

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

CHARLES C. JEROME.

Witnesses:

A. B. ELLIOTT,  
C. L. FORWARD.