(No Model.)

F. W. HAHN.

ELASTIC TREAD HORSESHOE.

No. 584,504. Patented June 15, 1897.

Fig. 1.

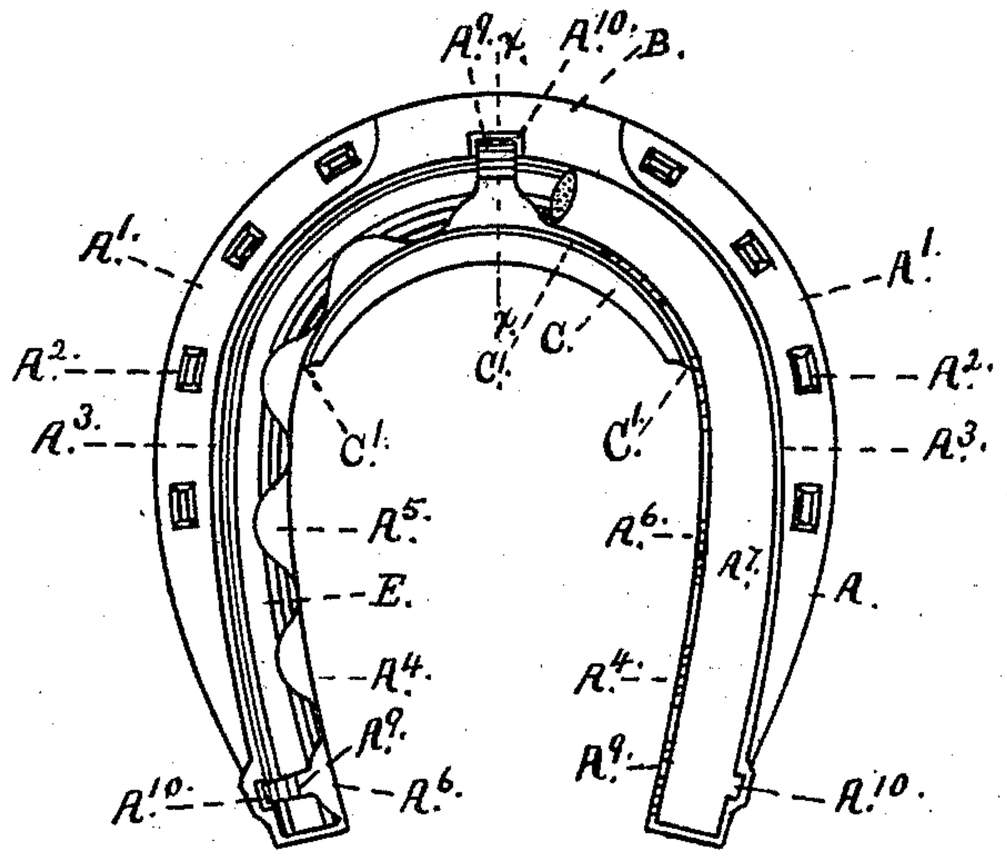


Fig. 2.

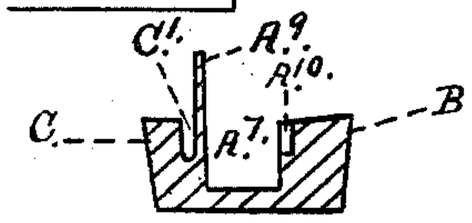


Fig. 4.

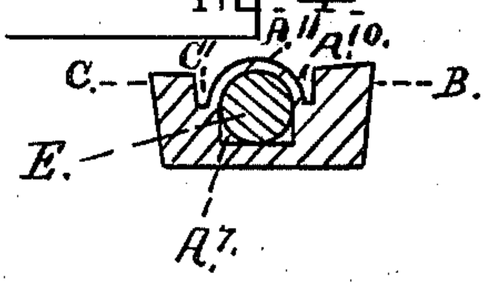


Fig. 5.

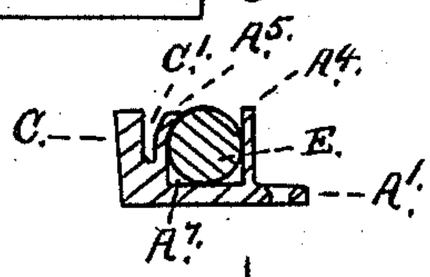


Fig. 3.

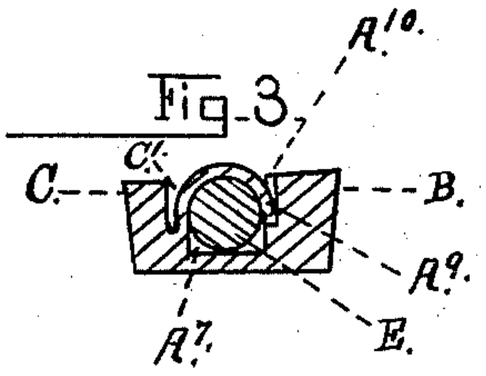


Fig. 6.

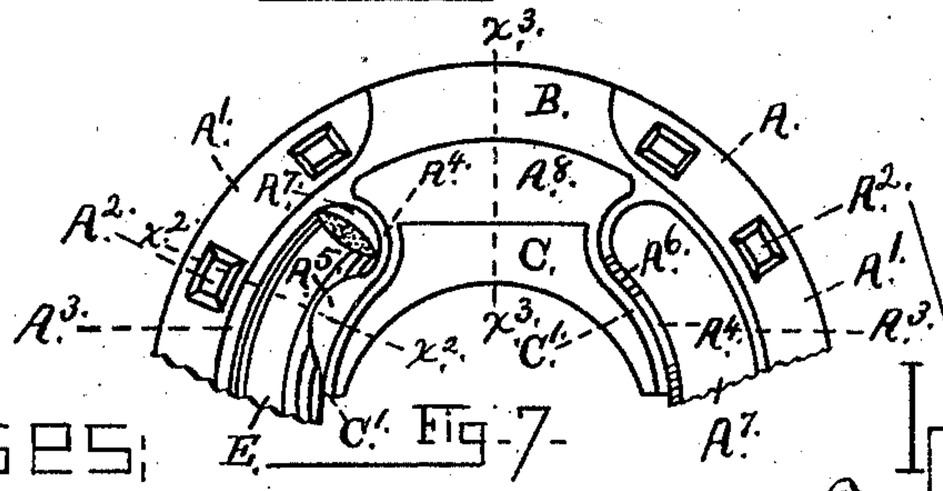
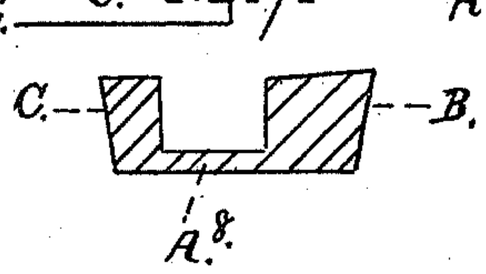


Fig. 7.



Witnesses;
L. Heusel.
E. V. Thomas
Wm. H. Bates

Inventor
Frederick W. Hahn
By.
E. V. Thomas
Atty.

UNITED STATES PATENT OFFICE.

FREDERICK W. HAHN, OF NEW YORK, N. Y.

ELASTIC-TREAD HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 584,504, dated June 15, 1897.

Application filed December 21, 1896. Serial No. 616,451. (No model.)

To all whom it may concern.

Be it known that I, FREDERICK W. HAHN, a citizen of the United States, and a resident of the city, county, and State of New York, have invented a new and useful Improvement in Elastic-Tread Horseshoes, of which the following is a specification.

The object of this invention is to enlarge the tread-wearing surface of a horseshoe and preserve the toe-calk.

The invention consists in an inner calk opposite the toe-calk and laps or staples to hold in the elastic packing.

Figure 1 represents the under side of the shoe with part of the elastic material in place. Fig. 2 is a cross-section of Fig. 1 on line *x x* before the lap or staple is bent or the packing E is in place. Fig. 3 is a cross-section of Fig. 1 on line X X. Fig. 4 is a modification of the finger A^9. Fig. 5 is a cross-section of Fig. 6 on line X^2 X^2. Fig. 6 is a modification of the shoe, and Fig. 7 represents a cross-section of Fig. 6 on line X^3 X^3.

A in the several figures represents a cast or struck-up horseshoe-frame having nail-flanges A′ and nail-holes A^2. A^7 in the various figures is a channel for receiving the packing E, formed by the two right-angled flanges A^3 and A^4. The inner flange A^4 is provided with lugs A^6 on its lower edge, which are bent over onto the elastic packing E, as shown at A^5, Figs. 1, 5, and 6, the flanges A^3, forming the outer wall of the channel, being provided with recesses A^{10} and merge into the broad calk B at the toe of the shoe, as shown in Fig. 1, the calk B being also provided with a recess A^{10}.

That the packing E may not stub out or its free ends become loose the center and heel lugs A^6, Figs. 1 and 2, are provided with fingers A^9, which are bent or turned over until their free ends enter the recesses A^{10}, as shown in Figs. 1 and 3.

In the use of malleable-iron shoes it has been found that the front part wears out much faster than the heel. To obviate this, I have formed an inner tread-step C, as shown in the several figures, which in the ordinary stepping of the horse saves the calk B and keeps the horse's feet level, thereby avoiding straining the muscles of the legs.

That the lugs A^6 opposite the tread C may be free from the said tread a groove C′ is formed between the lugs and tread, as shown in Figs. 1, 2, 3, and 6. By this plan the base of the lugs are not readily worn off.

In the modification shown in Fig. 6 there are two channels A^7, one upon each side of the shoe, leaving a central space for the calk B, tread-step C, and a web A^8, Fig. 7, uniting the said calk, tread, and channel-walls. By this plan the shoe is made more durable.

In Fig. 4 a loop A^{11} is cast integral with the shoe in place of the finger A^9, Fig. 3. The recesses C′ and A^{10} prevent the loop from being worn off, as the base of the loop is below the lower surface of the tread C and calk B.

It is apparent that I may force a staple into the recesses C′ and A^{10} by dispensing with the loop A^{11} and accomplish the same purpose.

If found desirable, I may V or corrugate the tread C.

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

1. A horseshoe-frame having flanges A^3 and A^4, a calk supported by and uniting the flanges A^3, the said calk having a recess A^{10} for receiving the finger A^9, in combination with the elastic packing E, as and for the purpose described.

2. A horseshoe-frame having flange A^4 provided with finger A^9 and lugs A^6 constructed to be bent over and retain the packing E, the flanges A^4, and a calk supported by and uniting the flanges A^3, the said calk having a recess A^{10}, in combination with the elastic packing E, as and for the purpose described.

3. A horseshoe-frame having tread C, flanges A^3 and A^4, and a calk supported by and uniting the flanges A^3, in combination with the elastic packing E, as and for the purpose described.

4. A horseshoe-frame having tread C, groove C′, flanges A^3 and A^4, and a calk supported by and uniting the flanges A^3, in combination with the packing E, as and for the purpose described.

5. A horseshoe-frame having tread C, recesses C′, flanges A^3 and A^4, and a calk provided with recess A^{10} and supported by the flanges A^3, and packing E, as and for the purpose described.

6. A horseshoe-frame having flanges A^3 provided with recesses A^{10}, flange A^4 having finger A^9, and a calk B supported by and uniting the flanges A^3, in combination with the elastic packing E, as and for the purpose described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 15th day of December, 1896.

FREDERICK W. HAHN.

Witnesses:
E. T. THOMAS,
HARRY S. WARSAWSKI.