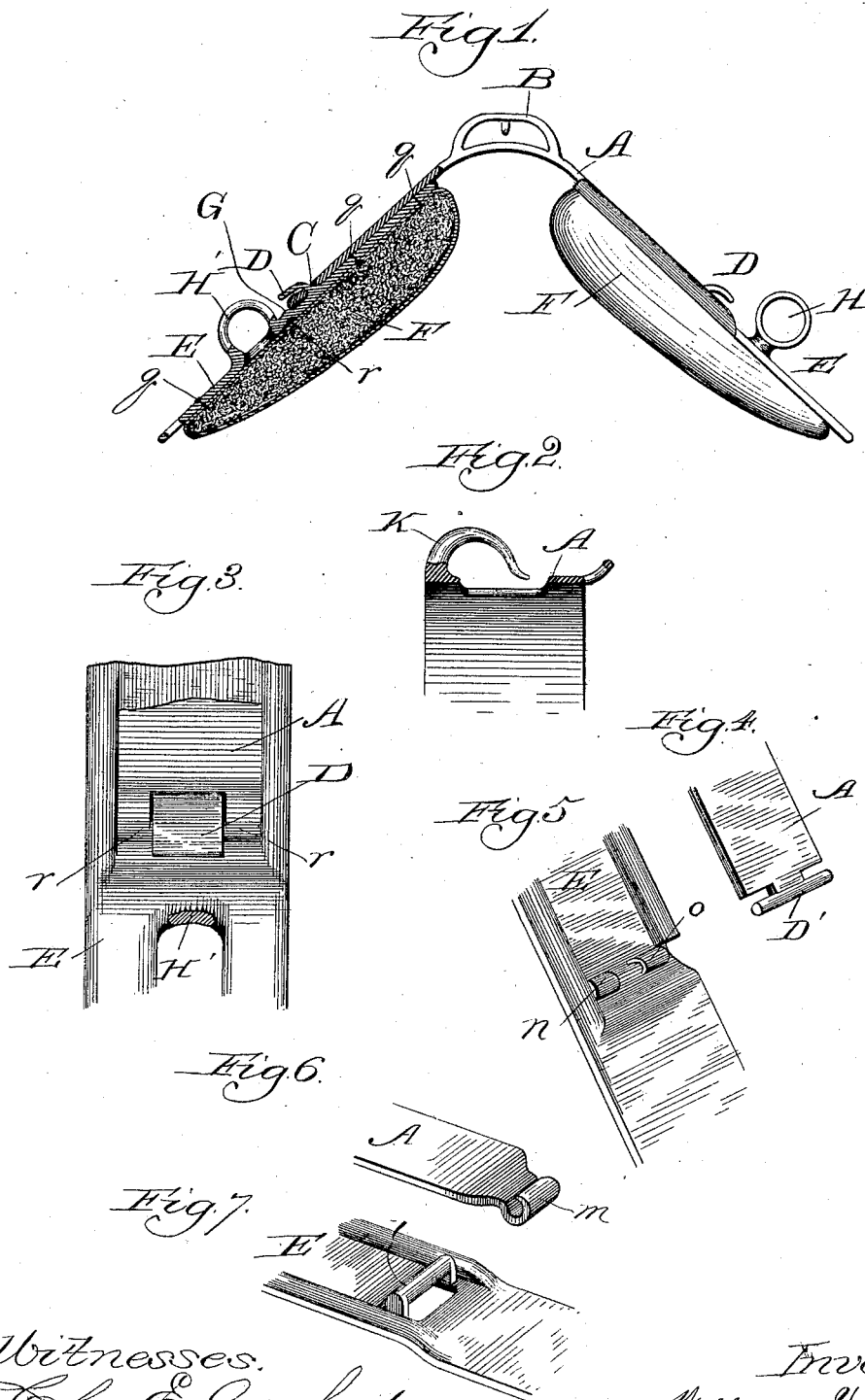


(No Model.)

W. V. KAY.  
HARNESS SADDLE.

No. 342,104.

Patented May 18, 1886.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

WILLIAM V. KAY, OF BELTON, TEXAS.

## HARNESS-SADDLE.

SPECIFICATION forming part of Letters Patent No. 342,104, dated May 18, 1886.

Application filed November 3, 1885. Serial No. 181,733. (No model.)

### *To all whom it may concern:*

Be it known that I, WILLIAM V. KAY, a citizen of the United States, residing at Belton, in the county of Bell and State of Texas, have  
5 invented certain new and useful Improvements in Harness-Pads and Saddle-Trees; and I hereby declare the following to be a full, clear, and exact description of the same.

It is my object to provide a harness-pad and  
10 saddle-tree in which the pads or saddle shall be self-adjustable to the backs of the animals to which they are applied, and this without the employment of inner plates to enable the tree to be used for folded-leather, slip, or stuffed  
15 pads, as may be desired.

To these ends my invention consists in the construction forming my improvement, and in details of such construction and combinations of parts forming the same, all as herein-  
20 after more fully set forth.

Referring to the drawings, Figure 1 represents my improved device in sectional elevation; Fig. 2, a sectional view of my improved form of rein-hook; Fig. 3, a broken plan view  
25 showing the hinge-connection of the construction illustrated in Fig. 1; and Figs. 4, 5, 6, and 7, perspective views showing modified details of construction.

A is the yoke, provided with a loop, B, formed as shown, to permit the back-strap to lead to the hame-strap at the top of the hame in the manner practiced with plow-harness and harness of other cheap descriptions, and to provide a device for the purpose the use of  
35 which will not tend to produce injury to the person in riding in from the field, as is often produced, by stumbling of the animal, with the old form of hook. Each arm of the yoke is provided toward its extremity with a slot, C, to receive a hook, D, upon a plate, E, to which  
40 a pad, F, is secured, in the manner hereinafter described. Each plate E has formed upon it, below the end of the hook D, a transverse elevation or rib, G, to serve in locking the yoke in position when adjusted, a groove, *r*, being  
45 provided toward each extremity of the yoke, on the under side thereof, which permits the yoke to be slipped into place by turning it back over the elevation G.

The pads F are secured to the plates E by means of rivets or pad-screws *q*, the nuts for

which are mounted, in the usual manner, on the under side of the top leather of the pad and by means of the terrets H on the plates, if the usual form of terret represented in Fig. 1 of the  
55 drawings by the letter H is employed, though I prefer to use the form of terret shown at H', which is cast as a part of the plate, this form being particularly useful in connection with folded pads, since by their use a perfectly-  
60 smooth surface is presented on the lower side of each pad to the animal's back, whereby galling or chafing of the same is avoided.

The plates E and upper surfaces of the arms of the yoke A may be countersunk longitudi-  
65 nally, as shown in Fig. 3 of the drawings, to receive leather finishings.

Instead of providing a single hook upon each plate E to engage with a slot, C, in the adjacent arm of the yoke, the latter may be provided at its extremity with a T-shaped head,  
70 D', as shown in Fig. 4 of the drawings, and a hook, *o*, and a socket, *n*, may be provided in proper position upon each plate E, as shown in Fig. 5, the adjustment of the parts being effected by inserting the extremities of the cross-  
75 head of the part D' into the hook *o* and socket *n* by turning the plates over to effect the desired adjustment, and turning them back, when adjusted, to their normal positions.

With either of the foregoing constructions a very effective form of hinge-joint is afforded to permit self-adjustability of the pads to the  
80 backs of different animals without the use of inner plates.

Still another desirable construction of the hinge-joint is represented in Figs. 6 and 7 of the drawings, wherein the yoke A is provided at its extremities with hooks *m*, which engage with bearings *l*, in the form of transverse cy-  
85 lindrical bars, supported in proper position in the plates E.

The hook K (shown in Fig. 2 of the drawings) constitutes the rein-hook, which I cast upon the yoke or seat, instead of attaching it, as  
95 has heretofore been the practice, by means of a bolt, whereby unsightliness and weakness of the part are the consequence. By casting the hook in the position shown I not only afford cheapness of the construction, but provide a stronger  
100 hook, owing to the increase of metal toward its base, and to the fact that, owing to its posi-

tion, the pull of the rein, instead of being, as heretofore, considerably above the base, whereby it is easily bent, and sometimes even broken, is at the base, where the hook is strongest.

- 5 The hook K is intended for use on pad-trees where it is not desirable to carry the back-strap forward to the hame, but to have it stop at the yoke and attach to the crupper-loop back of the hook K, which latter is cast as an  
10 open loop crosswise of the yoke, instead of lengthwise, as shown, of the loop B, the object being to have a hook provided where the nut is dispensed with, for use on a folded pad, where the nut would be objectionable as liable to in-  
15 jure the back of the animal.

What I claim as new, and desire to secure by Letters Patent, is—

1. An adjustable harness-pad and saddle-tree comprising, in combination, the yoke A  
20 and hinged plates E, forming the outside finish, and whereby the use of inner or intermediate plates or terret-nuts is dispensed with, substantially as and for the purpose set forth.

2. An adjustable harness-pad and saddle-  
25 tree comprising, in combination, the yoke A, a hook, K, formed upon it as a permanent part of the same, and hinged plates forming with the yoke the outside finish, and whereby the use of inner or intermediate plates or terret-  
30 nuts is dispensed with, substantially as and for the purpose set forth.

3. In a harness-pad and saddle-tree, the com-

bination, with the plates E, of terrets H', forming permanent parts of the plates, substantially as and for the purpose set forth.

4. In a harness-pad and saddle-tree, the yoke  
35 A and plates E, provided with transverse elevations G, and connected with the yoke by means of hinge-joints, substantially as and for the purpose set forth.

5. In a harness-pad and saddle-tree, the yoke  
40 A, provided with slots C, and plates E, having transverse elevations G, and hooks D, to enter the slots, substantially as and for the purpose set forth.

6. In a harness-pad and saddle-tree, the yoke  
45 A, provided with the loop B and grooves r, and plates E, having transverse elevations G, and connected with the yoke by means of hinge-joints, substantially as and for the purpose set  
50 forth.

7. The combination of a yoke, A, having  
55 slots C, and provided with a loop, B, and grooves r, plates E for the pads to be secured upon their under surfaces, and provided upon their upper surfaces with terrets H', cast thereon, and with hooks D, to enter the slots in the yoke, and transverse elevations G, to lock the yoke when hooked, substantially as described.

WILLIAM V. KAY.

In presence of—

H. C. CASSIDY,  
A. J. EMBREE.