No. 860,453. PATENTED JULY 16, 1907.

S. L. DUNLAP.

REMOVABLE CALK FOR HORSESHOES.

APPLICATION FILED JUNE 18, 1906.

Fig. 1.

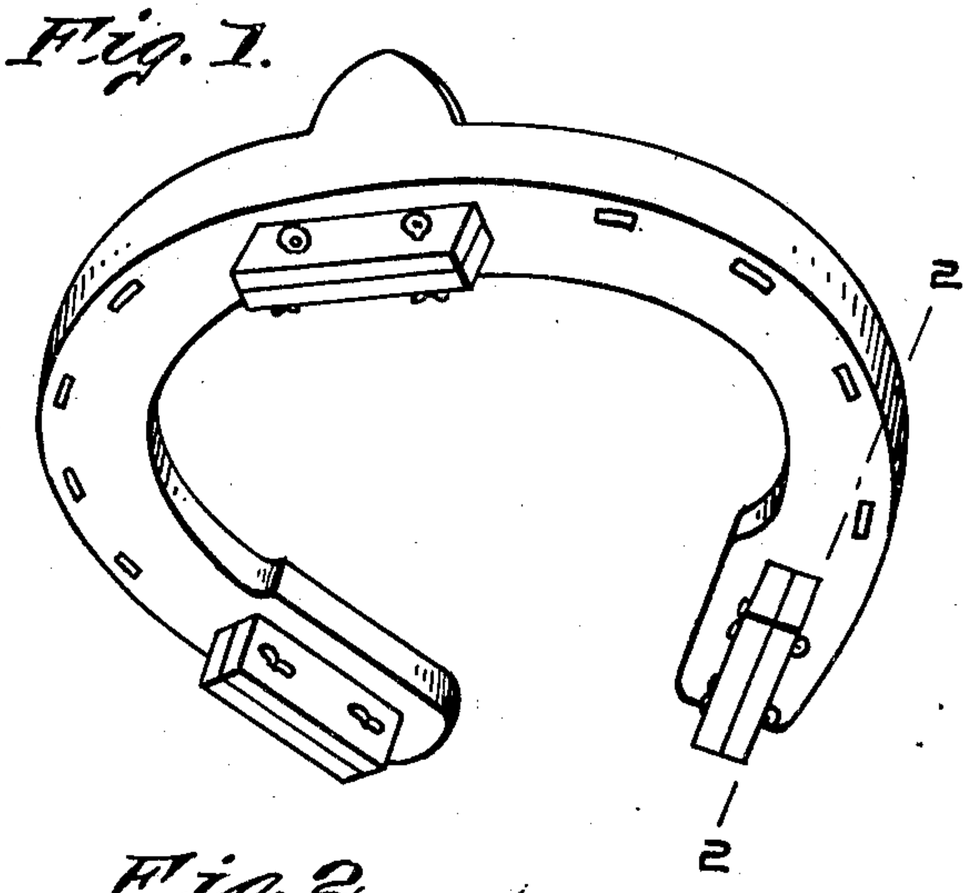


Fig. 2.

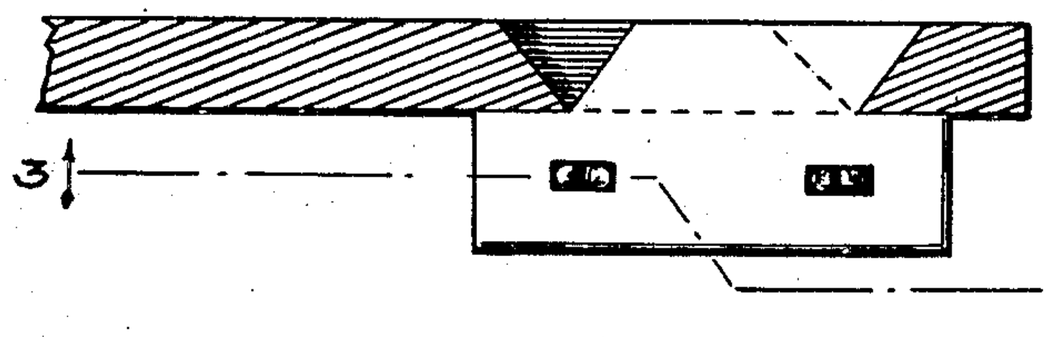


Fig. 5.

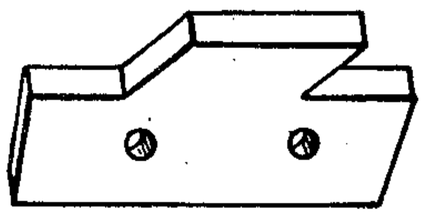


Fig. 3.

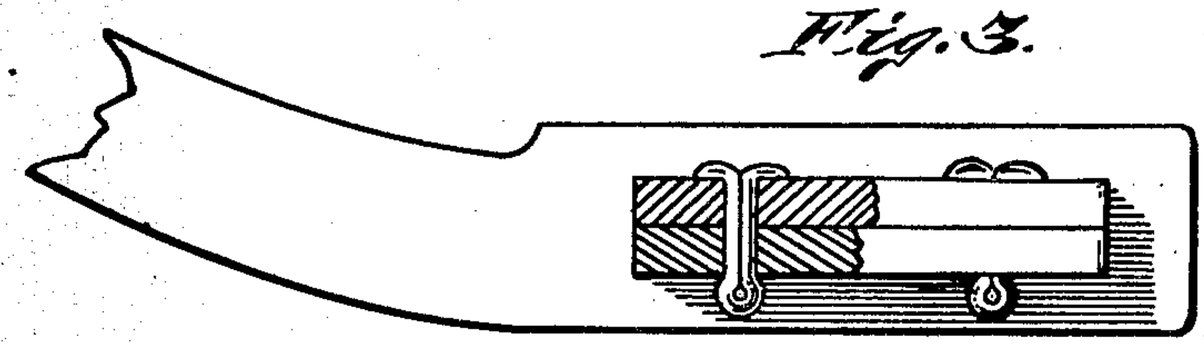
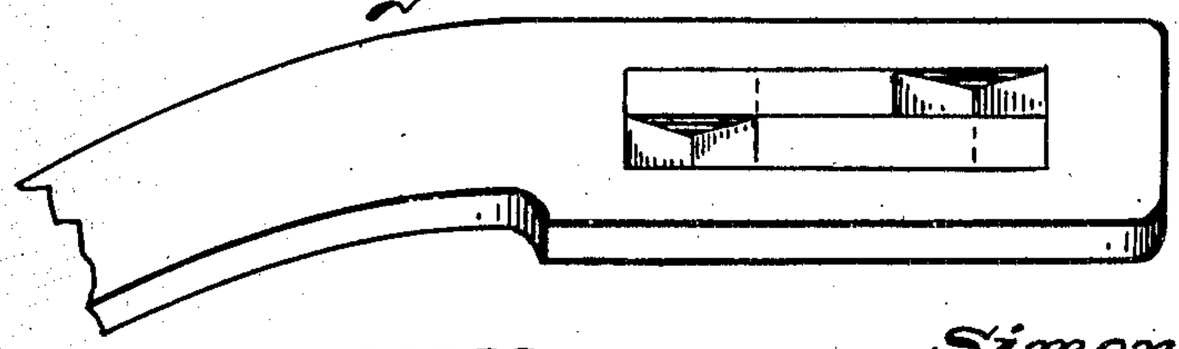


Fig. 4.



WITNESSES:

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ATTY'S

UNITED STATES PATENT OFFICE.

SIMON L. DUNLAP, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-TENTH TO NEWTON M. TAYLOR, OF INDIANAPOLIS, INDIANA.

REMOVABLE CALK FOR HORSESHOES.

No. 860,453. Specification of Letters Patent. Patented July 16, 1907.

Application filed June 18, 1906. Serial No. 322,249.

To all whom it may concern:

Be it known that I, SIMON L. DUNLAP, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Removable Calks for Horseshoes, of which the following is a specification.

This invention relates to an improvement in removable horse shoe calks, and the object of the invention is to provide means whereby said calks can be made to free themselves from the shoe when irregularly worn, and can be removed and others substituted while the shoes are still attached to the hoofs.

A horse shoe embodying the several features that constitute my invention is illustrated in the accompanying drawing, which forms part of this application, in which

Figure 1 is a perspective view of the underside of a shoe showing my improved calks in operating position. Fig. 2 is a section of a portion of the shoe in which a calk is shown in elevation, on the dotted line 2—2 in Fig. 1. Fig. 3 is an underside plan view of the construction shown in Fig. 2. Fig. 4 is a perspective view of the upper side of that portion of the shoe illustrated in Fig. 3, and Fig. 5 is a perspective view of one of the calk forming members.

In the drawings, 1 represents the body of the horse shoe which is provided with elongated slots 2, the number of which correspond with the number of calks intended to be employed in the shoe. The ends of the slots 2 are formed on diagonal lines which converge at a point below the under surface of the shoe—that is, the part of the shoe which faces the ground when in position. It will be noted that this construction provides a slot which is of a lesser diameter at the under surface of the shoe than at its upper surface.

The calks are formed by two interchangeable members 5, which may be cut from material of a uniform thickness, by means of a single die. The shape of one of the individual members, that form the calks, is clearly illustrated in Fig. 2. The upper end of each member 5 is cut on a diagonal line to correspond with the diagonal tapering ends that form the ends of the slot 2, and the other end is cut on a similar taper, or of sufficient angle to permit these upward and diagonal extending portions of the member 5 to be inserted or passed into said slot 2. After one of said members has been placed into position, a similar member is then placed against the first member in a reversed position, and then introduced into the slot 2, the combined members thus form the calk unit. The combined thickness of the two members 5 completely fill the transverse diameter of said slot 2, so that lateral movement is prevented. The members 5 are each provided with transverse apertures 6 which register with those in the other member when the two are assembled and in operating position, and to prevent the dislodgment of said calk unit from the shoe body 1, I pass a plurality of split-pins 10 through the apertures in both members, and by spreading the free ends of said pins (as shown in Fig. 3) the members are tightly drawn together. It will be seen that the upper extended and outwardly flaring ends of the members 5 will prevent the withdrawal of the calk unit from the body of the shoe. The members 5, however, may be easily removed and replaced when too badly worn, or for any other cause, by removing the transverse pins 10. This construction also permits the substitution, during the winter months, of members having their exposed ends that engage the ground to be brought to a wedge-shaped point so as to prevent slippage. This construction also permits the calks to free and lose themselves from the shoe whenever they have become worn down to the transverse apertures 6, which will permit the pins 10 to drop out. These features are the chief objects of this invention. The driver is not charged with the duty of watching the calks that have become too unevenly worn and unfit for further service, for they lose themselves when they have become sufficiently worn, and when the driver shall have observed that one or more of the calks are missing, he can readily replace them.

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

1. In a removable calk for horse shoes, the combination with a shoe provided with slots having their ends cut on downwardly and inwardly extending inclined plane lines, the calk formed of a plurality of longitudinally extending parallel members, said members having a portion of their oppositely positioned ends cut on an inclined plane to correspond with the abutting end of the slot, and locking means for securing the members together in operating position.

2. In a removable calk for horse shoes, the combination with a shoe provided with slots having their ends cut on downwardly and inwardly extending inclined plane lines, a calk formed of a plurality of longitudinally extending parallel members, said members having a portion on their oppositely positioned ends cut on an inclined plane to extend with the abutting end of the slot, while a similar portion of the positioned ends of the members are cut on an inclined plane in which the percent of inclination is no larger than that on which the antecedently mentioned ends are cut.

In witness whereof, I, have hereunto set my hand and seal at Indianapolis, Indiana, this 8th day of June, A. D. one thousand nine hundred and six.

SIMON L. DUNLAP. [L. S.]

Witnesses:
F. W. WOERNER,
L. M. HELMUTH.