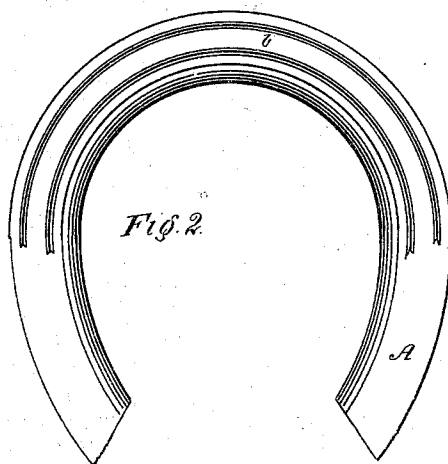
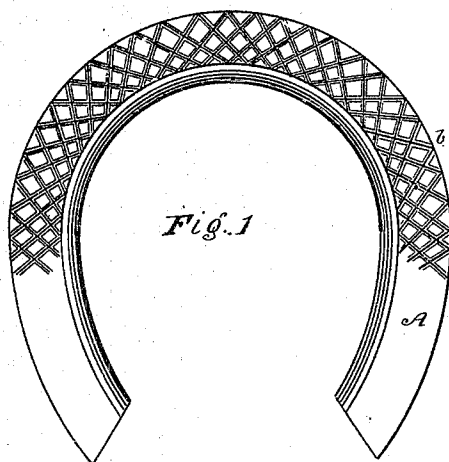


C. GOODENOUGH.  
Horseshoes.

No. 142,097.

Patented August 26, 1873.



Witnesses:

Wm. Thornton  
Harry C. Clark.

Inventor:

Charles Goodenough

# UNITED STATES PATENT OFFICE.

CHARLES GOODENOUGH, OF NEW YORK, N. Y.

## IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. **142,097**, dated August 26, 1873; application filed May 24, 1873.

*To all whom it may concern:*

Beit known that I, CHARLES GOODENOUGH, of the city of New York, in the county and State of New York, have invented a new and useful Improvement in Horseshoes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of this specification.

The object of my invention is to construct or make horse and mule shoes in such a manner that they will fit more closely to, and more immovably upon, the surface of the foot, thereby lessening their liability to displacement, and relieving the nails which fasten the shoe to the foot from lateral strain. The nature of my invention consists in forming upon the upper surface of the shoe, which is in contact with the foot, a series of indentations for the purpose of securing a firm seating of the shoe upon the foot, or, in other words, making the shoe with a roughened upper surface, either by milling, filing, or indenting the same. The wall of the foot, or that portion thereof to which the shoe is attached, being fibrous, will readily adapt itself to the irregularities of the milled or roughened surface of the shoe, more especially as the direction of the fibers is such that the ends of the same will enter the depressions or indentations, and when the shoe is "clined up" the latter will fit closely and immovably to the surface of the foot.

In the drawing, Figure 1 represents a plan view of the upper surface of a horseshoe with my improvement. Fig. 2 is a similar view, showing a modified form of the indented or roughened surface.

A is a horse or mule shoe, which, excepting my improvement thereof, may be of any of the ordinary or common kinds in use. Upon the upper surface thereof, or that portion which comes in contact with the foot, I form a series of indentations in any suitable manner or of any suitable kind, either by milling the surface or otherwise indenting or roughening it. *b b* represent the indentations.

By this means, the clips which are usually raised upon the edge of the shoe are rendered unnecessary, and the shoe is made to fit closely and compactly to the surface of the foot, thereby removing all lateral strain from the nails, and the shoe will remain in place until it is worn out, or until the heads of the nails wear off, although the animal may be worked upon stone pavements, which are so destructive to horseshoes when secured in the ordinary manner. The concussion occasioned by the shoe coming against the stone pavement, which has a tendency to force from the foot a shoe made and secured in the ordinary manner, will, in the case of my improved shoe, cause the fibers of the foot to press more firmly into the indentations, and thereby render it more immovable.

I may mention that either the whole or only a portion of the surface may be roughened.

What I claim as my invention is—

A horse or mule shoe having a roughened upper surface, substantially as herein shown and described, and for the purpose specified.

CHARLES GOODENOUGH.

Witnesses:

JOHN S. THORNTON,  
HARRY C. CLARK.