D. S. WILT & V. O. WILLIAMS.

SPRING HORSESHOE.

APPLICATION FILED MAY 14, 1914.

1,127,561. Patented Feb. 9, 1915.

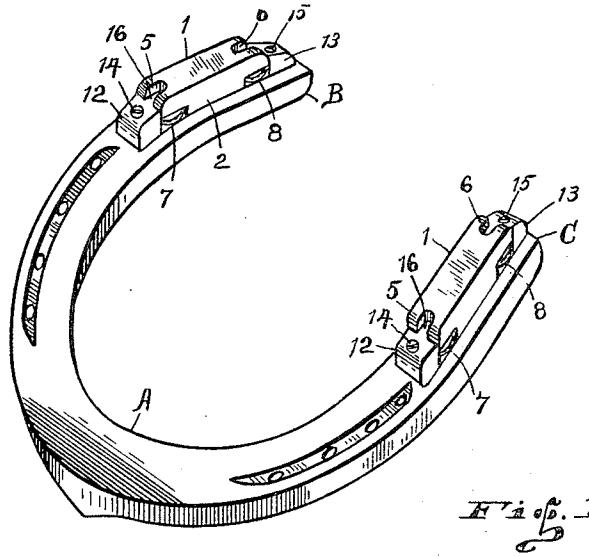


Fig. 1.

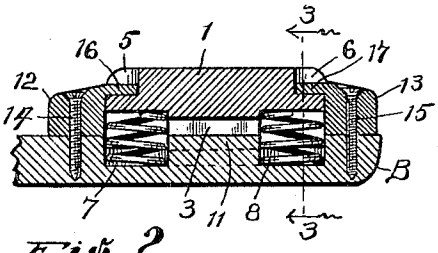


Fig. 2.

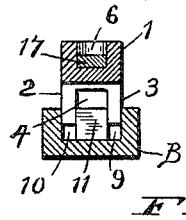


Fig. 3.

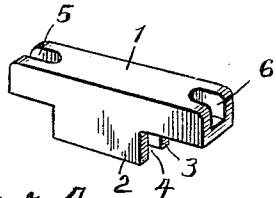


Fig. 4.

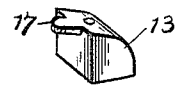


Fig. 5.

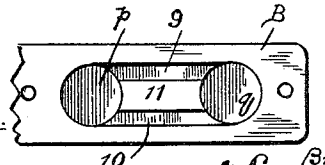


Fig. 6.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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SPRING-HORSESHOE.

1,127,561. Specification of Letters Patent. Patented Feb. 9, 1915.

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To all whom it may concern:

Be it known that we, DORAH S. WILT and VICTOR O. WILLIAMS, both citizens of the United States, residing in the city of Richmond, in the county of Wayne and State of Indiana, have invented new and useful Improvements in Spring-Horseshoes, of which the following is a complete and accurate specification, the same being such as will enable an ordinary mechanic to make and to apply the same to practice with accuracy.

Our present invention pertains particularly to improvements in horse shoes, and it has special reference to the cushioning means, whereby the animal to which they are applied will be relieved of jolts or jars incident to horseshoes of ordinary construction.

The object of our present invention, broadly stated, is to provide horse shoes adapted to afford a maximum of resiliency consistent with the use to which they are to be employed, which will be strong and durable in construction, inconspicuous in appearance, in which the specific improvements herein set forth may be employed in connection with various forms and styles of horseshoes now in use, and which can be manufactured and sold at a comparatively low price.

Other objects and particular advantages of our invention will be made manifest in the course of the following description and specification.

The means for carrying out the principles of our invention in a practical and a mechanical manner is shown in the accompanying drawings, in which—

Figure 1 is a perspective view showing the lower or face view of a horseshoe constructed in accordance with our invention. Fig. 2 is a central longitudinal section of the heel portion of one side of the horseshoe shown in Fig. 1. Fig. 3 is a cross section of the invention, as taken on the line 3—3 of Fig. 2. Fig. 4 is an isometrical view of one of the calks alone. Fig. 5 is an isometrical view of one of the lugs alone. And Fig. 6 is a plan view of the lower face of one of the heel portions alone, that is without the calks, springs, or the abutments.

Similar indices denote like parts throughout the several views.

Whereby the construction, the operation, and the advantages of our invention may be better understood and appreciated, we will now take up a detailed description thereof, in which we will set forth the same as fully and as comprehensively as we may. In the instance we have shown a complete horseshoe A, the same having two heel portions B and C.

It is evident that our invention is to be employed in duplicate in connection with each shoe, that is one of the complete devices is to be employed with each heel portion of the shoe, as shown in Fig. 1, therefore a description of one of the devices will answer for both, and the like parts in the two devices will be denoted by like reference numerals.

Numeral 1 denotes the calks, which are in the nature of short bars, the same being of less width and extending parallel with their respective heel portions of the shoe. Extending down from the central portion of each side of the calks are the lips 2 and 3. The outer faces of the said lips are even with the sides of the calks, and they form a channel 4 between them, for the purpose hereinafter stated. Formed in the ends and the upper faces of each calk are the angular sockets 5 and 6, which open both upward and horizontally.

Numerals 7 and 8 denote the two helical springs. The upper ends of the said springs are seated against the under face of the calk 1 and at the ends of the lips 2 and 3. The lower ends of the said springs are seated in sockets *p* and *q* formed therefor in the faces of the heel portions B and C, as indicated in Figs. 2 and 6. The said sockets for the springs, in the heel portions B and C, are connected by two channels 9 and 10, the said channels being spaced apart and divided by the core 11. The channels 9 and 10 are adapted to receive operably therein the respective tongues 2 and 3, and the core 11 is adapted to operate in the channel 4, as shown in Fig. 3.

Numerals 12 and 13 denote the two abutments, which are located at each end of the calks 1, and they are secured to the under face of the heel portions of the shoe by their respective screws 14 and 15. Extending inward, toward the calk 1, from the upper ends of the abutments 12 and 13, are the respective lugs 16 and 17, which are adapted to fit in the respective angular sockets 5 and 6, in order to limit the movement of the

calks away from the heel portions of the shoe as it is pressed by the springs 7 and 8.

In assembling the device the face of the shoe should be turned upward, as shown in the drawings, the springs 7 and 8 are then placed in their sockets in the heel portions, the calk 1 is then placed in position, as in Figs. 2 and 3. The next operation is to press the calk toward the heel portion of the shoe and against the resiliency of the springs, the abutments are then brought to position and then secured by the screws, after which the device will be ready for operation, and to be attached to the animal's hoof in the usual manner. It is evident that the springs should press upon their calks with considerable force whereby when the weight of the animal to which the shoe is attached is placed thereon the springs will have the proper resiliency to sustain the weight yet adapted to yield to the proper degree to afford the desired cushioning effect.

We desire that it be understood that various changes may be made in the size, the proportions, and in the several details of the construction herein shown, without departing from the spirit of our invention and without sacrificing any of the advantages thereof.

Having now fully shown and described our invention what we claim and desire to secure by Letters Patent of the United States, is—

A spring horseshoe, having the usual heel portions, with sockets spaced apart in each heel portion and channels spaced apart and connecting the said sockets with the material between the sockets and between said channels forming a core, springs adapted to rest in said sockets, a calk adapted to rest on the said springs, lips spaced apart and extending from the central portion of the calk and adapted to operate in the said channels of the heel portion with the said core adapted to operate in the space between the said tongues, abutments secured to the face of the heel portion and located at the ends of the calks, and lugs extending toward each other from the abutments and operative in angular sockets formed in the ends of the calks and opening upward to limit the movement of the calk away from the heel portion.

In testimony whereof we have hereunto subscribed our names to this specification in the presence of two subscribing witnesses.

DORAH S. WILT.
VICTOR O. WILLIAMS.

Witnesses:
ROBERT W. RANDLE,
R. E. RANDLE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."