

(No Model.)

A. D. ULRICH.
HARNESS SADDLE.

No. 468,848.

Patented Feb. 16, 1892.

Fig. I.

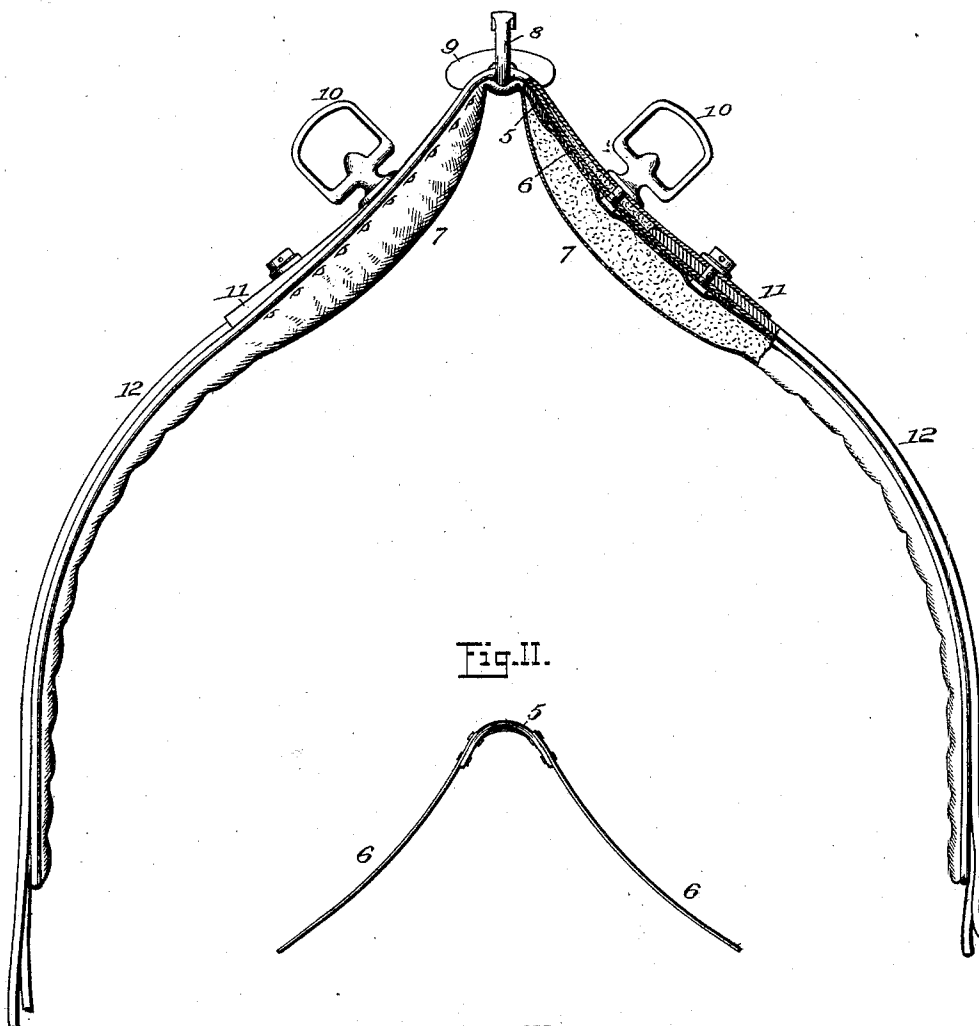


Fig. II.

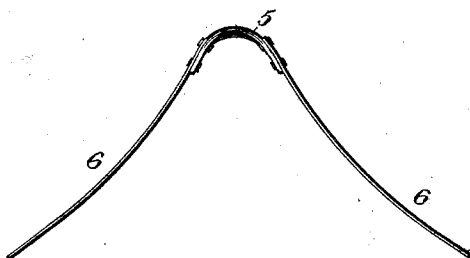
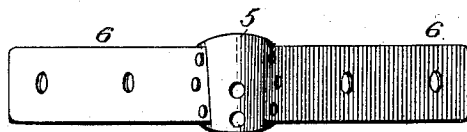


Fig. III.



WITNESSES.
Wm. L. Stevens
M. C. Hillyard.

INVENTOR.
Allen D. Ulrich
By *W. L. Stevens* ATTORNEY

UNITED STATES PATENT OFFICE.

ALLEN D. ULRICH, OF KOKOMO, INDIANA.

HARNESS-SADDLE.

SPECIFICATION forming part of Letters Patent No. 468,848, dated February 16, 1892.

Application filed November 24, 1890. Serial No. 372,504. (No model.)

To all whom it may concern:

Be it known that I, ALLEN D. ULRICH, a citizen of the United States, residing at Kokomo, in the county of Howard and State of Indiana, have invented certain new and useful Improvements in Harness-Saddle Trees; 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.

This invention relates in general to harness-saddles of that class commonly called "gig-saddles," and more particularly to the saddle-trees on which such saddles are formed; and its object is to provide a cheap and inexpensive harness-saddle tree having the quality of perfect stiffness at the center where it comes over the horse's backbone and of sufficient stability to support the pads of the saddle in shape at each side of the backbone and yet possessing sufficient elasticity in the latter region to conform readily to the shape of different horses, whether their backs be sharp or full, thus rendering the saddle easy to the horse and avoiding injury to his back.

To this end my invention consists in the construction and combination of parts forming a "harness-saddle tree," hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure I is an end view of a harness-saddle, partly in transverse vertical section, showing the location therein of my saddle-tree. Fig. II is an end view of my saddle-tree, and Fig. III is a plan or top view thereof.

5 represents the saddle-piece made of metal of sufficient thickness to be perfectly rigid and inflexible. This may properly be cast of malleable iron to the exact curve and form required.

6 represent the two pad-supporters, and they are properly made of sheet spring metal, such as steel, brass, &c., riveted at their upper ends firmly to the saddle-piece and free at their lower ends and along their middle portions to spring, so that the pads 7, which are formed thereon, may readily conform to the back of any horse upon which this portion of a harness may be placed.

The saddle-piece 5 should be only wide enough to bridge the curve of the backbone

and be curved enough to give the pad-supporters their proper direction—that is, about the apparent width and curve of a horse's backbone—and it should be so thin as to be readily inclosed between the leather coverings of the saddle. This thickness, which is from one-twelfth to one-eighth of an inch, and the width, which is about two and one-half inches, are necessary for two reasons: first, in order that when covered in with leather it will maintain the central portion of the saddle rigid and stiff, as required, to support the holdback-hook and yet not be in any way visible nor produce a clumsy appearance, the edges of the leather being readily closed at the edges of the saddle-tree; second, in order that the greatest possible range may be given to adapt the pad-supports to the shape of various backs, permitting the pads to be wadded close to the backbone or away therefrom, as may be required, and, further, permitting the rein-loops to be attached close to center for common harness or farther away for sporting-harness. The supporters being flexible and elastic throughout their length, yet rigidly held at one end of each, will adapt themselves to the shape of the back, or in case a rigid form is required they may be bent to such form and stayed by stiff leather, iron, or other usual means. This is a matter of great importance for relieving horses whose backs have become galled. The pad-supporters being readily detached from the saddle-piece by driving out the rivets, before referred to, may be replaced by others curved to bridge the sore at little expense, while the stiff saddle-piece still retains its form as originally fitted to receive the outer saddle and finishing parts.

Though it is not in any way essential to my invention, I have represented in Fig. I enough of a harness-saddle to show the location therein of my saddle-tree.

8 represents the holdback-hook; 9, the ornamental saddle; 10, the rein guides or loops; 11, the upper leather coverings, and 12 the girth. Thus it may be seen that the pad 7, which serves as the usual cushion, has in this case no rigid or inflexible backing of the saddle to which it must conform, because the springs 6 are yielding at all points, so that the pads may conform throughout their length to

the horse's back, thus rendering the saddle easy and in no way liable to gall the horse.

Having thus fully described my invention, what I believe to be new, and desire to secure
5 by Letters Patent, is the following:

The combination, in harness-saddle trees, of an inflexible curved saddle-piece of about the proportions and form described inserted between adjacent thicknesses of leather in the

saddle and pad-supporters flexible throughout their length secured to the said saddle-piece, substantially as described.

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

ALLEN D. ULRICH.

Witnesses:

N. B. SMITH,

W. A. KEYS.