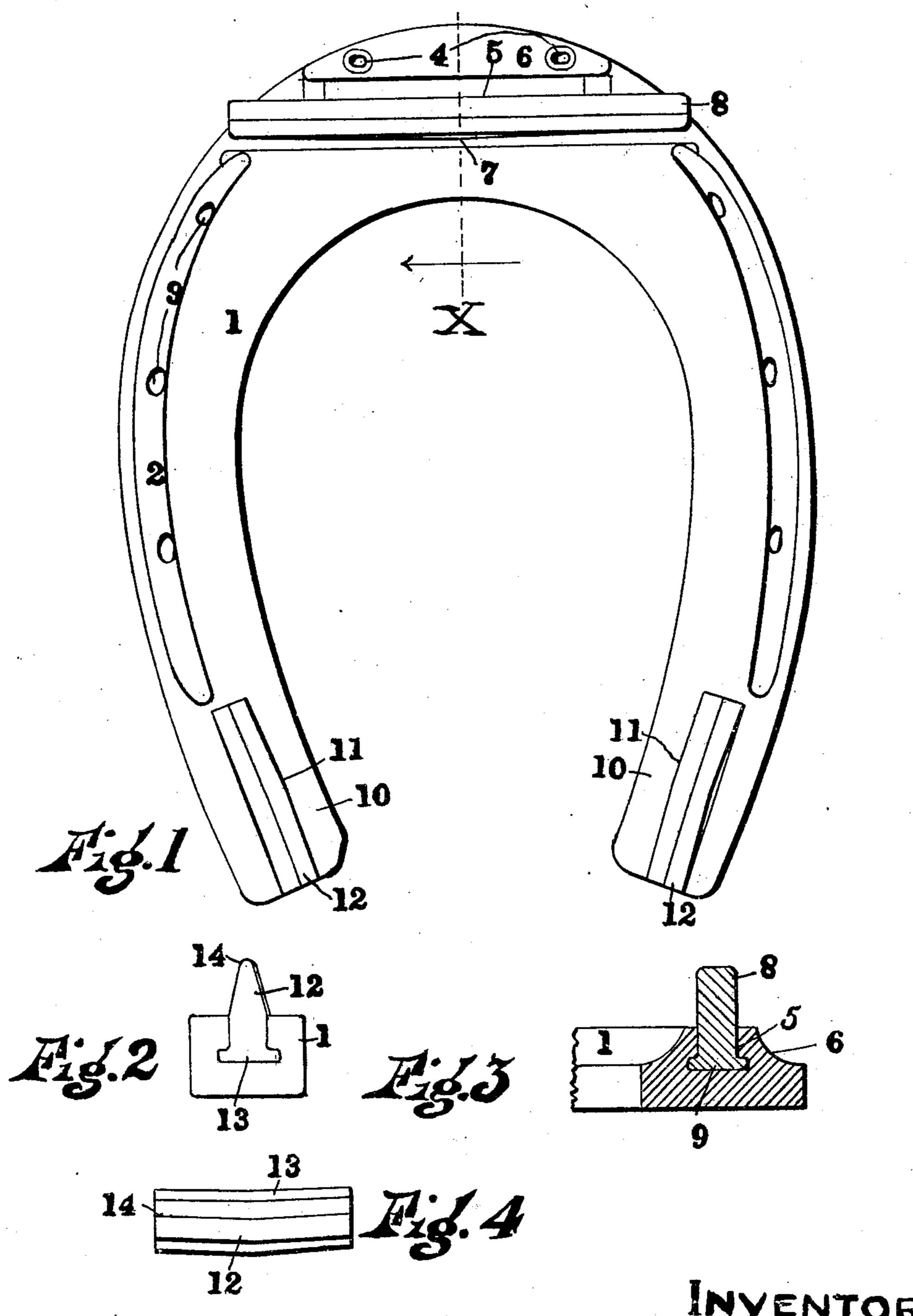
## M. D. BRILLHART.

HORSESHOE.

APPLICATION FILED DEC. 30, 1909.

962,812.

Patented June 28, 1910.



Witnesses:

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## UNITED STATES PATENT OFFICE.

MICHAEL D. BRILLHART, OF STERLING, OHIO.

## HORSESHOE.

962,812.

Specification of Letters Patent. Patented June 28, 1910.

Application filed December 30, 1909. Serial No. 535,683.

To all whom it may concern:

Be it known that I, Michael D. Brillhart, a citizen of the United States, residing at Sterling, in the county of Wayne and 5 State of Ohio, have invented new and useful Improvements in Horseshoes, of which the

following is a specification.

This invention pertains to horseshoes of the removable-calk type and it contemplates the provision of a horseshoe embodying simple and efficient means to preclude unintentional movement or displacement of a calk while the shoe is in use and yet adapted to permit of the ready removal of the calk and its replacement by a new one when neces-

sity demands.

With the foregoing and other objects in view, the invention consists in the novel construction, combination and arrangement of parts constituting the invention to be hereinafter specifically described and illustrated in the accompanying drawings which form a part hereof wherein is shown the preferred embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claim hereunto appended.

In the drawings, in which similar reference ence numerals indicate like parts in the different figures: Figure 1 is a plan of the under face of a horseshoe embodying this invention. Fig. 2 is a view in end elevation of one of the heel portions of the horseshoe shown in Fig. 1. Fig. 3 is a sectional view on line X of Fig. 1; and, Fig. 4 is a plan of a preferred form of calk detached

from a horseshoe.

Referring to the drawings, the reference 40 numeral 1 denotes a horseshoe of conventional type provided with grooves 2 in which are apertures 3 for receiving the nails for securing the device to the hoof of a horse. In the toe portion of the shoe are 45 two apertures 4 to receive nails for securing this portion of the shoe to the hoof. The under face of the toe portion of the shoe is provided with a transverse T-shaped groove 5 and with the body portion 6 in 50 advance of the groove preferably curvilinearly-formed. The portions of one of the side walls of the groove 5 on each side of the medial line thereof are at a slight obtuse angle with respect to each other, the

said angle being indicated in the drawings 55 by the reference numeral 7. Mounted in the groove 5 is a calk 8 which is formed with a T-shaped portion 9 arranged to be received in the T-shaped groove 5. This calk 8 is preferably formed with a slight 60 obtuse angle at its central medial portion so that when driven into the groove 5 it will fit therein so snugly as to not become accidentally or unintentionally displaced, but may be driven therefrom by a hammer in 65 the hands of an operator when desired to remove the same for sharpening, or to replace the worn calk by a new one. The heel portions 10 of the shoe are each provided with a longitudinally-extending T-shaped 70 groove 11 which is formed so that the end portions of one side edge of each of the grooves are at a slight obtuse angle with respect to each other. Mounted in each of these grooves 11 is a calk 12 provided with 75 a T-shaped portion 13 to seat in its respective groove 11 and with the outer projecting portion of each calk formed as desired, but shown in Fig. 2 as having a sharpened outer edge 14; however, any other form or con- 80 figuration may be imparted to the projecting portion of the calk as may be deemed best. These calks 12 are preferably formed as shown in Fig. 4 with the portions on each side of the transverse medial line thereof 85 bent at an obtuse angle with respect to each other so as to fit in the similarly-formed grooves 11. The calks 8 and 12 are secured in position by driving them into their respective grooves and when so positioned 90 they are prevented from accidental withdrawal by reason of the angular formation of the grooves and calks which causes an interlocking engagement between these elements; but if necessary for any reason the 95 calks may be removed by driving them outwardly from the grooves. The grooves 11 and calks 12 are preferably so positioned in the heel portions of the shoe that the apices of the angles formed therein will be inward 100 so as to be oppositely-disposed with respect to each other.

This invention contemplates that in the manufacture of calks they will be rolled in approximately continuous lengths, after 105 which the individual calks may be severed from the stock and before insertion into the grooves in the shoe each individual calk may

be given the angular conformation heretofore described, by the use of a hammer or other suitable tool.

I claim:

The combination with a horseshoe provided in its under face with a T-shaped recess extending from one of the lateral sides thereof into the body of said shoe and constituting a socket for a calk, one of the side walls of said recess formed with an obtuse angle, of a calk comprising a bar suitably fashioned to be passed into said socket from the open end thereof, the sides

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of said calk formed parallel and each with an obtuse angle therein whereby it will interlock with the angularly-formed side of said socket for preventing unintentional removal.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit- 20 nesses.

## MICHAEL D. BRILLHART.

Witnesses:

C. E. HUMPHREY, GLENARA FOX.