H. T. ROBERTS.

SADDLE.

APPLICATION FILED JULY 3, 1919.

1,391,409.

Patented Sept. 20, 1921.

3 SHEETS—SHEET 1.

Fig. 1.

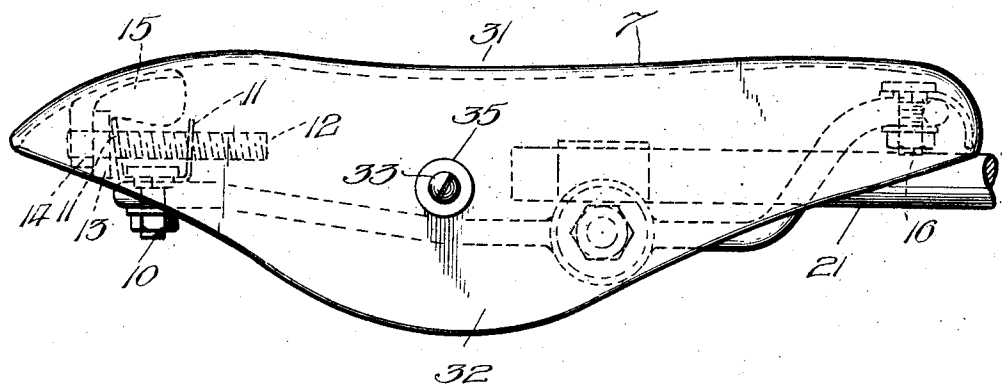
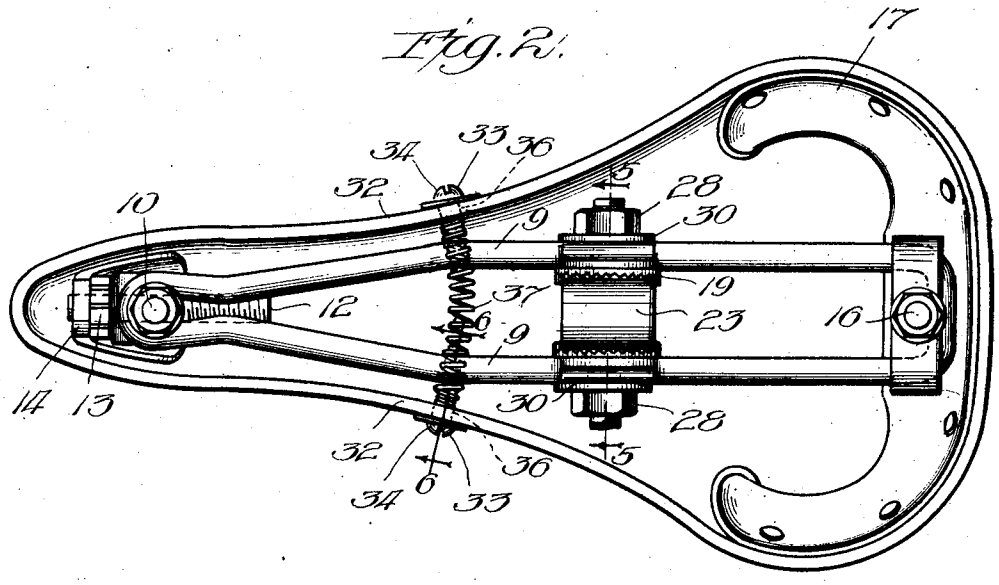


Fig. 2.



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3 SHEETS—SHEET 2.

Fig. 3.

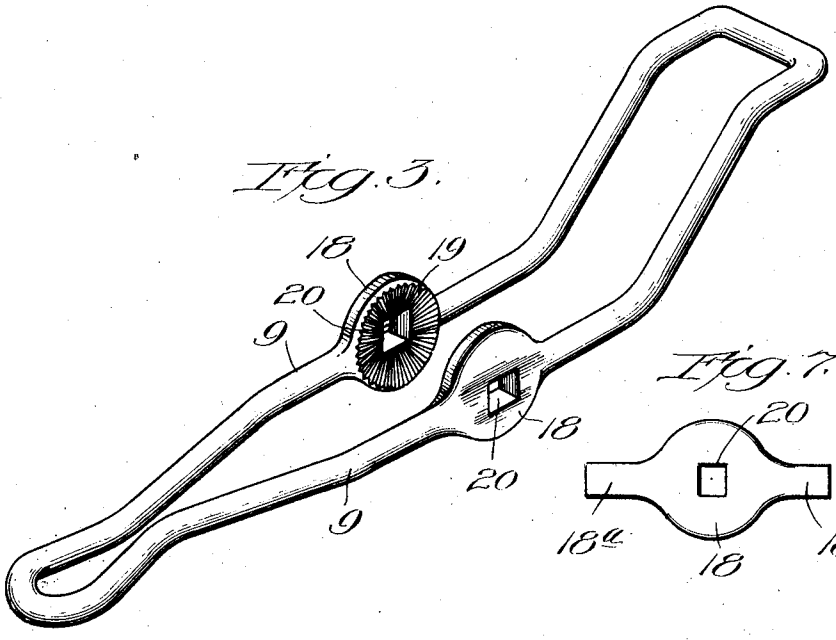


Fig. 7.

Fig. 4.

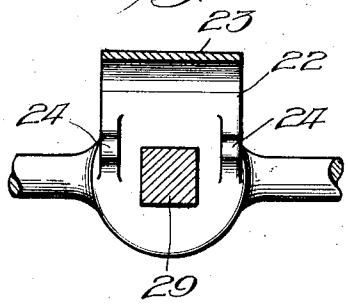


Fig. 5.

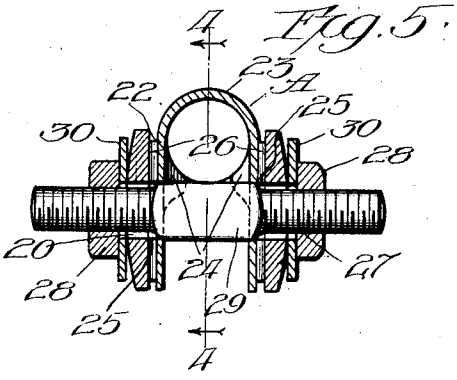
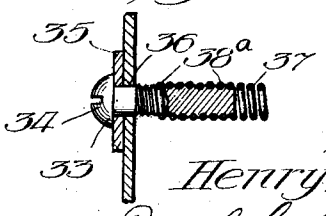


Fig. 6.



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3 SHEETS—SHEET 3.

Fig. 8.

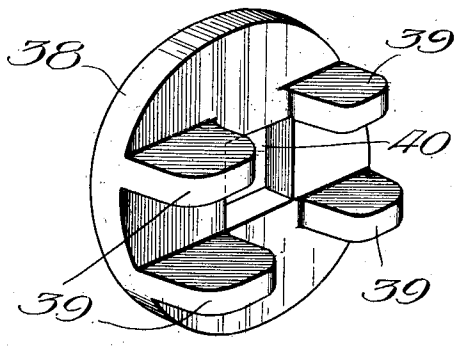


Fig. 9.

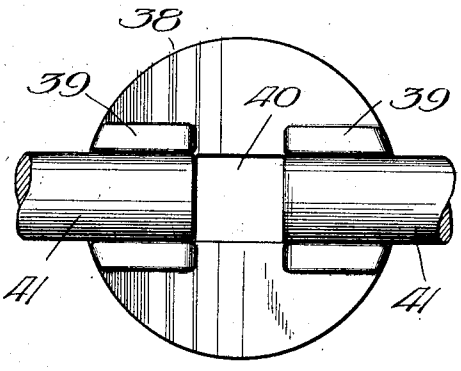


Fig. 10.

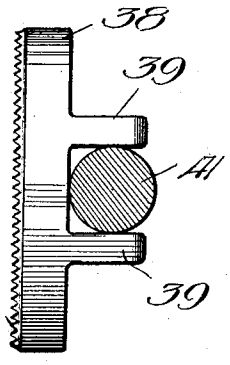
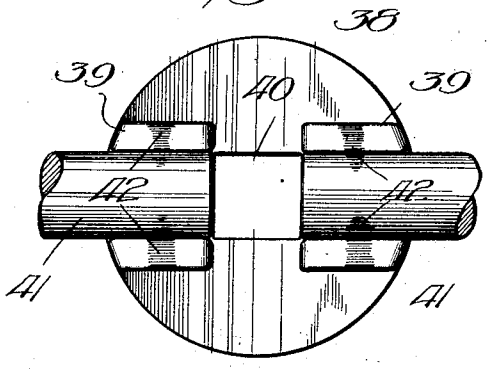


Fig. 11.



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UNITED STATES PATENT OFFICE.

HENRY T. ROBERTS, OF NEW YORK, N. Y.

SADDLE.

1,391,409. Specification of Letters Patent. Patented Sept. 20, 1921.

Application filed July 3, 1919. Serial No. 308,393.

To all whom it may concern:

Be it known that I, HENRY T. ROBERTS, a citizen of the United States, residing at 35 Warren street, New York city, in the county of New York and State of New York, have invented a new and useful Improvement in Saddles, of which the following is a specification.

My invention relates more particularly to saddles for bicycles, motorcycles and the like.

One of my objects is to provide in a saddle of the type employing truss-bars with means, involving so-called buttons, engaging the truss and adapted to engage the seat-post for securing the saddle thereto, a novel, inexpensive, simple, relatively light and strong construction of securing means, and one which will remain secure and against side twisting in adjusted position on the seat-post; and another object is to provide in a saddle of the type in which the body of the saddle, usually of leather, is supported at its ends in suspended condition from a supporting structure, means of a simple and inexpensive character for preventing the spreading of the sides of the jockey-portion of the saddle and the sagging of the same.

Referring to the accompanying drawings:—

Figure 1 is a view in side elevation of a saddle constructed in accordance with my invention, showing it in position on a seat-post, certain parts of the saddle being dotted. Fig. 2 is a bottom plan view of the saddle. Fig. 3 is a perspective view of the truss employed. Fig. 4 is a section taken at the line 4—4 on Fig. 5 and viewed in the direction of the arrows. Figs. 5 and 6 are sections taken at the lines 5 and 6, respectively, on Fig. 2 and viewed in the directions of the respective arrows. Fig. 7 is a view in elevation of one of the truss-buttons employed. Fig. 8 is a perspective view of another form of truss-button which may be employed. Fig. 9 is a face view of the button of Fig. 8 showing the truss-forming rods assembled therewith preparatory to welding these parts together. Fig. 10 is an edge view of the button showing the adjacent truss-rod in section; and Fig. 11, a view like Fig. 9 showing the parts welded together.

The body of the saddle, which is usually made of leather, is represented at 7, it being shaped as desired as is customary in practice, the form shown being that suitable for racing. The body 7 is supported at its ends, to be thus suspended, from a truss shown as formed of a pair of members 9, extending generally parallel and connected together at opposite ends, the truss as shown being a continuous member. The truss, as is common in saddle construction, is connected to the body 7 at its forward end by means of a bolt 10 which extends upwardly through the front end of the truss to which it is rigidly clamped. The bolt 10 secures in place a yoke 11 through alining openings in which latter a threaded rod 12 extends, this rod carrying a nut 13 which bears against the flange 14 of a clip 15 rigidly secured to the underside of the body 7, the rod 12 being slidable and held against turning, in an opening in the flange 14 whereby lengthwise movement of the rod 12, by turning the nut 13, is effected to increase or decrease the degree of tautness of the body 7. The rear portion of the body 7 connects with the truss as by a bolt 16 extending through the rear loop of the truss and connected with a frame 17 secured to the underside of the body 7.

Referring more particularly to Figs. 1 to 7, inclusive, each truss-member 9 is formed with a button 18 united with the other portions shown as rods, forming the members 9, as by electrically welding them thereto, whereby the buttons and rods form a unitary truss. The opposed faces of these buttons are radially serrated, as indicated at 19, and centrally thereof contain holes 20 which extend entirely through the buttons. The buttons 18 referred to are preferably formed of drop forgings of the shape shown (Fig. 7) presenting ears 18ª at opposite ends at which they are united, as by welding, to the ends of the rod-portions of the truss. Coöperating with the truss so formed are means for clamping the saddle to a seat-post, as for example the post shown at 21, these means comprising a yoke-member 22 of springy material adapted to embrace at its curved portion 23, the seat-post 21, the yoke being provided with lugs 24 on the portion 23 which overlap the post and form stops. The sides of the yoke 22 contain angular apertures 25 adapted to aline with the openings 20 in the buttons, and are provided with radiating serrations 26 adapted to mesh with the serrations 19 when the

parts are clamped together, as by the bolt shown at 27 and having nuts 28 screwed on its opposite threaded ends. The bolt has a central squared portion 29 where it extends through the holes 25, the nuts screwing against washers 30 on the bolt and securely clamping the truss to the seat-post. It will be understood from the foregoing that by loosening the clamping means just described the saddle may be adjusted along, and tilted to any desirable position, on the post and secured in such position by tightening the clamping means described.

Another feature of my invention relates to the maintaining of the jockey-portion 31 of the saddle in condition against sagging and at the same time permitting it to yield sufficiently to be comfortable to the user. This I accomplish by connecting together the depending free edges 32 of the portion 31 by resilient means, such as those shown, and comprising the screws 33 which bear at their heads 34 against washers 35 on the outer surfaces of the depending sides 32 of the jockey-portions, and extend at their threaded portions through holes 36 in these sides, the inner ends of these screws screwing into the ends of a spiral spring 37 the turns of which extend into the grooves 38ª of the threads on the screws, whereby the spring 37 is held in place on the screws to yieldingly hold the sides of the jockey-portion from spreading under weight on the saddle and in a sense maintain the backbone of the saddle, the desired tension being secured by adjusting the screws 33.

In Figs. 8, 9, 10 and 11 I have shown another member of my invention as regards the feature of forming the buttons as a part of the truss. In this embodiment I form the truss-buttons, one of which is represented at 38, preferably of forgings, with sets of substantially parallel flanges 39 spaced apart as shown, arranged in line with the square openings 40 in the buttons and extending laterally from the outer faces of the buttons; and to assemble these buttons with the truss-rods, I position the ends of the latter, represented at 41, between the flanges 39 as shown in Fig. 9 and secure them rigidly together preferably by electrically spot-welding the flanges to the rods at the points indicated at 42.

By constructing the truss part of the saddle in accordance with my invention drop-forged clamps may be used and the truss is rendered very solid, light, substantial and inexpensive to manufacture, highly resistant to stresses tending to bend or distort it and by which side twist of the clamping means, is avoided.

While I have illustrated and described particular constructions embodying the features of my invention, I do not wish to be understood as intending to limit it thereto, as the same may be variously modified and altered without departing from the spirit of my invention.

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

1. A one piece truss for a saddle consisting of a continuous member of loop form closed at its ends, the side members thereof extending substantially parallel and enlarged midway their length to form clamping buttons, for the purpose set forth.

2. A one piece truss for a saddle consisting of a continuous member of loop form closed at its ends, the side members thereof extending substantially parallel and equipped midway their length with apertured enlargements and with serrated inner faces and forming clamping buttons, for the purpose set forth.

3. In a saddle the combination of a portion of yieldable material supported at its opposite ends and having depending side-portions intermediate its ends, and means connected with said side portions and extending from one to the other thereof for preventing undue spreading of said side-portions, comprising a coil-spring operatively connected at its opposite ends with said side-portions, one of its connections being a rotatably mounted screw in one of said side-portions with its threaded portion extending into one end of the spring and the turns of the spring lying within and thereby engaging the grooves of said threaded portion.

HENRY T. ROBERTS.