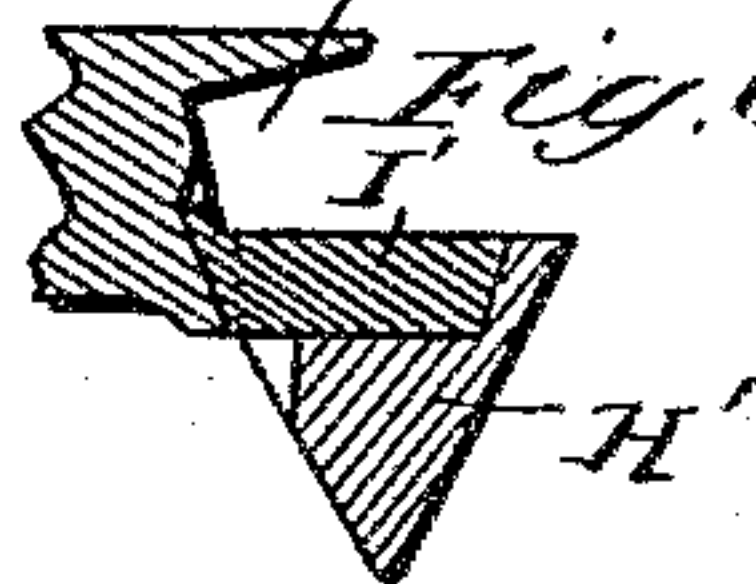
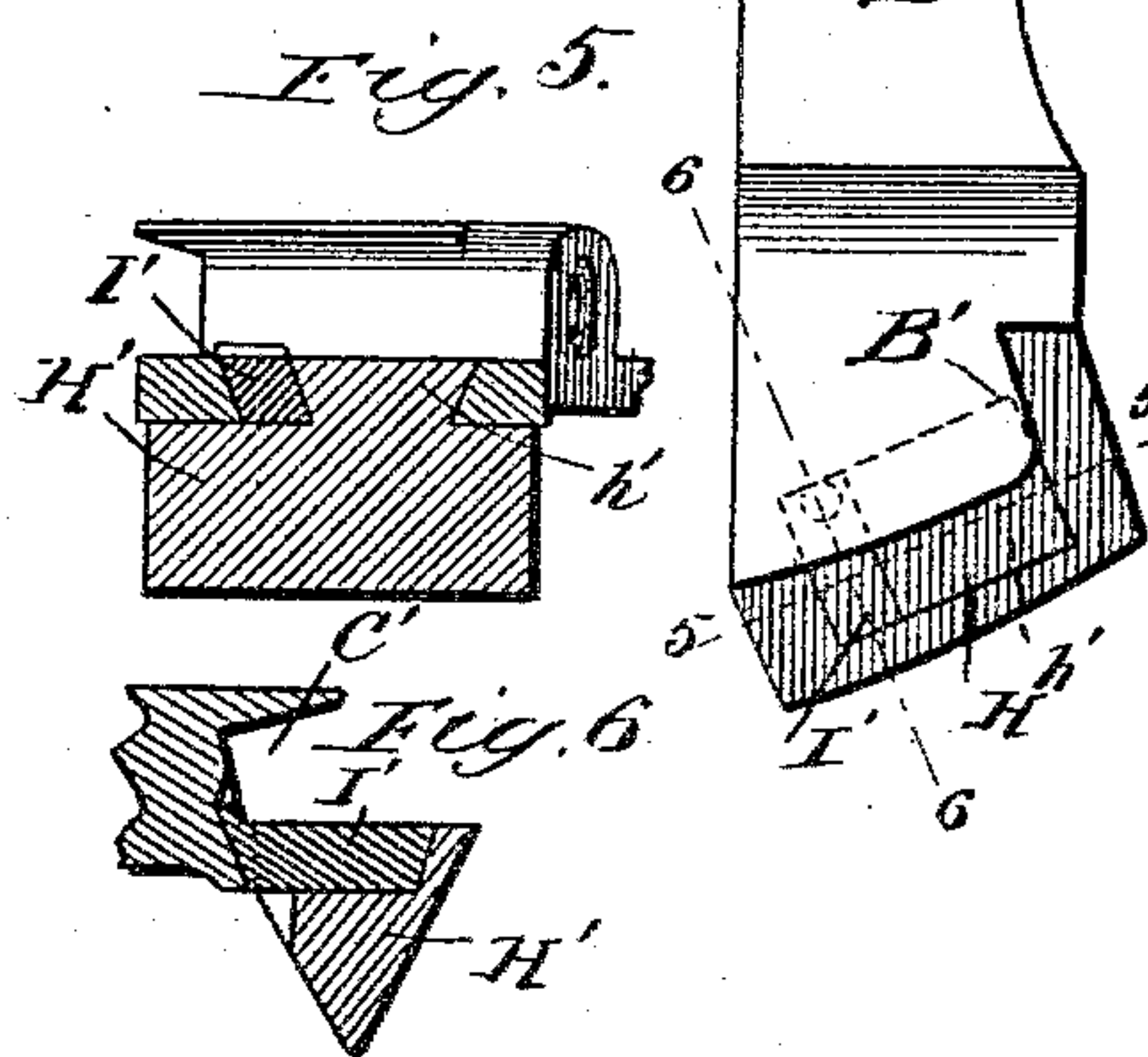
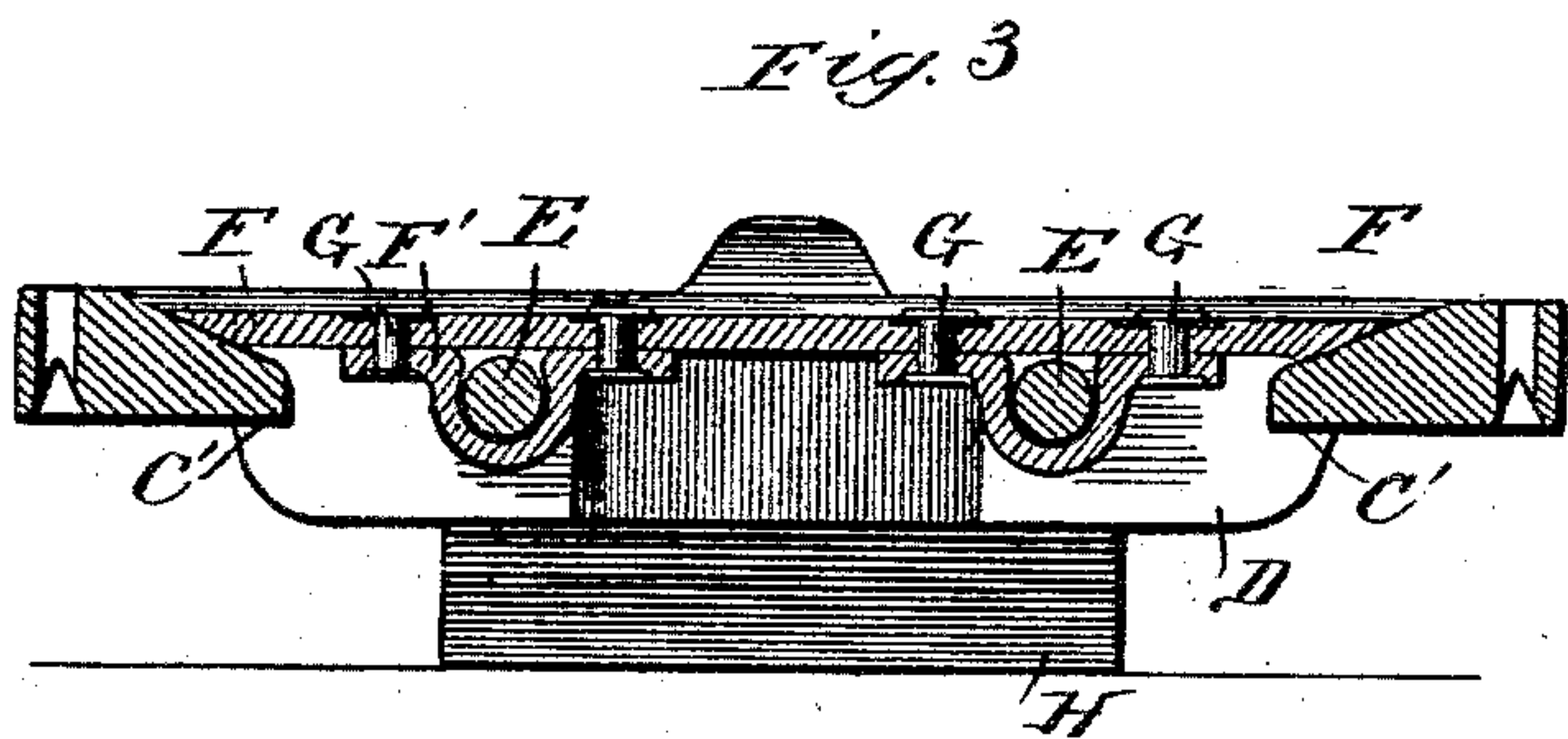
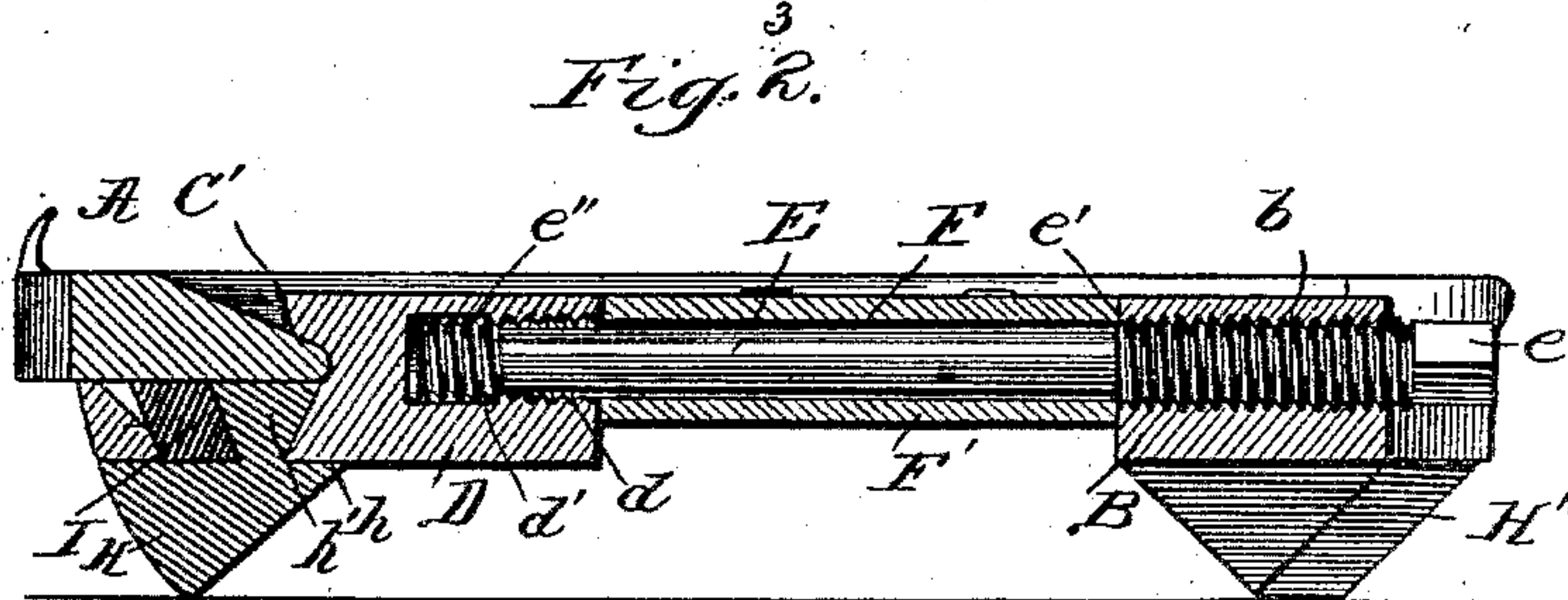
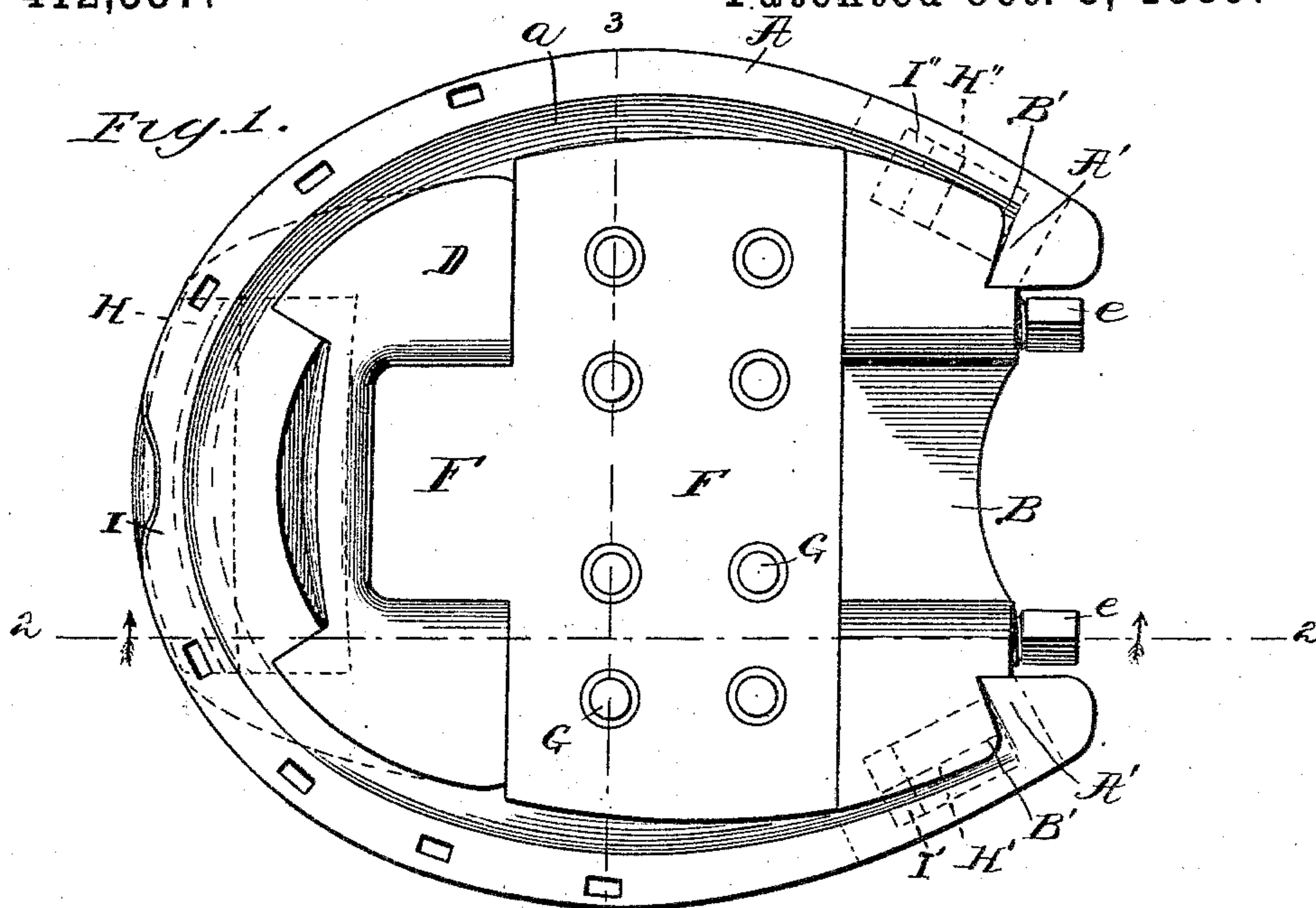


A. B. HOLSON.

HORSESHOE.

No. 412,337.

Patented Oct. 8, 1889.



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(No Model.)

2 Sheets—Sheet 2.

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Fig. 7.

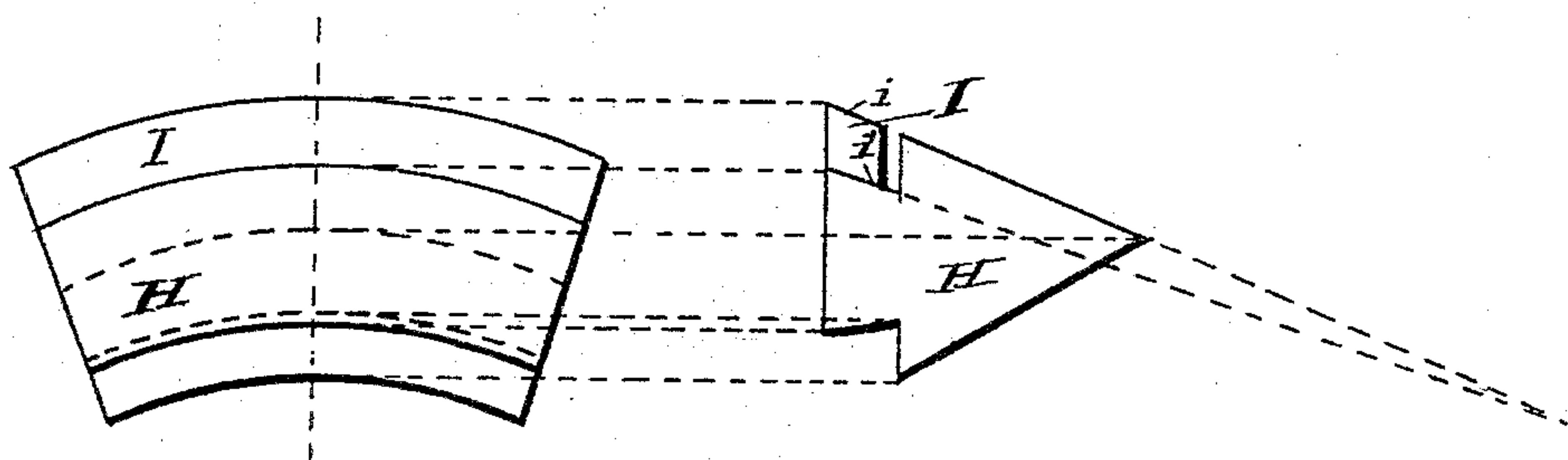


Fig. 8.

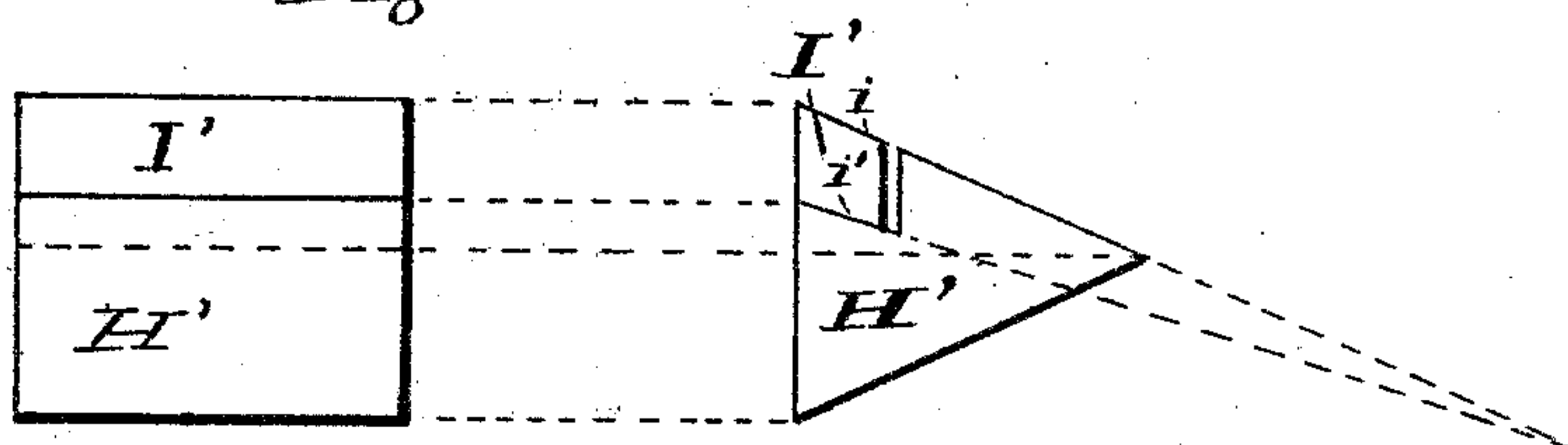
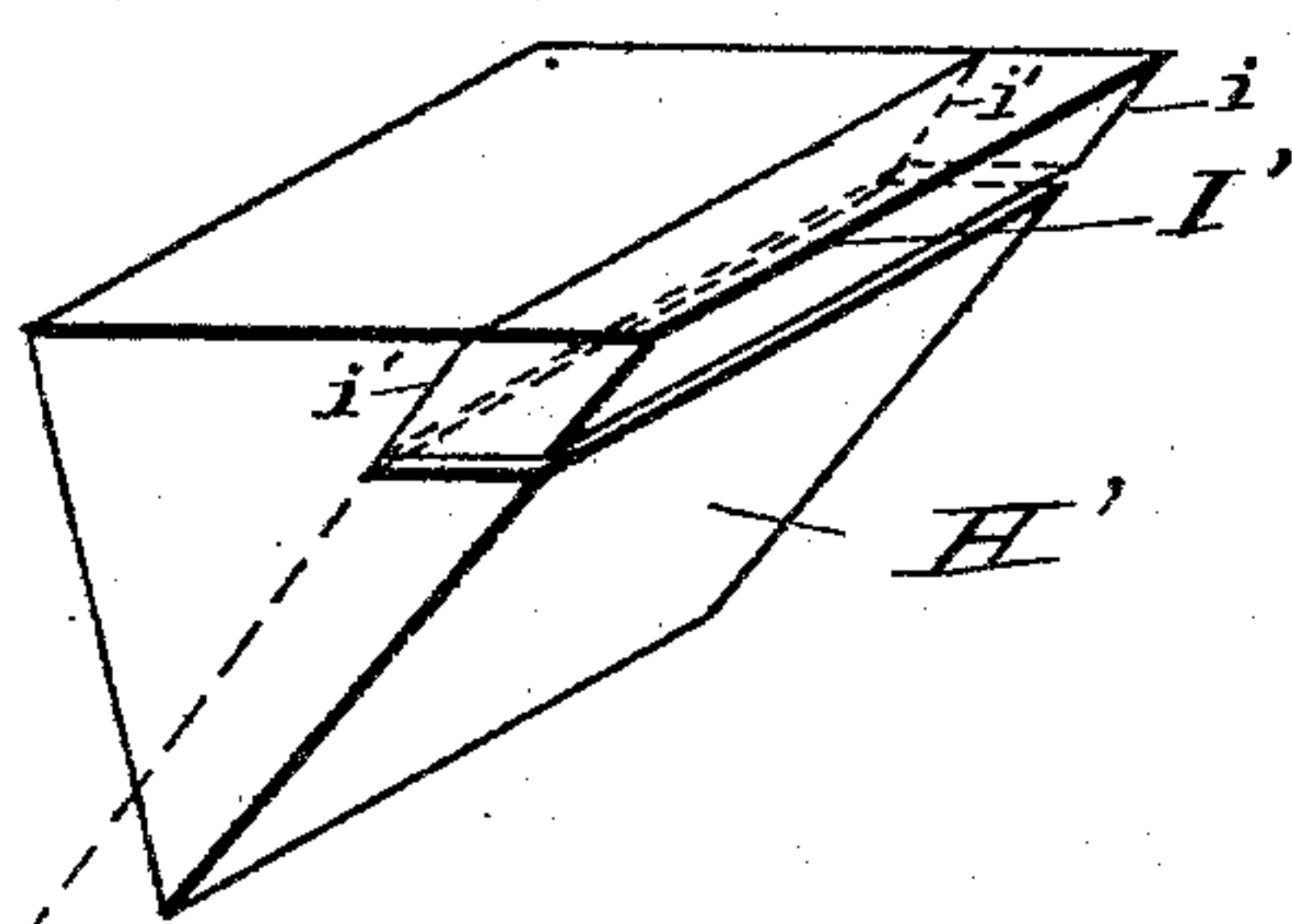


Fig. 9.



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# UNITED STATES PATENT OFFICE.

ALBERT B. HOLSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE HOLSON HORSESHOE COMPANY, OF SAME PLACE.

## HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 412,337, dated October 8, 1889.

Application filed January 18, 1888. Renewed February 28, 1889. Serial No. 301,582. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT B. HOLSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Horseshoes, of which the following is a full and complete description, reference being had to the drawings accompanying and forming a part hereof.

My invention relates to horseshoes having removable calks, devices for securing such calks to the shoe, for protecting such devices, and incidentally for protecting the frog of the foot to which my improved shoe is secured, and, further, to a device whereby a slight electrical action may be obtained.

I am aware that horseshoes have been heretofore constructed having removable calks attached to a supplemental shoe or to bars which may be secured to such horseshoes, and that such calks have been made removable from the supplemental shoe.

Figure 1 is a top plan view of a shoe having my invention attached thereto, showing in dotted lines the outlines of the removable calks. Fig. 2 is a sectional view on line 2 2 of Fig. 1. Fig. 3 is a sectional view on line 3 3 of Fig. 1. Fig. 4 is a plan view of a bar forming a part of the supplemental shoe and by means of which the heel-calks are secured to the horseshoe. Fig. 5 is a sectional view on line 5 5 of Fig. 4. Fig. 6 is a sectional view on line 6 6 of Fig. 4. Fig. 7 is a plan view of the toe-calk and an elevation, showing the lock. Fig. 8 is a plan view of one of the heel-calks, also showing an elevation of the calk and of the lock. Fig. 9 is an isometric perspective of the heel-calk illustrated in Fig. 8.

Like letters refer to like parts throughout the several views.

A is a horseshoe having a beveled edge *a* thereon.

A' A' are points or corners formed at the heel-points of shoe A by the bevel *a*, stopping short at said heel-points.

B is a bar extending across the shoe and near the heel thereof.

B' B' are beveled corners fitting against lugs A' in shoe A. B' and A' interlock, when bar B is properly secured in position, in such

manner as to prevent the heel-points of the shoe from being spread or forced apart by any wrench or other accidental means.

*b b* are holes in bar B, having an ordinary female screw cut therein.

C is a groove in the end of bar B, fitting over the beveled edge *a* of shoe A.

D is a bar curved upon its forward edge and having a groove C' therein. Curved bar D fits against the inner toe portion of the shoe A.

*d d d'* is a socket in bar D. Portion *d* of this socket has a female screw cut therein. Portion *d'* of said socket is of slightly larger diameter than the diameter of the bottom of the threads in portion *d* of said socket.

E is a bolt having a square end *e* at one end thereof, by which it may be turned, and having cut thereon male thread *e'* and *e''*. Thread *e'* fits into thread *b*, and thread *e''* fits into thread *d*. It will be observed that if bolt E is screwed into socket *d d'* until screw-thread *e''* is in part *d'* of said socket, no forward movement of said bolt E will occur if said bolt be turned continuously in the same direction by which it is screwed into said socket, and therefore, if necessary, the said bolt E may be turned in such direction until bar B, through which the bolt also passes, as described, is adjusted to any desired position, while at the same time screw-thread *e''* on bolt E serves as a lock, preventing the withdrawal of said bolt from socket *d d'*.

F F' is a guard, constructed of leather or other suitable material, protecting bolts E from injury by striking against rocks or other substances, and also forming a covering for the frog of the foot or a strip between which and said frog medicated liquids or porous material saturated with such medicated liquids may be placed. This guard also prevents the formation of "snow-balls." Guard F F' is usually constructed by me of leather; but in case electrical action or a slight current of electricity be desired one of said plates F F' is constructed of zinc and secured to the other of said plates—preferably of leather—by copper rivets G.

H H' H'' are removable calks. Calk H may be locked in bar D by lock I, portion *h* of said calk serving as a base and coming in contact



with the bar D, while portion *h'* is beveled or dovetailed in shape and passes through said bar D, coming in contact with shoe A. Calks *H'* and *H''* are secured in like manner by  
 5 locks *I'* and *I''*, respectively, in bar B. The sides *i i'* of wedge-lock *I, I',* and *I''* are not parallel, a cross-section of said wedge-lock at any point thereof being wedge-shaped, the lock thereby forming a wedge-lock. Calk *H'*,  
 10 it will be observed, has beveled edges running parallel with the outer edge of shoe A, or nearly so, while calk *H''* has beveled edges running at right angles to the edges of calk *H'*. Either form of calk may be used in any  
 15 shoe. I prefer to use one of each kind in a shoe, the better to prevent the slipping of the heel of the foot in any direction.

In order to place my device on any shoe suitable therefor, whether the said shoe be  
 20 secured to a horse's foot or free therefrom, calk *H* is placed in bar D and locked therein by lock or wedge *I*, and bar D placed in position on shoe A. Bar B, having calks *H' H''*, respectively, locked therein by wedges *I' I''*,  
 25 is placed in position on shoe A. Bolt *E* may then be screwed through bar B, passed through guard *F F'*, and screwed into socket *d d'*. Bolt *E* is then turned continuously in the same direction until bar B is pressed  
 30 firmly against point *A'* in the heel of shoe A and part *B'* of bar B locked against said point *A'* in the manner hereinbefore described.

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

1. In a horseshoe, the combination of a beveled shoe, a bar having a curved edge thereon with a groove fitting upon the beveled edge of said shoe at the forward end thereof, sockets  
 40 in said bar, a thread in each of said sockets extending a portion of the way thereinto from the outer edge thereof, a bar having a groove at each end fitting upon said beveled shoe near the heel portion thereof, said bar  
 45 having screw-threaded holes therein, and bolts having a like thread at one end passing through said holes, and having a thread at the other end thereof extending a short distance on said bolts and fitting into said thread in  
 50 said sockets in the front bar, all substantially as described, and for the purpose set forth.

2. The combination of a horseshoe with a bar having a curved grooved edge fitting over the inner beveled edge of the shoe at the  
 55 forward end thereof, sockets in said bar, a thread extending a short distance into each of said sockets from the outer edge thereof, a bar having a groove at each end fitting over the beveled edge of the shoe near the heel of  
 60 said shoe and having a beveled edge or side interlocking with a lug on said heel of said shoe, the said bar also having screw-threaded holes therein, and bolts having a like thread thereon at one end passing through said holes and

also having a thread at the other end thereof 65 extending a short distance from said end and fitting into the thread in said sockets, all substantially as described.

3. The combination of a horseshoe having a beveled inner edge with a bar having a 70 curved grooved edge fitting over the beveled edge of said shoe at the forward part of said shoe, sockets in said bar having a thread extending a portion of the way thereinto from the outer edge thereof, a bar having a groove 75 at each end thereof fitting over the beveled portion of said shoe near the heel thereof, said bar having screw-threaded holes therein, bolts having a like thread near one end thereof passing through each of said holes 80 and also having a thread at the other end thereof extending a short distance from said end and fitting into the thread in said sockets, and a guard through which said bolts may pass and by which that portion of said 85 bolts not in said sockets or passing through said bar is covered and protected, all substantially as described, and for the purpose specified.

4. The combination of a horseshoe with a 90 bar having a curved grooved edge fitting over the inner beveled edge of the shoe at the forward end thereof, sockets in said bar, a thread extending a short distance into said sockets from the outer edge thereof, a bar 95 having a groove at each end thereof fitting over the beveled edge of the shoe near the heel of said shoe and screw-threaded holes therein, the said bar also having a beveled side or lug thereon interlocking with a beveled edge 100 or lug on the heel of said shoe, bolts having a like thread near one end thereof passing through the holes in said bar and also having a thread at the other end thereof extending a short distance from said end on said 105 bolt and fitting into the thread in said sockets on said curved bar, and a guard through which said bolts may pass and by which they are protected from contact with rocks and other substances, all substantially as de- 110 scribed.

5. In a horseshoe consisting of a main shoe, an auxiliary shoe, and calks secured to said main shoe by said auxiliary shoe, the combination of bolts passing through one of the 115 bars forming said auxiliary shoe and into sockets in the other of the bars forming said auxiliary shoe, and a guard consisting of a strip of leather or other flexible material and a strip of zinc or other suitable material secured to said leather strip by copper or other 120 suitable bolts, whereby an electric action may be obtained in said guard, all substantially as described, and for the purpose set forth.

ALBERT B. HOLSON.

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