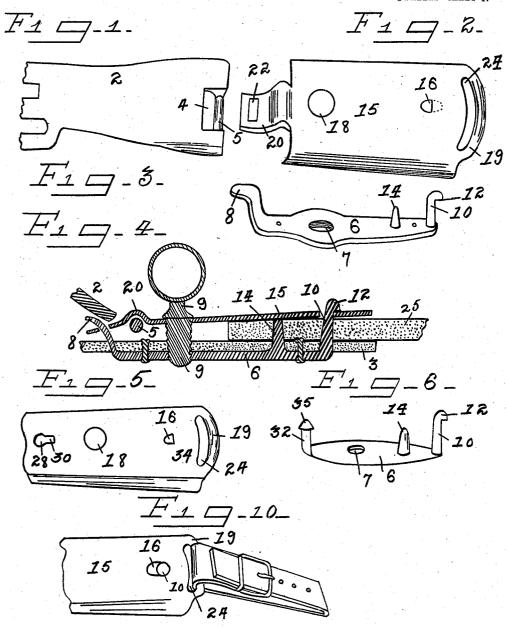
## C. H. GRINGS. HARNESS PAD. APPLICATION FILED JUNE 11, 1906.

2 SHEETS-SHEET 1.



WITNESSES: I.J. Hyde J.S. Way.

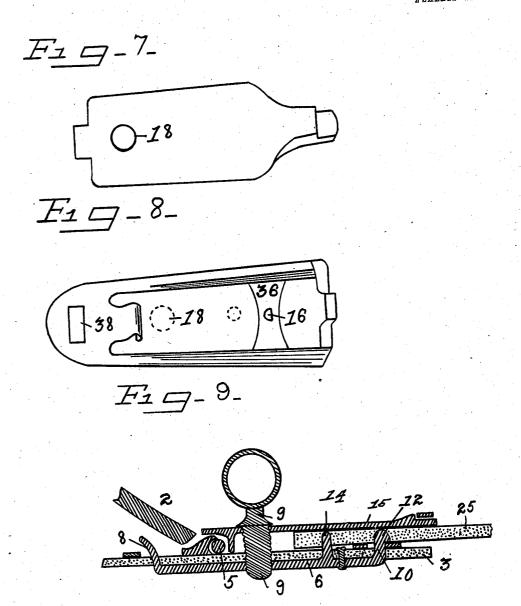
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THE NORRIS PETERS CO., WASHINGTON, D. C.

No. 858,510.

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2 SHEETS-SHEET 2.



WITNESSES:

J. S. Stay

barker H. Grings <sub>BY</sub> m. M. back <sub>ATTORNEY</sub>

THE NORRIS PETERS CO., WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

CASPER H. GRINGS, OF DUBUQUE, IOWA, ASSIGNOR OF ONE-HALF TO DUBUQUE HARNESS & SADDLERY COMPANY, OF DUBUQUE, IOWA, A CORPORATION OF IOWA.

## HARNESS-PAD.

No. 858,510.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed June 11, 1906. Serial No. 321,148.

To all whom it may concern:

Be it known that I, CASPER H. GRINGS, a citizen of the United States, residing at Dubuque, in the county of Dubuque and State of Iowa, have invented certain 5 new and useful Improvements in Harness-Pads, of which the following is a specification.

My invention relates to harness saddles, with special reference to improvement upon my device for harness pads, filed Oct. 2d, 1905, Serial Number 280,955.

The following specification will point out the mode of construction and show wherein this improvement differs from and possess advantages over my former ap-

Figure 1 is a perspective view of one-half of a yoke. 15 Fig. 2 is a perspective view of my jockey plate. Fig. 3 is a perspective view of the base plate. Fig. 4 is a longitudinal section of the yoke and pad complete with the skirt attached therein. Fig. 5 is a modified form of a jockey plate used without the yoke. Fig. 6 20 is a perspective view of the base plate which is used with Fig. 5. Fig. 7 is a perspective view of the jockey plate used in my former invention. Fig. 8 is a lower plate, modified and adapted to be used with my present invention. Fig. 9 is a longitudinal section of Figs. 25 7 and 8 united with Fig. 3. Fig. 10 is a perspective view of part of my jockey plate with a strap instead of a skirt attached to the plate.

Like letters of reference denote corresponding parts in all of the figures.

Referring to the drawings, 2 designates the yoke, which is substantially the same as the former construction, having an oval shape and slightly widened at the lower end, and having a rectangular recess 4 with a bar 5 disposed across the front of the recess at the 35 lower end of the yoke and on a plane with the lower surface of the yoke.

3 is a bur-piece. Against the under side of the bur-piece 3 is secured a plate 6, shown in Fig. 3, provided with a hook 8 which projects up through the 40 bur-piece, and to the other end of the plate is secured a spud 10, which also projects up through the burpiece and is provided with a shoulder 12 for the purpose presently to appear. Another spud 14 is secured to the plate 6 in the rear of the spud 10. Where the saddle 45 is wide and the harness large and strong there may be another of the spuds 14 secured to the plate 6. The plate 6 is further provided with a screw threaded opening 7 into which the terret shank 9 is screwed.

The jockey 15 consists of a plate slightly curved at 50 its longitudinal edges and provided with a D shaped opening 16 and a round terret opening 18 through which the terret shank 9 passes and engages the opening 7 in the plate 6 and assists to hold the jockey plate

on the pad. The forward end of the jockey terminates in a bent tongue 20 and is provided with a rectan- 55 gular opening 22, and adapted to engage the hook 8 of the plate 6. The rear of the jockey plate 15 is provided with a crescent opening 24 and a rounded bar 19 integral with the jockey plate for purposes presently

to appear.

In Figs. 5 and 6 is shown a modification of the jockey and also a modification of the plate 6. In Fig. 5 there is no yoke, but this plate serves in connection with the pad strap as a yoke and pad combined. In Fig. 5 there is no tongue, but there is an opening 28 of circu- 65 lar form and terminating at one end in a notch 30. This opening takes the place of the opening 22 in the plate 15. The plate 6 is provided with the same spuds 10 and 14. The hook 32, however, is of mushroom or rounded shape and adapted to engage the opening 28, 70 and when the jockey is in position, the shoulder 12 of the spud 10 will rest upon the jockey at 34 and the top 35 of the hook 32 will rest upon the edge of the opening 30. The plate also is provided with the slot 24 and an oval or rounded bar 19.

In Fig. 10 the bar 19 is formed of semi-oval shape and the strap, which answers to the skirt in certain kinds of harnesses, is attached in the opening 24 around the

In Figs. 7, 8 and 9 plate 6 is used in connection with 80 the jockey plate shown in my former invention and in connection with the under plate, with the exception that in the cross bar 36 there is an opening 16, and instead of the former screw opening, whereby the lower plate of the jockey was secured to the upper side of the 85 bur-piece, there is now a rectangular opening 38, in which the hook 8 engages and holds the lower jockey plate instead of being held by the screw. In this modification the spud 10 as shown in Fig. 9, passes through the opening 16 in the plate 36 and holds the lower plate 90 upon bur-piece, but the spud 10 does not pass through the upper jockey plate.

The mode of assembling my device is substantially as follows: The plate 6 is attached to the under side of the bur-piece 3 with the spuds 10 and 14, together with the 95 hook 8 projecting through the bur-piece of the saddle, then the jockey 15 is brought into engagement with the yoke 2 through the slot 4, over the bar 5 and engages the hook 8 through the opening 22, at the same time the spud 10 passes through the D shaped opening 16, and 100 the shoulder 12 engages the upper surface of the jockey plate and the spud 14 is in contact with the under surface of the jockey 15, then the terret shank 9 is passed through the opening 18, and when it enters the opening 7 the jockey plate 15 is moved toward the yoke so that 105 the shoulder 12 on spud 10 engages on the jockey plate

at a point indicated by dotted lines in Fig. 2 on outer side of opening 16; enough space being allowed in opening 22 to permit the movement toward the yoke which movement must be sufficient to bring the shoulder over the jockey plate at the point indicated by the dotted lines and thus interlock. The engagement of the terret shank with threaded opening 7 brings the parts firmly together, the jockey resting on spud 14.

If the skirt 25 is to engage the spuds 10 and 14 then 10 the skirt is placed upon those spuds in the manner shown in Fig. 4 and the jockey is brought down on top of the spuds as before. If, however, it is desired to use a strap instead of a skirt, the strap is attached to the cross bar 19 through the opening 24 then the jockey is 15 first adjusted in the position shown.

It will be observed by this mode of construction that there would be only one plate instead of two upon the outside of the pad or bur-piece and it will do away with all of the screws for fastening the jockey to the pad, as 20 the jockey interlocks with the spud 10, hook 8 and the yoke 2 in the slot 4 over the bar 5. It is held, not only by those, but by the terret shank passing through the opening 18 and screwed into the opening 7 into the plate 6.

It will further be observed that where the strap is put in engagement with the bar 19; by means of the spud 10 entering and interlocking with the jockey plate, that there will be no sidewise motion to the jockey, as the projection of the spud 10 through the jockey 15 not only 30 prevents sidewise motion when strap is attached, but also when skirt is inserted, so that it is possible to use same plate either with a strap or with a skirt, and since the bar 19 is constructed with its upper edge curved and rolling and the jockey held from lateral movement, 55 the strap will not be materially worn even by long use.

It will also be observed that the cost of construction and assembling of the parts in making a harness pad will be largely reduced, as the parts are simple in construction and interlock with each other without the aid of screws.

Having now described my invention what I claim is:

 In a device of the character described, a base plate provided with a hook and a spud provided with a shoulder, in combination with a jockey plate provided with openings adapted to be engaged by the hook and spud and locked thereon.

2. In a device of the character described, a jockey plate provided with openings, a bar at one end of said plate, a bur-piece, a base plate provided with an opening,

and a hook thereon, a spud on said plate provided with 50 a shoulder said hook and spud adapted to engage the openings in the jockey plate and interlock therewith.

3. In a device of the character described, a yoke, a bur-piece, a plate secured to the bur-piece, a jockey plate provided with openings, and means connected with 55 the base plate for engaging the jockey plate and locking the yoke, the base plate and the jockey plate together.

4. In a device of the character described, a base plate provided with an opening, and a hook thereon, and a spud provided with a shoulder at the opposite ends of the 60 plate, in combination with a jockey plate having a central opening and an opening near the rear with which the spud on the lower plate interlocks, a tongue attached to the jockey plate and provided with an opening adapted to be engaged by the hook on the base plate, and a turret 65 adapted to pass through the jockey plate and engage the base plate.

5. In a device of the character described, a yoke provided with a recess therein, a bar across the recess connected with the yoke, a bur-piece, a plate secured to the 70 under side of said bur-piece, provided with a book adapted to project through the bur-piece, a spud on said plate adapted to project through said bur-piece, and through a jockey plate provided with openings adapted to engage said hook and spud and interlock therewith.

6. In a device of the character described, a burpiece, a base plate provided with a screw threaded opening, and a hook thereon, a spud provided with a shoulder on the rear of said plate, a shorter spud on the plate, in combination with a jockey plate having a central opening 80 and a rear opening adapted to interlock with the rear spud, a tongue provided with an opening at one end of the jockey plate and adapted to engage the hook on the base plate, and a turret adapted to pass through the jockey plate and engage the base plate and hold the 85 jockey plate upon the rear spud and interlocked with the hook and rear spud.

7. In a device of the character described, a yoke provided with a bar in the end of the yoke, a bur-piece, a base plate, provided with a hook at one end, and a spud 90 provided with a shoulder at the other end of the base plate said hook and spud projecting through said burpiece, a jockey plate provided with an opening near the rear, a tongue on said jockey plate provided with an opening adapted to engage the yoke and the hook on said 95 base plate and hold the yoke and jockey plate at one end and said jockey plate adapted to engage the spud through the opening and interlock with the shoulder on the spud, and a turret adapted to pass through an opening in the jockey plate and be screwed into the base plate 100 to aid the jockey plate in interlock position with the base plate.

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

CASPER H. GRINGS.

Witnesses:
M. M. CADY,
F. S. HAY.