No. 607,651. Patented July 19, 1898.

H. BLOSSOM.

SADDLE FOR VELOCIPEDES.

(Application filed July 13, 1897.)

(No Model.) 2 Sheets—Sheet 1.

FIG:1.

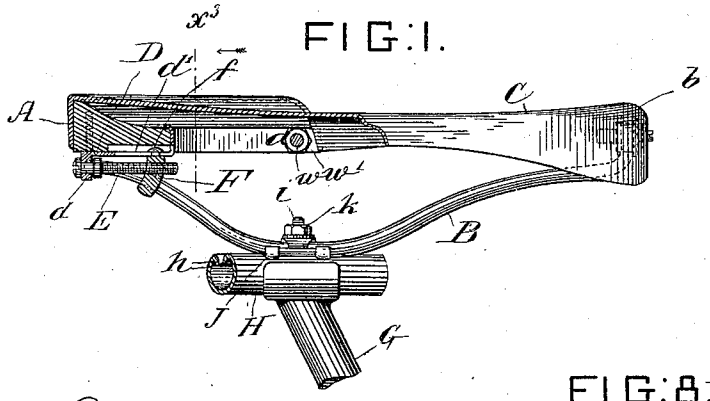



FIG:8.

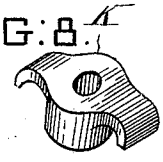



FIG:6.

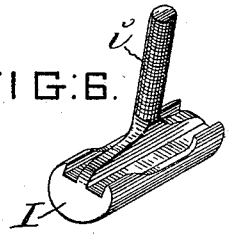



FIG:5.

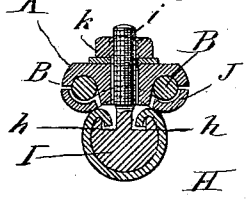



FIG:7

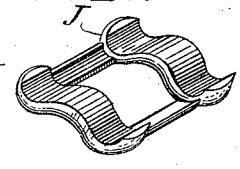



FIG:2.

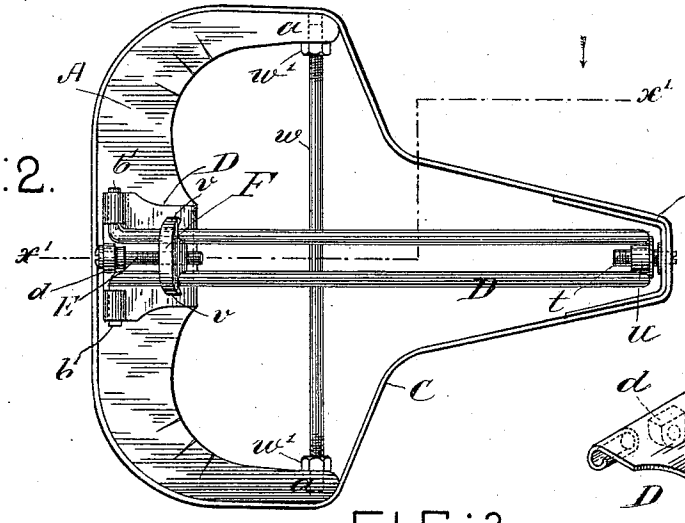



FIG:4.

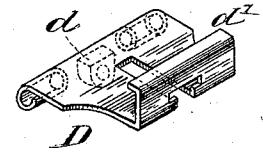
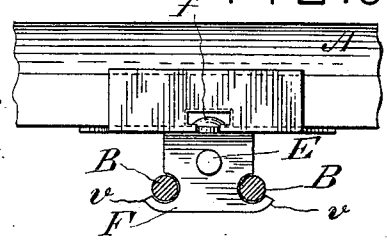



FIG:3.




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No. 607,651. Patented July 19, 1898.

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## SADDLE FOR VELOCIPEDES.

(Application filed July 13, 1897.)

(No Model.) 2 Sheets—Sheet 2.

FIG. 9.

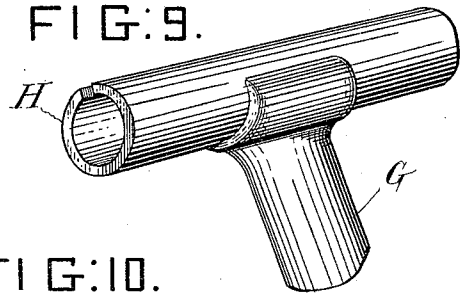



FIG. 10.

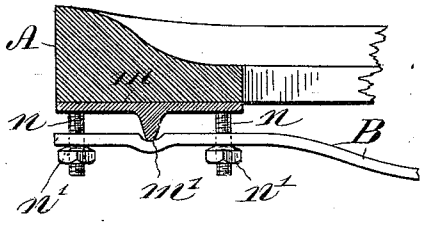



FIG. 12.

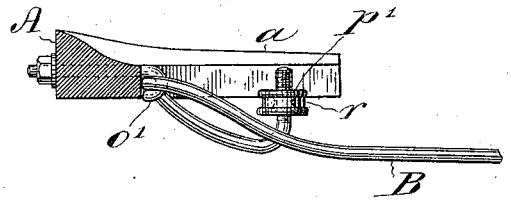



FIG. 11.

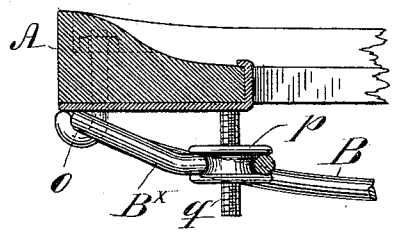



FIG. 11ª.

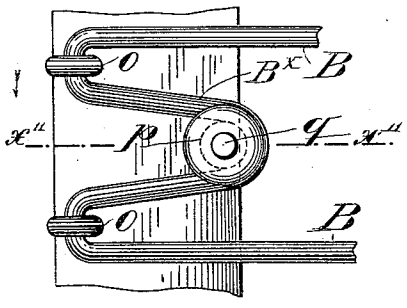
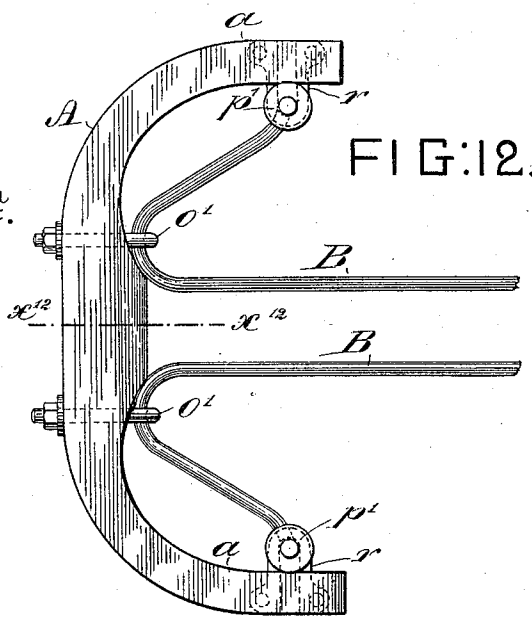



FIG. 12ª.




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# UNITED STATES PATENT OFFICE.

HERBERT BLOSSOM, OF NEW YORK, N. Y.

## SADDLE FOR VELOCIPEDES.

SPECIFICATION forming part of Letters Patent No. 607,651, dated July 19, 1898.

Application filed July 13, 1897. Serial No. 644,404. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT BLOSSOM, a citizen of the United States, residing at New York, (Brooklyn,) Kings county, New York, have invented certain new and useful Improvements in Saddles for Velocipedes, of which the following is a specification.

This invention relates to seats or saddles especially for use on bicycles, tandems, and the like, and the object is in part to provide an adjustment of the front end of the seat portion of the saddle up or down with relation to the pommel or horn and in part to provide an improved device for securing the saddle to the frame of the velocipede.

The accompanying drawings illustrate embodiments of my invention.

Figure 1 is a sectional side elevation of the saddle and seat-post, the cantle and seat portion of the saddle being in vertical section substantially on line $x'$ in Fig. 2. Fig. 2 is an under side view of the saddle seen in Fig. 1, and Fig. 3 is a front view of the slide F, being substantially a transverse section at line $x^3$ in Fig. 1. Fig. 4 is a detached perspective view of the hinging-plate D at the back of the cantle. Fig. 5 is a cross-section of the seat-post arm and the seat-securing device or clip thereon. Figs. 6, 7, and 8 are detached views of the several elements or members of the securing device or clip. The remaining views—viz., Figs. 9, 10, 11, $11^a$, 12, and $12^a$—illustrate modified forms which will be hereinafter described in detail. Figs. 3, 4, 5, 6, 7, and 8 are drawn to a larger scale than Figs. 1 and 2.

So far as relates to the adjustment of the seat it may be stated that the saddle consists, essentially, of a curved or U-shaped cantle the branches of which extend forward, a cover of some flexible material, as leather, over the cantle, so as to form the seat proper and extending out to the front to form a pommel, and a longitudinally-extending downwardly-curved supporting-spring the upturned front end of which is secured to the cover in front at the tip of the pommel, while at the rear the cantle is so hinged to said spring and provided with adjusting means that the projecting front branches of the cantle may be raised or lowered, the spring and pommel remaining undisturbed.

Referring to the principal figures of the drawings, which illustrate the preferred construction, A represents the U-shaped cantle, the arms $a\,a$ of which project forward, their ends marking the limit of the seat proper of the saddle. B represents the curved supporting-spring extending longitudinally or from front to rear. This spring is formed of a steel wire or rod bent upon itself, the bight at the front end being bent upward at $b$ and secured to the forwardly-projecting portion of the flexible cover C to form the pommel or horn of the saddle. At its rear end the branches of the spring-wire are bent laterally outward oppositely to form hinging-lugs $b'\,b'$, which find bearings at the rear edge of the cantle in a plate D. (Seen detached in Fig. 4.) This plate is secured firmly to the lower face of the cantle. It will be seen that by this construction the cantle may rock on or turn about its hinge in a manner to elevate or depress its arms $a$ with respect to the tip of the pommel.

In order to effect the adjustment, any one of various devices may be employed. That shown in Figs. 1, 2, and 3 is preferred. Mounted rotatively in a block $d$ on the plate D and extending forward between the branches of the supporting-spring is a long screw E, which screws into a slide F, embraced between the supporting-spring below and the cantle above, bearing above on the lower face of the plate D. By means of the screw E this slide F may be drawn back into the V-shaped space between the spring and the lower face of the cantle, when said slide will act as a wedge to raise the front edge of the cantle. In order to keep the slide in place laterally, but allow it to move forward and back, it is guided below on the spring, having lateral grooves to engage the parallel branches of the spring, (see Fig. 3,) and is guided above in a slot $d'$, Fig. 4, in the plate D, the slide having a headed stud $f$, the neck of which plays along the said slot in the plate. As parts of the slide take over the plate D and under the spring B, the slide when driven forward depresses the front of the cantle.

I will now describe the clip for securing the saddle to the frame of the bicycle, with especial reference to Figs. 1, 5, 6, 7, and 8.

G is the seat-post and in it is fixed the hori-

zontal arm H, which is to carry the saddle. This arm is a tube slitted along the top and the margins of the slit turned inward or downward. This construction forms a slot extending longitudinally of the tubular arm, with two parallel pendent lips *h h* along its margin, Figs. 1 and 5. In the hollow of the arm is fitted to slide a block I, (detached in Fig. 6,) which has two grooves in its upper face, in which fit the lips or ribs *h*. Rising from this block is a screw-threaded stud *i*, which projects through and may play along the slot in the arm H. A frame or yoke J (detached in Fig. 7) rests on the arm H about the stud *i* and has at its corners concave supports which take under the parallel branches of the spring B, and on the spring rests a bearing-plate K, (detached in Fig. 8,) on which bears a nut *k*, which clamps the supporting-spring B between the yoke and the bearing-plate. In this construction it will be obvious that the securing device may be shifted along the slotted arm H without interfering with the seat-post G, thus permitting a much greater range in longitudinal adjustment than with the ordinary clamp or clip, which takes under the arm on the post. The engagement of the yoke J on the tubular arm H at the sides of the slot therein prevents the spreading of the slotted arm laterally, and the arm is further strengthened and stiffened by the engagement of the inturned lips or flanges thereon with the grooves in the block I. These lips, however, I do not deem absolutely essential. The arm H may be merely slotted, as shown in Fig. 9, the pressure of the yoke J being sufficient to strengthen and brace it. Fig. 9 shows the slotted arm H and seat-post G detached.

It will be seen that my construction provides means for securing the cantle of the saddle to the supporting-spring in such a manner that the tilt of the former may be conveniently varied without altering the pitch of the spring. The effect is also to secure an elevation or depression of the pommel. For example, if the pitch of the seat proper be satisfactory but the pommel be too high, the entire saddle may be tilted forward until the pommel is low enough, and after securing the spring B by the clip the front of the cantle can be elevated to its first position.

Figs. 10 to 12ª illustrate various modes of hinging the cantle A to the supporting-spring B and also illustrate several forms of this spring.

In Fig. 10 a fulcrum-plate *m* is secured to the lower face of the cantle A at the back, this plate having fixed in it two screws *n*, one in front of the fulcrum *m'* and the other back of it. These screws pass down through holes in a flat spring B and have nuts *n'* for securing the cantle to the spring and adjusting it. The cantle pivots or hinges about the fulcrum.

Fig. 11 is a section on line $x^{11}$ in Fig. 11ª, and the latter is an under side view illustrating another mode of hinging the cantle A to a wire supporting-spring B. The spring has two hinging-points *o o* and a forwardly-bent loop $B^{\times}$ between said points, the bight of which engages the groove in a circumferentially-grooved nut *p* on a screw *q*, projecting downward from the cantle near the front edge of its rear bar. By running the nut up or down on the screw the adjustment is effected.

Figs. 12 and 12ª, the former being a section on line $x^{12}$ in Fig. 12ª and the latter a plan, illustrate another mode of hinging the spring where the ends of the wire spring are threaded to serve as screws. In this construction the spring B, of wire, is hinged to the cantle A at two points *o' o'*, and the ends of its two branches are carried forward and outward to points near the front ends of the branches *a a* of the cantle, where they are bent upward and screw-threaded, passing upwardly through circumferentially-grooved nuts *p'*, rotatively mounted in collared bearing plates or yokes *r* on the branches or arms of the cantle.

In Figs. 1 and 2 I have shown how the spring B is connected to the cover C to form a pommel and to provide a means for straining the cover; but this is not material to my invention. It need only be said that *s* is a metal pommel-plate and *t* is a screw having a shoulder which bears outwardly against the pommel-plate, the screw being driven through a block or nut *u*, mounted between the upturned branches of the spring B.

The screw E will be collared in the block *d*, as seen in Fig. 1, so that it may rotate, but not move longitudinally. I contemplate making the slide F of malleable iron, with lips (*v* in Fig. 3) on it which will be bent up under the branches of the spring B, as seen in Fig. 3, after the slide is in place. This mode of construction is not, however, essential.

I find it most convenient to use a steel tube for the arm H and to slot it along its upper side, so as to form an undercut hollow or bore for the block I, which takes under the overhanging sides of the groove, bore, or hollow; but it will be obvious that this end may be attained by forming an undercut way for the block in some other manner. I also find the screw *i* a convenient means for connecting the sliding block with the exterior parts of the clip or securing device, so that the block may be drawn up and the overhanging parts of the arm clamped, as shown; but other means for accomplishing this object may be employed without departing materially from my invention.

In Figs. 1 and 2 I have shown a stretcher extending across the saddle transversely between the arms *a a* of the cantle, this stretcher consisting of a screw-threaded rod *w*, the ends of which have bearings in bores in the arms of the cantle and nuts *w'* on the said rod, which serve as shoulders and also as means for distending the seat laterally to take up slack in the cover.

Having thus described my invention, I claim—

1. A saddle for a velocipede, comprising a seat-base of rigid material, a supporting-spring extending longitudinally of the saddle, a hinging device connecting the rear end of the supporting-spring with the back part of said seat-base, so that the front end of the latter may be elevated or depressed, means for turning the seat-base at the hinge so as to elevate or depress its front end, a pommel secured to the forward end of the supporting-spring, and a cover over said seat-base and pommel, substantially as set forth.

2. A saddle for a velocipede, comprising a broad seat-base, a supporting-spring extending longitudinally of the saddle and hinged at its rear end to the back of said seat-base so that the front end of the latter may be raised or lowered, a pommel carried on the end of said spring, a cover of flexible material over the seat-base and spring, means for elevating or depressing the front edge of the seat-base by causing it to turn about its hinged connection to the spring, and means for securing said spring adjustably to the frame of a velocipede, substantially as set forth.

3. A saddle for a velocipede, comprising a U-shaped cantle to form the base of the seat proper, a supporting-spring extending lengthwise of the saddle, said spring being hinged to the rear part of the cantle, a flexible cover to which the front end of the spring is secured, and means for raising and lowering the front end of the cantle independently of the pommel and fixing it when adjusted, substantially as set forth.

4. In a saddle for a velocipede, the combination with the U-shaped cantle A, the flexible cover C thereon, and the supporting-spring B, secured at its front end to the front prolongation of said cover and hinged at the rear end to the cantle, of the slide F, between the spring and the cantle and serving as a wedge to raise the front end of the cantle, and the collared screw for operating the said slide, substantially as set forth.

5. A saddle for a velocipede having a U-shaped cantle, with arms extending forward, a cover of flexible material over said cantle and extending out forward to form a pommel, a supporting-spring, coupled to the cantle at the rear and to the pommel at the front, and a transverse stretcher between the forwardly-projecting arms of the cantle, for spreading the arms of the cantle, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

HERBERT BLOSSOM.

Witnesses:
PETER A. ROSS,
HENRY CONNETT.