(No Model.)

F. LILLIBRIDGE.

SADDLE FOR BICYCLES.

No. 294,645. Patented Mar. 4, 1884.

Fig. 1.

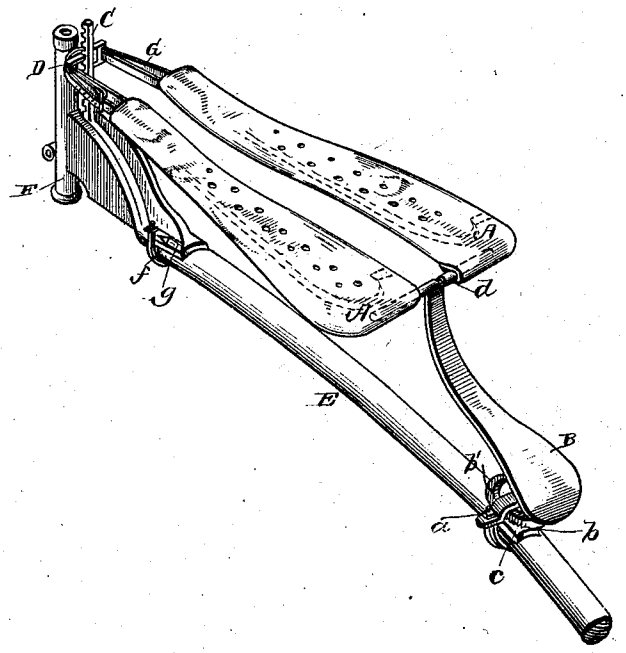


Fig. 2.

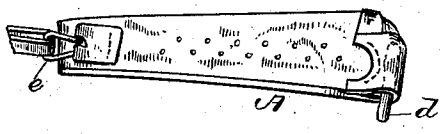


Fig. 3.

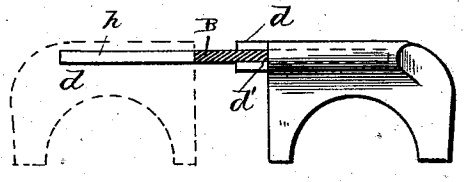
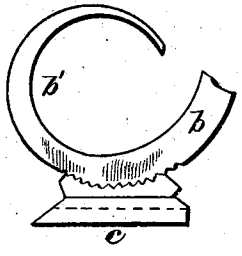


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

FREEMAN LILLIBRIDGE, OF CEDAR RAPIDS, IOWA.

SADDLE FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 294,645, dated March 4, 1884.

Application filed January 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, FREEMAN LILLIBRIDGE, a citizen of the United States, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Saddles for Bicycles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view of the saddle. Fig. 2 is an under view of one of the halves of the saddle-seat. Fig. 3 is an under view of one of the forms for the saddle-seat and one of the horns of the saddle-spring. Fig. 4 is a side view of the metallic seat for the rear spring, together with the foot portion of the spring resting thereon.

This invention relates to improvements in saddles for bicycles, and in some general particulars has the same end in view as that embodied in my application filed March 30, 1882, Serial No. 56,838.

The saddle-seat is made in two parts, A A, each alike, excepting that one is for the right side and the other for the left. Each part is made of leather, having the edges and center thinned from the under side, and, pressed into a round and hollow form from above the center portion, is perforated with holes for ventilation. The front ends of each part of the seat are joined by a strap, G, which passes around a support, D, on the upright post C. The support D has notches to engage with the notches on said upright. This strap-support D may be of any desired width, so as to allow the proper width for the forward ends of the saddle. I prefer a strap passing twice around the support D, and at its other end passing through the loop *e*, which is secured to the saddle A. A buckle or any like means may be connected to the strap, to enable it to be tightened. The post C is shaped to conform to the curve of the flattened portion of the neck F of the bicycle, so that the saddle may be placed as far front as possible. The foot portion of C is curved on its under surface to fit the backbone E, and is fastened to it by the clip *f*, which engages with the lugs *g*. The rear end of each half of the saddle-seat is joined to a metallic form, *d*. This form, preferably of the shape shown in Fig. 3, is thickened and rounded at the rear, and has a forwardly-extending portion, which is as thin as may be desired. In the thickened part is a socket, *d'*, which is adapted to receive the horn or T-piece *h*, attached to the upper end of the spring B. The form *d* is made in the general manner described, in order to give a rounding form to the corner of the seat, and at the same time afford means for connecting the seat with the horns of the spring, so as to allow the entire seat to be level with the horns of the spring in whatever position—low or high—the spring is placed. The construction now shown allows also of a separate action for each half of the seat corresponding with the thighs of the rider, and to admit of an adjustment in the width of the seat to suit the form of the different riders by drawing the halves of the seat apart. The leather may be drawn over the forms and gathered and fastened on the under side; or it may be fastened directly to the under side of the form without covering it. There will be no danger of the form on either side slipping off the horn or T part of the spring, because the tension of the seat, when the seat is made and adjusted, as described, will be entirely sufficient to prevent enough lateral movement of the form at its rear for any such result, while at the same time the form will have all necessary motion to insure the desired flexibility in the seat.

The spring B is increased in width toward the base in proportion as it needs more strength, and the lower portion is turned in the form of a scroll having the foot portion *b*, which rests in the metallic seat *c*, underneath the main part of the spring. The foot portion *b*, which rests in the metallic seat *c*, is narrowed and thickened, so as to possess proper strength, but not flexibility, and is continued in lighter form, as at *b'*, to complete the scroll.

The seat *c* is curved to fit the backbone E on its lower side, and to receive the foot portion of the spring on its upper side. In the foot of the spring are fine saw-teeth to engage with those of the seat, to prevent slipping.

The spring and metallic seat are held in place on the backbone by means of a clip, *a*, and yoke *a'*, passing around them. By this means the spring and seat can be adjusted as desired. By this scroll form and extra width of the spring above the clip the latter is somewhat covered from view, and is out of the way should the rider fall while mounting.

The clip and metallic seat can be moved up and down the backbone, and the spring can be moved up or down in the metallic seat, to produce any height of spring, while the strap-support at the front end can be placed high or low in the notches of the post, giving the rider any height of saddle he desires.

Having now described my invention, what I consider new, and desire to secure by Letters Patent, is—

1. A bicycle-saddle seat made in two longitudinal parts, each composed of but a single thickness of leather lying side by side, and suspended at the rear by and movable on the T-head of an uprising spring, substantially as described.

2. A bicycle-saddle seat made in two longitudinal parts, each composed of but a single thickness of leather lying side by side, and supported in front, so that the tension on one side will reciprocate with that of the other, substantially as described.

3. A separate upright post or support combined with the fore part of the backbone of a bicycle, and constituting the forward support of a flexible saddle-seat, while its rear end is supported by a spring.

4. A post or support for a flexible saddle, having a seat adapted to be secured to the forward part of the backbone, and having its upright curved forward to support the front part of the saddle-seat.

5. In combination with a flexible saddle-seat supported substantially as described, a spring which extends backward from the seat, when it makes a turn underneath itself and is attached to the backbone.

6. A flexible saddle-seat suspended at its forward end from a post attached to the fore part of the backbone, and suspended at its rear end from a spring which extends backward from the seat, where it makes a turn underneath itself, and is attached to the backbone.

7. In combination with a flexible saddle-seat attached to its upper and free end of a spring, which extends backward therefrom, and makes a curve underneath itself, by means of which and the curve of the backbone an adjustment in height is afforded, substantially as and for the purpose set forth.

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

FREEMAN LILLIBRIDGE.

Witnesses:
CHARLES DIXON,
HENRY CLAY WAITE.