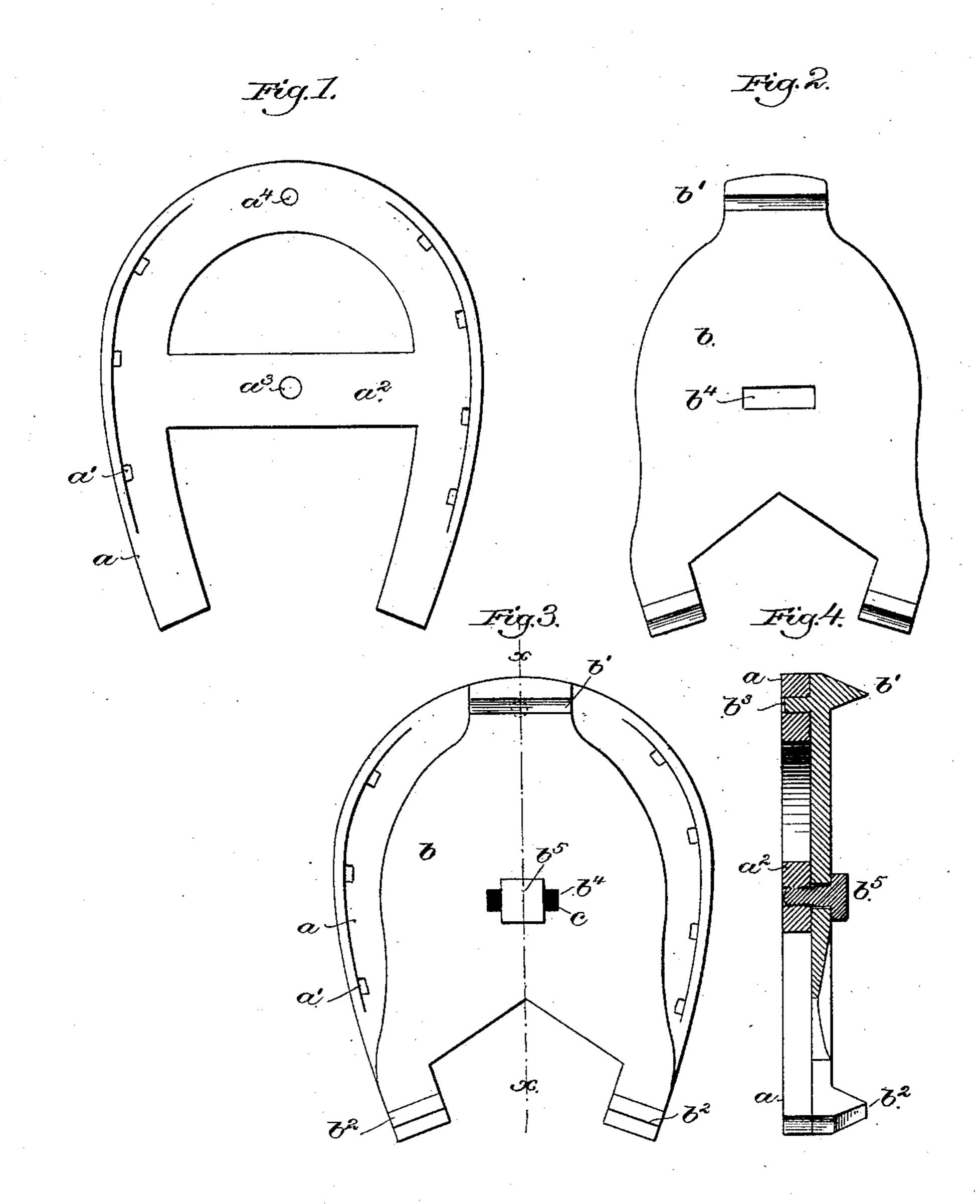
(No Model.)

I. FENNO.

HORSESHOE.

No. 353,354.

Patented Nov. 30, 1886.



Witnesses. John F.C. Primbled Ashun Zipperten. Invertor.
Isaac Tenno,
Ty brosby Aregory alligs.

United States Patent Office.

ISAAC FENNO, OF BOSTON, MASSACHUSETTS.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 353,354, dated November 30, 1886.

Application filed March 24, 1886. Serial No. 196,352. (No model.)

To all whom it may concern:

Be it known that I, Isaac Fenno, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Horseshoes, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to provide a horseshoe which may be readily used as either a plain or a sharp or calk shoe, the addition of the sharp or calk part being quickly and easily made, the junction being very firm

and secure.

In accordance with my invention I provide a plain shoe with a cross-bar having a substantially central threaded hole, and near the toe the said shoe is provided, preferably, with a hole, or it may be with a stud. To the outside of this plain shoe having the described additions I apply an auxiliary shoe, preferably made as a plate having calks, the said plate, as herein shown, having a stud to enter the hole in the toe of the shoe, a central slot in the said plate receiving through it a bolt, the threaded part of the bolt being screwed into a threaded hole in the cross-bar of the main shoe nailed to the hoof.

Figure 1 represents the main shoe; Fig. 2, 3c the auxiliary shoe, or sharp or calk part. Fig. 3 shows the auxiliary shoe applied to the main shoe, and Fig. 4 a section of Fig. 3 in the dotted line x x.

The main shoe a, having usual nail-holes, a', is provided with a cross-bar, a^2 , having a threaded hole, a^3 . The shoe a, near the toe part, also has a hole, a^4 , or it might be a stud, the converse of the hole.

The shoe so far described is a plain shoe, and is suitable for roads not covered with snow or ice.

The auxiliary shoe, as herein shown, is composed of a plate, b, of a size and shape to cover, preferably, the open space of the shoe a.

45 This plate b has a toe-calk, b', and two heelcalks, b^2 , and if the shoe a has a hole at a^4 then the plate b will have a stud, b^3 , to enter the said hole. The plate b is slotted at b^4 to receive a bolt, b^5 , which, screwed into the threaded hole in the bar a^2 , serves to confine the auxiliary shoe or sharp or calk part in

place on the main shoe. The slot b^4 permits the plate b to be adjusted to place the calks b^2 b^2 in any desired position with relation to the heel of the shoe a or the hoof of the horse, 55 for it frequently happens that the heel-calks have to be adjusted in position to the peculiarities of gait of the horse to which the shoe is applied. The application of the plate b to or its removal from the shoe may be made 60 very quickly, as occasion requires.

It will be noticed in my improved shoe that the sharp or calk part is applied directly to the outside of the main shoe, and that it takes bearing on the bottom of the main shoe, and 65 that it may be made very thin and light.

I do not desire to limit my invention to making the calks as integral parts of the plate b. for they may be separately attached to the plate b by welding, or by other usual ways.

To avoid the possibility of the plate slipping under the head of the bolt, I may plug the ends of the slot each side the bolt with pieces of leather, as at c in black; or, if desired, I may use more than one set-screw.

I claim—

1. The main shoe having a cross-bar, a^2 , provided with a screw-threaded hole, and the auxiliary shoe having calks, and slotted and provided with an opening for the reception of 80 a bolt, combined with a bolt to attach the said main and auxiliary shoes together, substantially as described.

2. The main shoe a, having a cross-bar. a², provided with a screw-threaded hole, the said 85 shoe also having a hole for the reception of a stud, and an auxiliary shoe provided with calks and with a stud and with a slot for the reception of a bolt, combined with a bolt to connect the said main and auxiliary shoe, the stud 90 of one shoe entering a hole in the other shoe, the slot and bolt permitting adjustment of the auxiliary shoe on the main shoe, substantially as described.

In testimony whereof I have signed my name 95 to this specification in the presence of two subscribing witnesses.

ISAAC FENNO.

Witnesses:
G. W. GREGORY,
JAS. H. LANGE.