No. 755,904. PATENTED MAR. 29, 1904.

F. MESINGER.

SADDLE.

APPLICATION FILED SEPT. 17, 1903.

NO MODEL.

Fig. 1.

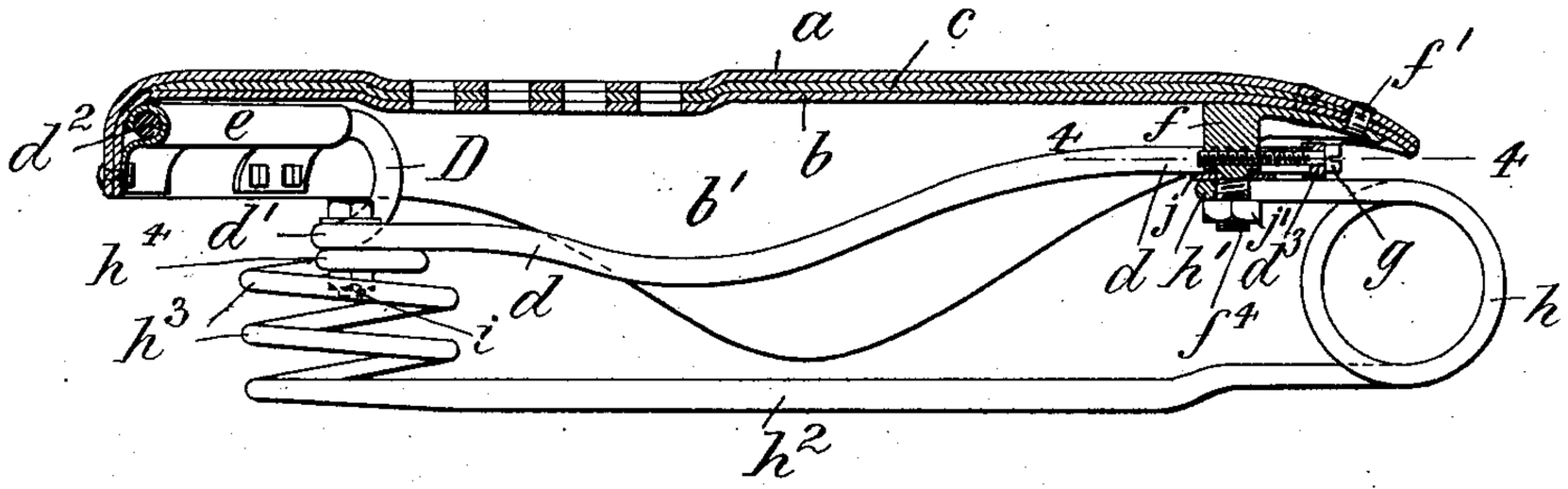

Fig. 4.

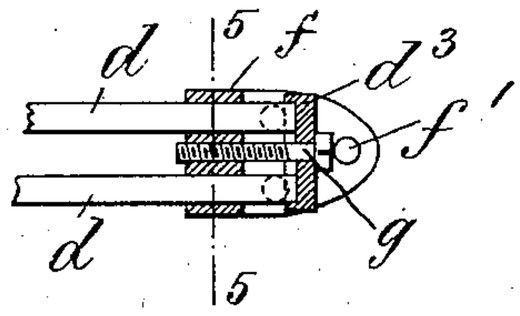

Fig. 2.

Fig. 5.

Fig. 3.

Witnesses:

William Schulz

Frederick Unfricht.

Inventor:

Frederick Mesinger

by Dawson Brieson Atty.

No. 755,904. Patented March 29, 1904.

UNITED STATES PATENT OFFICE.

FREDERICK MESINGER, OF NEW YORK, N. Y.

SADDLE.

SPECIFICATION forming part of Letters Patent No. 755,904, dated March 29, 1904.

Application filed September 17, 1903. Serial No. 173,503. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK MESINGER, a citizen of the United States, residing at New York city, Bronx, county and State of New York, have invented new and useful Improvements in Saddles, of which the following is a specification.

This invention relates to a cycle-saddle which is light and strong, possesses great resiliency, and may be readily tightened up from time to time when sagging through wear.

In the accompanying drawings, Figure 1 is a longitudinal section of my improved saddle; Fig. 2, a bottom view thereof; Fig. 3, a cross-section through the seat on line 3 3, Fig. 2; Fig. 4, a longitudinal section on line 4 4, Fig. 1; and Fig. 5, a cross-section on line 5 5, Fig. 4.

The seat of the saddle is composed of an upper layer *a*, a lower layer *b*, and a central layer or core *c*, all made, preferably, of leather. The layers *a* and *b* are substantially of the same size and are turned downward to form front and rear flanges *a' b'*, which are extended downward at the sides to form side flaps, which project below such flanges. These side flaps are engaged by the legs of the rider and should be of a flexibility sufficient to yield to lateral pressure, which, however, should not be transmitted to the sustaining part of the saddle. The central layer *c* extends from cantle to pommel between the horizontal sections of the layers *a b* up to the top of the flaps, Fig. 3, but not beyond the bend. Thus while the sustaining part of the seat is composed of three layers the flaps are composed of but two layers. This insures a material increase in stiffness and carrying power without any objectionable increase in weight and without impairing the flexibility of the flaps. The core *c* is shaved down to form a feather-edge along the bend of the seat, and all the layers are securely connected by cementing and stitching.

In order to attach the truss or stay-spring D to the saddle, I secure to the back of the latter a tubular housing *e* and to the front a nose or bearing *f*. The spring D is so bent as to form a pair of diverging shanks *d*, a pair of horizontal outwardly-opening rear eyes *d'*, and a curved rear section d^2 back of such eyes, which connects the same and is inclosed within the tubular housing *e*, such housing thus serving to connect the spring to the cantle portion of the saddle. The housing is composed of a rearwardly-opening upper tubular section and of a lower flange. The upper section is adapted to receive the spring D, while the flange is adapted to be connected to the saddle by rivets *e'*. In assembling the parts the spring is fitted into the partly-open housing, which is then closed around the spring, and finally the housing is riveted to the saddle, Fig. 1. In this way the downwardly-bent upper end of the housing is held tightly against the saddle-flange and is prevented from uncoiling under strain. The bearing *f* is riveted to the pommel portion of the saddle, as at *f'*, and is provided with a pair of grooved seats f^2, within which the spring-shanks *d* are slidably held. At the front the shanks *d* are connected by a cross-piece d^3, having a perforation for the accommodation of a tension-screw *g*, which engages a tapped perforation f^3 of bearing *f*. Thus by manipulating the screw the seat may be stretched from time to time to compensate for slack.

Below the stay-spring D is fitted the bottom spring H, which is bent to form a front upright coil *h*, with front eye *h'*, a pair of shanks h^2, and a pair of horizontal coils h^3, having rear eyes h^4, the coils *h* and h^3 being made integral with the shanks h^2. The spring is so swaged that the thickness of the shanks is considerably greater than the thickness of the front and rear coils, Fig. 1, while the shanks, as well as the coils, are of circular form in cross-section, so that the strength of the spring is increased without diminishing its resiliency. In other words, the cross-section of the shanks have an area greater than the cross-section of the coils, more material going into a given length of the shank than into a like length of coil. The rear eyes h^4 of spring H are secured to the rear eyes *d'* of spring D by bolts *i*, while the front eye *h'* of spring H embraces a post f^4, depending from bearing *f*. An annular washer *j* is fitted upon the post between the shanks *d* and eye *h'*, while a nut *j''*,

engaging the threaded end of the post, secures both springs to the same. This nut must be somewhat slackened before the tension-screw can be manipulated.

It will be seen that my improved saddle is strong and light, possesses great resiliency combined with sustaining power, and that it may be readily tightened up from time to time by means of the tension-screw.

What I claim is—

A saddle provided with a grooved bearing having a threaded post, a stay-spring having a perforated cross-piece, a tension-screw for adjustably connecting said spring with the bearing, a bottom spring having an eye that embraces the post, and a nut that connects the bottom spring to the post, substantially as specified.

Signed by me at New York city, (Manhattan,) New York, this 15th day of September, 1903.

FREDERICK MESINGER.

Witnesses:
FREDERICK RATH,
ERNST WOLKWITZ.