No. 676,021. Patented June 11, 1901.

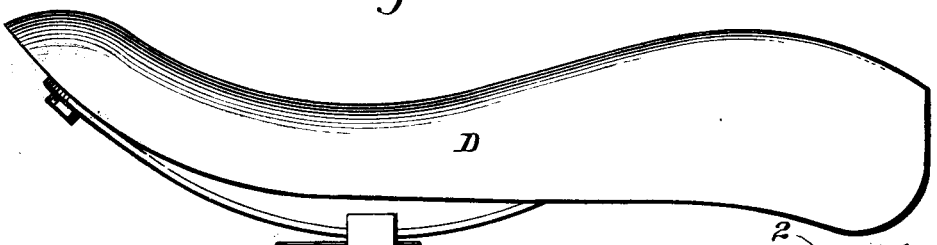
A. R. ANTHONY, C. T. CUNNIUS & J. A. WATSON.

BICYCLE SADDLE SUPPORT.

(Application filed Dec. 16, 1898.)

(No Model.)

Fig. 1.



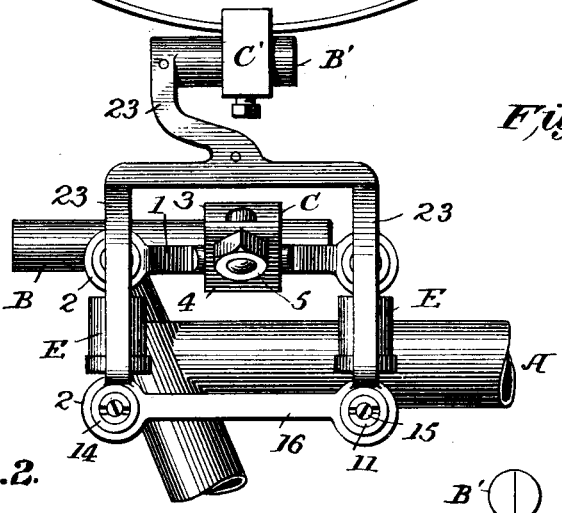


Fig. 2.

Fig. 5.

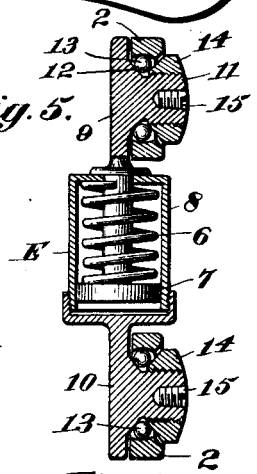
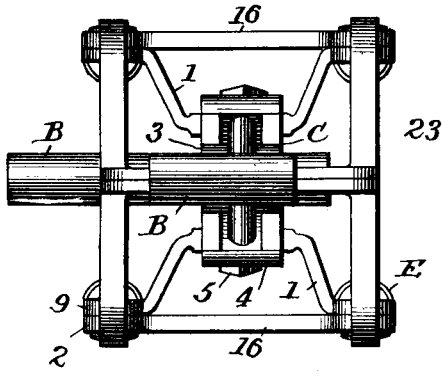


Fig. 3.



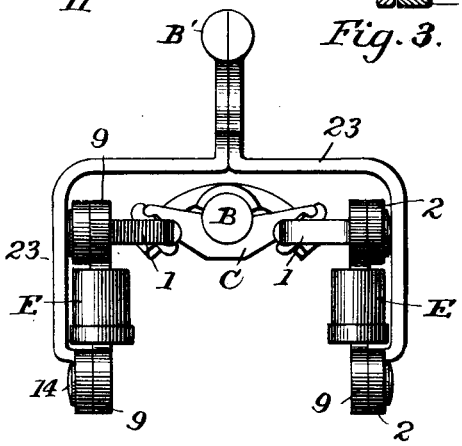
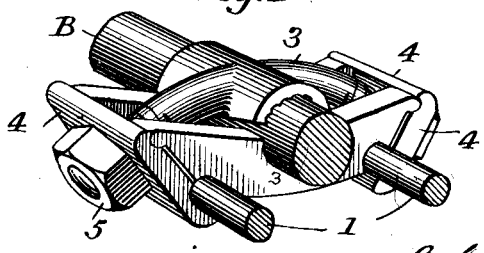


Fig. 4.



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UNITED STATES PATENT OFFICE.

ALFRED R. ANTHONY AND CALVIN T. CUNNIUS, OF WILKESBARRE, PENNSYLVANIA, AND JAMES A. WATSON, OF WASHINGTON, DISTRICT OF COLUMBIA; SAID WATSON ASSIGNOR TO SAID ANTHONY AND CUNNIUS.

BICYCLE-SADDLE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 676,021, dated June 11, 1901.

Application filed December 16, 1898. Serial No. 699,476. (No model.)

To all whom it may concern:

Be it known that we, ALFRED R. ANTHONY and CALVIN T. CUNNIUS, residing at Wilkesbarre, in the county of Luzerne and State of Pennsylvania, and JAMES A. WATSON, residing at Washington, District of Columbia, citizens of the United States, have invented certain new and useful Improvements in Bicycle-Saddle Supports, of which the following is a specification.

In riding bicycles over rough roads, roughly-paved streets, car-tracks, and the like there is an unpleasant jar of the frame of the machine both vertically and horizontally, which is transmitted to the saddle to the discomfort of the rider.

The object of our invention is to provide cushioning means which will prevent transmission of the vibrations in the bicycle-frame to the saddle.

To this end the invention comprises a series of links which may be suspended from the seat-post with freedom to swing longitudinally of the frame, means for connecting the upper ends of the links to the seat-post, and means for connecting the lower ends of the links to a second seat-post, on which the saddle may be secured.

In the accompanying drawings, Figure 1 is a side view of a bicycle-saddle support constructed in accordance with our invention. Fig. 2 is a plan view with the saddle omitted. Fig. 3 is a rear elevation. Fig. 4 is a perspective view of the clamp shown for connecting the attachment to a bicycle. Fig. 5 is a detail view illustrating the construction of the spring-links employed in the embodiment of the invention illustrated.

Referring to the drawings, A indicates the frame of the bicycle, and B a seat-post of the kind commonly used.

C and C′ indicate two forms of clamps adapted for clamping saddles to seat-posts, and D indicates the saddle.

Our invention is not limited to any particular form of clamp or saddle, but is generally applicable to all forms.

A pair of bars 1, having eyes 2, are rigidly connected with the seat-post B by means of the clamp C. (See Fig. 4.) The clamp C consists of jaws 3, which grip the seat-post, and jaws 4, which grip the bars 1, all of the parts being drawn securely together by nuts 5. To the extremities of the bars 1 are connected spring-links E, forming cushions upon which the saddle is suspended. As shown, each of these links consists of a spring 6, confined between a head 7 and the end of the casing of box 8. The head 7 is connected with the upper end 9 of the link, and the box 8 is connected to the lower end 10. We prefer to connect the bars 1 to the links by ball-bearing joints. As shown, the ends of the spring-links are formed with projections 11 and fixed cones 12. The balls 13 run between the fixed cones, the eyes 2, and adjustable cones 14. The ends of the projections 11 are preferably split and adapted to be spread by conical screws 15 to lock the adjustable cones 14. The lower ends of the links are connected by bars 16, having eyes 2, similar to the eyes of the upper bars. The upper bars 1 and the lower bars 16 are preferably of the same length, and the links E normally hang vertical and parallel. A second seat-post B′ is supported upon the bars 16 by a bridge-piece 23. The bridge-piece may be of any suitable form and connected in any suitable manner with the bars 16. As shown it is integral with the bars. The object of this form is to adapt the invention readily to all ordinary forms of saddles. Bicycle-saddles are all adapted to be fastened to the ordinary seat-post B, and it will be evident that they can as readily be connected to the seat-post B′. It will be evident, therefore, that the device shown is adapted to be made and sold without reference to any particular form of bicycle or saddle, being suitable to connect any saddle to any bicycle.

Having described our invention, what we

claim, and desire to secure by Letters Patent, is—

In a bicycle-saddle support, the combination with the seat-post of the bicycle, of two pairs of links pivotally supported upon and depending from said seat-post, said links being arranged to swing in vertical planes lengthwise of the bicycle-frame, a bridge-piece having its lower extremities pivotally connected to the lower ends of said links, said bridge-piece extending over the said seat-post, and a second seat-post supported upon said bridge-piece above the first-named seat-post.

In testimony whereof we affix our signatures in presence of witnesses.

ALFRED R. ANTHONY.
CALVIN T. CUNNIUS.
JAMES A. WATSON.

Witnesses to signatures of Anthony and Cunnius:
R. LAURA CANNON,
WILLIAM E. NEFF.
Witnesses to signature of J. A. Watson:
E. M. OLMSTED,
W. C. DUVALL.