No. 726,060. PATENTED APR. 21, 1903.

F. HERZOG.

HORSESHOE.

APPLICATION FILED FEB. 7, 1902.

NO MODEL.

Fig. 1.

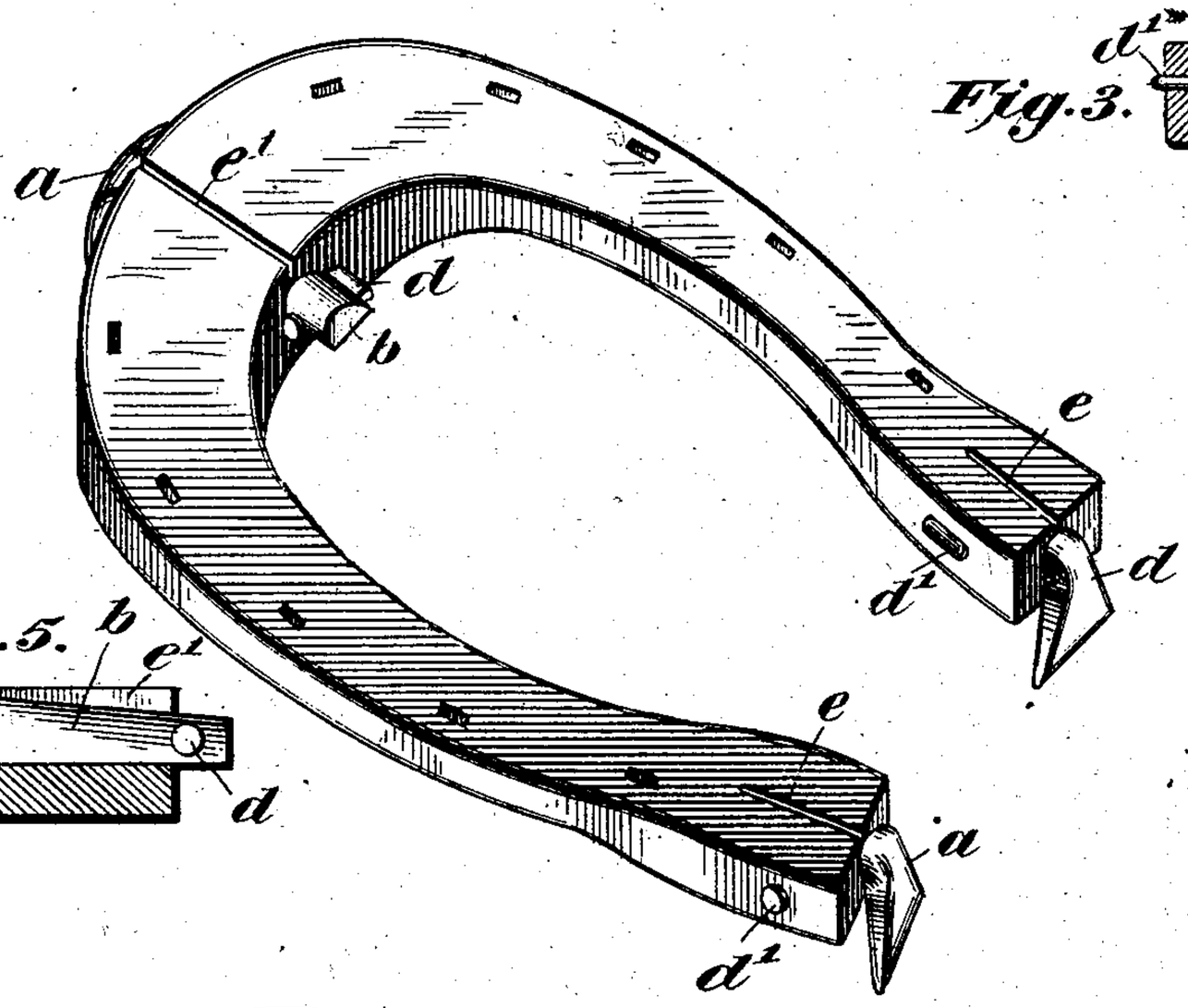


Fig. 3.

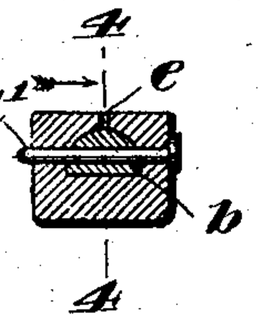


Fig. 5.

Fig. 2.

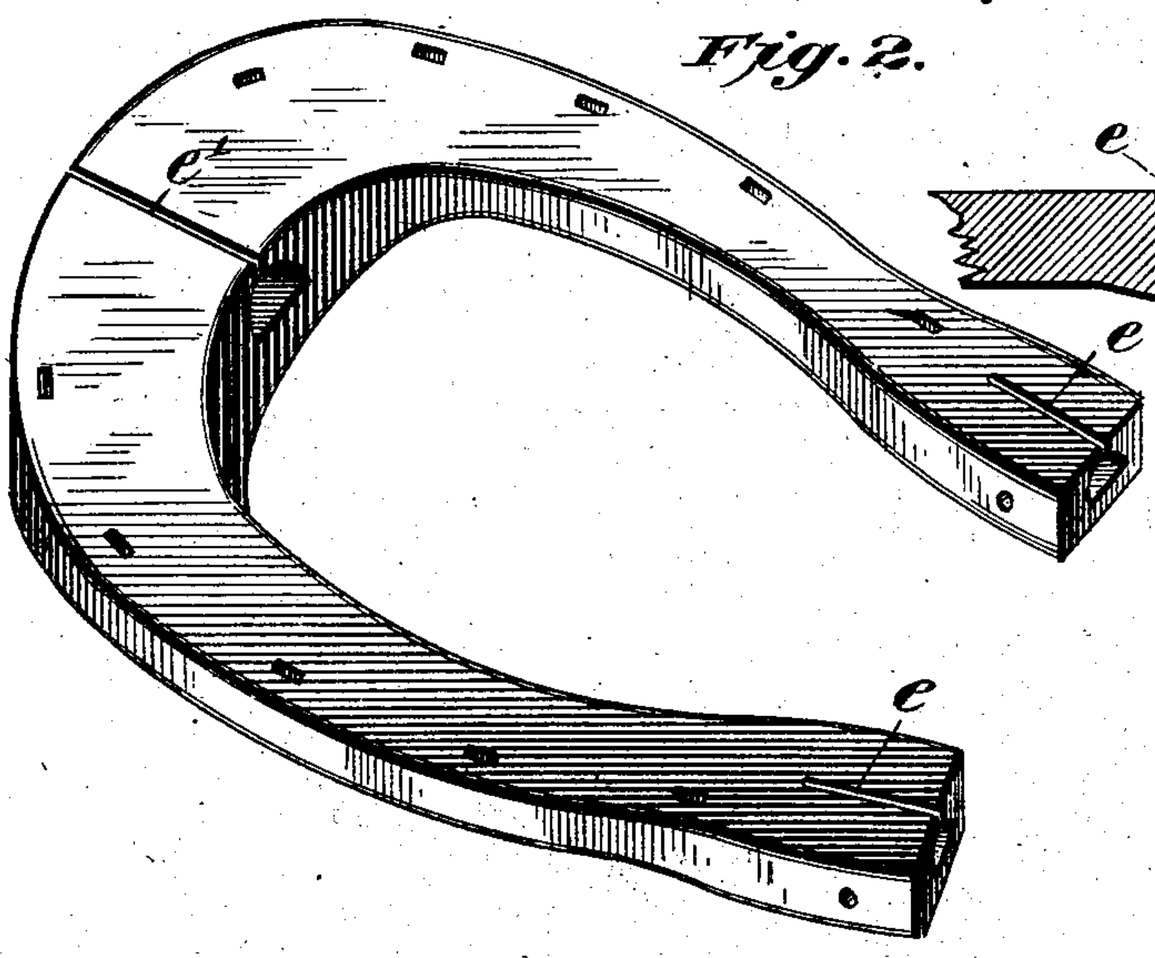


Fig. 4.

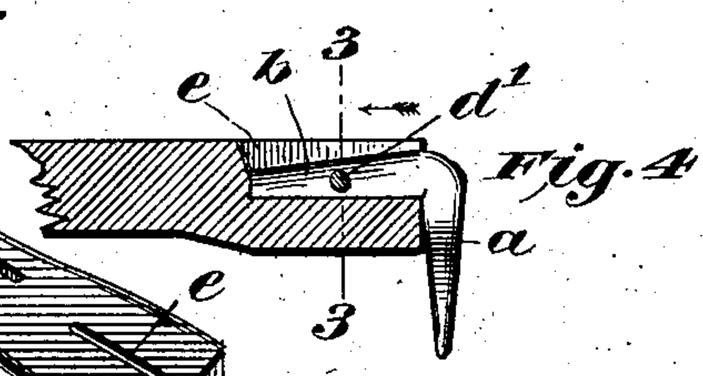
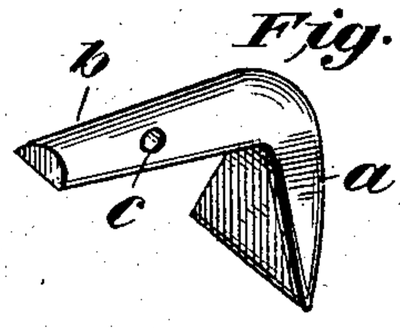


Fig. 6.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRITZ HERZOG, OF WASHINGTON, DISTRICT OF COLUMBIA.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 726,060, dated April 21, 1903.

Application filed February 7, 1902. Serial No. 93,065. (No model.)

To all whom it may concern:

Be it known that I, FRITZ HERZOG, a citizen of the United States of America, and a resident of Washington, District of Columbia, have invented certain new and useful Improvements in Horseshoes, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a shoe provided with my improved calks; Fig. 2, a similar view with the calks removed. Fig. 3 is a detail transverse section on the line 3 3 of Fig. 4; Fig. 4, a sectional view on the line 4 4 of Fig. 3; Fig. 5, a detail cross-section taken through the forward or toe part of the shoe, and Fig. 6 a detail perspective view of one of the calks.

The object of this invention is to provide a construction that will permit the shoe to be used with or without calks and the calks to be readily attached or detached without the intervention of skilled labor and without removing the shoe from the animal's hoof, as more fully hereinafter set forth.

The shoe proper is constructed in any suitable manner except as hereinafter described and is provided with the usual holes for the passage of the fastening-nails. The three calks are constructed alike, each consisting of a sharpened head portion *a* and a shank portion *b*, formed integral therewith and projecting laterally therefrom, this shank portion being tapered its full length in a direction away from the head portion. Each shank is provided with a transverse hole *c*. To receive the toe-calk, the shoe is provided at the middle of its bow with a transverse tapering hole extending entirely through the bar of the shoe from front to rear. Through this hole the shank of the calk is rearwardly passed, the shank fitting the hole snugly and projecting a short distance from the rear wall of the shoe. Through the hole *c* in this rearwardly-extending end a nail or pin *d* is passed, which has its end or ends suitably bent over to lock the calk in place. To receive the heel-calks, each heel portion is provided with a socket extending into the shoe from the rear end thereof and tapered to snugly fit the shank of the calk, and to lock the calk in place a nail or pin *d'* is passed inwardly through the shoe from the side and suitably bent over on the inner wall of the shoe, the pin or nail passing through the hole *c* in the shank. To compensate for any weakening that may result from making the sockets for the calks, the forward part and the rear ends of the shoe are somewhat thickened, as shown, and to facilitate the removal of any matter that may pack into the heel-sockets slots or slits *e* are formed in the upper sides of the respective heel portions, said slots extending from the rear ends of the shoe to approximately the inner ends of the sockets. When the shoe is put on the hoof in the usual way, its rear ends project far enough beyond the hoof to permit a nail or other tool to be inserted into the sockets through the slots, and thereby expel any dirt that may have lodged therein. These slots are important also in that they facilitate the formation of the sockets in the manufacture of the shoes, the slots permitting suitable dies to be used, over which the metal can be forged, thereby avoiding the necessity of boring or drilling out the sockets. For this reason a slot or slit *e'* is also formed in the shoe coincident with toe-calk socket and extending the full length thereof.

A horseshoe constructed as set forth possesses a number of important advantages. It is obvious that a very great advantage lies in the fact that the tread or wearing face of the shoe is not mutilated and is entirely free of holes, lugs, &c., thereby specially adapting it for use as a calkless shoe, it being obvious that if the tread-face of the shoe be provided with notches, holes, or lugs, or other fastening devices these devices would soon become injured past redemption if the shoe were used without the calks, thereby preventing the calks being again replaced when the condition of the roads demands their use. This capability of using the shoe as a calkless shoe without injuring its capacity to receive and hold calks is very important from a practical standpoint in view of the fact that the frequent and sudden changes in the weather demand frequent and sudden changes in the shoes if injury to the horse is to be prevented and his usefulness in all kinds of weather is to be maintained. Another important advantage is that the calks may be readily attached and detached without removing the shoe from the hoof and without

the employment of a skilled horseshoer. To attach the calks, it is simply necessary to clean out the sockets if any dirt be lodged therein, insert the shanks of the calks, and then lock them in place with nails or pins, as described, and as these locking pins or nails are out of the way they are extremely unlikely to become injured sufficiently to either prematurely detach the calks or to prevent their ready removal when they are not needed, their removal being accomplished when desired by simply straightening or cutting off the bent parts of the lock pins or nails.

Having thus fully described my invention, what I claim, and desire to obtain by Letters Patent, is—

A horseshoe adapted for use interchangeably as a calked shoe or a calkless shoe, having its tread-surface free of obstructions and mutilations and provided with sockets for removably holding calks, one of said sockets extending horizontally through the toe portion and the others extending horizontally and longitudinally into the ends of the heel portions of the shoe, calks having each an apertured-shank portion extending into one of said sockets, and a locking-pin for each calk, said locking-pin passing through the aperture in the shank and engaging the adjacent portion of the shoe at each side of the shank, each of said pins being removable and lying above the tread-surface of the shoe, as and for the purposes set forth.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 7th day of February, 1902.

FRITZ HERZOG.

Witnesses:
HERBERT C. EMERY,
CHARLIE J. HERZOG.