No. 712,580. Patented Nov. 4, 1902.

C. P. NORGATE.

MOTOR CAR SADDLE AND HANDLE BAR SUPPORT.

(Application filed May 31, 1902.)

(No Model.)

Fig. 1.

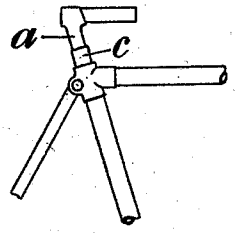


Fig. 2.

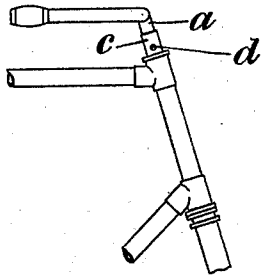


Fig. 3.

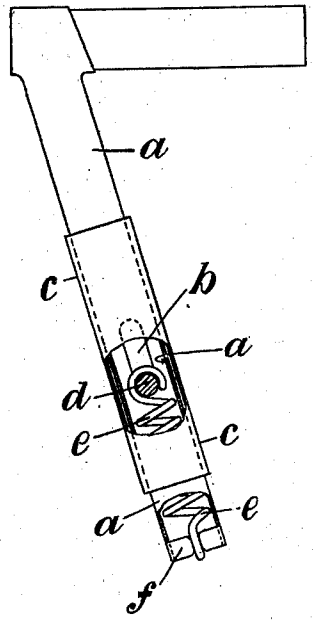


Fig. 5.

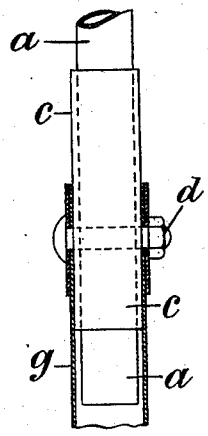
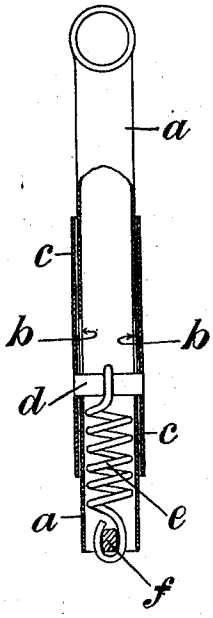


Fig. 4.



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

UNITED STATES PATENT OFFICE.

CHARLES P. NORGATE, OF ORRELL, ENGLAND.

MOTOR-CAR SADDLE AND HANDLE-BAR SUPPORT.

SPECIFICATION forming part of Letters Patent No. 712,580, dated November 4, 1902.

Application filed May 31, 1902. Serial No. 109,707. (No model.)

To all whom it may concern:

Be it known that I, CHARLES PASSMORE NORGATE, a subject of the King of England, and a resident of Orrell, near Liverpool, England, have invented certain new and useful Improvements in Cycle and Motor-Car Saddles and Handle-Bar Supports, of which the following is a specification.

This invention has reference to spring-supports for the handle-bar stems and saddle-pillars of cycles, motor-cars, and the like, and has for its object and effect to provide such a spring-support which shall be simple in construction and effective in operation.

Generally according to my invention the pillar of the seat or saddle support or handle-bar stem of the ordinary or usual type as fitted to cycles or autocars is slotted in a suitable position, and over said stem or pillar is fitted an outer case or sleeve. This case or sleeve bears closely on the stem, but permits of movement between same. In the outer case or sleeve, where it is opposite the slot in the stem or pillar, a hole is provided, through which a pin is placed, said pin passing through sleeve and stem or pillar and being secured to the sleeve by brazing or riveting. Over the pin, inside the stem, the loop or end of one end of a spring is secured, the other end of said spring being secured to a pin supported at or near the bottom of the stem.

Drawings illustrating my invention are annexed hereto, in which—

Figures 1 and 2 show in side elevation a manner of application of my invention to the seat and handle-bar of a cycle, respectively. Fig. 3 is a side elevation, partly in section, showing a construction of seat-stem, drawn to an enlarged scale. Fig. 4 is a front sectional elevation. Fig. 5 illustrates a modified construction of connecting the spring-support to the machine.

Referring now to the drawings, *a* represents the pillar of a seat or saddle support or stem of handle-bar, as the case may be, of a cycle, being slotted at *b*.

c is the outer case or sleeve, fitting over the stem or pillar *a*, while *d* is a pin connected with said sleeve and passing through said stem or pillar.

e represents a spring disposed within the stem or pillar *a*, the upper end of which is connected to the pin *d*, while the lower end is connected with a pin *f*, which is held in position at the lower part of the stem or pillar *a*.

Usually the outer case or sleeve *c* will be secured in position on the cycle by clamping in the usual manner, but, if desired, the pin *d* may be of the form of a bolt, Fig. 5, which will pass through holes provided in the tubing *g* of the cycle, and so hold the stem *a* securely therein.

In use the weight of the rider upon the stem *a* tends to force it downward in its socket against the resistance of the spring *e*, and the vibration due to unevenness of the road over which the rider may be traveling is minimized by the intervention of this spring, the stem or pillars *a* moving upward or downward, its movement being limited according to the length of the slots *b* and strength of spring.

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

In supports of cycle and auto-vehicle saddle and handle-bar pillars, the combination of the pillar *a*, the spring *e*, having its lower end fastened to the lower end of the pillar *a*, an outer sleeve *c*, a pin *d* held in the outer sleeve *c* and passing through the pillar *a*, and to which the upper end of the spring is attached, and slots *b* in the pillar *a*, in which the pin *d* works vertically, all arranged so that the pillar is suspended from the pin *d* by the spring which stretches when pressure is applied to the pillar.

In witness whereof I have hereunto set my hand in presence of two witnesses.

CHARLES P. NORGATE.

Witnesses:

JOHN H. WALKER,

GEO. E. GODDING.