M. O. ROLSTAD.

HARNESS.

APPLICATION FILED NOV. 2, 1914.

1,155,165. Patented Sept. 28, 1915.

Fig. 1.

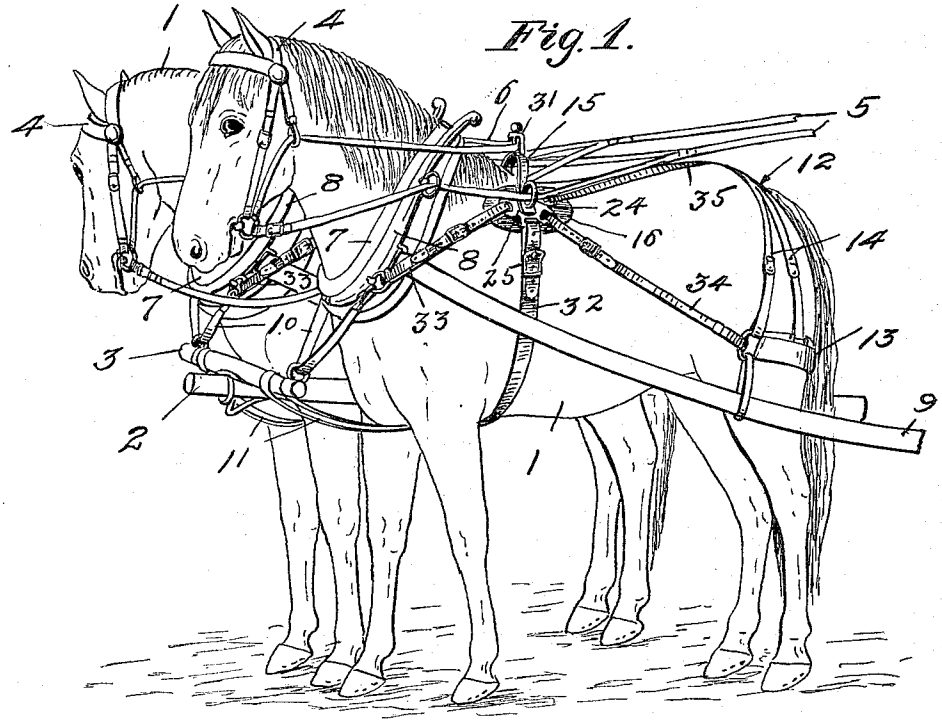


Fig. 2.

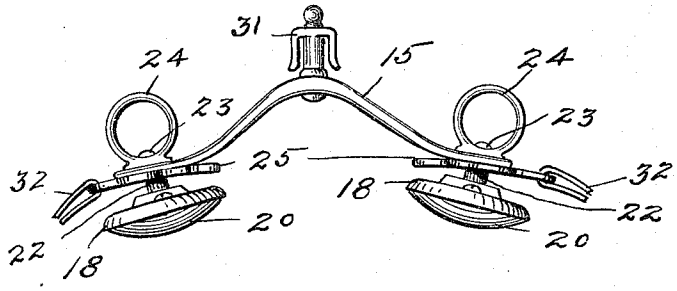
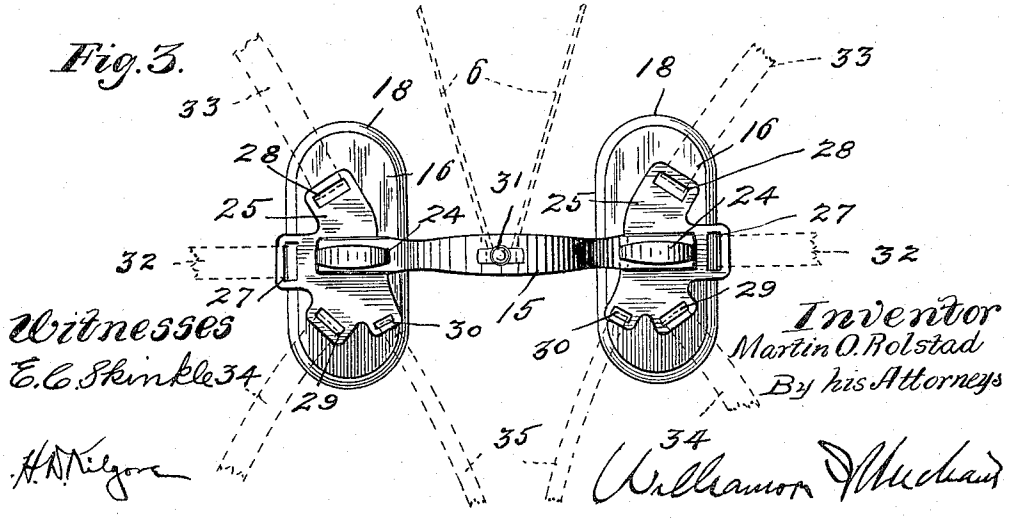


Fig. 3.



Witnesses

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HARNESS.

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To all whom it may concern:

Be it known that I, MARTIN O. ROLSTAD, citizen of the United States, residing at Sisseton, in the county of Roberts and State of South Dakota, have invented certain new and useful Improvements in Harness; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in team harnesses and has for its object to provide means for transmitting the load, both normal and backing strains, from the collar to the horse's back.

As is well known, in some kinds of work horses are required to do, such as drawing farm machinery, their necks often become very sore, making them unfit for work, owing to the necessary weight carried by the collars and the continuous pounding action of the draft poles on the neck yokes. To relieve the horses' necks of this load, my invention is designed to transmit the load to their backs where the same may be easily carried.

To the above end, generally stated, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings, Figure 1 is a perspective view of a harnessed team of horses, hitched to a draft pole and showing the invention incorporated in the harnesses; Fig. 2 is a rear edge elevation of the invention, some parts being removed and some parts being broken away; and Fig. 3 is a plan view of the invention, as shown in Fig. 2, some parts being indicated by broken lines.

The numerals 1, 2 and 3 indicate, respectively, a team of horses, draft pole and neck yoke. Of the parts of the harness, it is necessary to note the bridle 4, lines 5, check rein 6, collar 7, hames 8, traces 9, neck yoke strap 10, martingale 11, crupper 12, breeching 13 and hip straps 14. The above described parts may be of the standard or any desired form.

Referring now to the invention incorporated in the above described harness, the numeral 15 indicates a bridge bracket, having on each end a back pad. Each back pad comprises a pair of coöperating clamping top and bottom plates 16, only the former of which is shown. The top plate 16 is provided with an outwardly and downwardly turned flange 18, within which is mounted the bottom plate 16. Machine screws or other suitable means adjustably and detachably connect the plates 16 for parallel movements toward and from each other. The marginal edge of the cover pad 20 is frictionally clamped between the plates 16 and a filler, of hair or other suitable material, is placed between said cover and bottom plate 16. Obviously, by manipulating the connecting means of the plates 16, the old pad cover and filler may be readily replaced with a new one.

The back pads are secured to the bridge bracket 15 for universal movements with respect thereto by ball and socket joints 22. The socket members of these joints are formed in the central portions of the bottom plates 16, and the ball members thereof depend from and are secured to the end portions of the bridge bracket by nut-equipped bolts 23. These bolts 23 also secure to the ends of the bridge bracket 15 a pair of upwardly projecting line rings 24. Strap plates 25 are secured by machine screws, not shown, to the ends and under side of the bridge bracket 15. These machine screws 26 also extend into the base portions of the line rings 24 and hold the same against lateral twisting movement on the bolts 23. In each strap-receiving plate are formed strap-receiving slots 27, 28, 29 and 30. A check rein hook 31 is rigidly secured to the longitudinal center of the bridge bracket 15 and projects thereabove.

A belly band 32 is connected at its ends to the strap plates 25 through the slots 27 and holds the back pads in position on the horse's back. Supporting straps 33 are passed through the neck yoke strap rings, which are on the hames 8, and through the slots 28 in the strap plates 25. Obviously, the normal weight on the collar 7 is transmitted from the neck yoke 3 directly to the back pads, through the neck yoke strap 10 and supporting straps 33. Breeching straps 34 connect the ends of the breeching 13 with the strap plates 25. Said straps 34 are passed through the slots 29 of said strap plates. Obviously, backing strains on the breeching 13 are transmitted to the neck

yoke 3 through the breeching straps 34, strap plates 25, supporting straps and neck yoke strap 10. This transmitting of the backing strains relieves the horse's neck from the customary pulling strains of the collar. To prevent the back pads from pulling forward under the pulling strains of the supporting straps 33, crupper straps 35 are connected to the crupper 12 and to the strap plates 25 by passing the same through the slots 30 in said strap plates. All of the straps 32, 33, 34 and 35 are equipped with buckles so that they may be adjusted to fit the horse to which they are applied.

The above described device has, in actual usage, proven highly efficient for the purpose had in view.

What I claim is:

1. The combination with a harness, having a collar, hames and a breeching, of a bridge bracket, having at its ends strap plates and back pads, strap connections between said hames and strap plates tending to shift the load on said collar to said back pads, a belly band connecting said strap plates, and strap connections betweeen the breeching of said harness and said strap plates.

2. The combination with a harness, having a collar, hames, a breeching and a crupper, of a bridge bracket, having at its ends strap plates and back pads, strap connections between said hames and strap plates tending to shift the load on said collar to said back pads, a belly band connecting said strap plates, strap connections between the crupper of said harness and said strap plates, and strap connections between the breeching of said harness and said strap plates.

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

MARTIN O. ROLSTAD.

Witnesses:
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