No. 750,614. PATENTED JAN. 26, 1904.

C. L. DAHLY.

HORSESHOE CALK.

APPLICATION FILED MAY 27, 1903.

NO MODEL.

Fig. 1.

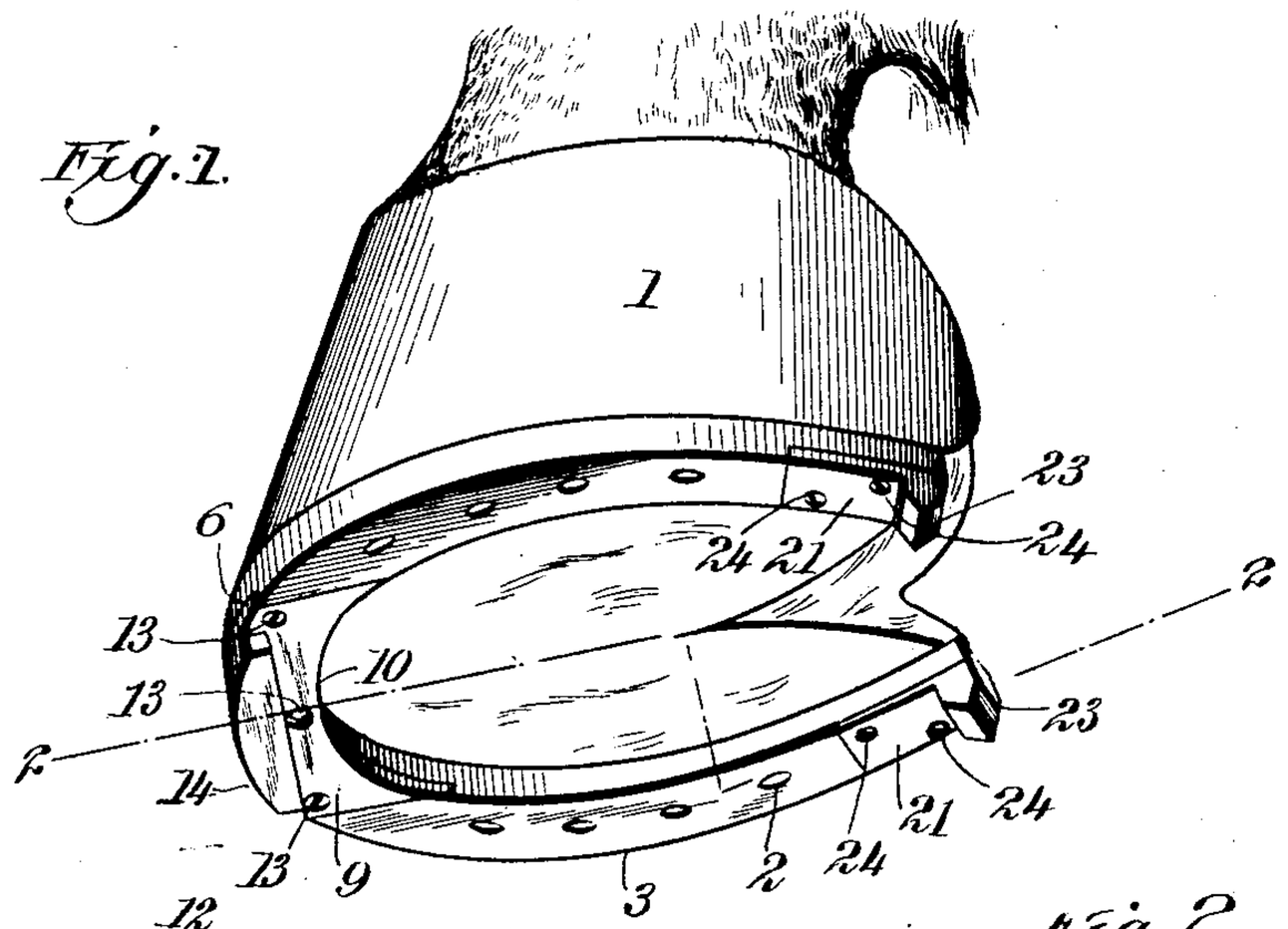


Fig. 2.

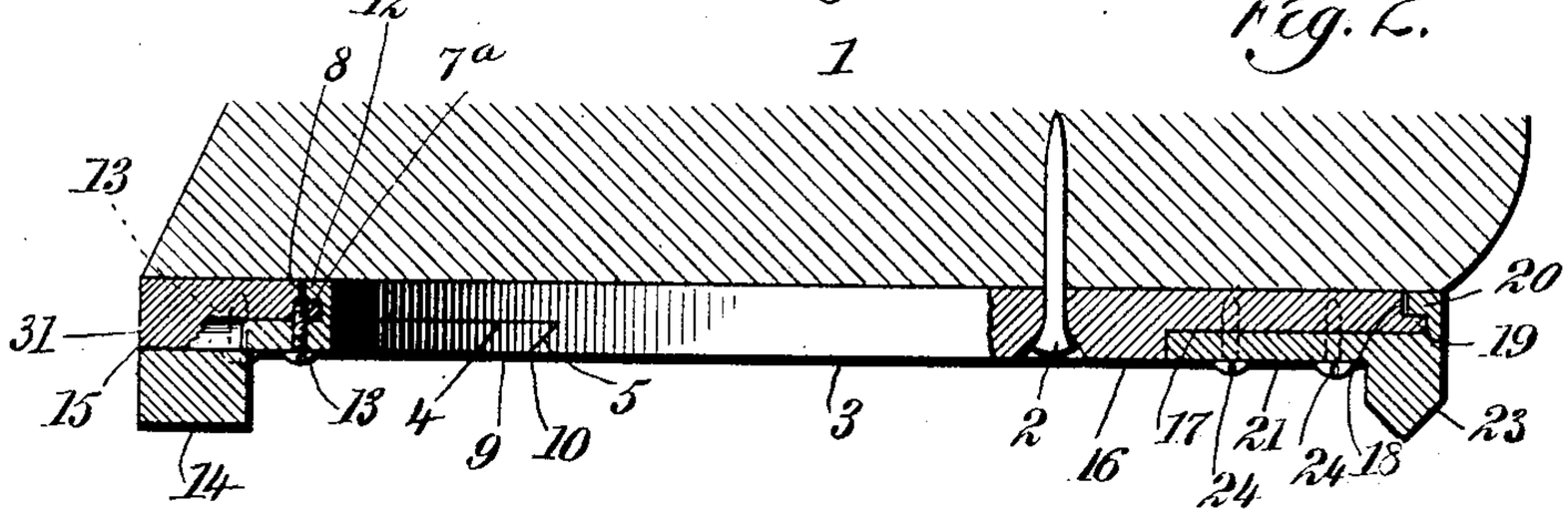


Fig. 3.

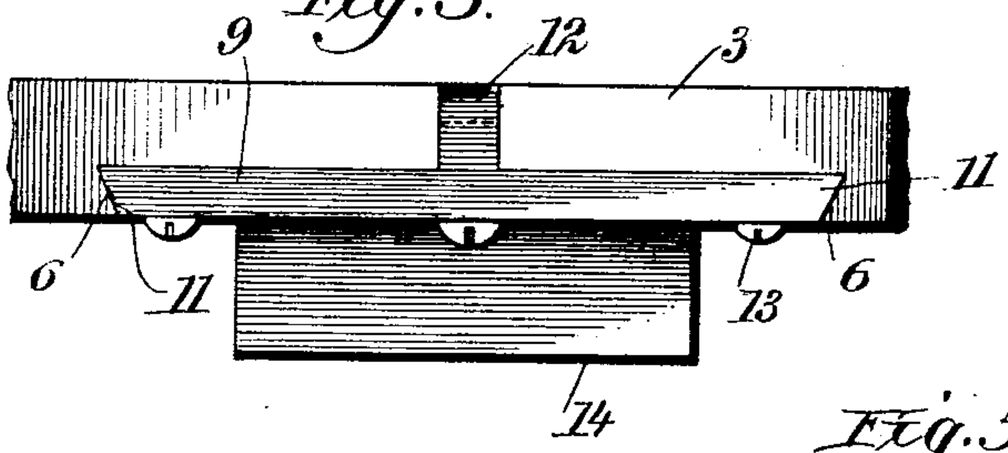


Fig. 4.

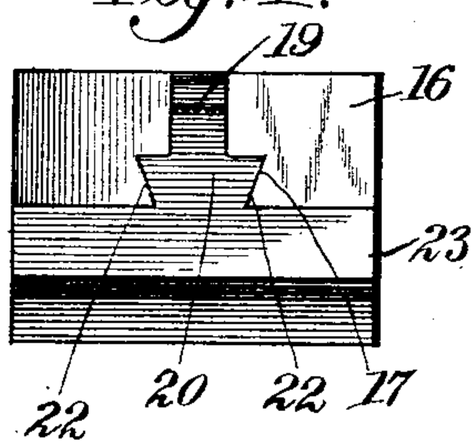
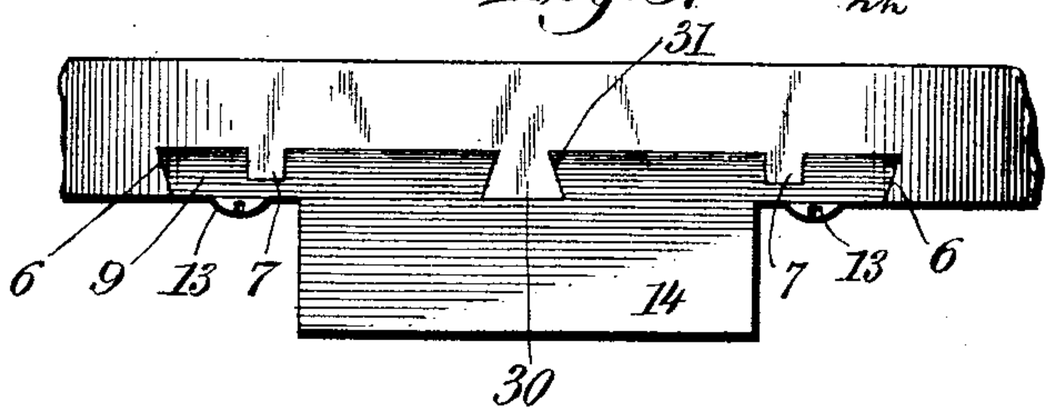


Fig. 5.



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No. 750,614. Patented January 26, 1904.

UNITED STATES PATENT OFFICE.

CHARLES L. DAHLY, OF DECORAH, IOWA.

HORSESHOE-CALK.

SPECIFICATION forming part of Letters Patent No. 750,614, dated January 26, 1904.

Application filed May 27, 1903. Serial No. 158,967. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. DAHLY, a citizen of the United States, and a resident of Decorah, in the county of Winneshiek and State of Iowa, have invented a new and Improved Horseshoe-Calk, of which the following is a full, clear, and exact description.

This invention relates to horseshoes; and it consists, substantially, in certain parts and details and combinations thereof, as hereinafter particularly described and claimed.

My improvements have reference more especially to calks for horseshoes; and one of the principal objects of my invention is to overcome numerous disadvantages and objections common to many similar devices hitherto devised and also to provide devices of this kind which are effective and reliable in use, besides being easily and readily applied and comprising few parts not easily broken and not liable to get out of order.

A further object of the invention is to provide devices of the character referred to which are simple in construction and organization and which are also comparatively inexpensive to manufacture and possess the capacity for long and repeated service.

The above and additional objects are attained by means substantially such as are illustrated in the accompanying drawings, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a view in perspective of the hoof of a horse, having attached thereto a shoe provided with a toe-calk and heel-calks, each embodying my improvements. Fig. 2 is an enlarged sectional view substantially on the broken line 2 2 of Fig. 1. Fig. 3 is a rear elevation of the front portion of the shoe. Fig. 4 is an end view of one of the heel portions of a horseshoe and showing the application thereto of a heel-calk constructed in accordance with my invention, and Fig. 5 is a front elevation showing more clearly certain parts of the means by which the toe-calk is applied or fastened to the shoe.

Before proceeding with a more detailed description it may be stated that in the form of my improvements herein shown I preferably provide a horseshoe of special construction at the forward portion thereof, by which to adapt the same for the attachment thereto of the toe-calk, this latter element being also of special embodiment, and in like manner I also provide each heel portion of the shoe of special construction, with which portion is combined the heel-calk similarly of special form. While I have herein represented my improvements in a certain preferred embodiment, it will be understood, of course, that I am not limited to the precise details thereof in practice, since immaterial changes therein may be resorted to coming within the scope of my invention.

Referring now to the drawings, 1 represents the hoof, to which is secured in any suitable manner, as by nails 2, the shoe 3. A recess or channel 4 is formed in the under side of the shoe to the forward middle portion thereof, the opposite side walls of which are preferably beveled or inclined downward—that is, converging—and are also preferably equidistant. Said recess is of any desired height or depth from the under surface of the shoe and is of a width substantially equal to that of the toe portion of the shoe, and the forward part of the latter is formed or provided on opposite sides of the transverse center thereof with suitable pendent lugs or projections 7, which are disposed any desired distance apart within the recess, and at substantially the central forward portion of the shoe from the inner edge thereof a notch 8 is formed practically in line with a vertical plane passing centrally between said lugs 7, said notch producing a small horizontal ledge or shelf 7^a. (See Fig. 2.)

Fitted within the recess 4, with its under surface practically flush with the corresponding surface of the shoe, is a plate 9, the inner or rearward edge 10 of which is flush with the rear or inner face of the shoe, the parallel side edges 11 of this plate being also beveled in correspondence with the said side walls 6 of the recess. The said plate 9 is formed centrally of the inner edge thereof with an upwardly-projecting integral hook or engaging device 12, which coincides with the notch 8 and overlaps the ledge or shelf 7^a in such manner that the plate is prevented from slipping or moving forwardly relatively to the

shoe, it being here mentioned that said plate is secured to the shoe by means of suitable screws 13, passing through corresponding openings therefor in the plate and shoe, as is apparent. The plate 9 is, moreover, constructed on the forward part of the under surface thereof with a calk 14, on either side of which in the upper surface of the outer edge of the plate is a notch 15, corresponding to one of the lugs or projections 7, these latter elements fitting snugly within said notches and serving to retain the plate in proper position upon the shoe and also serving as stops to prevent thrust or forward movement or tendency to move of the calk-plate, thereby relieving part of the strain on the projection 12 and also the shearing strain on the fastening screws or bolts.

I likewise form the under side of each heel portion 16 of the shoe with substantially a dovetailed groove 17, leading inwardly from such portion a suitable distance from the end thereof, (see Fig. 2,) and in the upper surface of this said portion at the end I form a notch 18, the base 19 of which constitutes a ledge or shelf, which is overlapped by a corresponding upwardly-projecting hook or engaging device 20, formed integrally with the rearward end of a plate 21, the sides 22 of which are beveled or substantially dovetailed to snugly fit the correspondingly-shaped sides of the said groove 17, (see Fig. 4,) said plate 21 also being formed on its under side at the outer end with preferably an integral calk 23, which may be beveled on either side thereof from the end, as shown. This plate 21 is also preferably secured to the shoe by means of screws 24, having the under surface thereof flush with the corresponding surface of said shoe, as shown.

It is thought the construction and organization of the elements or parts contributing to my improvements will be fully understood without further explanation thereof, it being added, however, that at the forward under surface of the shoe or centrally of the toe portion thereof I preferably provide the shoe with a substantially beveled or dovetailed lug 30, which fits snugly in a correspondingly-shaped recess 31 therefor in the upper part of the calk 14, which calk and recess may be of any length desired, it being apparent that by the employment of the same the said calk is the more securely held in proper relation to the shoe.

It will be apparent that the calk-plate is supported at its side portions by the beveled engaging surfaces, at its rear by the projection 12, and at its forward central portion by the dovetailed lug 30, thereby providing strong retaining means for the calk-plate at both ends and both sides of its intermediate portion.

In applying the calk-plate it is placed inside of the shoe with the engaging beveled side walls registering, and then the plate is slid forwardly until it is in proper position with the hooked projection 12 and the lugs 7 in engagement with their proper sockets. Thereupon the attaching-screws 13 are put in and driven home. When the calk 14 becomes worn or dull, it is a very simple matter for the stable boy or any one without special mechanical ability to substitute a new calk for the one in use by simply removing the screws, sliding the calk-plate back out of its retaining portion of the shoe, and attach a new plate, as above described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A horseshoe having on the lower face a channel extending longitudinally, the shoe having the opposite side walls of the channel converging downward thereby forming a dovetailed recess, a calk-plate of substantially dovetailed section and arranged to snugly fit said channel in the shoe, a hook-shaped extension on the rear of the plate that projects upward and then forward, a correspondingly-shaped notch in the shoe in which said extension fits and thereby resists the forward and downward movement of the plate, a calk on said plate, screws securing the plate to the shoe, and a lug extending downward from the shoe at the bottom wall of said channel at the front portion of the shoe, the calk-plate having a notch arranged to receive said lug when the calk-plate is in place.

2. A horseshoe having on the lower face a channel extending longitudinally, the shoe having the opposite side walls of the channel converging downward thereby forming a dovetailed recess, a calk-plate of substantially dovetailed section and arranged to snugly fit said channel in the shoe, a hook-shaped extension on the rear of the plate that projects upward and then forward, a correspondingly-shaped notch in the shoe in which said extension fits and thereby resists the forward and downward movement of the plate, a calk on said plate, screws securing the plate to the shoe, and a dovetailed projection extending downward from the shoe from the bottom of said channel at the forward portion of the shoe, the calk-plate having a correspondingly-shaped groove arranged to engage said latter projection.

3. A horseshoe having on the lower face a channel extending longitudinally, the shoe having the opposite side walls of the channel converging downward thereby forming a dovetailed recess, a calk-plate of substantially dovetailed section and arranged to snugly fit said channel in the shoe, a hook-shaped extension on the rear of the plate that projects upward and then forward, a correspondingly-shaped notch in the shoe in which said extension fits and thereby resists the forward and downward movement of the plate, a calk on said plate, screws securing the plate to the

shoe, and a lug extending downward from the shoe at the bottom wall of said channel on each side at the front portion of the shoe, the calk-plate having notches arranged to receive said lugs when the calk-plate is in place.

4. A horseshoe having at both ends thereof a calk-plate, said end being rabbeted on its lower side, a calk-plate arranged to lie in said rabbeted portion on the plate, an extension on the rear portion of said plate projecting upward and then forward, the shoe having a correspondingly-shaped notch arranged to fit said projection, said plate having a calk on its rear end, and having apertures in its other portion, and screws securing the plate to the shoe at said apertured portions.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES L. DAHLY.

Witnesses:
ROBERT B. BERGESON,
L. M. ENGER.