(No Model.)

G. MEADER.

VELOCIPEDE SADDLE.

No. 457,654. Patented Aug. 11, 1891.

Fig. 1.

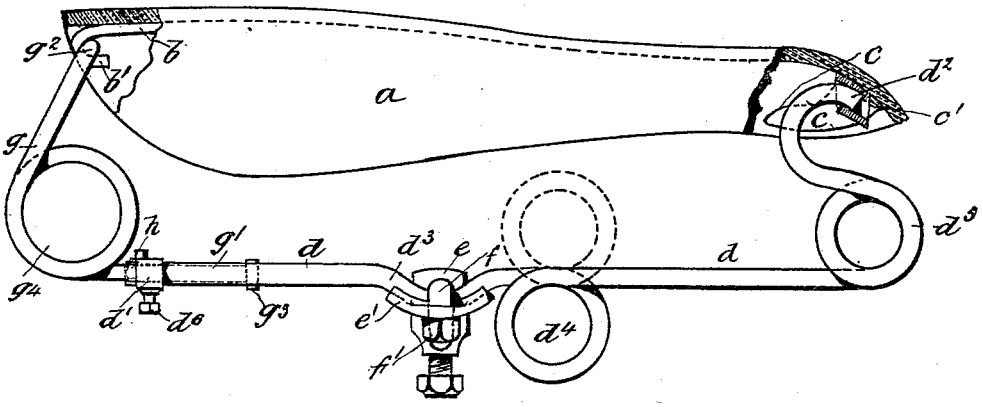


Fig. 2.

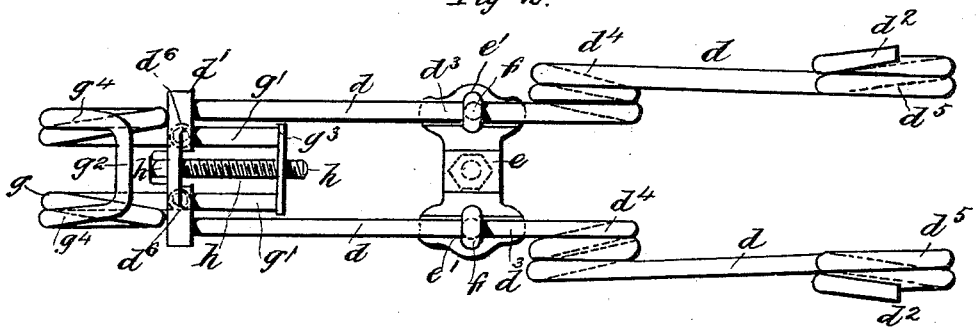


Fig. 3.

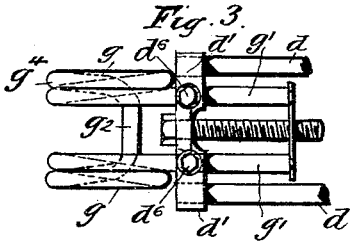
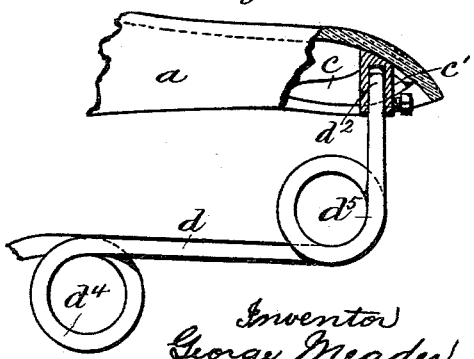


Fig. 4.



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UNITED STATES PATENT OFFICE.

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VELOCIPEDE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 457,654, dated August 11, 1891.

Application filed January 16, 1891. Serial No. 378,007. (No model.)

To all whom it may concern:

Be it known that I, GEORGE MEADER, foreman of works, a subject of the Queen of Great Britain, residing at the Cradle Spring Works, Coventry, in the county of Warwick, England, have invented certain new and useful Improvements in Spring-Saddles for Velocipedes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to a novel construction and arrangement of the supports and springs, whereby I obtain great comfort in riding, facility for adjusting the strain on the saddle-leather, and a simple and effective means of tilting the saddle to any required extent without materially altering the position of the saddle longitudinally in relation to its support.

My invention is represented in the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section, of my improved spring-saddle. Fig. 2 is a plan of the same with the saddle-leather removed. Fig. 3 is an under side view of the front spring and parts of the main springs; and Fig. 4 is a side elevation of portion of part of the main springs, showing a slight modification.

In all the figures like parts are indicated by similar letters of reference.

a is the saddle-leather, the metal nose or peak *b* of which is formed with a hook *b'* to receive the cross-bar of the front spring, while the cantle-plate *c* is formed with sockets *c'* to receive the rear ends of the main or rear springs, as is well known.

In carrying my invention into effect I employ two main or rear springs *d d*, extending from near the nose of the saddle to the rear thereof, and which are connected rigidly together at the front ends by a cross-bar *d'* and at or near the center of the saddle by curved lugs or supports *e'*, fixed to the pillar-socket *e*, while the rear ends d^2 of such springs are placed within the sockets *c'* of the cantle-plate *c*. These springs *d* are straight, or nearly so, from their front ends to near the center of the saddle, where they are formed with a sharp curve d^3, fitting recesses formed in a corresponding curve of the lugs or supports *e'* of the pillar-socket *e*, to which such curved parts d^3 are adjustably fixed by means of rings, loops, or hooks *f*, the screwed stems of which are passed through the lugs or supports *e'* and fixed thereto by nuts *f'* screwing thereon. Just behind the supporting-socket *e* these springs *d* are formed with vertical coils d^4, and other vertical coils d^5 are formed at the rear thereof, whence such springs *d* bend forward a short distance and are then curved upward and backward, so as to enable the rear ends d^2 thereof to enter the sockets *c'* of the cantle-plate; or the rear ends of such springs *d* may extend directly upward and then be bent backward. The front cross-bar *d'* has passed through holes formed therein the ends *g'* of a double spring *g*, which supports the front of the saddle-leather, and the said ends *g'*, to the rear of the before-mentioned cross-bar, bear on another cross-bar g^3, which is tapped centrally to receive an adjusting-screw *h*, passed through a hole in the center of the cross-bar *d'*, which latter is also provided with set-screws d^6 to fix the front spring *g* in position after adjustment thereof by means of the screw *h*. Said front spring *g* is otherwise formed, as heretofore, of a single length of rod metal, which is bent at its center, so as to form a cross-bar g^2 to fit into the hook *b'* of the metal nose or peak *b*. The two portions of the rod thence extend downward and slightly forward in a parallel or nearly parallel direction, where they are formed into two vertical coils g^4, from the lower sides of which the ends *g'* of the said spring extend rearward in a parallel or nearly parallel direction, where they are fixed to the main spring, as hereinbefore described.

If desired, the coils d^4, instead of being made to descend below the main part of the spring *d*, as shown by the full lines in Fig. 1, may be made to rise above the same, as shown by the dotted circles in said figure.

In Fig. 4 I have represented another slight modification. In this case the rear parts of the spring *d*, instead of bending forward of the coils d^5 and then upward and backward, as represented at Fig. 1, are made to extend directly upward from said coils d^5 and to enter

vertical sockets c', attached to the cantle-plate set-screws c^2 being employed to secure the ends d^2 in said sockets. By this means also an adjustment in the tilt of the saddle can be effected by causing the ends d^2 of the spring to enter more or less deeply into the cantle-sockets c'.

The sharp curves d^3 of the rear springs $d\,d$, fitting into the corresponding recesses formed in the lugs or supports e' of the pillar-socket, enable the saddle to be adjustably tilted on its support to suit the rider.

Having fully described my invention, what I desire to claim, and secure by Letters Patent, is—

1. The combination, with the saddle-leather a, peak-hook b', cantle-sockets c', and rear or main spring d, of front spring g, adjustably fixed to the rear or main spring d by cross-bar d', through which the ends g' of said spring g are passed, cross-bar g^3, bearing against said ends g', screw h, passed through central hole in cross-bar d' and screwing into cross-bar g^3, and set-screws d^6, substantially as herein shown and described.

2. The combination, with the saddle-leather a, peak-hook b', cantle-sockets c', and front spring g, of a main or rear spring d, adjustably fixed to the front spring g and formed with sharply-curved parts d^3, vertical coils d^4 just behind such parts d^3, vertical rear coils d^5, and ends d^2 to enter cantle-sockets c', substantially as herein shown and described, and for the purpose stated.

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