(No Model.)

J. A. EIPER.

HORSESHOE.

No. 523,765. Patented July 31, 1894.

Fig. 1.

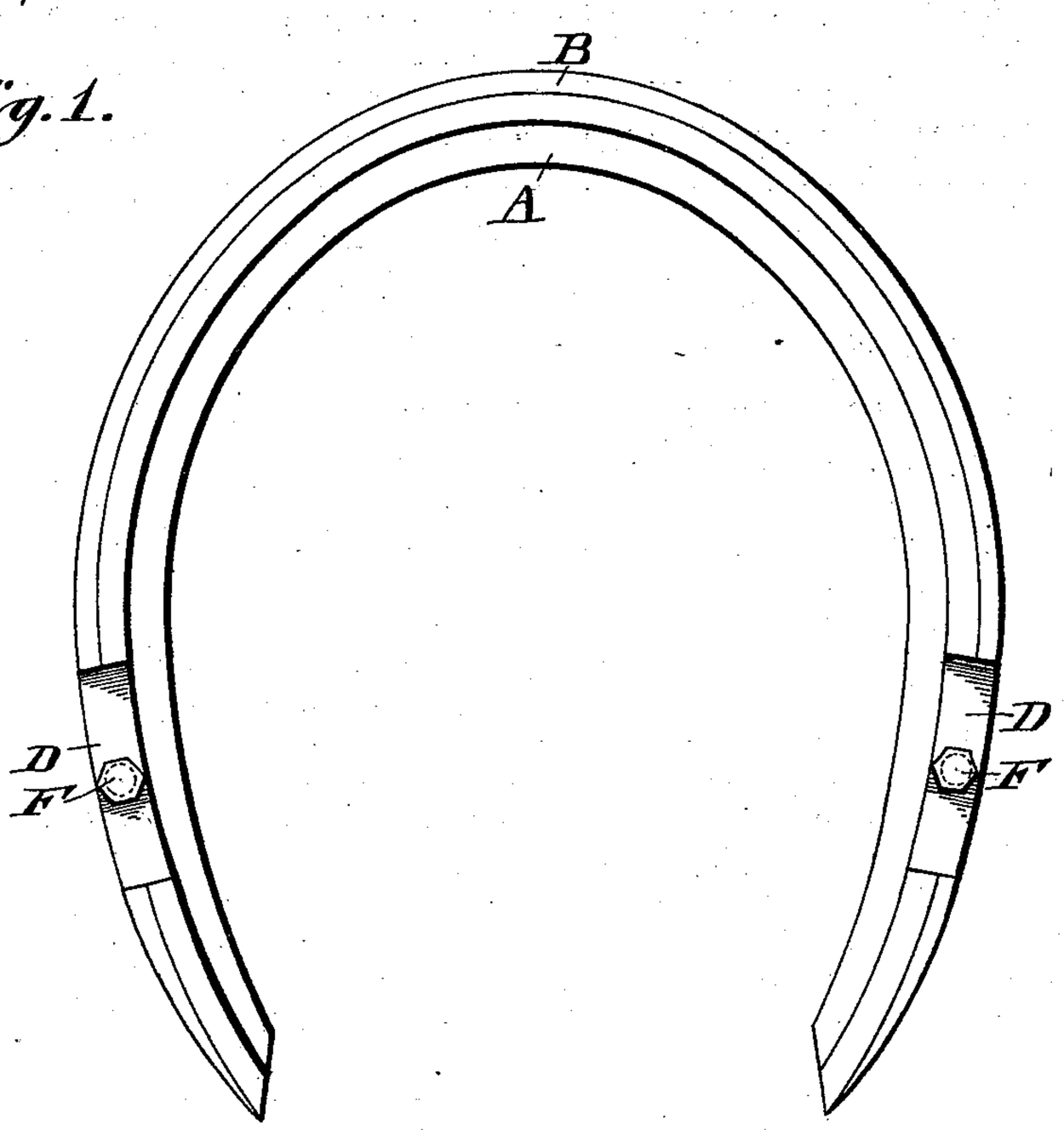


Fig. 2.

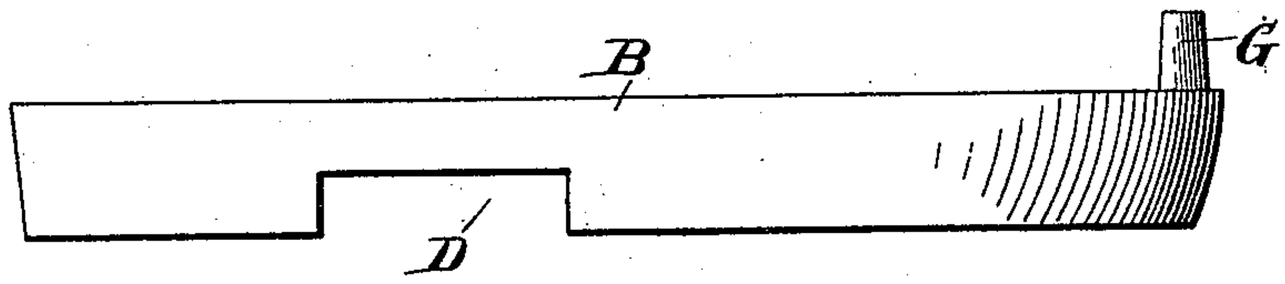
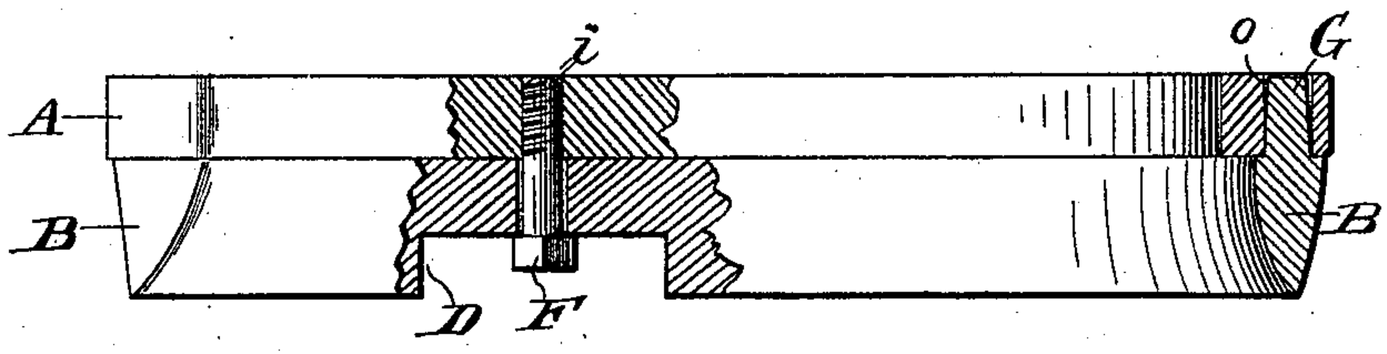


Fig. 3.



Witnesses:
Jos. H. Blackwood.
Albert B. Blackwood

Inventor.
Jay Austin Eiper,
by W. B. Doolittle
Attorney.

UNITED STATES PATENT OFFICE.

JAY AUSTIN EIPER, OF WILKES-BARRÉ, PENNSYLVANIA, ASSIGNOR OF ONE-FOURTH TO GILBERT B. STEWART, OF SAME PLACE.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 523,765, dated July 31, 1894.

Application filed April 7, 1894. Serial No. 506,726. (No model.)

To all whom it may concern:

Be it known that I, JAY AUSTIN EIPER, a citizen of the United States, residing at Wilkes-Barré, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Horseshoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention consists in an improvement in that class of horse shoes provided with a removable continuous calk, and its general objects are to render such a combination more useful by making it cheaper, more simple, convenient and efficient in construction and operation.

In many cases in the previous state of the art, horse shoes when provided with removable calks have had the shoe or hoof part so peculiarly constructed with reference to the calk, as to require the shoe part to be made with particular reference to the calk part with which it is to be connected, and in such manner that the calk cannot be applied to any ordinary shoe without requiring the shoe to be re-made.

The principal object of my invention is to construct a continuous calk that will enable it to be applied to any shoe of a corresponding size, by simply drilling three holes in the under surface of the shoe to receive the calk, a work of a very few minutes.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a bottom plan view of a shoe with my improvement attached; Fig. 2, a side view of the continuous calk, and Fig. 3, a sectional side view of one half the combined shoe and calk.

Referring to the drawings, A is a horse shoe of ordinary form but without toe or heel calks, and provided with the usual fullering, or creases, along the sides of its under surface and having nail holes therein to receive the nails. B is a continuous calk of the same contour with the shoe part, and adapted to bear flatly on the shoe over the creases, to entirely cover the creases and protect and cover the nail heads. In the drawings the calk is shown as beveled inside terminating at its base in a sharp edge. This form of calk is desirable for use in cold weather to give the shoe a firm hold on ice or frozen ground, or at other times for use on surfaces requiring a sharp penetrating calk. But at other times, and on ordinary good streets or roadways, a flat surfaced calk may be used. In both cases the foot of the horse has a level bearing over the entire shoe. This calk on its under surface near the heels is provided with directly opposite cut away portions D D. These cut away portions have each a plain hole drilled through the same to receive a small screw bolt, F, and a screw hole, *i*, is drilled in each of the corresponding under sides of the shoe to receive the ends of said screw bolts. It is by means of these two screw bolts that the calk is secured to the shoe part, and when in place the screw heads are beneath the adjacent surface edges of the calk. The calk is also provided on its upper surface directly at the center of the toe with a plain smooth pin, G, and a hole *o*, to receive the same, is drilled at a corresponding point in the shoe. At the cut out portions the calk may be made thicker to strengthen the calk at those points.

The calks are made of different numbered sizes to correspond with different sizes of shoes, and all that is required to be done to fit a calk to its shoe is to ascertain the size of the shoe, and then to drill two screw holes *i*, in the under surface of the shoe at the points to register with the holes in the calk as above described, and a hole, *o*, at the toe to receive the pin G of the calk. By these means the shoe is preserved a long time, the nails held in place, and frequent horse shoeing avoided, and any shoe at any time can be provided with a corresponding protecting calk by the slight alterations above described.

Having thus described my invention, what I claim is—

The combination with a horseshoe of the ordinary form but without toe or heel calks, of a continuous calk having a plain upper surface fitting over the nail creases in the

shoe, said calk provided on its under surface near its heels with directly opposite plain cut-away portions D, D, and on its upper surface at the center of the toe with a permanent pin G, said shoe part provided with two screw holes to receive screw bolts which are countersunk in the cut-away portions D, D of the calk, and also with a hole at its toe to receive the pin G of the calk, substantially as described.

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

JAY AUSTIN EIPER.

Witnesses:

JOS. H. BLACKWOOD,

H. P. DOOLITTLE.