

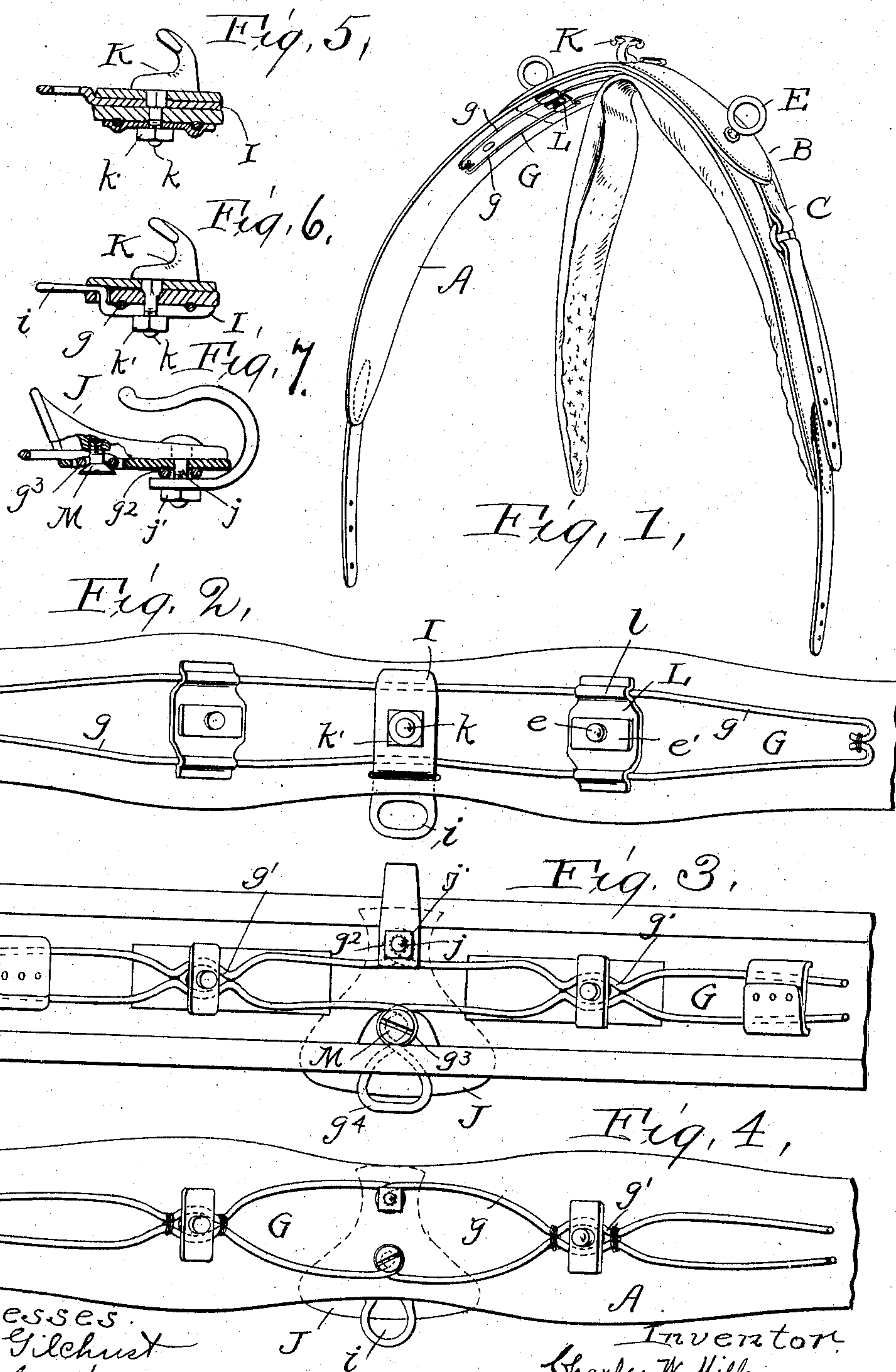
No. 736,760.

PATENTED AUG. 18, 1903.

C. W. MILLER.  
HARNESS SADDLE.

APPLICATION FILED JUNE 23, 1902.

NO MODEL.



Witnesses.  
E. B. Gilchrist  
H. M. Wise.

Inventor.  
Charles W. Miller  
By his attorneys  
Thurston & Bates.



# UNITED STATES PATENT OFFICE.

CHARLES W. MILLER, OF CANTON, OHIO, ASSIGNOR TO THE GILLIAM MANUFACTURING COMPANY, OF CANTON, OHIO, A CORPORATION OF WEST VIRGINIA.

## HARNESS-SADDLE.

SPECIFICATION forming part of Letters Patent No. 736,760, dated August 18, 1903.

Application filed June 23, 1902. Serial No. 112,785. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES W. MILLER, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented a certain new and useful Improvement in Harness-Saddles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

My invention relates to improvements in harness-saddles; and it consists in the novel features of construction hereinafter described, reference being had to the accompanying drawings, which illustrate several forms in which I have contemplated embodying my invention, and said invention is fully disclosed in the following description and claims.

Referring to the drawings, Figure 1 is a perspective view of a harness-saddle embodying my invention, the pad of said saddle loosened on one side, so as to show the saddle-tree and its manner of connection. Fig. 2 is a bottom plan view of the middle part of one specific embodiment of my invention. Fig. 3 is a like view showing another modified construction. Fig. 4 shows still another modification. Fig. 5 is a cross-section through the center of the saddle shown in Fig. 1. Fig. 6 is a cross-section through the center of the saddle shown in Fig. 2, and Fig. 7 is a cross-section through the center of the saddle shown in Fig. 3.

As heretofore constructed harness-saddles have generally each included a rigid inflexible tree made of wood or iron and secured centrally to other parts of the saddle. Such trees have two diverging arms which are set at an angle which corresponds with the shape of the back of what may be termed the "average" horse. Such saddles, however, have only a limited capacity for adapting themselves to the shape of the backs of different horses. In fact, it is only by the compression of the pad, which is secured to the under side of the saddle, that they are adaptable at all to different-shaped horses.

It is the object of this invention to provide a saddle of simple construction which has a wide range of flexibility, whereby it will adapt

itself to the shape of any horse's back to which it is applied.

The invention consists, broadly, in the employment in a harness-saddle of a metallic tree which is transversely flexible from end to end and which is clamped to the under side of the skirt by means of the same bolts which are employed to secure the usual fixtures, such as the seat, the terrets, checkrein-hook, crupper-loop, &c.

It also consists in the more specific characteristic of construction and combination, as set forth definitely in the claims.

Referring to the parts by letters, A represents the saddle-skirt, made, as usual, of thick leather.

B represents the jockey, and C the back-strap, which in the construction shown passes across the top of the saddle between the skirt and the jockey.

G represents a saddletree which in all of the constructions shown consists of two strands *g g*, of spring-wire, permanently bent at their middle points to conform as near as may be to the shape of the back of the average horse. This two-strand-wire tree is secured to the underside of the saddle-skirt on opposite sides of its center by clamping devices of which preferably the terrets E form the bolt member. In the construction shown in Fig. 1 a clamping-plate L is associated with each terret and lies just below the skirt. The terret stem or bolt *e* passes through it, the skirt, the back-strap, and the jockey and screws into a nut *e'*, which bears against the under side of said plate, and thereby draws the plate against the under side of the skirt, thereby holding the two strands *g g*, which lie in grooves *l* in the upper side of said clamping-plate, against the skirt and in proper relationship to each other. These wires are not, however, clamped together, but are movable endwise between the skirt and clamping-plate.

In the form of the device shown in Figs. 3 and 4 the two strands of the tree are bent toward and from each other and are secured together by solder, as shown in Fig. 3, or by the wires, as shown in Fig. 4, or by any suitable means, so as to leave between them eyes



$g' g'$ , through which the terret stem or bolt  $e$  may pass. The terret-nut  $e'$  bears directly against the under side of the two wires forming this tree, and thereby clamps said wire to the skirt.

The middle part of the flexible trees in all of the modifications shown is also clamped to the skirt. In the construction shown in Fig. 2 a clamping-plate  $I$  is employed, and this clamping-plate has formed integral with it the crupper-loop  $i$ . The screw-threaded stem  $k$  of the checkrein-hook  $K$  passes through the leather part of the saddle above the tree, between the two wire strands, and through this crupper-loop plate  $I$ , and the parts are clamped by means of the nut  $k'$  screwing onto this stem  $k$ .

As shown in Fig. 3, each of the wire strands  $g g$  is bent at its middle portion to form the loops  $g^2 g^3$ . As shown in Fig. 3, a bolt  $j$  on the under side of the seat  $J$  passes through the jockey and skirt and through the loop  $g^2$  and also through the end of the checkrein-hook  $K$ , and all of these parts are clamped together by a nut  $j'$ . The rear strand of the flexible tree, in the exemplification thereof shown in Fig. 3, is also bent rearward to form the crupper-loop  $g^4$ . This strand is secured in place by a screw  $M$ , which passes through the loop  $g^3$  and screws into the seat  $J$  referred to.

In the construction shown in Fig. 4 a checkrein-hook does not appear; but it may be a part of the seat  $J$ . The crupper-loop  $i$  may be a part of the seat or it may be on a plate which lies between the jockey and the skirt, and it may be held in place by a screw  $M$ , passing through a loop  $g^3$  in the rear strand  $g$  of the flexible tree and screwing into said seat  $J$ .

It is clear from the foregoing description that the described saddle is transversely flexible from end to end and that a saddle containing such a tree will adapt itself readily to the back of any horse, whatever be its shape. The invention is shown in the form which is specifically known as a "harness-saddle;" but this is a generic name and includes as well other saddles which in the saddlery trade have other specific names, as "coach-pads," &c., and the invention is applicable to such other specifically-named saddles.

The several modifications shown exemplify the best constructions I now have in mind; but it is evident that the two metal strands may be of any desired form in cross-section

and that many different forms of clamping devices may be employed without departure from the invention.

Having described my invention, I claim—

1. In a harness-saddle, the combination with the skirt, jockey, and back-strap, of a two-strand spring-wire tree, two clamping-plates on the inner side of said skirt and on opposite sides of its middle and bearing against the two strands of the tree, two terrets, each provided with a threaded shank extending through the jockey and back-strap and adapted to engage a corresponding clamping-plate, and means for clamping the middle parts of said strands to the middle part of the skirt, substantially as described.

2. In a harness-saddle, the combination with the skirt, jockey, back-strap, and crupper-loop, of a two-strand spring-wire tree, two clamping-plates on the inner side of said skirt and on opposite sides of its middle and bearing against the two strands of the tree, two terrets, each provided with a threaded shank extending through the jockey and the back-strap and adapted to engage a corresponding clamping-plate, and means for clamping the middle parts of said strands to the middle part of the skirt, said means also clamping the crupper-loop to the saddle, substantially as described.

3. In a harness-saddle, the combination with the skirt and jockey, of a tree formed of two strands of spring-wire having integral loops at their middle points, clamping-bolts passing through said loops and through the skirt and jockey, and other clamping devices which clamp the two strands to the skirt on opposite sides of said loops, substantially as specified.

4. In a harness-saddle, the combination with the skirt and jockey, of a tree formed of two strands of spring-wire having integral loops at their middle points and being bent to form eyes therebetween on opposite sides of said loops, clamping-bolts passing through said loops and through the skirt and jockey, and clamping-bolts extending through the eyes and clamping the two strands to the skirt on opposite sides of said loops, substantially as described.

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

CHARLES W. MILLER.

Witnesses:

E. B. GILCHRIST,  
E. L. THURSTON.