(No Model.)

H. G. YATES.

HORSESHOE.

No. 244,964.

Patented July 26, 1881.

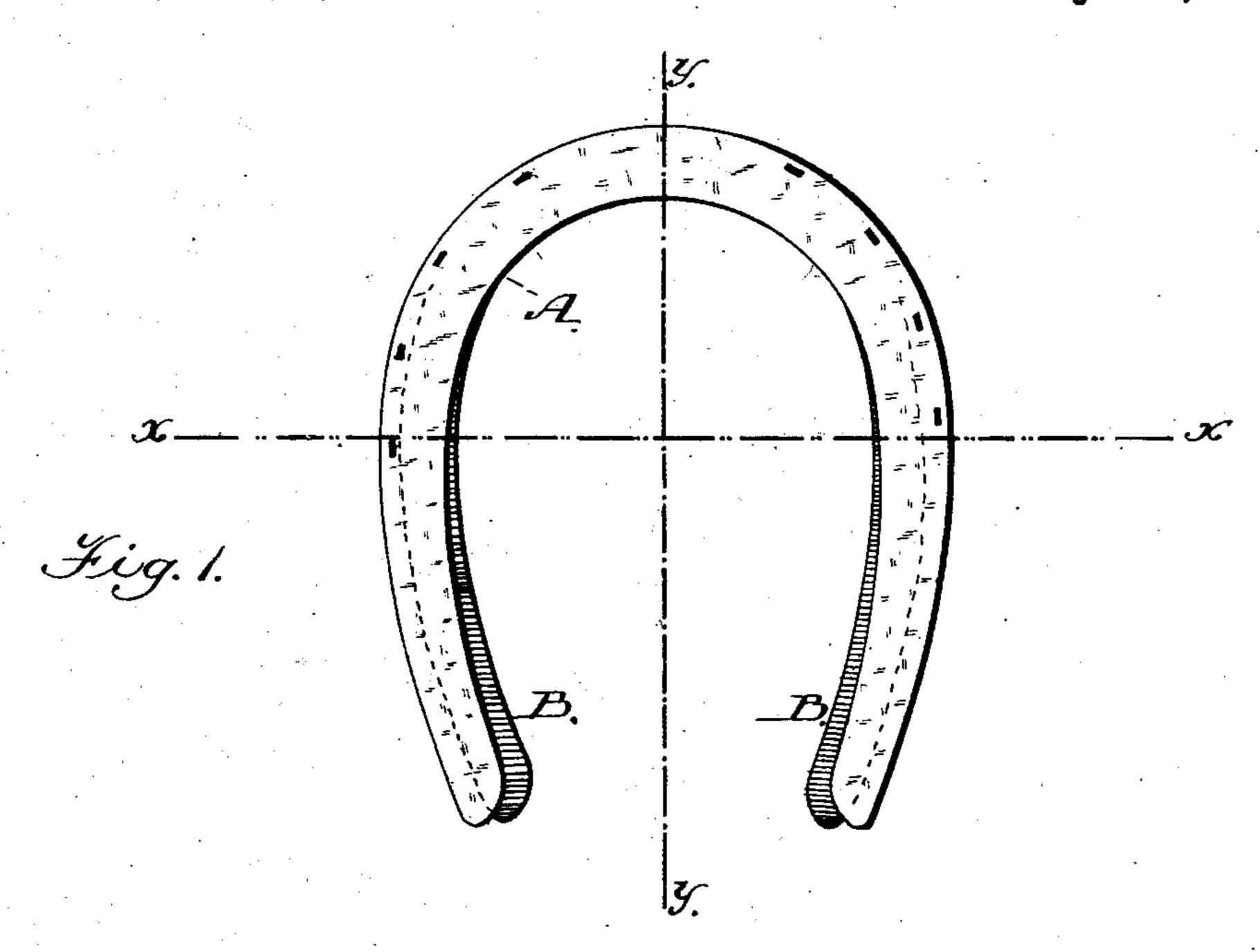


Fig.2.

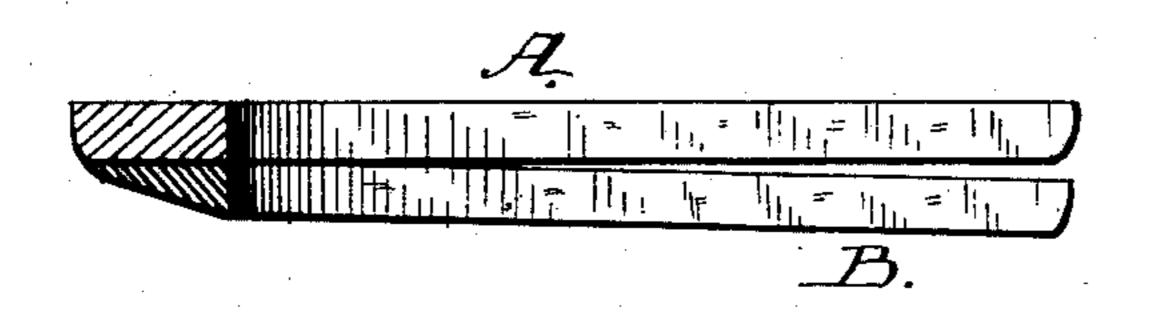
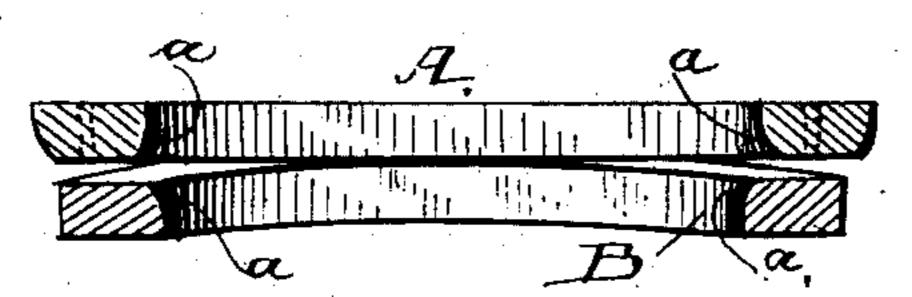


Fig.3.



Witnesses: Maller Fowler, Im L'Condron Inventor;
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Ser atty
A. W. Evans of

United States Patent Office.

HENRY G. YATES, OF NEW YORK, N. Y.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 244,964, dated July 26, 1881.

Application filed January 31, 1881. (No model.)

To all whom it may concern:

Be it known that I, HENRY G. YATES, a citizen of the United States, residing in the city, county, and State of New York, have in-5 vented certain Improvements in Horseshoes, of which the following is a specification.

This invention relates to certain improvements on inventions in horseshoes for which patents were granted to me July 1, 1879, 10 and December 14, 1880, numbered respectively 217,187 and 235,604. In those patents I showed a shoe provided with an elastic plate or part formed by slitting the shoe vertically from points at each side of the toe to the heel 15 and swaging the inner portions below the outer part, so as to form an elastic tread or bearing. To prevent the elastic parts from being pressed through against the sensitive parts of the animal's foot, I arranged the ends 20 of the elastic parts to overlap a shoulder formed on the fixed part at the heel. I now construct the shoe proper in the usual or any | of the shoe uppermost in all of the figures. good way, and then form a shoe-shaped plate of elastic metal and weld or otherwise secure 25 the two together at the toes, so that the branches of the elastic plate may overlap the inner edges of the shoe proper at the sides and stand normally in a lower plane, touching only at the attaching-point, as will be more 30 particularly hereinafter set forth.

In the drawings which serve to illustrate my invention, Figure 1 is a plan view of the under side of a shoe embodying my invention. Fig. 2 is a section of the same on line yy, Fig. 35 1. Fig. 3 is a cross-section taken in the plane of the line x x in Fig. 1.

Let A represent a horseshoe, made in the usual way, and with or without calks.

B B are branches of a shoe-shaped plate of 40 elastic metal of less size than the shoe proper. The branches B B are or may be made from a single piece of steel bent into the form shown and welded to the shoe proper at the toe. These branches stand off from the shoe proper, 45 as indicated in Fig. 2, and receive the weight of the horse, whereby they are pressed back toward the shoe proper; but being arranged to overlap the latter around the sides, when pressed back they rest upon the shoe proper l

and are supported from end to end. To pre- 50 vent clogging up the opening between the elastic branches and the shoe, I prefer that the said branches shall only overlap the inner edge of the shoe about one-fourth of an inch, or even less; and to further avoid this diffi- 55 culty I prefer to bevel or round off the inner edges of the elastic branches and the shoe in opposite ways, as shown at a a in Fig. 3, so that as the parts are brought together by the weight of the horse the tendency will be to 60 press out any mud or other matter that may get between the parts.

Instead of forming the branches separately from the shoe proper and afterward securing them thereto, I may make a thick shoe and 65 slit its branches horizontally, leaving them attached only at the toe. These branches thus split away could then be bent away from the shoe proper and made to stand as shown. For convenience I have shown the lower face 70

I am aware that the heels of horseshoes have been split horizontally from the heel a portion of the way toward the toe, in order to form a spring; but in such cases the spring 75 portion of the shoe lies immediately below and under the solid or upper portion. Such I do not claim to be my invention, as I make a separate elastic plate which overlaps only the inner edges of the shoe proper as it ap-80 proaches the heel. By this construction the shoe is less liable to become choked with dirt or gravel.

I do not claim, broadly, herein the employment of an elastic tread of metal secured to 85 or forming part of the shoe, as that was clearly shown in my former patents; but

What I do claim is—

1. As an improvement in elastic horseshoes, a horseshoe in which the shoe proper is 90 provided on its under side with elastic metal bearing-plates, made independent of and secured to the toe of the shoe, and arranged to overlap the inner edge of the shoe at the sides, said plates being arranged to stand off from 95 the shoe, except at the point of attachment, substantially as and for the purposes set forth.

2. A horseshoe comprising the shoe proper,

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A, and the elastic independent plate B B, ser | In witness whereof I have hereunto signed cured to the shoe at the toe, and arranged to slightly overlap the shoe at its inner edge at the sides, said plate being constructed to stand 5 off normally free from the shoe proper, except at the point of attachment, substantially as S. A. Brown, and for the purposes set forth. FREDERICK A. Roe.

my name in the presence of two subscribing witnesses.

HENRY G. YATES.

 $ext{Witnesses:}$