No. 667,262. Patented Feb. 5, 1901.

T. C. STROUD & T. H. ROCHE.

ELASTIC HORSESHOE.

(Application filed Nov. 16, 1900.)

(No Model.)

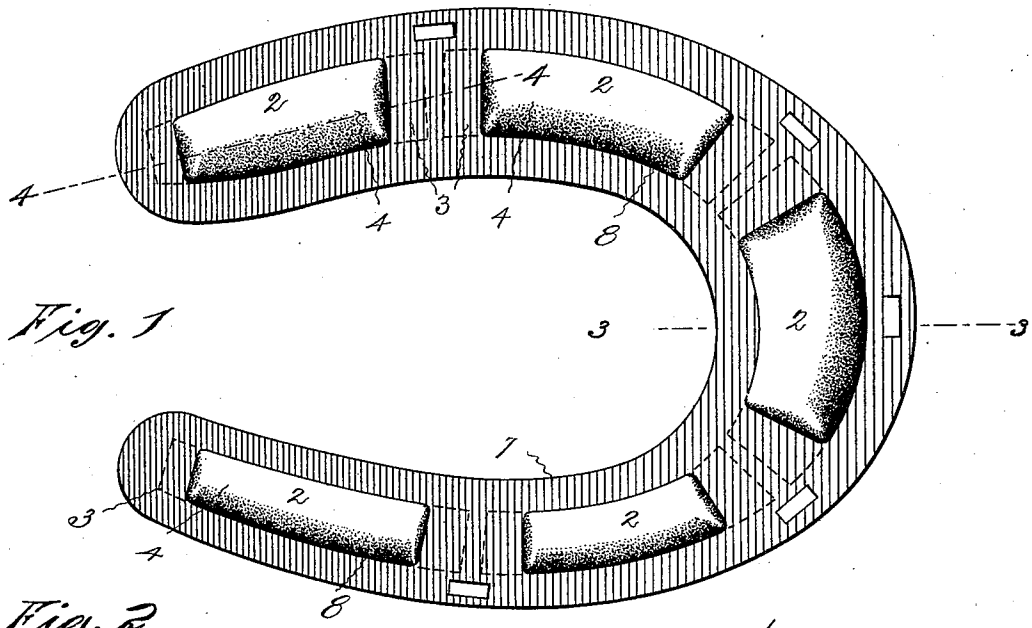
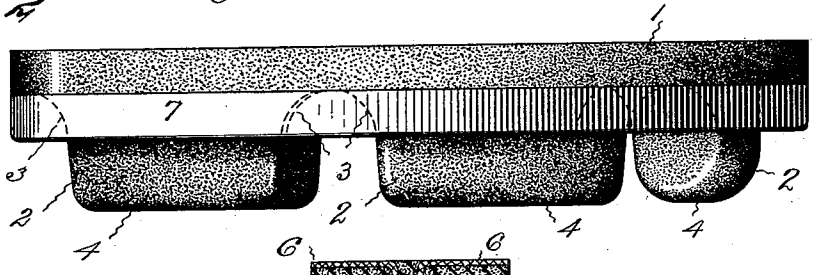


Fig. 1

Fig. 2



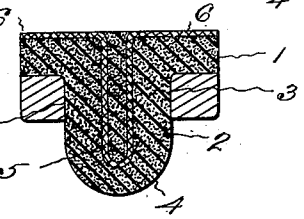


Fig. 3

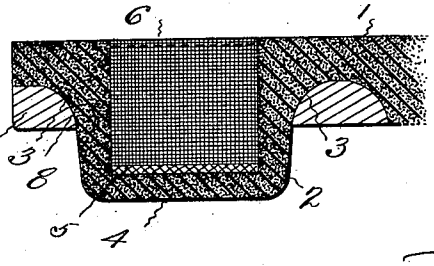


Fig. 4

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UNITED STATES PATENT OFFICE.

THOMPSON C. STROUD AND THOMAS H. ROCHE, OF HARTFORD, CONNECTICUT.

ELASTIC HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 667,262, dated February 5, 1901.

Application filed November 16, 1900. Serial No. 36,732. (No model.)

To all whom it may concern:

Be it known that we, THOMPSON C. STROUD and THOMAS H. ROCHE, citizens of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Elastic Horseshoes, of which the following is a specification.

This invention relates to a horseshoe which is made of rubber or a similar elastic material with a wearing-face formed of a row of calks and which is secured to the hoof of a horse by nails that pass through a light metal frame that embraces the calks below the elastic shoe.

The object of this invention is to provide a shoe of this character which is so constructed that the slipping of the horse on wet and icy pavements is reduced to a minimum and the calks so secured that they will not break off when the shoe is in use.

The invention resides in a horseshoe having a shoe-shaped elastic pad adapted to rest against the bottom of the hoof, a row of elastic calks integral with and depending from the pad, with textile fabric extending from the calks into the pad, and a metal frame which conforms to the pad and embraces the calks and when secured in position tends to bind the calks to the pad and to hold the pad and the textile fabric that anchors the calks close against the bottom of the hoof.

Figure 1 of the accompanying drawings is a view of the bottom of a shoe that embodies the invention. Fig. 2 is an edge view of the shoe. Fig. 3 is a transverse section taken at the toe of the shoe on plane indicated by line 3 3, and Fig. 4 is a longitudinal section taken at the heel of one leg of the shoe on plane indicated by line 4 4.

The pad 1, which is made of rubber or other elastic material, may be formed to the shape of a regular shoe or a right or left side-weight shoe. Integral with this pad are a number of calks 2, of rubber or other elastic material. These calks depend from the bottom of the pad in a row which conforms to the general outline of the shoe. If the shoe is a side-weight, as illustrated in the drawings, the calks on the heavy leg may be thicker than those on the light leg. The upper portion of each of these calks flares outwardly at both ends, so that the base 3 of each calk is longer than the tip 4. In the center of each calk is a doubled piece 5 of textile fabric, such as heavy canvas. The ends 6 of this fabric pass upwardly through and turn outwardly on the upper face of the pad. These pieces of textile fabric are molded with the rubber and vulcanized in position when the pad and calks are formed.

The frame 7 has the same general shoe-shaped outline as the pad. The frame is formed of metal, preferably steel, with openings 8, that fit the bases of the calks. The ends of the openings are inclined, so that portions of the frame when in position underlie parts of the bases of the calks.

The shoe is secured in position for use by driving nails through nail-perforations in the frame and through the pad into the hoof. When the frame is nailed to the hoof, the pad is tightly clamped between the frame and the hoof, as are also the outwardly-turned ends of the textile fabric. By this construction the ends of the textile fabric are not only clamped so that the calks are anchored by the textile fabric, but the ends of the calks are by underlying portions of the frame bound tightly to the pad.

This shoe has great durability, because of the elasticity of the calks and the pad and because the calks do not accidentally become detached, for they are anchored to the pad by the outturned ends of the textile fabric that extends from the calks into the pad, and they are bound at their ends by the portions of the frame at the ends of the calk-openings that underlie the outwardly-flaring bases of the calks. A horse shod with such calks does not easily slip upon wet or icy pavements on account of the elasticity of the calks, which do not present a continuous rubber wearing-face. The slipping is also reduced, when the tips of the calks become worn, by the action of the textile fabric, which anchors the calks to the pad.

We claim as our invention—

1. A horseshoe consisting of an elastic shoe-shaped pad, integral elastic calks depending from the pad, textile fabric extending from the calks into the pad and turning outwardly

above the lower face of the pad, and a metal frame conforming to the shape of the pad and embracing the bases of the calks, substantially as specified.

2. A horseshoe consisting of an elastic shoe-shaped pad, integral elastic calks depending from the pad, with the ends of the bases of the calks flaring outwardly, textile fabric extending from the calks into the pad, and a metal frame conforming to the shape of the pad and embracing the flaring bases of the calks, substantially as specified.

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