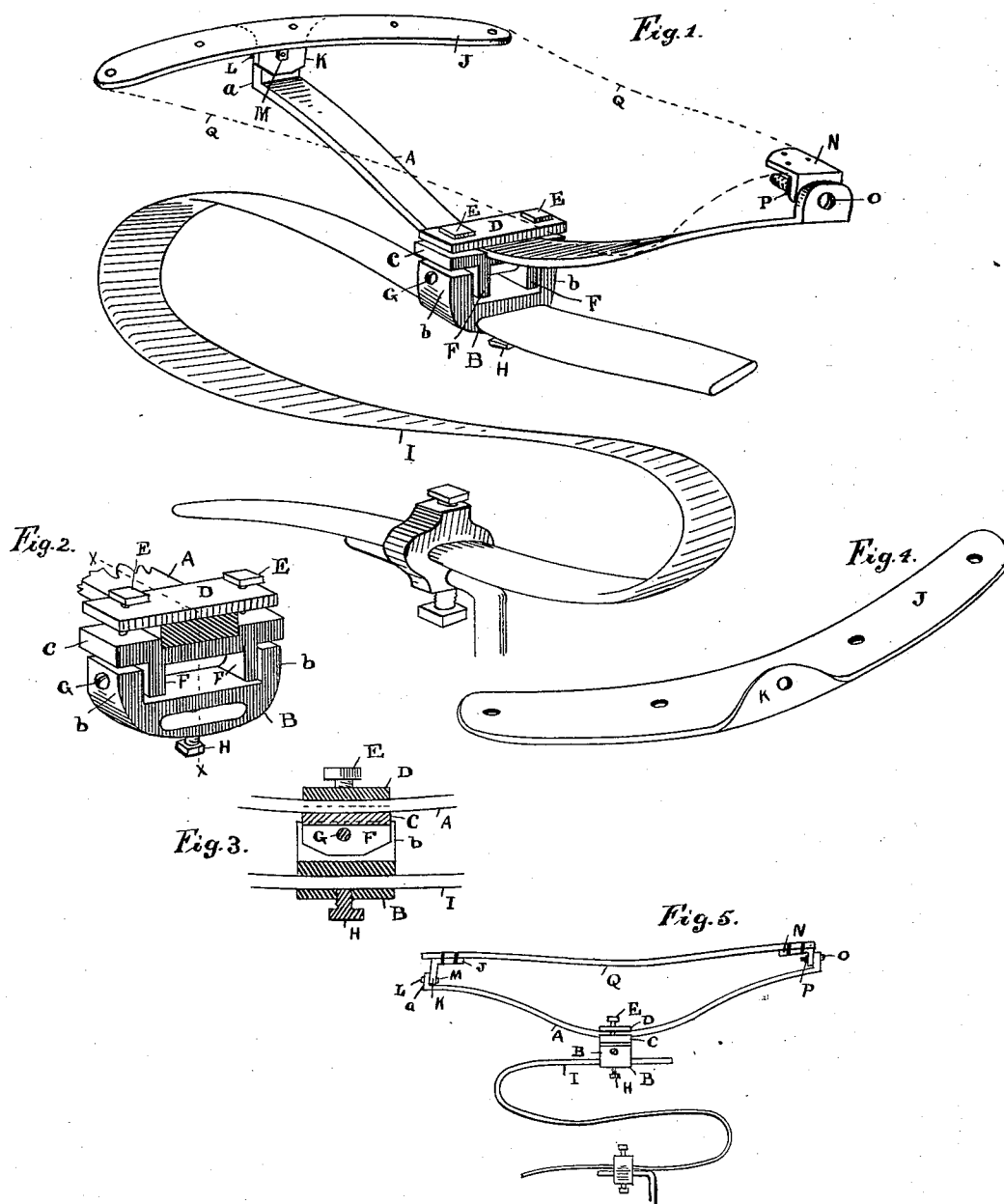


(No Model.)

E. SMITH.
VELOCIPEDE SADDLE.

No. 477,277.

Patented June 21, 1892.



Witnesses.

C. Johnson.

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By

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UNITED STATES PATENT OFFICE.

ELIAS SMITH, OF PEORIA, ILLINOIS.

VELOCIPED-SADDLE.

SPECIFICATION forming part of Letters Patent No. 477,277, dated June 21, 1892.

Application filed October 9, 1891. Serial No. 408,258. (No model.)

To all whom it may concern:

Be it known that I, ELIAS SMITH, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have
5 invented certain new and useful Improvements in Saddles for Velocipedes; and I do 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
10 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in
15 saddles for velocipedes.

The object of the invention is to provide a saddle which may tilt from side to side, according to the movements of the rider, and also that the saddle may be pivoted at or near the
20 center of its length (or at any point to suit the rider) to accomplish the purpose for which it was intended, and, furthermore, a spring (upon which the saddle is mounted) is of a construction which, when depressed by the
25 weight of the rider in passing over obstacles, will lower in a direct line. In other words, were the saddle rigidly attached to the said spring both ends of said saddle would lower on a horizontal plane by the depression of the
30 said spring.

In the drawings presented herewith, Figure 1 represents a perspective view of the saddle mounted on its spring and the said spring attached in the usual manner to the L-post of the machine. Fig. 2 is also a perspective view
35 of a clamp and pivoting portion of the invention, which serves to secure the saddle to the large S-spring, Fig. 1. Fig. 3 is a cross-section of Fig. 2 through dotted lines *x x*. Fig.
40 4 is a perspective view of an inverted curved plate used in the construction of the saddle on the rear end thereof and showing a beveled ear or lug made integral therewith. Fig. 5 is a side view of the saddle and spring, showing
45 certain parts.

In the drawings, A represents a spring substantially of the shape shown. The front and rear ends of the said spring are bent up to form the ears *a a*, as shown. A curved plate
50 J, with a depending ear K, is mounted on the rear ear *a* by a bolt L, which is provided with a nut M. The forward ear *a* also supports a

front saddle-plate N, of angle-iron, by the aid of a bolt O, and this bolt carries a nut P on its inner end. The lower corners of the depending ear K are beveled off, as shown, the
55 purpose of which will be hereinafter described.

Stretched over the plate J and plate N of the saddle and riveted thereto is the leather Q (dotted lines, Fig. 1) ordinarily used and
60 better shown in Fig. 5. The saddle thus constructed may now be placed or mounted on an S-shaped spring I in the following manner: A clamp is formed of a plate D on top of the spring A, which is secured by the bolts E E to
65 a plate C, having depending ears or lugs F F. In the upper face of the plate C a depression is formed, in which rests the spring A. This secures the said spring firmly in place. A
70 casting B of the form shown is placed on the S-shaped spring I by the slot cut therein and is there secured by the bolt H. In the said casting B is left a depression, and this leaves a pair of ears *b b* at either end, as shown. Into
75 the depression in the casting B are let the depending ears F F of the plate C, and a bolt G is passed through these ears F F and *b b*, and thereby forming a pivot for the saddle to tilt
80 on. The lower edges of the ears F F of plate C are beveled the same as the lug K on the rear saddle-plate J. The spring I is formed in the shape of an S and is secured to the L-post of machine in the ordinary manner.

The operation of the saddle and its essential parts may be understood from the following:
85 A person in riding a wheel has more or less discomfort with the saddle of his machine from the fact that in the raising of the feet with the pedals the upper part of his limbs are chafed against the sides of saddle, and
90 this is because the saddle is rigid and will not give with the motion of the rider. It is my purpose, therefore, to provide a saddle which when being ridden will tilt from side to side on the pivots formed by the bolts L and O.
95 The purpose of the bevels on the depending lug K of plate J is that the rear end of the saddle may tilt from one side to the other without danger of tipping so far as to unseat the rider or to cause inconvenience, and while the
100 front of the saddle is allowed to swing freely. The rear ear *a* of the spring A may be also beveled, so that in case it is desired to set the leather seat backward for any purpose the

bolt L may be removed and the lug K set behind the ear *a* instead of in front of it, and the said bevel on the ear *a* may answer the same purpose as the bevel on the said lug K.

5 The saddle proper may tip backward or forward on the pivot formed by the bolt G, so that the rider may shift his position to suit his convenience or requirements. In going downhill the rider has but to move slightly
10 backward on his saddle beyond the balancing-point, when the saddle will be more nearly on a level. In going uphill if the rider will shift forward of the balancing-point the seat will again assume the level position, and the
15 rider will consequently be more over his work. In the shifting of the rider backward or forward the beveled edges of the depending ears F F strike on the clamp B thereunder, so that there is not too much of a tilt, as in the case
20 of the beveled lug K of the saddle proper. The spring I is also an important feature of my invention. Being in the shape of an S, when it is depressed it lets the rider down in a direct line, so that the saddle is not tipped
25 either backward or forward, as in the case of some saddles. The clamp used on the saddle and spring may be adjusted to suit the rider's weight or requirements. The saddle and clamp may also be taken off the spring I and
30 used directly with the L-post of the machine, there being enough vibration in the said spring A for most purposes.

I claim—

1. In a saddle for velocipedes, the spring A,
35 substantially as shown, having the beveled

ear *a* formed on the rear end thereof and the ear *a* on the forward end thereof, in combination with the rear saddle-plate J, with its beveled lug K, made integral therewith, the bolt L, and the forward saddle-plate N, and the bolt O, substantially as and for the purposes herein set forth and described. 40

2. In a saddle for velocipedes, the spring A, substantially as shown, having the beveled ear *a* formed on the rear end thereof and the ear *a* on the forward end thereof, in combination with the clamp composed of the plate C, having depending ears F F and pivoted to a casting B by the bolt G, substantially as and for the purposes set forth and described. 50

3. In a saddle for velocipedes, the spring A, substantially as shown, having the beveled ear *a* formed on the rear end thereof and the ear *a* on the forward end thereof, the rear saddle-plate J, with its beveled lug K, made integral therewith, the bolt L, and the forward saddle-plate N, and the bolt O, in combination with the clamp composed of the plate D, secured by the bolts E E to the plate C, having depending ears F F and pivoted to a casting B by the bolt G, and the S-shaped spring I, substantially as herein set forth and described. 55 60

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

ELIAS SMITH.

Witnesses:

ROBERT RAKERS,
A. KEITHLEY.