

F. J. GUMMERSBACH.
HORSESHOE.
APPLICATION FILED AUG. 3, 1912.

1,057,957.

Patented Apr. 1, 1913.

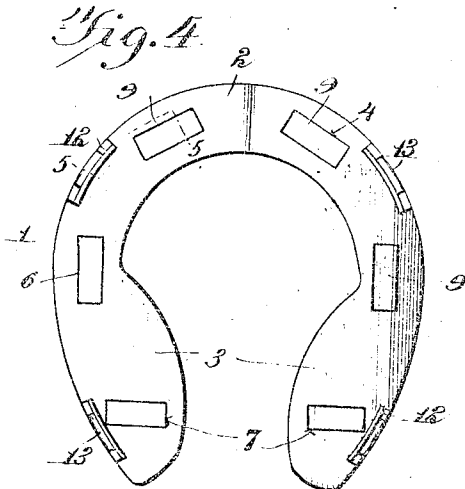
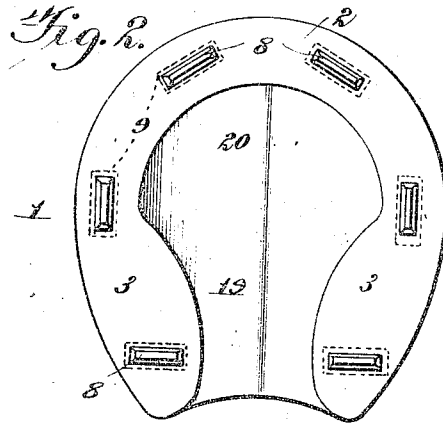
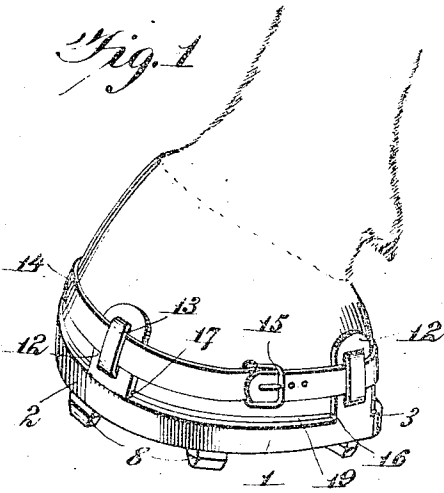


Fig. 3

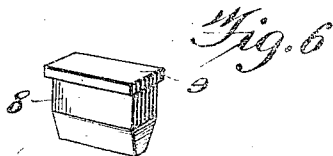
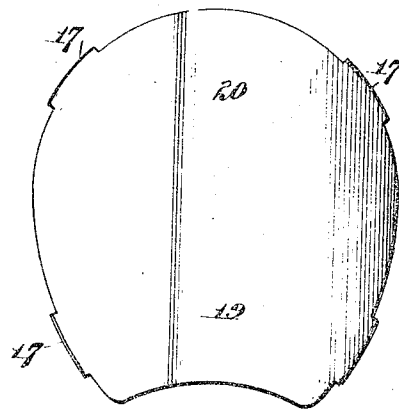
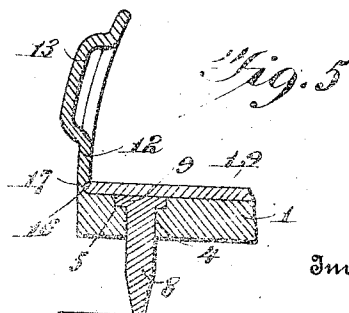
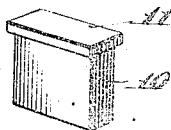


Fig. 7



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UNITED STATES PATENT OFFICE.

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HORSESHOE.

1,057,957.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FREDERICK JOSEPH GUMMERSBACH, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Horseshoes, of which the following is a specification.

This invention relates to horse shoes and has for an object to provide a device of this character which may be made to comfortably fit the hoof of an animal and to have such connection therewith as will eliminate the provision of nails or like shoe attaching means to be driven into the hoof.

Another object of the invention is to provide a shoe wherein will be included removable anti-slipping calks that are capable of being removed from the shoe when worn and to be replaced by new calks at a minimum cost.

Another object of the invention is to provide a retaining plate for holding the calks against accidental displacement from the shoe when the latter is removed from the hoof.

In the drawing forming a portion of this application, and in which like letters of reference indicate similar parts in the several views:—Figure 1 is a perspective view of the shoe showing the application of the same to the hoof of an animal. Fig. 2 is a bottom plan view of the shoe. Fig. 3 is a plan view of the plate. Fig. 4 is a plan view of the shoe with the plate removed. Fig. 5 is a section through a portion of the shoe showing the means of securing the plate thereto. Fig. 6 is a perspective view of one of the calks. Fig. 7 is a perspective view of a slightly modified form of calk.

The shoe 1 is preferably provided with an arcuate portion 2 which is the same width throughout and which terminates into laterally enlarged portions 3 of the shoe. The shoe is provided at its toe end with calk receiving passages 4 which are angularly disposed relatively and whose walls are undercut as at 5 adjacent to the upper surface of the shoe. Similar passages 6 are formed approximately at the terminals of the arcuate portion 2. These passages are disposed in parallel relation relatively and at right angles to the similar passages 7 in the laterally enlarged heel portions 3. All of the passages receive calks

8 of steel and as illustrated the calks are of a configuration so as to conform with the shape of their receiving passages and they are provided with upper flanges 9 which are seated in the undercut walls 5 as shown. In this manner the outward adjustment of each calk is limited.

The calks as shown in the preferred embodiment of the invention are pointed and they are relatively broad. The calk illustrated in the modified form of the invention shown in Fig. 7 has a portion 10 of the same thickness throughout and a flanged upper portion 11. The first described calk is preferably used where the animal is to be driven over slippery surfaces. The modified construction of the calk may be formed of rubber, being admirably adapted for summer driving of an animal.

Ears 12 upon the shoe 1 are stamped to provide strap loops 13 through which a retaining strap 14 may be passed and the terminals thereof connected by means of a buckle 15 whereby the shoe can be effectually held in an applied position upon the hoof. Adjacent to the upper surface of the shoe 1, the ears 12 are stamped to form concavities 16 which are adapted to receive projections 17 upon the side edges of the metallic protecting plate 19. This plate is provided with an intermediate frog protecting portion 20. The plate is adapted to be placed flat against the upper surface of the shoe 1 and to wholly overlie the upper flat surfaces of all of the calks and to prevent the calks from being brought into contact with the hoof under the weight of the animal. The position of the front calks of the shoe is such that they will be most effective as to the animal's finding a proper initial purchase upon the ground, and they assist in the action of the heel calks and the side calks in holding the animal against slipping laterally.

I claim:—

A horse shoe provided with an arcuate portion and with laterally enlarged heel terminals, the arcuate portion being of the same width throughout, calks disposed angularly relatively at the toe of the shoe, calks angularly disposed with relation to the first calks and disposed immediately at the terminals of the arcuate portion, and calks carried by the laterally enlarged heel ends and disposed at right angles to the second

named calks, ears formed on the shoe and adapted to extend against the sides of the hoof, a hoof embracing strap associated with the ears, the said shoe having passages
5 therein receiving the said calks, the said calks having their upper surfaces lying flush with the upper surface of the shoe, and a guard plate extending over the calks and engaged against the upper surface of the

shoe and having portions secured in the 10 said ears.

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

FRED. JOSEPH GUMMERSBACH.

Witnesses:

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