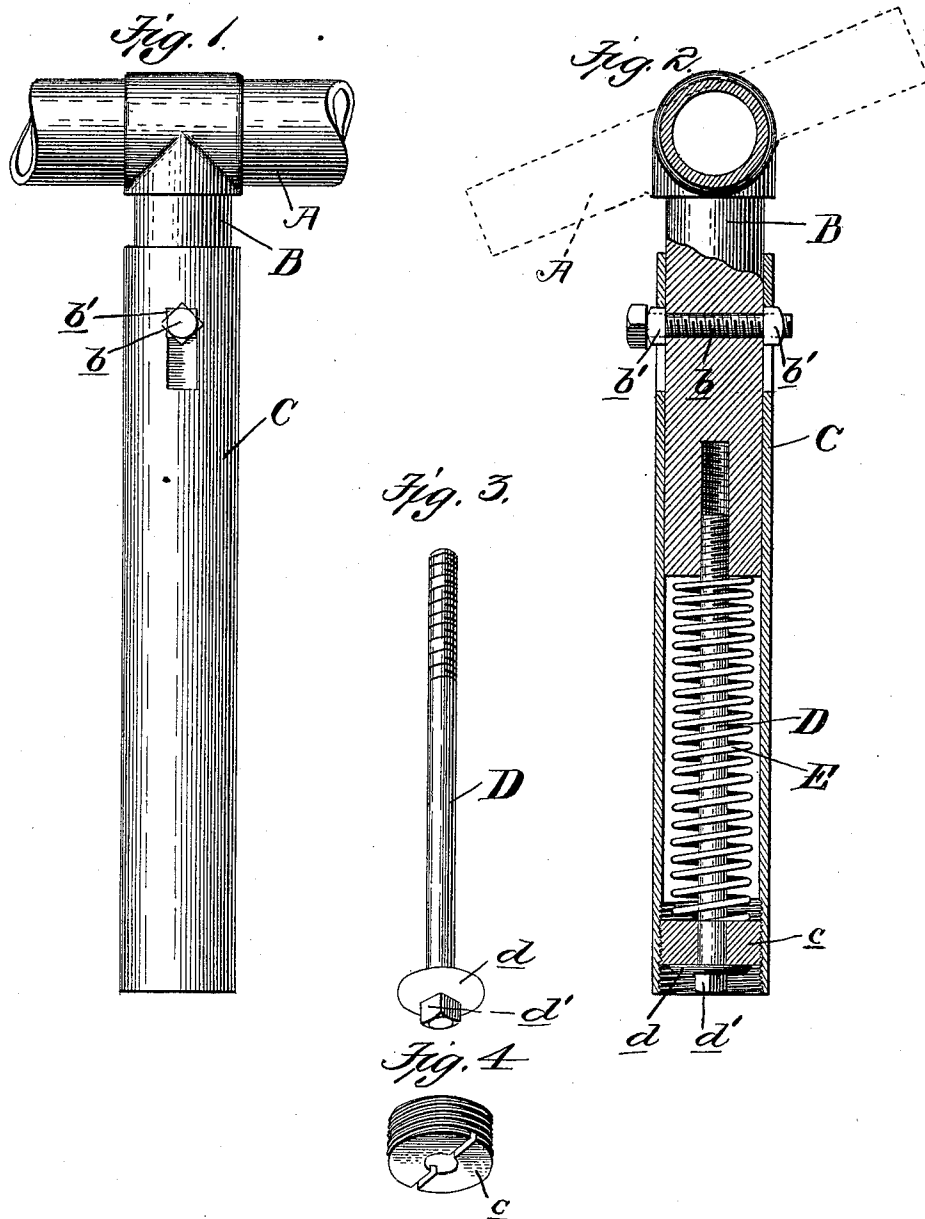


(No Model.)

C. W. BRENIZER.
SPRING SEAT POST OR HANDLE BAR.

No. 583,886.

Patented June 8, 1897.



Witnesses:
F. R. Cornwall
G. A. Pennington

Inventor,
C. W. Brenizer
by Paul Bakewell
his atty.

UNITED STATES PATENT OFFICE.

CLARENCE WILLIS BRENIZER, OF ST. LOUIS, MISSOURI.

SPRING SEAT-POST OR HANDLE-BAR.

SPECIFICATION forming part of Letters Patent No. 583,886, dated June 8, 1897.

Application filed November 16, 1896. Serial No. 612,215. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE WILLIS BRENIZER, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Attachments to Posts for Handle-Bars or Seats of Bicycles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a front elevational view of my improved attachment. Fig. 2 is a vertical sectional view. Fig. 3 is a detail perspective view of the bolt. Fig. 4 is a detail view of the plug.

This invention relates to a new and useful improvement in attachments to posts for handle-bars or seats of bicycles; and it consists in the construction, arrangement, and combination of the several parts, all as will hereinafter be described, and afterward pointed out in the claims.

The object of my invention is to provide an attachment for the posts of handle-bars or seats of bicycles or similar vehicles which will absorb the shock or jar occasioned when the vehicle is being ridden over rough surfaces, one which is simple and compact, and which may be cheaply manufactured.

In the drawings, A indicates the handle-bar or the T-head to which the seat is adapted to be fastened, and B the post.

C indicates a sleeve, into the upper end of which is slidably fitted the post B. In the lower end of this sleeve is threaded a plug *c*, having a central opening through which a bolt D freely passes. The inner or threaded end of the bolt engages a threaded opening in the lower end of the post B, while the opposite end of the bolt is provided with a flattened head *d* and squared shank *d'*, which head is adapted, should the spring be broken, to impinge against the lower face of the plug *c* and draw the post down into the sleeve to establish a firm unyielding connection between the post and sleeve.

E indicates a spring interposed between the lower end of the post B and plug *c*, which spring prevents the vibrations from the sleeve, which is firmly secured in the steering-head of the bicycle if the device is used in con-

nection with the handle-bar, or in the frame if used in connection with the seat-post, from being communicated to the rider. To prevent the post turning and also limit its vertical movement in the sleeve, I form one or more slots in the sleeve, through which pass pins or projections on the post. In the drawings I have shown a bolt *b*, passing through a smooth opening in the post, which is of slightly larger diameter than said bolt, and upon which bolt are mounted squared nuts *b'*, fitting in the slots in the sleeve. By screwing up the bolt its head impinges against one of the nuts, forcing said nut against the post, while the nut on the end of the bolt is drawn tightly against the post. This action tends to hold the bolt firmly in place. It is obvious that the side walls of the slots in which the nuts work will prevent said nuts from turning on the bolt. The tension of the spring E may be adjusted by screwing the plug *c* farther in, or near the lower end of the sleeve, and to afford ready means for so turning said plug I preferably groove its lower face, as shown in Fig. 4, with which groove a screw-driver may cooperate.

I am aware that minor changes in the construction, arrangement, and combination of the several parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination with the post of a handle-bar, or seat, of a sleeve into which said post is slidably fitted, a slot-and-pin connection between the upper ends of the post and sleeve, a plug threaded into the lower end of the sleeve, a spring interposed between the plug and lower end of the post, and a bolt passing freely through said plug and threaded into the lower end of the post, the head of said bolt impinging against the under side of the plug; substantially as described.

2. The combination with the post of a handle-bar, or seat, of a slotted sleeve into which said post is slidably fitted, a bolt which passes through said post, squared nuts on said bolt, which nuts fit into the sleeve-slots, a plug threaded into the lower end of the

sleeve, a spring interposed between the plug
and lower end of the post, and a bolt passing
freely through said plug and threaded into
the lower end of the post, the head of said
5 bolt impinging against the under side of the
plug; substantially as described.

In testimony whereof I hereunto affix my

signature, in presence of two witnesses, this
31st day of October, 1896.

CLARENCE WILLIS BRENIZER.

Witnesses:

HUGH K. WAGNER,
F. R. CORNWALL.