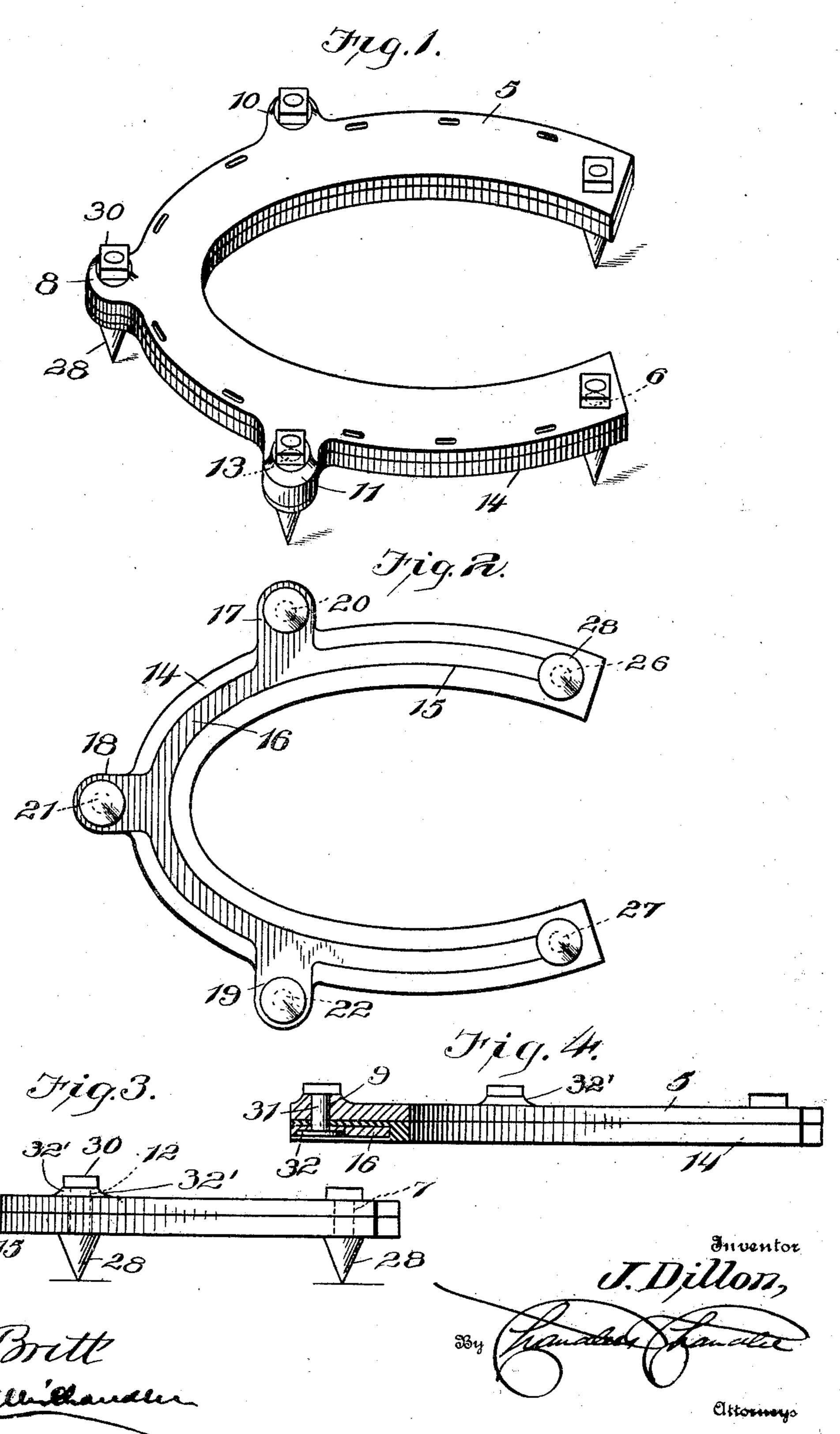
,我们们就是一个人的人,我们就是一个人的人,就是一个人的人的人,我们就是一个人的人的人的人的人的人的人的人,我们也不是一个人的人的人,不是一个人的人的人的人, 第二十二章 1000年,我们就是一个人的人的人的人的人的人的人的人的人,我们就是一个人的人的人的人的人的人的人的人的人的人的人的人的人的人的人的人们也不是一个人

## J. DILLON. HORSESHOE.

(Application filed Feb. 24, 1902.)

(No Model.)

Witnesses



## United States Patent Office.

JOHN DILLON, OF NEW YORK, N. Y.

## HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 703,123, dated June 24, 1902.

Application filed February 24, 1902. Serial No. 95,365. (No model.)

To all whom it may concern:

Be it known that I, John Dillon, a citizen of the United States, residing at New York city, in the county of New York, State of New York, have invented certain new and useful Improvements in Horseshoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to horseshoes; and it has for its object to provide a construction of shoe involving a plurality of parts of such structure and arrangement that the shoe may be adapted easily for use in slippery weather

or in fair weather.

A further object of the invention is to provide a construction wherein when calks are used the vibrations will be in large part absorbed by a cushion, a portion of which is disposed to bear upon the ground, while a portion acts to cushion the calks.

In the drawings forming a portion of the specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing a horseshoe embodying the present invention and having all of its parts assembled. Fig. 2 is a bottom plan view of the shoe with the calks in place. Fig. 3 is a section taken longitudinally of the shoe and including the toe-calk. Fig. 4 is a view similar to Fig. 3 and showing an attaching-bolt in the place of the calk.

Referring now to the drawings, the present shoe is shown including an upper member 5, which is a permanent member and is attached to the horse's hoof by means of nails driven through perforations therein in the usual 40 manner. The member 5 of the shoe is provided with perforations 6 and 7 at the heels thereof, and at the front or toe portion of the shoe is a forwardly-projecting lug 8, in which is a perforation 9, other lugs 10 and 11 being 45 provided at the outer periphery of the member 5, at the sides thereof, these last-named lugs having perforations 12 and 13 therein. It will be noted that the perforated portions of the member 5 are so disposed and formed 50 as to project beyond the horse's hoof.

Against the under side of the member 5 is

disposed an elastic pad 14, preferably of rubber and which conforms in outline to the member 5 and has perforations therethrough conforming to the perforations of the latter. 55 In the under face of the pad 14 is formed a channel 15, centrally thereof or midway between the inner and outer edges of the pad, said channel being broadened at the lugs or projections 8, 10, and 11 for a purpose to be 60 explained.

A supplemental shoe 16 is provided and is formed to fit in the channel 15 and has lugs 17, 18, and 19, which fit in the broadened portions of the channel and in which are formed 65 perforations 20, 21, and 22, which register with the perforations 12, 9, and 13 and with corresponding perforations formed in the pad 14.

A series of calks are provided and each of which consists of a cylindrical body 25 of a 70 size to fit snugly in the alining perforations at one portion of the shoe, it being noted that the free ends of the supplemental shoe 16 have also perforations 26 and 27, which register with perforations in the heel of the shoe mem- 75 ber 5 and in the pad. At the lower end of the body portion 25 of each calk is formed an inverted conical head 28, the major diameter of which is greater than that of the body 25, so that a shoulder 29 is formed which rests 80 against the under face of the supplemental shoe 16, the upper end of the body 25 extending through the member 5 and having threads for engagement of a nut 30, which draws the calk into place and holds it securely against 85 movement. It will be noted that five of these calks are provided and that as the stems 25 of the calks are slidably engaged with the shoe the pressure upon the calks will compress the elastic cushion and prevent excess- 90 ive jarring. Furthermore, it will be noted that the rubber or elastic cushion projects slightly beyond the supplemental shoe 16, so that it may engage the snow or ice through which the calks may pass.

When it is desired to use the rubber face for the horseshoe without the calks, bolts 31 may be substituted for the stems of the calks, the heads of the bolts engaging in the countersinks 32 at the lower ends of the perforations through the supplemental shoe, as shown in Fig. 4 of the drawings. Surrounding the

upper ends of the perforations through the shoe proper, 5, of the article are flanges 32', against which the retaining-nuts may bear.

It will be understood that in practice modifications of the specific construction shown may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

o What is claimed is—

1. A horseshoe comprising a member adapted for attachment to a hoof and having perforations therethrough, an elastic pad disposed against the under face of the member and having perforations alined with the perforations of said member, a supplemental shoe disposed against the under face of the pad and having perforations alining respectively with those of the first member and cushion, and means for holding said parts together, said means consisting of calks engaged slidably with the perforations and having retaining means engaged with their upper ends above the first member whereby the calks are slidably sustained.

2. A horseshoe comprising a main member adapted for attachment to a hoof, an elastic pad disposed against the under face of said

member and having a channel therein, a supplemental shoe disposed within the channel, 30 said parts having alining perforations, and means for holding said parts together, said means consisting of calks slidably engaged with the perforations and having nuts screwed on their upper ends above the main member 35 whereby the calks are yieldably sustained.

3. A horseshoe comprising a main member adapted for attachment to a hoof, an elastic pad disposed against the under face of said member and having a channel therein, a supplemental shoe disposed within the channel, and lying with its lower face above the lower face of the elastic pad, said parts having alining perforations, and means for holding said parts together, said means consisting of calks 45 slidably engaged with the perforations and having nuts screwed on their upper ends above the main member whereby the calks are yieldably sustained.

In testimony whereof I affix my signature 50 in presence of two witnesses.

JOHN DILLON.

Witnesses:
JOHN C. CARPENTER,
MARY H. REGAN.