

G. S. MEYER.  
 REMOVABLE CALK FOR HORSESHOES.  
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Fig. 1

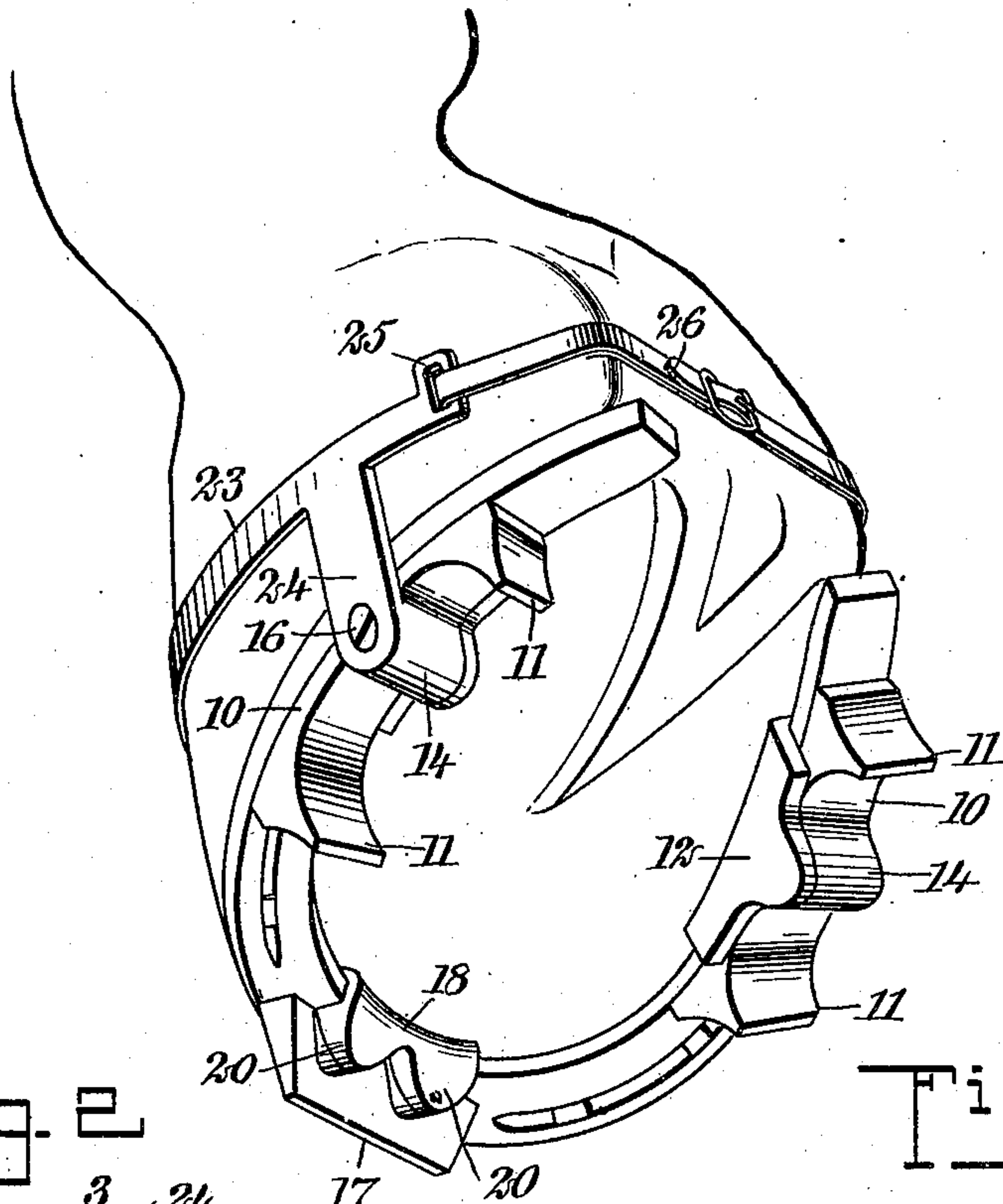


Fig. 2

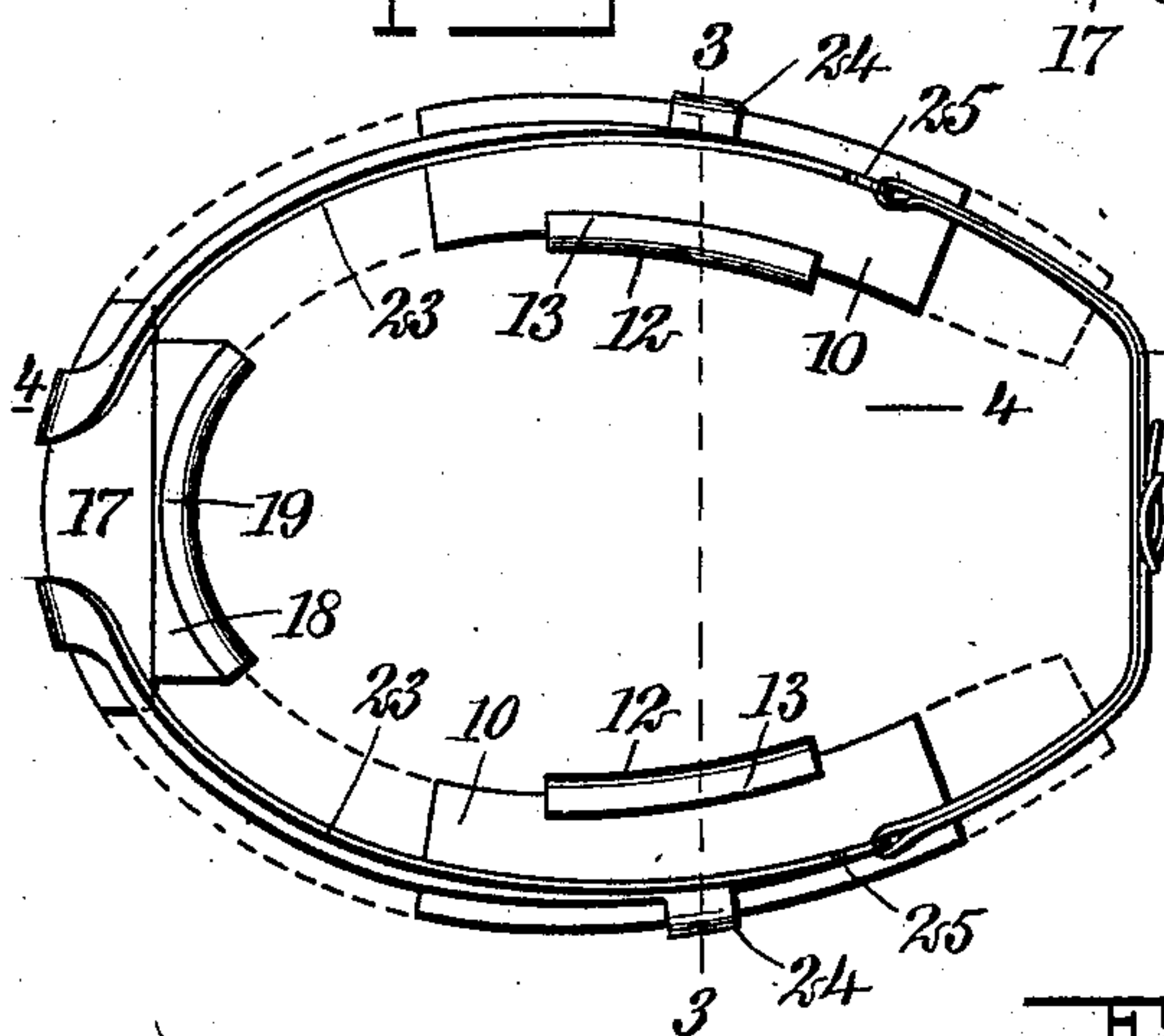


Fig. 3

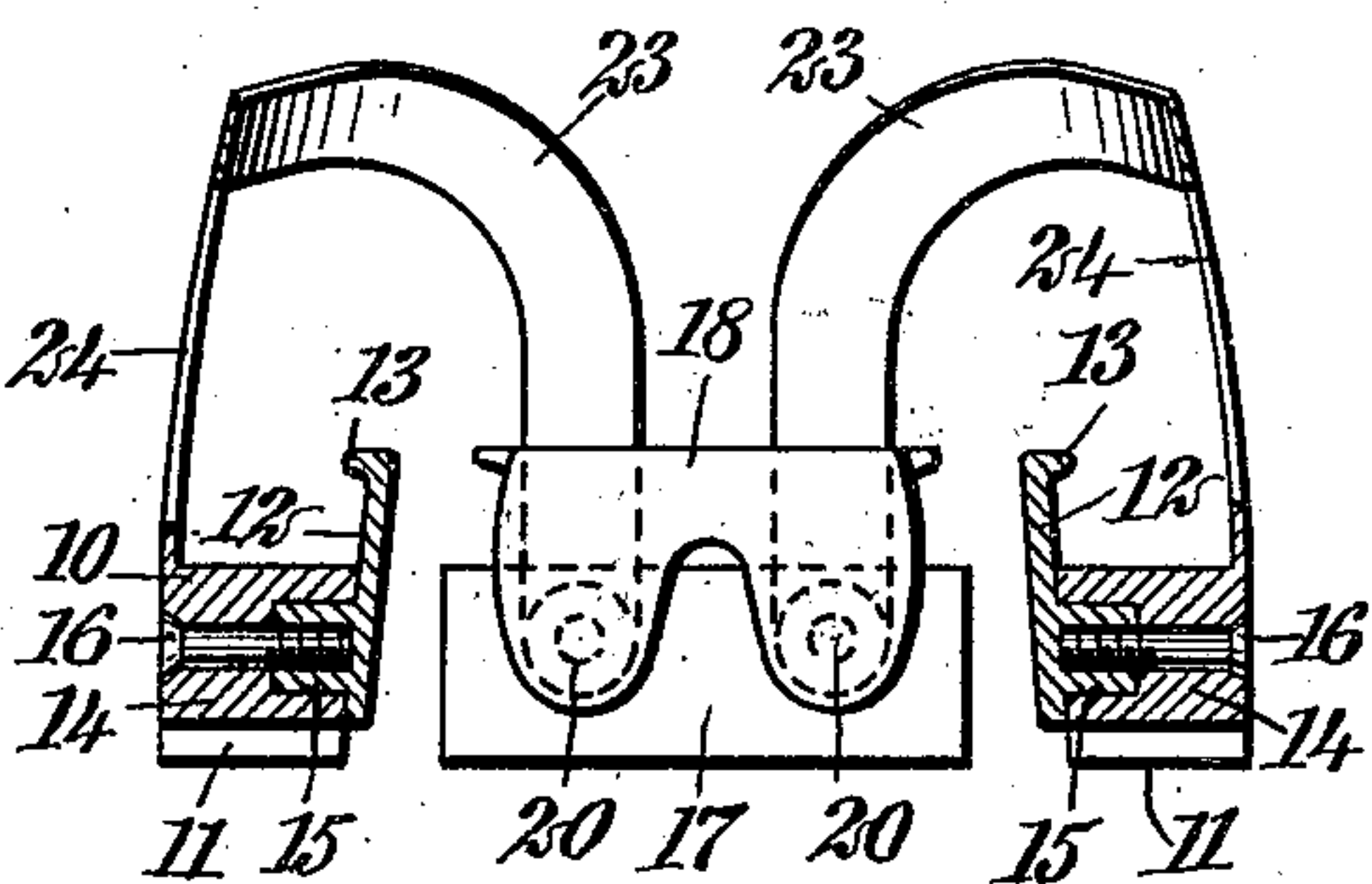
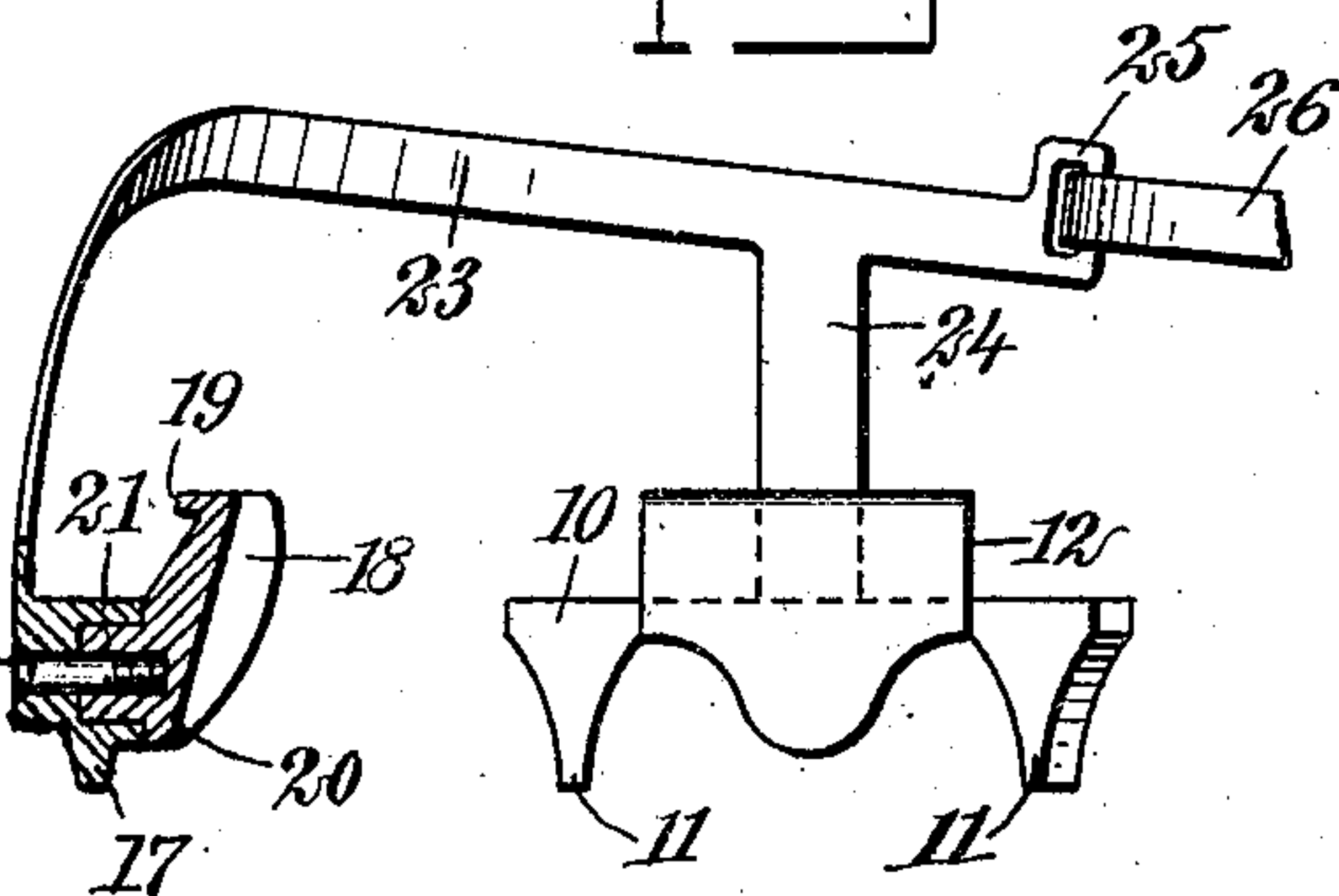


Fig. 4



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# UNITED STATES PATENT OFFICE.

GEORGE S. MEYER, OF NEWBURGH, NEW YORK.

REMOVABLE CALK FOR HORSESHOES.

934,198.

Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed January 20, 1909. Serial No. 473,211.

*To all whom it may concern:*

Be it known that I, GEORGE S. MEYER, a citizen of the United States, and a resident of Newburgh, in the county of Orange and State of New York, have invented a new and Improved Removable Calk for Horseshoes, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in that type of calk disclosed in my previous patent Number 892,282, granted June 30, 1908, and my prior application, Serial Number 467,377, filed December 14, 1908.

The object of the present invention is to provide means for effectively holding the calks in engagement with the shoe without the necessity for a separate member extending along the inner edge of the shoe, as is employed in my prior constructions. In the present instance, I provide a clamping plate which engages with the upper surface of the inner edge of the shoe and effectively holds the calk against displacement. My improved clamping plate is so connected to the calk-bearing member that the two are positively locked against relative vertical displacement. I provide the clamping plate with a projection extending into the calk-bearing plate and hold the projection in place, as well as the two members together, by the use of a suitable screw, access to which may be gained at the outer side of the hoof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which—

Figure 1 is a perspective view of a horse's hoof provided with a removable calk constructed in accordance with my invention; Fig. 2 is a top plan view of the calk and holding means, the shoe being shown in dotted line; Fig. 3 is a transverse section substantially on the line 3—3 of Fig. 2; and Fig. 4 is a longitudinal section substantially on the line 4—4 of Fig. 2.

In my present construction I provide a plate or bar 10, adapted to lie in engagement with the under surface of the shoe intermediate the front and back portions thereof, and preferably of a width substantially equal to the width of the adjacent portion of the shoe, and having a curvature corresponding thereto. The plate or bar 10

has extending downwardly therefrom two calks 11, which are preferably integral with the plate and may be sharpened or in any other manner adapted to engage with the ground to give the horse a firm holding on the latter. Adjacent the inner edge of the plate or bar 10, is a clamping plate 12, extending upwardly adjacent the inner surface of the shoe and having a flange 13 at its upper edge for engagement with the upper surface of the shoe, that is, intermediate the shoe and the bottom of the hoof. The clamping plate is detachable from the calk-bearing plate 10, to facilitate the attachment of the device to the shoe and hoof. The calk-bearing plate preferably has a ridge or flange 14 extending across the under surface thereof, intermediate the two terminal calks 11, and this ridge or flange is provided with a recess extending into it at the end adjacent the clamping plate. The clamping plate is provided with a long stud or projection 15 extending into this recess and held therein by a screw 16. The screw extends through the ridge or flange 14 from the outer end thereof and has threaded engagement with the stud 15 within the recess in the inner end of the flange. The stud extending into the recess serves to receive the screw 16 of any shearing stress, and thus I am able to employ a comparatively small screw whose sole function is to hold the stud within the recess. The outer end of the screw is preferably countersunk, so that should the horse interfere, he cannot cut himself on the head of the screw. Two of these calk-bearing plates 10 and their corresponding clamping plates 12 are employed, one for each half of the shoe, and a somewhat similar construction is employed at the front of the hoof. Here I employ a transverse calk 17 and a clamping plate 18. The clamping plate extends upwardly along the inner surface of the shoe and is curved along its length, so as to fit the curvature of the shoe. At the upper edge of the clamping plate there is an outwardly-directed flange 19, for engagement with the upper surface of the shoe at the inner edge, and at the lower edge of the plate there are provided two downwardly-extending flanges 20, 20, each of which has a forwardly-extending stud 21 adapted to fit into a corresponding recess in the back of the front calk 17. The function of the studs 21 is substantially the



same as that of the studs 15, in that they serve to prevent any relative vertical movement of the clamping plate and calk. The studs are held within their recesses by suitable screws 22, extending through the calk into the studs at the front side of the former.

For connecting together all of the calks and clamping plates, I employ strap members engaging with the calks adjacent the screws 16 and 22. As shown, I employ two separate strap members 23, 23, each lying in engagement with the outer surface of the hoof above the shoe and each having its front end curved downwardly to the front calk. At the sides of the shoe, each strap member has a depending arm 24 extending to the flange 14 of the corresponding side calk-bearing plate. These strap members may be secured to the calk members by means of the screws 22 and 16, or they may be made integral therewith. If desired, the rear ends of the two strap members 23, 23, may have loops 25, and the two loops may be connected by a leather strap 26, but if the parts be made sufficiently strong, it is evident that this strap may be omitted, for the calks cannot move outwardly by reason of the clamping plates, nor can they move downwardly by reason of the flanges 13 and 19 of these straps. The strap members 23 prevent the inward movement of the calks toward the center of the hoof, and also prevent their rearward movement; thus, the strap 26 only serves to hold firmly in place,

parts which could not become displaced unless bent, injured, or broken.

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

A device of the class described, comprising a calk plate supported adjacent the under side of the horseshoe and having a plurality of transversely-extending calks integral therewith and depending therefrom, a band extending about the upper portion of the hoof and connected to the outer side of said calk plate for normally retaining the latter in position, said calk plate having a recess at the side thereof toward the center of the shoe, a clamping plate in engagement with the inner edge of the shoe and having a projection extending into said recess whereby relative vertical movement of said plate and said calk are prevented, a flange carried by said clamping plate for engagement with the upper surface of the shoe, and a screw extending through the calk plate from the outer side thereof into the recess in the inner side thereof and into the projection on said clamping plate for holding the latter in position.

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

GEORGE S. MEYER.

Witnesses:

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