

(No Model.)

A. E. MAKEL.
ICE SHOE FOR HORSES.

No. 538,452.

Patented Apr. 30, 1895.

Fig. 1

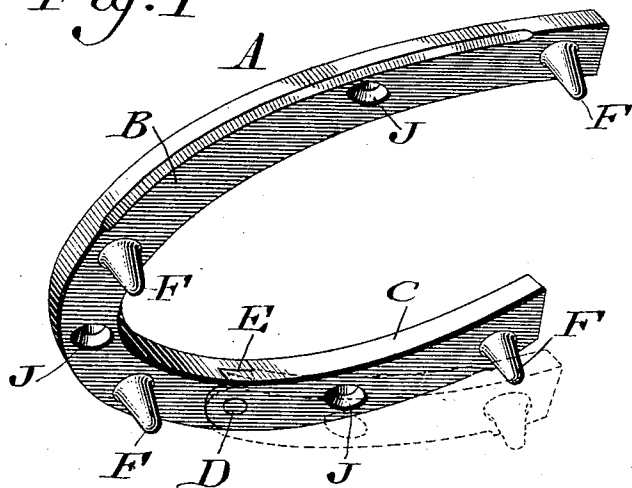


Fig. 2.

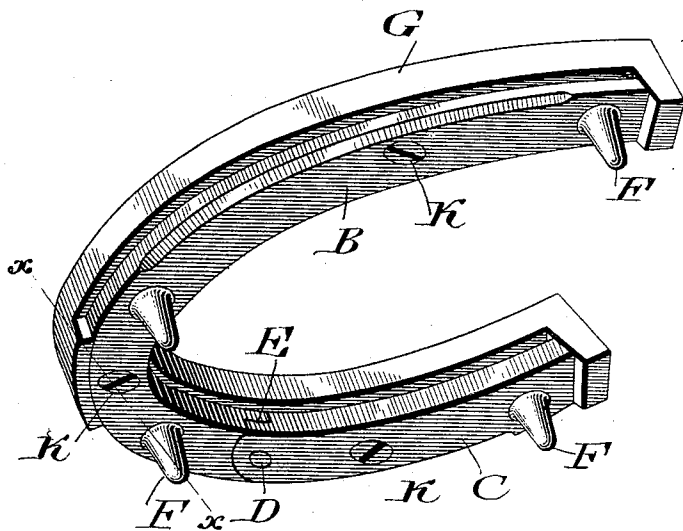
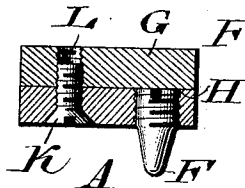


Fig. 3



Witnesses
O. F. Nagle.
L. Douville.

Inventor
Alexander E. Makel.
By John A. Federstein
Attorney

UNITED STATES PATENT OFFICE.

ALEXANDER E. MAKEL, OF PHILADELPHIA, PENNSYLVANIA.

ICE-SHOE FOR HORSES.

SPECIFICATION forming part of Letters Patent No. 538,452, dated April 30, 1895.

Application filed January 16, 1895. Serial No. 535,077. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER E. MAKEL, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Ice-Shoes for Horses, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an ice shoe formed in sections pivotally connected by a lap-joint, calks inserted in the sections from above, and means for securing the said shoe to a shoe proper.

Figure 1 represents a perspective view of an ice-shoe embodying my invention. Fig. 2 represents a perspective view of the shoe in operative position. Fig. 3 represents a vertical section on line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a removable ice shoe formed of the sections B and C, connected by the pivotal pin D, the ends of which sections adjacent to said pin, having knuckles E, which form a lap-joint hinge, and permit lateral movement of the sections, so as to be adjusted relative to the size of the shoe G proper.

F designates calks which have threaded shanks, and are fitted into the shoe from above, through the openings H, provided for the purpose.

In said shoe A are openings J, which receive the screws K, which enter openings L in the said shoe G, and fasten the said shoes together, it being noticed that the shoe A fits

between the front and the rear calks of the shoe G, and is thus braced.

It is seen that the ice shoe is held firmly and reliably in position, and it may be easily removed when not required for use.

When the shoe is removed, the calks F may be screwed farther out by inserting a screw-driver in the nicks in the top of the threaded shank of said calks, thus adapting the calks to be used until almost worn off. As the sections are pivotally connected, they may be spread apart or closed toward each other, so as to adapt the device to shoes proper of different widths or sizes.

As the knuckles E are lapped or placed one on the other, they receive uniform strain when the ice shoe is in use, and prevent breaking-up of the hinge or pivot of the sections.

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

1. An ice shoe having a screw-threaded calk which is inserted into the same from above, a nick in the top of the threaded shank of said calk, and means for securing said shoe to a shoe proper, substantially as described.

2. A removable shoe formed in sections, pivotally connected by a lap-joint hinge, and means for securing said shoe to the shoe proper, and screw-threaded calks inserted in the sections from above, the nicks of said calks being in the top of the threaded shanks of the same, substantially as described.

ALEXANDER E. MAKEL.

Witnesses:

JOHN A. WIEDERSHEIM,
A. P. JENNINGS.