(No Model.) 2 Sheets—Sheet 1.

E. L. SHULTZ.

SADDLE FOR VELOCIPEDES.

No. 502,681. Patented Aug. 1, 1893.

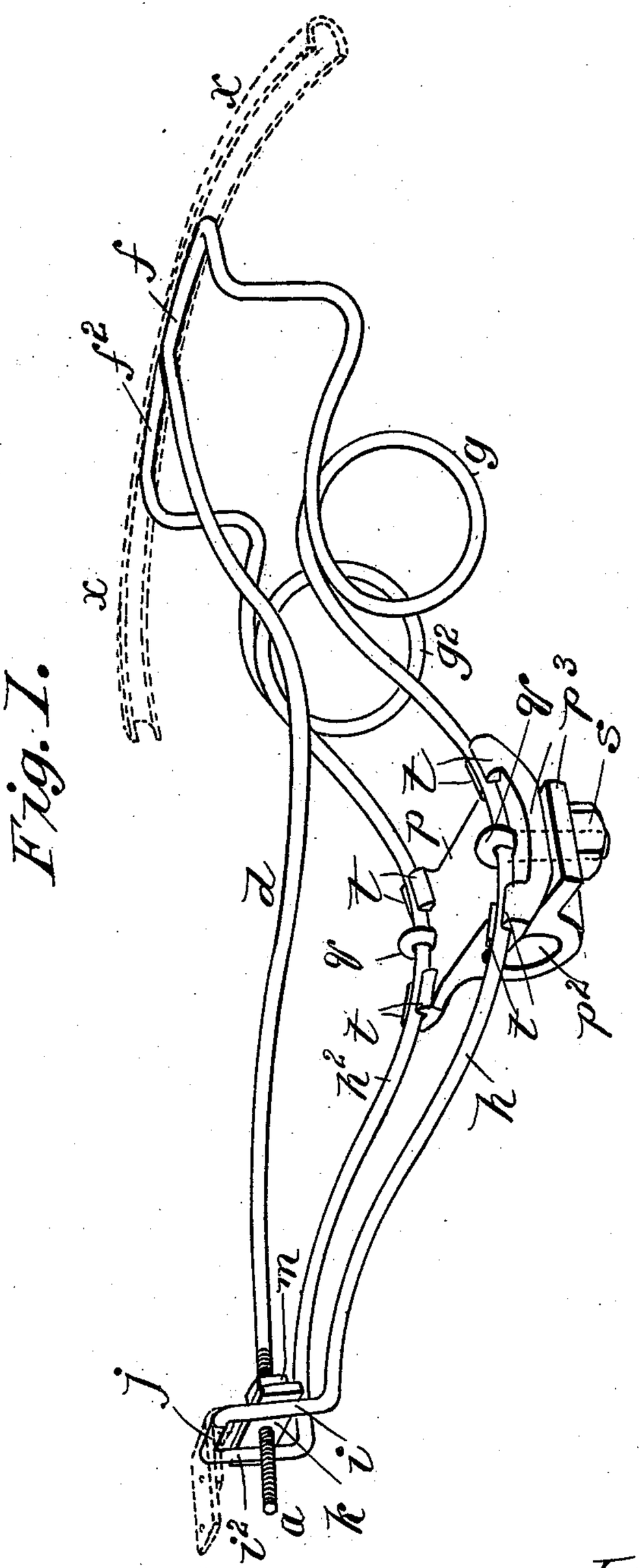

Fig. 1.

Witnesses:
J. A. Garfield
K. L. Clemons.

Inventor.
Edward L. Shultz
per Chapin & Co
attys

(No Model.) 2 Sheets—Sheet 2.

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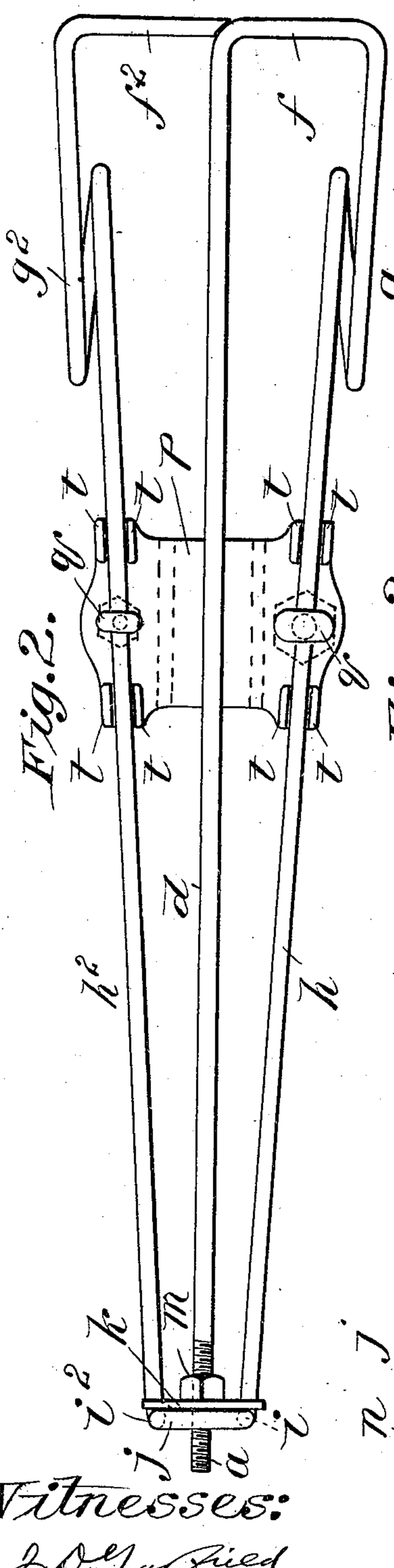

Fig. 2.

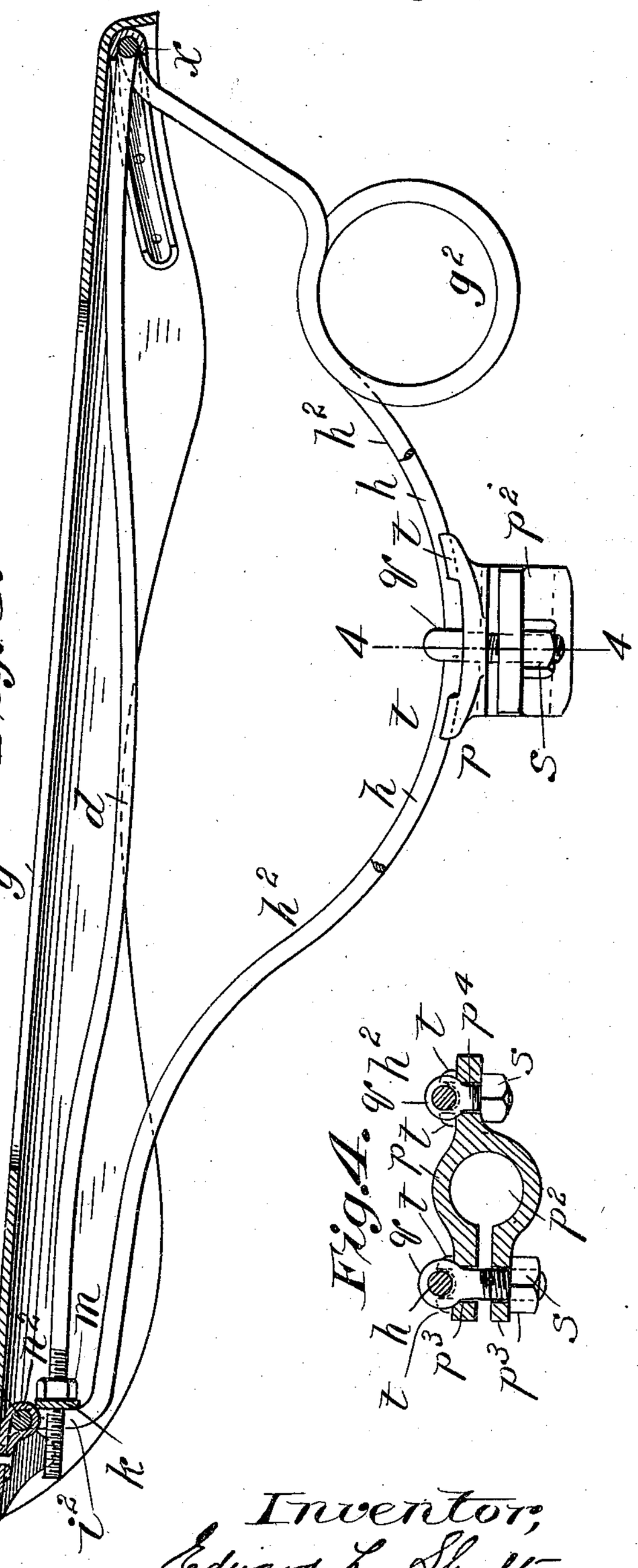

Fig. 3.

Fig. 4.

Witnesses:
J. D. Garfield
K. A. Clemons.

Inventor:
Edward L. Shultz
per Chapin & Co Attys

UNITED STATES PATENT OFFICE.

EDWARD L. SHULTZ, OF SPRINGFIELD, MASSACHUSETTS.

SADDLE FOR VELOCIPEDES.

SPECIFICATION forming part of Letters Patent No. 502,681, dated August 1, 1893.

Application filed July 19, 1892. Serial No. 440,494. (No model.)

To all whom it may concern:

Be it known that I, EDWARD L. SHULTZ, a subject of the Czar of Russia, but residing in the United States of America, at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Saddles for Velocipedes, of which the following is a specification.

The objects of the present invention are to construct a novel saddle for bicycles having great simplicity and lightness; to constitute the resilient frame or seat leather supporting portions thereof by a single length of heavy spring wire, and to impart thereto capabilities and means for the distension of the so constituted saddle frame for stiffening it and imparting the required degree of tension upon the seat leather; and to provide efficient means for the attachment of the said saddle frame to the saddle post or frame of the machine.

To these ends the invention consists in the formation of certain of the parts, and the combination or arrangement thereof, all substantially as will hereinafter more fully appear and be set forth in the claims.

Reference is to be had to the accompanying drawings in which—

Figure 1 is a perspective view of the improved saddle frame, the top or seat leather being removed. Fig. 2 is a plan view of the frame. Fig. 3 is a central vertical longitudinal section of the saddle. Fig. 4 is a cross section on line 4—4, Fig. 3.

The single piece of heavy spring wire from which the saddle frame is substantially constituted, it will be seen, begins at *a* and terminates at *b*. Starting at said forward end *a* there is formed the section *d* extended rearwardly the whole length of the saddle frame in the median longitudinal line thereof with a slight intermediate depression; from the rear of said section the wire continues laterally in the short length, *f*, then bending forwardly, and being continued to the front end of the frame in the section, *h*, has in its course which, generally stated, is decidedly depressed or bowed, the coil (or coils, if desired), as seen at *g*: a short distance in advance of the coil is the greatest dip of the bow while somewhat forward thereof the section is extended nearly horizontally, in an easy curve, and at its forward end the section is nearly, or quite, vertically turned and upwardly extended as at *i*, then turned horizontally, as at *j*, crossing over and slightly above the forward end, *a*, of section *d*, and is then turned about vertically and downwardly in the short length, i^2,—corresponding to the section, *i*; the wire is thence continued rearwardly, at the other side of the middle section, *d*, in the section h^2, which is the counterpart of the bowed section, *h*, including the coil, g^2, and has its extremity, f^2, transversely inwardly turned and is terminated at the rear of the frame next to the portion, *f*, and may be connected to said portion in any suitable manner, and such portions, *f* and f^2, constitute the rear members of the saddle frame with which the cantle, *x*, of the seat leather is engaged.

The bowed side members, *h*, h^2, of the frame, are slightly forwardly divergent; and a plate, *k*, lies against the vertical forward parts, *i*, i^2, the same being apertured for the loose passage therethrough of the forward, screw threaded extremity of the middle section, *d*, while the nut, *m*, engages said screw threaded extremity and bears against the rear side of the said plate.

The seat leather, *y*, is to be connected with the forward part of the saddle frame in any desired manner; and in the accompanying drawings an approved means of making the connection is shown, which consists of a strip or strap, *n*, of metal, or other material, intermediately bent to form the eye, n^2, which embraces part, *j*, of the saddle frame, the terminals of said strap being superposed and riveted to the under side of the seat leather at the peak; the seat-leather, as before intimated, has the cantle at its rear end, substantially as usual, whereby the stiffness and form are imparted to the said rear, and whereby the medium of supporting connection is constituted between the rear of the frame and seat.

By properly turning the nut the desired degree of rigidity to the frame, and of tension to the leather may be imparted.

The means for attachment of the saddle to the usual saddle-post-arm, consists of a clip, *p*, which includes the cleft or split ring p^2, with ear-lugs, p^3, p^3, at each side of the split,

and the ear-lug, p^4, extended at its opposite side, said lugs forming rests for the saddle frame. Ring bolts, q, are, by their eyes, engaged with the intermediate portions of the bowed members, h, h^2, the screw shanks thereof passing through the lugs of the clip, and are held in their confining relations by the nuts, s, s. The tightening of the nuts on said bolts draws the bowed members of the saddle frame to a hard bind against the top of the clip, and the tightening action of one of the nuts insures the constriction of the clip about the arm of the saddle-post. The ring-bolts are adapted to be so let down within and through the openings therefor in the clip-lugs that the lower borders of the ring eyes will be as low as the top face of the clip whereby the under sides of the bowed saddle frame members which pass through said eyes may be drawn to forcible contact against the top of the clip.

It will be perceived that the top of the clip is in effect channeled longitudinally whereby the bowed members of the frame may be restrained from lateral swinging movements. These channels are constituted by the opposing pairs of lugs, t t, t t, which are integrally formed on the clip forward and rearward of the ring eyes.

What I claim is—

1. In a velocipede saddle, a saddle frame consisting of a single piece of suitable spring wire which, beginning at the front, extends longitudinally rearward constituting the section, d, then laterally turned and forwardly continued in a bowed side member, then transversely turned across and near the forward extremity of said section, d, and then rearwardly continued in another bowed side member the rear terminal thereof being turned inwardly, and a medium of connection between the adjacent forward portions of the saddle frame, substantially as and for the purpose set forth.

2. In a velocipede saddle, a saddle frame consisting of a single piece of suitable spring wire which, beginning at the front, extends longitudinally rearward constituting the section, d, then laterally turned and forwardly continued in a bowed side member, then transversely turned across and near the forward extremity of said section, d, and then rearwardly continued in another bowed side member the rear terminal thereof being turned inwardly, and means for imparting an endwise force upon the intermediate member, substantially as and for the purpose set forth.

3. In a velocipede saddle, a saddle frame consisting of a single piece of suitable spring wire which, beginning at the front, extends longitudinally rearward constituting the section, d, then laterally turned and forwardly continued in a bowed side member, which comprises a coil, then transversely turned across and near the forward extremity of said section, d, and then rearwardly continued in another bowed side member which also comprises a coil, the rear terminal thereof being turned inwardly, and a medium of connection between the adjacent forward portions of the saddle frame and means for imparting an endwise force upon the intermediate member, substantially as and for the purpose set forth.

4. In a velocipede saddle, a saddle frame consisting of a single piece of suitable spring wire which has its forward end screw threaded and extended longitudinally rearward constituting the section, d, then laterally turned and forwardly continued in a bowed side member, then upwardly transversely, and downwardly turned, forming a loop which loosely embraces the forward extremity of said member, d, and rearwardly continued forming the other bowed side member, and the apertured plate, resting against the said loop with the extremity of the member, d, passing therethrough, and the nut, all arranged for operation, substantially as and for the purpose set forth.

EDWARD L. SHULTZ.

Witnesses:
H. A. CHAPIN,
W. S. BELLOWS.