No. 783,773. PATENTED FEB. 28, 1905.

E. E. BROWN.

BICYCLE SEAT POST LOCK.

APPLICATION FILED NOV. 12, 1903.

Fig. 1.

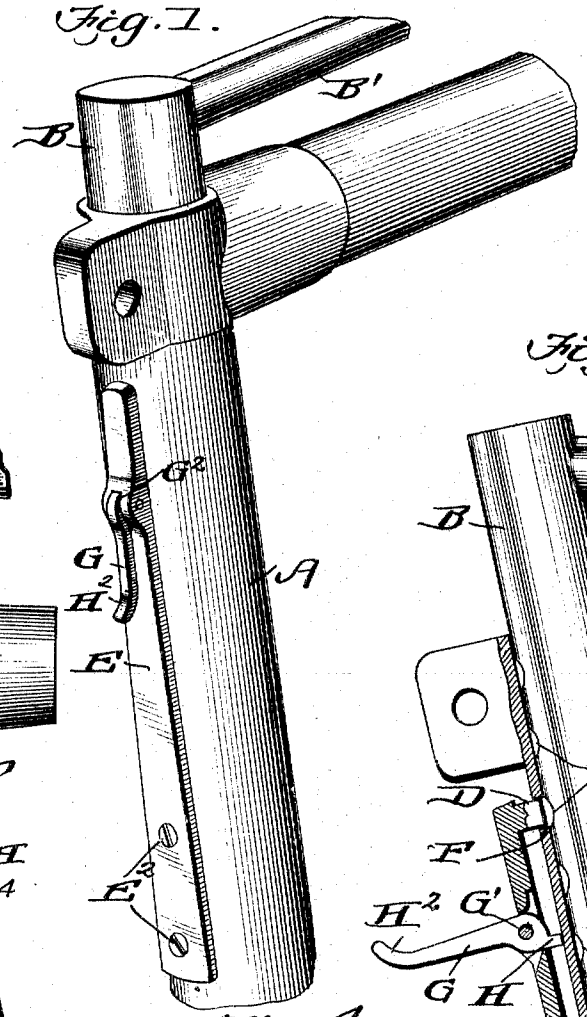


Fig. 2.

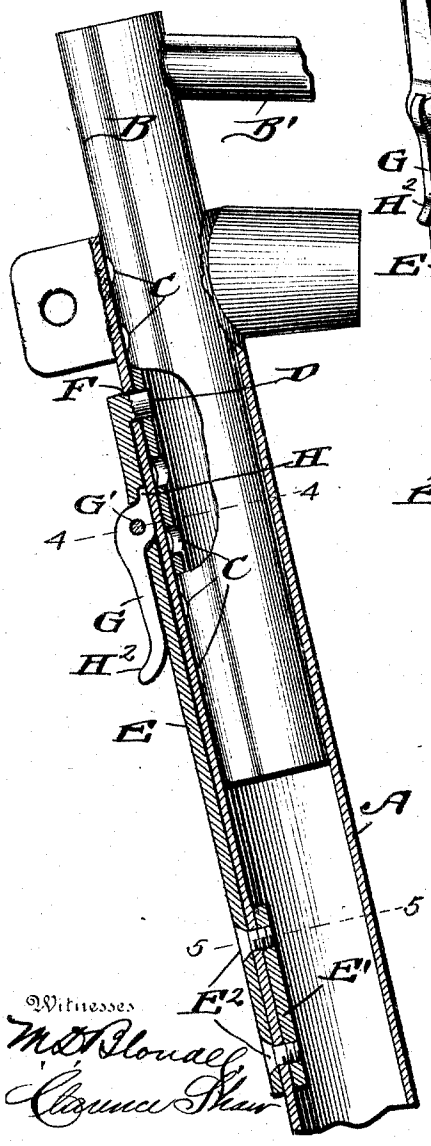


Fig. 3.

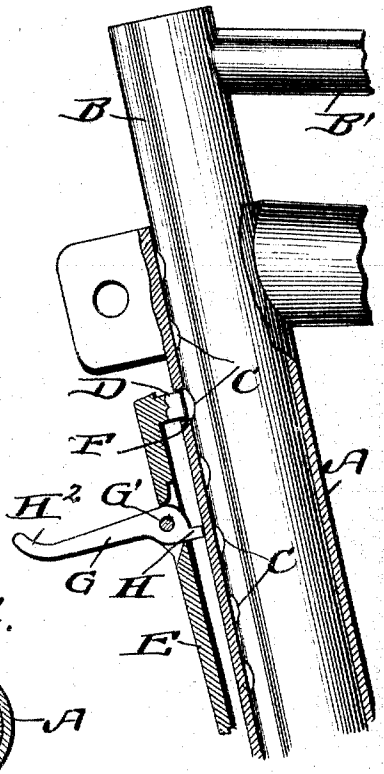


Fig. 4.

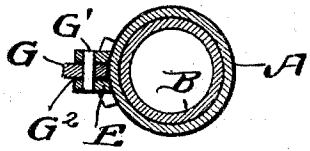
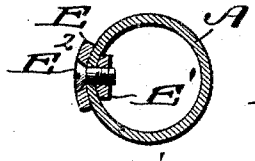


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

ELMER E. BROWN, OF LOS ANGELES, CALIFORNIA.

BICYCLE SEAT-POST LOCK.

SPECIFICATION forming part of Letters Patent No. 783,773, dated February 28, 1905.

Application filed November 12, 1903. Serial No. 180,925.

To all whom it may concern:

Be it known that I, ELMER E. BROWN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Bicycle Seat-Post Lock, of which the following is a specification.

This invention relates generally to bicycle seat-posts, and more particularly to an improved means for securing said post within the frame and avoiding the use of clamping bands and nuts.

Another object of the invention is to provide a fastening means of such character that the seat-post can be quickly and easily raised or lowered and refastened without the use of a wrench or other appliance commonly used at the present time.

With these and several other objects in view the invention consists, essentially, in providing the seat-post with a series of apertures and in arranging a spring-bar upon the exterior of the upright member of the frame, said spring-bar carrying a bolt at its free end adapted to engage one of a series of perforations in the seat-post for the purpose of holding the said seat-post locked in the frame.

The invention consists also in providing the spring-bar with a lever whereby the bolt carried by the said bar can be thrown out of engagement with the said seat-post.

The invention consists also in certain details of construction hereinafter fully described, and pointed out in the claim.

In the drawings forming part of this specification, Figure 1 is a perspective view showing the practical application of my invention. Fig. 2 is a sectional elevation showing the position of the parts when the said post is locked. Fig. 3 is a similar view showing the position of the parts when the seat-post is unlocked. Figs. 4 and 5 are sectional views on the lines 4 4 and 5 5, respectively, of Fig. 2.

Referring to the drawings, A indicates the upright tubular member of an ordinary bicycle-frame and in which fits the tubular seat-post B, having an arm B′, to which the seat is attached. This seat-post B has a series of apertures C produced in the rear side thereof, said apertures being adapted to be engaged by the bolt D, carried at the upper end of the spring-bar E, fastened at its lower end to the exterior of the tubular member of the frame, a plate E′ being arranged upon the interior of the tube and the bolts E^2 passing through the end of the spring-bar into said plate, thereby securely fastening the said spring-bar. The bolt D works through an aperture F in the tubular member of the frame and is adapted to engage one of the series of apertures in the seat-post, thereby securely locking said seat-post within the frame, and it will of course be understood that the said seat-post will also be held against rotation, so that all clamping bands and nuts heretofore employed may be dispensed with. For the purpose of throwing the spring-bar outwardly for the purpose of disengaging the bolt from the seat-post I employ a lever G, which is pivoted at G′ in a longitudinal slot G^2, produced in the spring-bar, said spring-bar being slightly reinforced at that point in order to provide a sufficient bearing for the pivot of the lever. This lever has a nose H, which is adapted to bear against the tubular member of the frame for the purpose of throwing the spring-bar away from the said member, and the outer end is shaped into a suitable handle H^2, which normally rests close against the spring-bar, as most clearly shown in Figs. 1 and 2. When it is desired to adjust the seat-post, the lever is raised, withdrawing the bolt from the aperture of the seat-post, and the post can then be raised or lowered, as desired, and after the seat has been properly adjusted the lever is again thrown down and the bolt will engage the proper aperture and securely lock the seat-post.

It will thus be seen that I provide an exceedingly cheap and simple device for securing the seat-post and one by means of which the said post can be quickly removed, raised, or lowered when desired.

While I have shown and described my invention as applied to the seat-post of a bicycle, it is obvious that my invention may be applied and used upon any machine in which an adjustable seat may be found necessary.

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

A seat-post having a series of apertures in combination with a spring-bar secured at its lower end to the tubular upright member of the bicycle-frame; a lock-bolt arranged at the upper end of the spring-bar and adapted to engage the seat-post and the lever pivoted in a slot in the spring-bar and comprising a nose and a handle portion, the nose being adapted to engage the tubular upright member of the bicycle-frame for the purpose of disengaging the locking-bolt from the seat-post, as set forth.

ELMER E. BROWN.

Witnesses:
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URIAH THOMAS.