F. REINHARD.

HORSE COLLAR PAD.

APPLICATION FILED JAN. 25, 1909.

924,581.

Patented June 8, 1909.

Fig. 2.

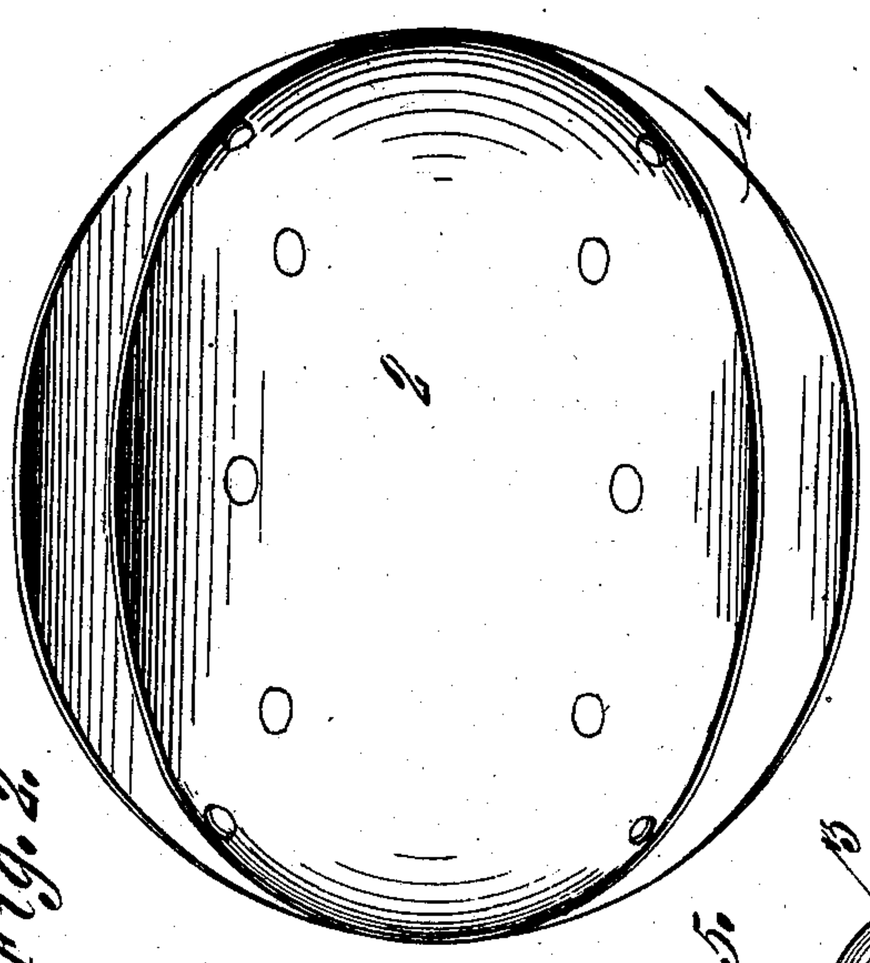


Fig. 5.

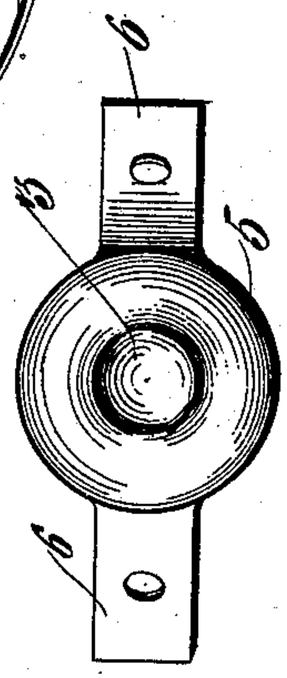


Fig. 4.

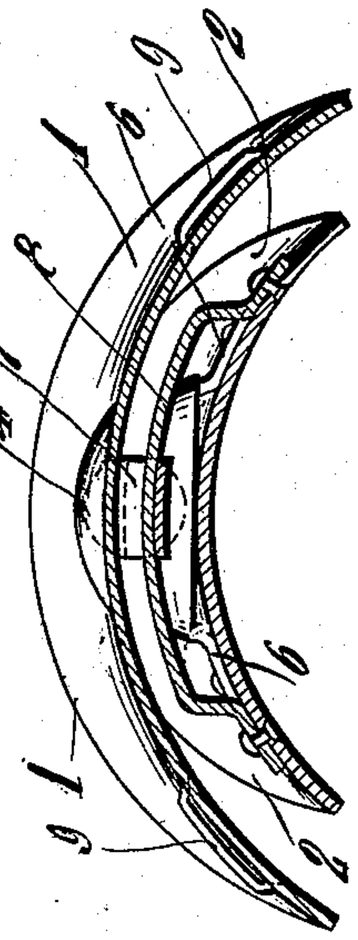


Fig. 1.

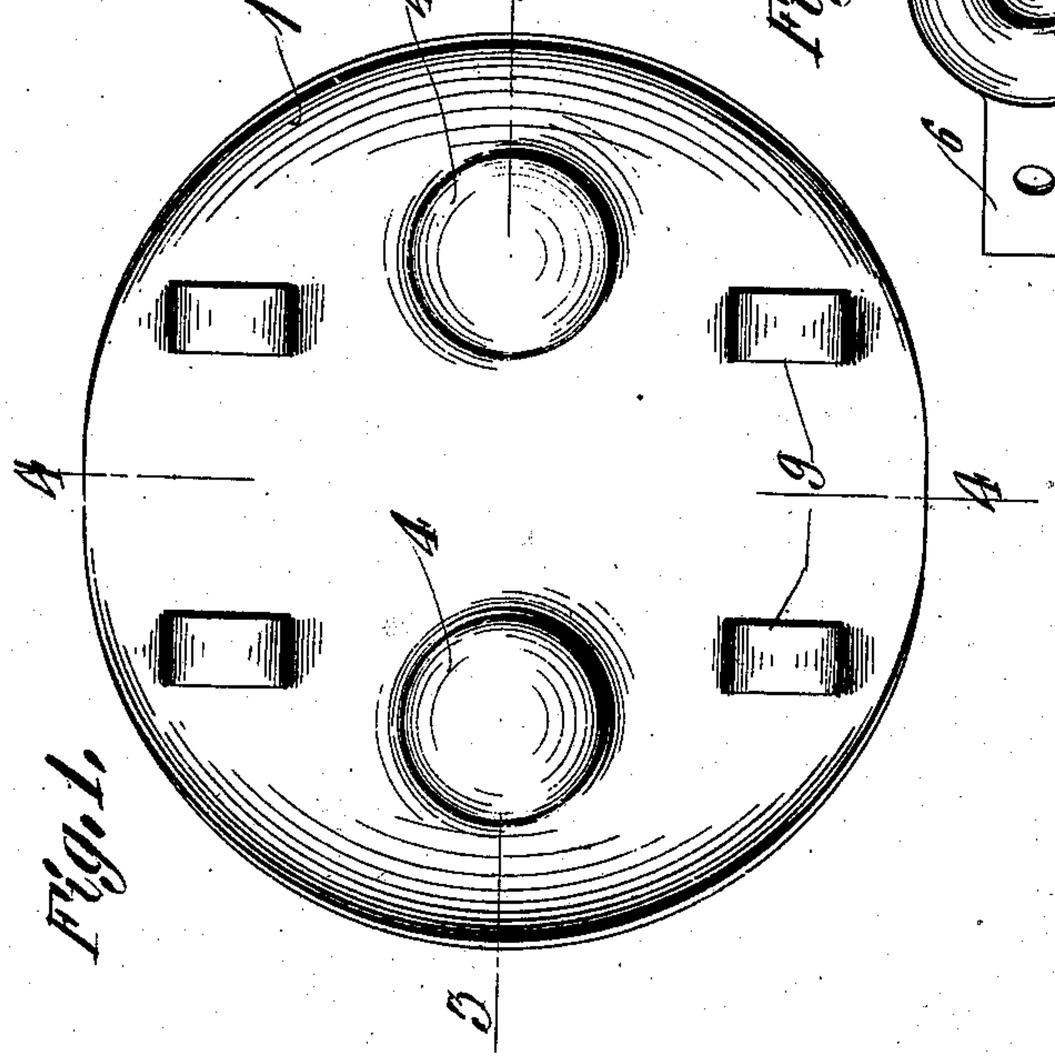
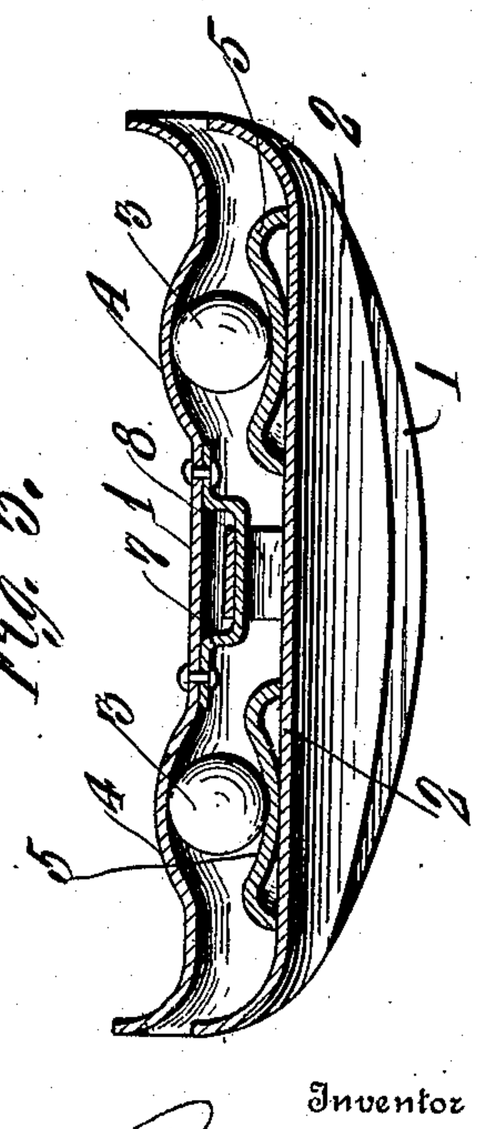


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

FRANK REINHARD, OF EAU CLAIRE, WISCONSIN, ASSIGNOR OF ONE-THIRD TO F. R. FARR, OF EAU CLAIRE, WISCONSIN.

HORSE-COLLAR PAD.

No. 924,581. Specification of Letters Patent. Patented June 8, 1909.

Application filed January 25, 1909. Serial No. 474,121.

To all whom it may concern:

Be it known that I, FRANK REINHARD, a citizen of the United States, residing at Eau Claire, in the county of Eau Claire and State of Wisconsin, have invented certain new and useful Improvements in Horse-Collar Pads, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in horse collar pads, and consists of the novel construction, combination and arrangement of parts hereinafter fully described and claimed.

The object of the invention is to provide a simple and practical pad of this character which will effectively prevent rubbing and chafing of the horse's neck and the use of which will permit sore necks to quickly heal.

The above and other objects of the invention are attained in its preferred embodiment illustrated in the accompanying drawings, in which—

Figure 1 is a top plan view of the improved horse collar pad; Fig. 2 is a bottom plan view; Figs. 3 and 4 are, respectively, longitudinal and transverse sectional views, taken on the planes indicated by the lines 3—3 and 4—4 in Fig. 1; and Fig. 5 is a detail view of the seat for one of the bearing balls.

The invention consists of two sections or plates 1, 2, the upper one of which is adapted to be suitably connected to the horse collar and the lower one of which rests upon the animal's neck. These sections or places are transversely curved or arc-shaped to fit the animal's neck and their ends are preferably curved upwardly and outwardly so that the plates are substantially saddle-shaped. The upper plate or member 1 is supported upon the lower plate or member 2 by means of two bearing balls 3 arranged between the members on the line of their longitudinal axis, said balls being arranged in seats 4, 5 upon said plates. The seats 4 upon the plate 1 are preferably formed by stamping concaved depressions in the bottom face of the same, while the seats 5 are preferably formed by making similar-shaped depressions or cavities in separate metal pieces which may be cast or stamped from heavy sheet metal. These metal pieces forming the seats 5 are provided at opposite points with flanges or ears 6 which are riveted or otherwise secured to the top of the plate 2. The ball seats or cavities 4, 5 are of greater size than the bearing balls 3 so that the latter may roll around in said seats and thereby permit the two plates or sections to have both longitudinal and transverse shifting movement with respect to each other. This construction enables the upper plate or section 1 to have free movement with the collar without imparting such movement to the lower plate or section 2 which rests upon the base of the animal's neck.

To prevent the plates 1, 2 from becoming separated and to retain the bearing balls in their seats and at the same time allow the upper plate or section 1 to have a limited swinging or oscillating movement in both a longitudinal and transverse direction, a loose link or strap connection is provided between said plates. This connection is arranged centrally on said plates and consists of a U-shaped strap 7 disposed longitudinally upon the bottom face of the plate 1 and engaged with a similar-shaped strap 8 arranged transversely and secured to the top face of the plate 2, as clearly shown in Figs. 3 and 4 of the drawings. It will be noted that this connection allows the upper plate 1 to have free movement with the movement of the collar and the animal's neck, without imparting such movement to the bottom plate 2 which rests directly on the base on the neck of the horse or other animal. By reason of this loose connection and the arrangement of the bearing balls between the plates, it will be seen that the rubbing and chafing of the animal's neck by reason of the movement of the collar is effectively prevented so that no sore necks will be produced by the use of the improved pad.

While the upper plate or section 1 may be connected to a horse collar by any desired means, said plate is preferably provided on opposite sides with loops 9 which are stamped out from said plate for the reception of straps or similar fastenings for the purpose of attaching the device to the collar.

The bottom plate or section 2 may, if desired, have its under face covered with a lining of felt or other cushioning material which may be riveted or otherwise secured to said plate.

Having thus described the invention what is claimed is:

1. A horse collar pad comprising superposed sections, the lower one being trans-

versely curved to fit the animal's neck, bearing balls arranged between the sections on the line of their longitudinal axis, opposing seats being provided on the opposing faces of the sections for the reception of said balls, and said seats being of greater size than said balls, and a loose connection arranged centrally between the sections, whereby the balls will be retained in their seats and the sections connected to permit them to have both longitudinal and transverse movement with respect to each other.

2. A horse collar pad comprising superposed sections, the lower one being transversely curved to fit the animal's neck, bearing balls arranged between the sections on the line of their longitudinal axis, opposing seats being provided on the opposing faces of the sections for the reception of said balls, and said seats being of greater size than said balls, and a loose connection between the sections consisting of engaged straps, one being disposed longitudinally and arranged centrally on one section and the other being disposed transversely and arranged centrally on the other section whereby the balls will be retained in their seats and the two sections will be permitted to have both longitudinal and transverse movement with respect to each other.

3. A horse collar pad comprising superposed plates, the lower one being curved transversely to fit the animal's neck and the upper one having stamped in its bottom face on the line of its longitudinal axis ball bearing seats, ball bearing seats secured at opposite points upon the top face of the lower plate, bearing balls arranged in said opposing seats, and a loose connection between the plates consisting of engaged straps, one of the latter extending longitudinally and being arranged centrally on one of the plates and the other strap extending transversely and being arranged centrally upon the other plate.

4. The hereindescribed horse collar pad comprising superposed plates curved transversely and having their front and rear ends curved upwardly and outwardly, the upper plate having bearing ball seats stamped in its under face and also having loops stamped out of its side portions, members formed with bearing ball seats and secured upon the bottom plate opposite the seats in the top plate, bearing balls in said opposing seats, and a loose connection arranged centrally between the plates and consisting of engaged straps of substantially U-form, one strap being disposed longitudinally and secured to one plate and the other disposed transversely and secured to the other plate.

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

FRANK REINHARD.

Witnesses:
F. R. FARR,
L. M. MCCUMBER.