(No Model.)

T. W. MURPHY.

HORSESHOE.

No. 267,243. Patented Nov. 7, 1882.

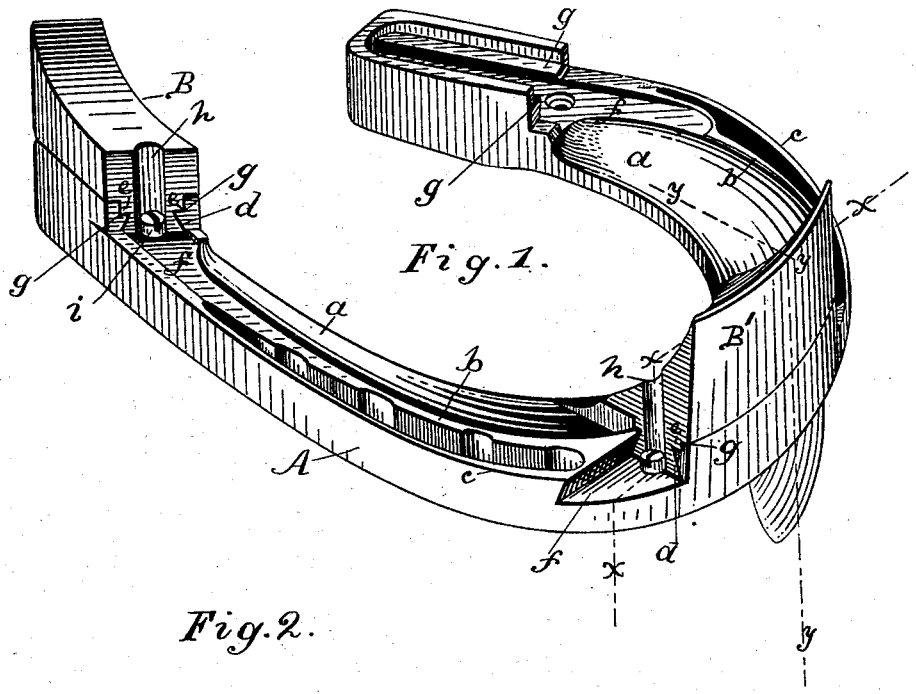


Fig. 1.

Fig. 2.

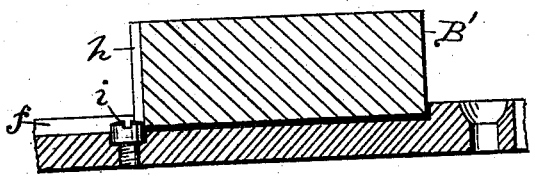


Fig. 3.

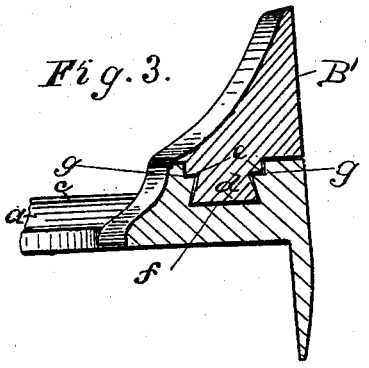
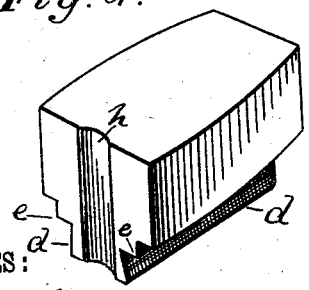


Fig. 4.



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UNITED STATES PATENT OFFICE.

TIMOTHY W. MURPHY, OF WASHINGTON, DISTRICT OF COLUMBIA.

HORSESHOE.

SPECIFICATION forming part of Lettert Patent No. 267,243, dated November 7, 1882.

Application filed April 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY W. MURPHY, of Washington, in the District of Columbia, have invented a new and useful Improvement in Horseshoes, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, forming part of this specification.

This invention relates to horseshoes having removable calks; and the invention consists in constructing a horseshoe with dovetailed and shouldered recesses for receiving calks of corresponding construction, and in securing the calks in position by means of screws having their heads countersunk in the shoe, as hereinafter described.

In the accompanying drawings, Figure 1 is a perspective bottom view of the shoe, showing one of the calks and its screw removed. Fig. 2 is a sectional view taken on line *x x*, Fig. 1, and Fig. 3 is a sectional view taken on line *y y*, Fig. 1; and Fig. 4 is a perspective view of a heel-calk for every-day wear.

A represents a horseshoe having a curved concavity, *a*, extending from the heel to the toe-calk on each side, and the ridges *b* and outer edges, *c*, as shown in Letters Patent No. 194,712, granted to me under date of August 28, 1877.

The heel-calks B B, which are intended for winter wear, are each provided with a dovetailed tenon, *d*, and with longitudinal shoulders *e* at the sides of the tenon, which are adapted to slide into the recesses *f*, which are open at the ends toward the toe. The recesses *f* are dovetailed at the bottom, and provided with offsets *g*, which serve as bearing-surfaces for the shoulders *e* of the calks. The calks B B are provided with concave recesses *h* in their forward ends, and are secured in position by screws *i*, which are provided with cylindrical heads countersunk in the shoe and abutting against the concave surface of the recesses *h*.

The toe-calk B′ is constructed in like manner with a dovetailed tenon, *d*, and shoulders *e*, and slides in a recess, *f*, across the toe of the shoe. This recess is closed at one end, and the calk is secured therein by means of the screw *i*, the head of which is countersunk in the shoe, as above described.

I am aware that horseshoes have been constructed with dovetailed recesses for receiving corresponding tenons on the calks, and therefore I do not claim this feature, broadly. In my invention, however, the longitudinal offsets, forming bearing-surfaces for the shoulders at each side of the dovetailed tenon, serve to relieve the tenon by increasing the bearing-surface between the shoe and the calk. In this manner the tenon only needs to serve as a key for holding the calk in position, while the longitudinal shoulders at the sides of the tenon may be made to support the principal strain upon the calk.

I am also aware that it is not broadly new to secure a calk in position by a screw which is inserted into the body of the shoe at one end of the calk. It is to be observed, however, that in my invention the cylindrical head of the screw is fitted into a recess in the calk and countersunk in the shoe, so that the head is strongly supported in its seat, and thus any strain upon the head is thrown upon the body of the shoe, while the concave recess in the end of the calk, into which the head is placed, serves to protect the head from being battered by contact with stones, gravel, &c.

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

1. A horseshoe having dovetailed recesses *f*, open at one end, and provided with longitudinal offsets *g* at the sides of the dovetailed portion, in combination with the calks B B′, having corresponding tenons and shoulders, and the screws *i*, having their heads countersunk in the body of the shoe, substantially as shown and described.

2. The calks B B′, having dovetailed tenons *d*, and longitudinal shoulders *e* at the sides of the tenons, and having a concave recess, *h*, at one end, in combination with the body of the shoe A, having recesses, substantially as described, and the screw *i*, countersunk in the shoe and abutting against the surface of the said concave recess, as shown and described.

T. W. MURPHY.

Witnesses:

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