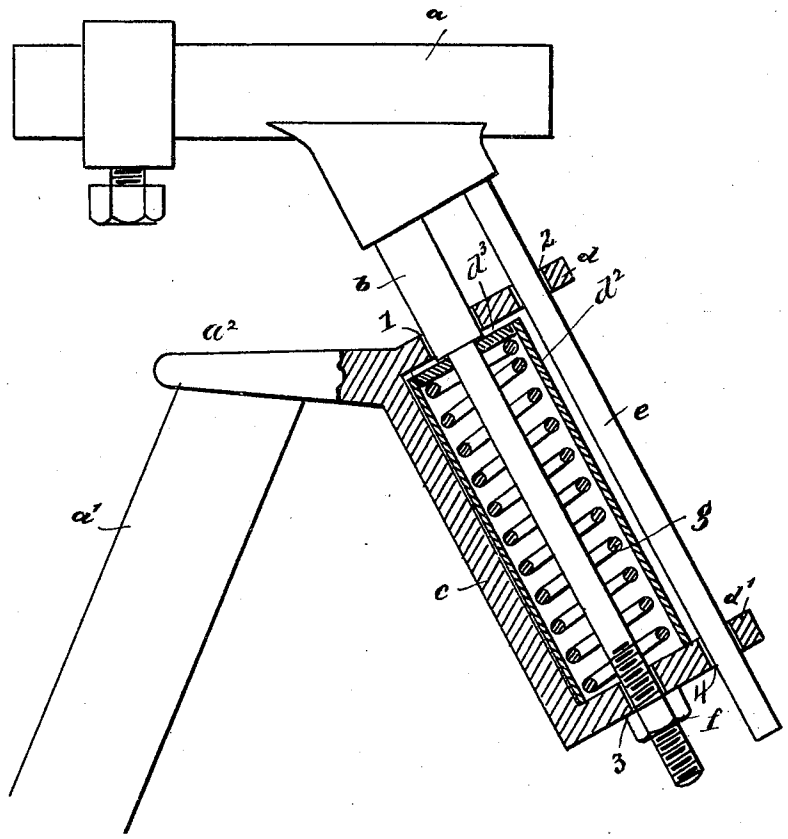
No. 642,606. Patented Feb. 6, 1900.

J. HAIDER.

SPRING SADDLE SUPPORT.

(Application filed Apr. 20, 1899.)

(No Model.)



Witnesses:
Anton Hoefner
F. H. Schott

Inventor.
Josef Haider
by Max Georgii
his attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOSEF HAIDER, OF MUNICH, GERMANY.

SPRING SADDLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 642,606, dated February 6, 1900.

Application filed April 20, 1899. Serial No. 713,741. (No model.)

To all whom it may concern:

Be it known that I, JOSEF HAIDER, a citizen of Bavaria, residing at Munich, Bavaria, Germany, have invented a certain new and useful Improvement in Velocipede Saddle-Supports; 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.

This invention relates to saddle-supports for bicycles and similar vehicles; and it consists, substantially, in such features of improvements as will hereinafter be more particularly described.

The invention has for its object to provide a bicycle saddle-support in which a cushioning effect or resistance is had coincident or more directly in line with the upper part of the body while riding the machine, whereby disturbing and injurious effects produced from shock and vibrations are obviated or avoided.

The above and additional objects are attained by the means illustrated in the accompanying drawing, in which is shown in side view, partly in section, a bicycle saddle-support constructed and arranged in accordance with my invention.

In carrying my invention into effect I provide a short rod or stem a', having an upward inclination toward the rear of the machine (not shown) and which is designed to fit into the upper end of the tubular standard portion (not shown) of an ordinary bicycle. Formed with or attached to the upper end of said short rod or stem is a lateral or rearwardly-extending arm or branch a^2, having pendent therefrom a box or frame c, the top and bottom of which are indicated at d and d', respectively, and located within which is a casing d^2, containing a spiral or other suitable spring g. The said casing is tubular in form, and its lower end rests or is seated upon the bottom of the said box or frame. Preferably the casing is of height sufficient to fully inclose the spring and protect the same from dirt and moisture. The said box or frame c occupies a position substantially at right angles to that of the short rod or stem a', and it is upon this box or frame that the weight of the rider of the machine is directly supported. The top and bottom of the said box or frame are provided with coinciding openings 1 3 and 2 4, those first named being in line with the axis or center of spring g and those last named being outside of or beyond the case d^2 and rearwardly thereof.

The short horizontal bar a, upon which the saddle (not shown) is fitted in the ordinary way, is formed or provided with pendent parallel rods b and e, which occupy such angle or position relative to the position of the said bar as to bring said rods substantially parallel with the box or frame c, and said rod b passes through the openings 1 3 in the top and bottom of said box or frame, while the said rod e passes through the outer openings 2 4 of said top and bottom. The casing d^2, contained in the box or frame, is preferably provided with a movable disk d^3 to furnish an even and increased bearing upon the upper end of the spring g, the bottom d of said box or frame furnishing a similar bearing for the lower end of said spring. The lower end of rod b is screw-threaded and provided with a nut f, through the medium of which the tention or cushioning effect of said spring can be easily regulated.

From the foregoing it will be observed that the cushioning effect or resistance afforded to the rider of the machine is more nearly coincident or in direct line with the forwardly-inclined position assumed by the upper part of the body while the rider is propelling the machine, and consequently the injurious effects of vibration are overcome. By adjusting the nut f the tension of the spring g can be regulated at will, and in lieu of said spring it is evident that a rubber or other elastic cushion can be employed with equal effect. If no elasticity is desired, the spring or its equivalent can be dispensed with and the saddle then supported rigidly in any manner desired, and in which case the line or direction of vibration produced in riding is still maintained coincident with the forwardly-inclined position of the upper part of the body. It will also be observed that my improved saddle-support has a free and easy motion vertically in virtue of the rods b and e being evenly guided in the openings therefor in the top and bottom of the box or frame c. The said rod e also serves to prevent the saddle-

support from turning in either direction sidewise and it adds to the strength of the saddle and its support.

Without limiting myself to the details of construction and arrangement of the several parts shown and described, I claim—

1. A saddle-support for bicycles and similar vehicles, the same comprising a rod or stem supported at an upward inclination toward the rear of a machine, and a vertically-movable rod occupying a position rearwardly of and substantially at right angles to said rod or stem, and provided with means for the attachment of a saddle.

2. A saddle-support for bicycles and similar vehicles, the same comprising a rod or stem supported at an upward inclination toward the rear of a machine, a vertically-movable rod occupying a position rearwardly of and substantially at right angles to said rod or stem, an elastic cushion for said movable rod, and means for the attachment of a saddle.

3. A saddle-support for bicycles and similar vehicles, the same comprising a rod or stem supported at an upward inclination toward the rear of a machine, a vertically-movable rod occupying a position rearwardly of and substantially at right angles to said rod or stem, means for the direct attachment of a saddle, and an additional movable rod for preventing lateral turning of the support.

4. A saddle-support for bicycles and similar vehicles, the same comprising a rod or stem supported at an upward inclination toward the rear of a machine, a box or frame supported by said rod or stem rearwardly of the same and substantially at right angles thereto, a movable rod supported and guided in said box or frame, and means for the attachment of a saddle.

5. A saddle-support for bicycles and similar vehicles, the same comprising a rod or stem supported at an upward inclination toward the rear of a machine, a box or frame supported by said rod or stem rearwardly of the same and substantially at right angles thereto, a movable rod guided in said box or frame, an elastic cushion and adjusting devices therefor, and means for the attachment of a saddle.

6. A saddle-support for bicycles and similar vehicles, the same comprising a rod or stem supported at an upward inclination toward the rear of a machine, a box or frame supported by said rod or stem rearwardly of the same and substantially at right angles thereto, a movable rod working in said box or frame, a casing within the said box or frame, a spring within the casing surrounding the rod and serving as a cushioning resistance for a saddle, an additional guide-rod, and means for the attachment of a saddle.

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

JOSEF HAIDER.

Witnesses:
LOUIS LEWIN,
ARTHUR GUTMANN.