(No Model.) 2 Sheets—Sheet 1.

N. B. RILEY.

COMBINED HAME AND HORSE COLLAR.

No. 456,850. Patented July 28, 1891.

Fig. 1.

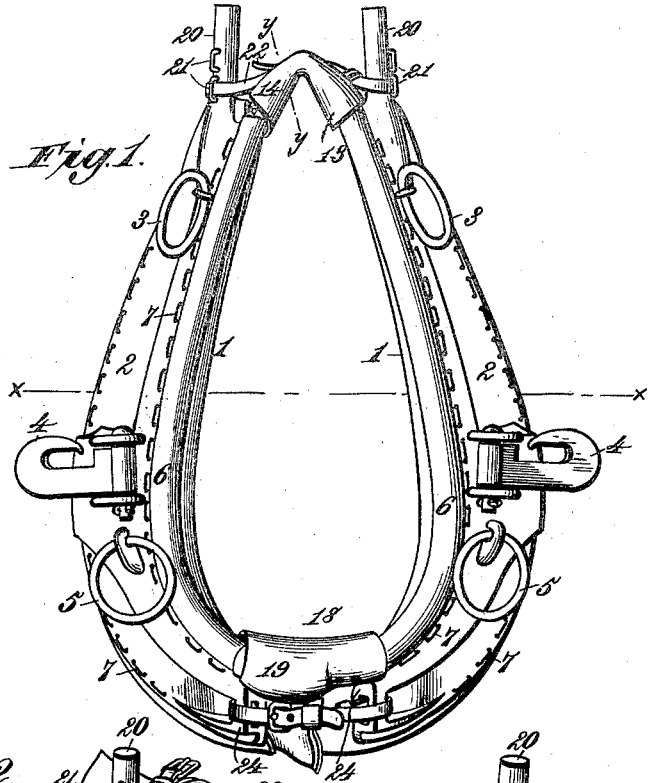
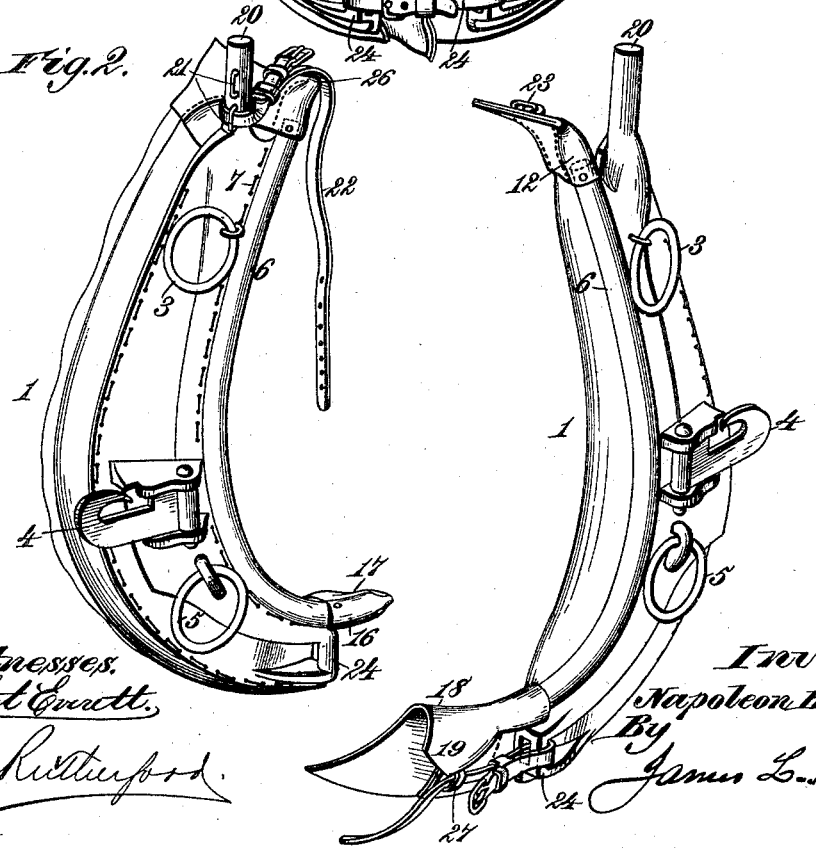


Fig. 2.



Witnesses.
Robt Everett.
J. A. Rutherford.

Inventor:
Napoleon B. Riley,
By James L. Norris.
Atty.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

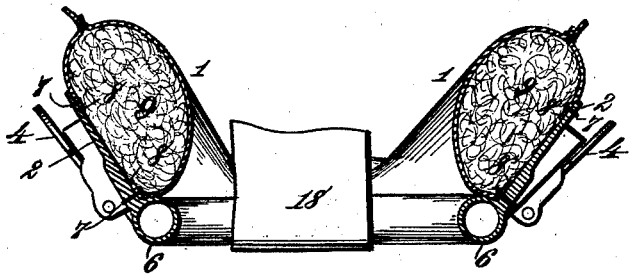


Fig. 4.

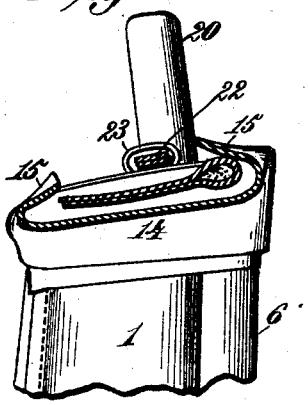


Fig. 5.

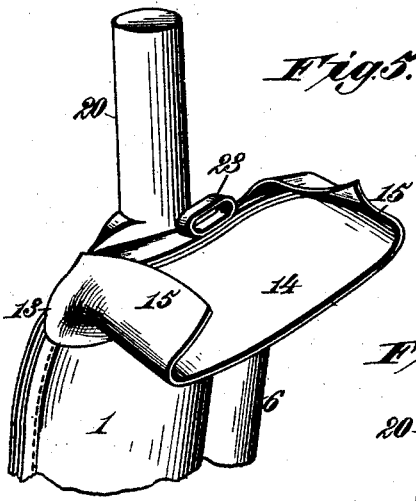


Fig. 7.

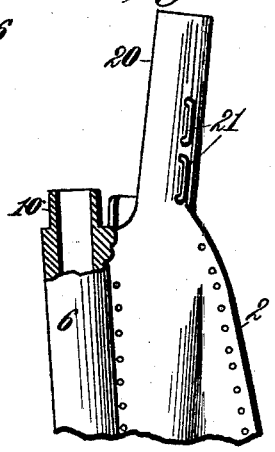
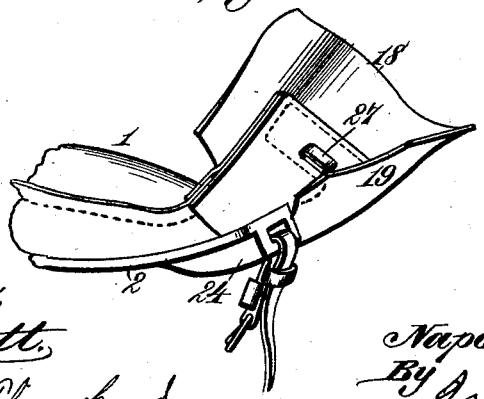


Fig. 6.



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UNITED STATES PATENT OFFICE.

NAPOLEON B. RILEY, OF ALLENSVILLE, KENTUCKY.

COMBINED HAME AND HORSE-COLLAR.

SPECIFICATION forming part of Letters Patent No. 456,850, dated July 28, 1891.

Application filed February 12, 1891. Serial No. 381,231. (No model.)

To all whom it may concern:

Be it known that I, NAPOLEON B. RILEY, a citizen of the United States, residing at Allensville, in the county of Todd and State of Kentucky, have invented new and useful Improvements in Combined Hames and Horse-Collars, of which the following is a specification.

This invention relates to that type or class of combined horse-collars and hames wherein metallic hame-plates constitute the front of the pad or body side and are permanently secured to the edges of the leather covering, so that the stuffing is combined between the latter and the hame-plates.

The object of my invention is to improve this type of horse-collars and hames, to render them stronger, more durable and efficient, and satisfactory in use, while providing a symmetrical appearance similar to the ordinary horse-collars.

The invention also has for its object to provide a novel construction whereby parts of the attached hame-plates constitute the fore-wale or small roll of the horse-collar by projecting as a symmetrical roll past the attached inner edges of the pad or body side.

The invention also has for its object to provide the hame-plates with portions in the form of seamless tubes, which project past the inner attached edges of the pad or body side and constitute the fore-wale or small roll, to produce a combined horse-collar and hames which possesses lightness with the requisite strength to fulfill the conditions required.

The invention also has for its object to improve the withers of those horse-collars having permanently attached hame-plates, whereby the top portions of the latter are housed and prevented from injuring the neck of the animal.

This invention also has for its object to provide novel means for connecting and shielding the lower ends of the hame-plates and collar to avoid chafing the breast and neck of the animal.

The invention also has for its object to provide a novel horse-collar and hames of this type, wherein each hame-plate is wholly of metal, and provided with a poll or tip for the adjustable collar-strap.

To accomplish all these objects my invention involves the features of construction and the combination or arrangement of parts hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a front elevation of a combined horse-collar and hames embodying my invention. Fig. 2 is a perspective view showing the two sections of the collar and hames separated from each other. Fig. 3 is a horizontal sectional view taken on the line *x x*, Fig. 1. Fig. 4 is a detail sectional view taken on the line *y y*, Fig. 1. Figs. 5 and 6 are respectively detail perspective views of the upper and lower end portions of one of the collar and hame sections; and Fig. 7 is a detail sectional view showing the upper end portion of a hame-section.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, wherein—

The numeral 1 indicates the two sections comprising the after-wale, pad, or body side of the horse-collar, and 2 the metallic hame-plates having applied thereto in any suitable manner the line-rings 3, tug-hooks or similar draft attachments 4, and rings 5. The rings are preferably attached by staples, as usual, and the draft-hooks may be detachable if their pivot-bolts be removable.

The hame-plates are approximately coextensive with the front of the pad or body side, and each plate is formed integral along its inner edge with a uniformly-curved tube 6, preferably made by being cored out during the process of casting. The plates are each thickened up at the outermost edge of the tube wherein the latter joins the plate, the object being to secure sufficient strength and enable the remaining portion of the plate to be constructed comparatively thin, as will be understood by reference to Fig. 3. The thickened portion of the plate at its outermost edge is provided with a line of perforations for the passage of staples 7, for the purpose of permanently attaching the hame-plate to the edges 8 of the leather covering forming a part of the pad or body side of the horse-collar. I prefer to employ metallic staples passing through the perforations to attach the hames to the pad; but obviously

the perforations enable the part to be permanently connected through the medium of suitable threads passing through the parts in a suitable manner. The stuffing 9 is retained between the hame-plates and the leather covering to the pad or body side, and the latter part of the horse-collar is of the usual or proper form in cross-section to meet the conditions required.

The inner edge of the leather covering to the pad or body side is attached to the hame-plates along the outer edge portions of the tubes 6 in such manner that the tubes project laterally past the inner attached edges of the pad or body side and constitute the fore-wale or small roll of the horse-collar, which, however, are so offset from the pad or body side as not to have contact with the animal when pressure is applied to the horse-collar to draw a vehicle. The tubular portions of the hame-plates are preferably circular in cross-section and thereby constitute cylindrical portions, which, as before stated, project past the inner attached edges of the pad or body side and constitute a symmetrical small roll to the horse-collar, while in fact such roll constitutes a part of the metallic hame-plates. The entire surface of the cylindrical tubular portion of the hame-plates can be left entirely exposed by reason of the pad or body portion being attached to the hame-plates at the outer edges of the tubes. It will be obvious, however, that the tubular portions of the hame-plates can be suitably ornamented by any desired coating or covering, if desired; but such is not essential for the purpose of retaining the hame-plates in position as a permanent attachment to the pad or body side of the horse-collar.

By the construction described and shown I provide a strong, durable, efficient, and satisfactory horse-collar and hames of that type in which these parts are permanently connected together, while I also provide a symmetrical and attractive appearance, quite similar to the ordinary form of horse-collars, where the hames are attachable and detachable in the usual manner.

The top extremities of the tubular portions 6 are each slightly reduced in diameter to form a tenon 10, Fig. 7, round which is placed a leather covering 12, which is stitched or otherwise attached to the upper end portion of the pad or body side, and subsequently a leather shield-piece 13 is secured round and attached to the leather covering 12, to leave a projecting flap portion 14 to underlie the upper end portion of the adjacent section of the horse-collar and hames, as in Fig. 1. The leather shield-piece 13 is folded, as at 15, Fig. 5, to overlie the leather coverings 12 applied to the upper ends of the collar-sections. That portion of the leather coverings 12 which encircles the tenon 10 at the upper ends of the hame-plates are stuffed with a suitable filling material to render them somewhat soft and flexible and to avoid rigid top ends to the tube 6, as such would be liable to injure the animal. The lower extremities of the tube 6 are each provided with a leather covering, as at 16, Fig. 2, which is suitably attached by stitches or otherwise and contains a stuffing material similar to that described with reference to the top end of the tube, in order to provide a soft or flexible tongue-extension 17 at the lower end of the tube to enter into and be covered and retained by a leather shield 18, Figs. 2 and 6, suitably applied to the lower end of one section of the collar and hames. The leather shield 18 is somewhat similar in form to the leather flap or shield 13, and is designed to overlay the soft or flexible tongues or extensions 17 at the lower ends of the tubes 6, Fig. 2, the construction being such as to effectually avoid chafing the neck and breast of an animal when exerting draft strain.

The padded or stuffed leather coverings, forming extensions 17 and 26 to the lower and upper ends of the tubes 6, are desirable features in connection with the shields or flaps 13 and 18, in that this peculiar construction provides simple means whereby the movable ends of the hame-plates are retained from direct action on the neck and breast of an animal. The upper and lower shields 13 and 18 are preferably composed of leather; but other flexible and sufficiently strong material can be substituted therefor; but the construction should be such that the shields or flaps possess the overlaying side flanges 15 and 19 for the purpose of forming, as it were, flexible sockets to receive the end portions of the opposite collar and hames section, as will be understood by reference to Fig. 1.

The metallic hame-plates are each provided at their upper end portion, at a point outside of its tube 6, with a poll or tip in the form of a cylindrical shank 20, provided with a series of loops or staples 21 for the passage of the collar-strap 22. The collar-strap is buckled round one poll or tip 20, and one extremity is then passed through a loop or guide-eye 23, secured to the upper side of the shield or flap 13, and such strap is then passed through one of the loops or staples on the opposite poll or tip and is again passed through the loop 23 and then buckled. By this means the sections of the collar and hames are securely connected and a very desirable withers is provided to the horse-collar.

The lower extremity of each hame-plate is provided with an eye or loop 24 for the purpose of applying the hame-fastening strap, which strap also fulfills the conditions required to secure and retain the collar portion at the lower end thereof. The hame-fastening strap is engaged with one of the eyes or loops 24, and one end portion of the strap is passed through the eye or loop 27, secured to the under side of the leather shield or flap 18, Fig. 2, and such strap is then passed through the loop 24 on the opposite hame-plate and is then buckled in the usual manner. By this means the leather shield or flap

18 is held in position to surround and protect the lower end portions of the collar and hame sections, and the latter are connected together in such maner as to effectually avoid injury to the animal.

The flexible leather coverings 12 and 16 constitute flexible extensions at the ends of each collar and hame section, and as such leather coverings are padded or stuffed to form flexible extensions of the tubes 6 the collar and hame sections can be firmly secured together, providing flexible and yielding joints which are not liable to chafe or injure an animal.

The improved construction is desirable, in that it provides a combined collar and hames wherein a comparatively small quantity of leather can be employed in the production of the article, while the metallic hame-plates constitute the faces of the pad or body side as well as the fore-wale or small roll. This, in connection with the cylindrical or similar-shaped poll or tip extensions 20, gives the article an appearance which is very similar to the horse-collar having removable wooden or metal hames.

The tubular construction of the hame-plates at their inner edges to form cylindrical and symmetrical rolls is a desirable construction; but obviously the roll could be made solid instead of tubular. The tubular construction is desirable, however, in that it secures the requisite strength with a considerable reduction in the weight of the hame-plates.

Having thus described my invention, what I claim is—

1. A combined horse-collar and hames consisting of rigid hame-plates having tug-hooks, perforated edges, and formed with the small roll or fore-wale, the stuffing behind the hame-plates, the rear leather covering inclosing the stuffing to form the pad or body side, and fastenings passing through the perforations in the hame-plates and securing the leather, substantially as described.

2. A horse-collar consisting of the pad or body side having permanently-attached metallic hame-plates, each formed integral with a roll projecting laterally past the inner attached edge of the pad or body side to form the fore-wale or small roll of the horse-collar, and provided at the upper and lower extremities with padded or stuffed flexible extensions, substantially as described.

3. A horse-collar consisting of the pad or body side having the permanently-attached metallic hame-plates, each provided with a roll projecting laterally past the inner attached edge of the pad or body side to form the fore-wale or small roll of the horse-collar and having at each end a flexible extension, and a flexible shield-piece secured to the flexible extension at the ends of one collar and hames section and adapted to receive and cover the flexible extensions at the ends of the opposite collar and hames section, substantially as described.

4. A horse-collar consisting of the pad or body side having permanently-attached hame-plates, each provided with a roll projecting laterally past the inner attached edge of the pad or body side to form the fore-wale or small roll of the horse-collar, and having at the upper end the poll or tip extensions 20, carrying loops or staples 21, substantially as described.

5. A horse-collar consisting of the pad or body side having permanently-attached hame-plates, formed with cylindrical rolls which extend laterally past the inner attached edges of the pad or body side to form the fore-wale or small roll of the horse-collar, and one collar and hames section having at the upper and lower ends the attached flexible shields for receiving and covering the ends of the opposite collar and hames section, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of two subscribing witnesses.

NAPOLEON B. RILEY. [L. S.]

Witnesses:

GEO. W. REA,

JAMES A. RUTHERFORD.