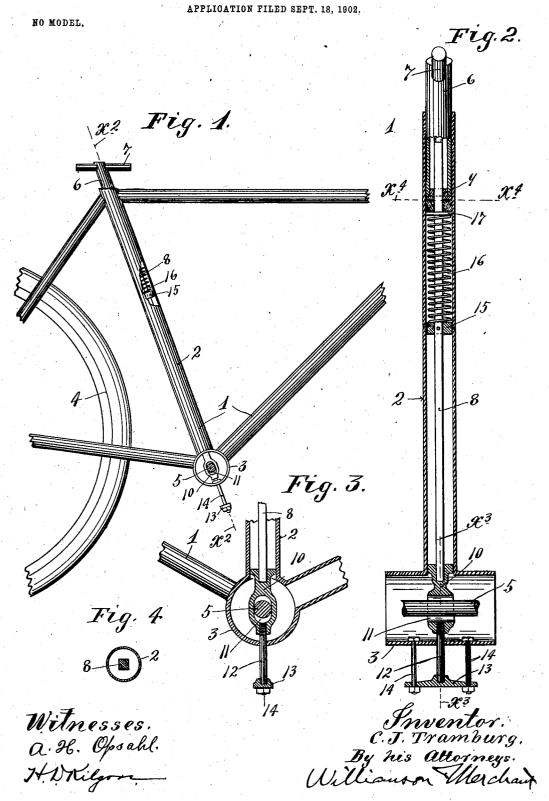
## C. J. TRAMBURG. SEAT SUPPORT FOR BICYCLES.



## UNITED STATES PATENT OFFICE.

CHARLES J. TRAMBURG, OF MINNEAPOLIS, MINNESOTA.

## SEAT-SUPPORT FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 724,630, dated April 7, 1903.

Application filed September 18, 1902. Serial No. 123,854. (No model.)

To all whom it may concern:

Be it known that I, Charles J. Tramburg, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Seat-Supports for Bicycles; 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.

My invention has for its object to provide certain improvements in bicycle-frames.

To the above end the invention consists of the novel devices and combinations of devices hereinafter described, and defined in the claims.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 is a view in side elevation, showing a portion of a bicycle-frame and a portion of one of the bicycle-wheels and illustrates my invention as applied to the said frame. Fig. 2 is a transverse section taken approximately on the line  $x^2$   $x^2$  of Fig. 1. Fig. 3 is a vertical section on the line  $x^3$   $x^3$  of Fig. 2, and Fig. 4 is a transverse section on the line  $x^4$   $x^4$  of Fig. 2.

The numeral 1 indicates an ordinary bicycle-frame, having, as is usual, the upright seat-post 2 and crank-shaft hanger or sleeve 3.

The numeral 4 indicates a portion of the rear wheel of the machine, and the numeral 5 indicates a portion of the pedal crank-shaft, the bearings for which are not shown, but would be supported by the crank-shaft hanger or sleeve 3 in the ordinary way.

The seat-post is formed in sections. The lower section of the seat-post is anchored to the crank-shaft hanger, and the upper seat-post section is mounted for vertical movements on the lower section, a spring being placed between the said two sections, so that the upper post-section is spring-mounted for movement on the lower section.

The numeral 6 indicates the upper section of the seat-post, which loosely fits and telescopes within the upper end of the frametube 2 and is provided with an ordinary head 7, to which the seat is attached in the ordinary head 1.

postis preferably in the form of a square rod, which works through a plug 9 in the lower end of the post-section 6. The post-section 55 6 is thus free to move vertically on the rod 8, but is held against rotation with respect thereto. At its lower end the rod or post-section 8 rests in a squared seat of the yoke 10, which is provided with a vertically-elon-60 gated slot 11, quite closely fitting the shaft 5 and preventing the said parts 6, 8, and 10 from rotating. From the yoke 10 depends a short rod or stem 12, which rests in a suitable socket of a supporting bar or head 13, 65 which in turn is anchored to the crank-shaft hanger by a pair of nutted bolts 14 or similar devices.

Within the frame-tube 2 is a collar 15, pinned or otherwise rigidly secured to the rod 70 or lower post-section 8. A seat-supporting spring 16, which surrounds the rod 8, rests upon the said collar 15. As shown, a loose washer 17 is placed on the rod 8 between the upper end of the spring 16 and the plug 9 75 and the lower end of the upper post-section 6.

The weight of the rider, which is of course thrown upon the seat-post 6, forces said seat-post downward and compresses the spring 16 80 against the collar 15. Thus a yielding seat-support is provided, and the weight of the rider is transmitted through said rod 8, yoke 10, stem 12, head 13, and bolts 14 to the crank-shaft hanger 3.

It will of course be understood that the invention above described is capable of considerable modification without departing from the spirit of my invention.

What I claim, and desire to secure by Let- 90 ters Patent of the United States, is as follows:

1. The combination with a bicycle-frame having an upright tube, of a two-part seat-post, the lower section of which passes down through said tube and is supported from and 95 connected to the crank-shaft hanger below the crank-shaft, and the upper section of which is telescopically movable within said tube, and a spring compressed between said post-sections for yieldingly supporting the 100 seat, substantially as described.

tube 2 and is provided with an ordinary head 7, to which the seat is attached in the ordinary way. The lower section 8 of the seat- hanger or sleeve 3, of the seat-post sections 6

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telescoping into the upper end of said tube 2, the rod or section 8 having the collar 15 and fitting an angular seat in the lower end of said section 6, the spring 16 compressed be-5 tween said collar 15 and the lower end of said post-sections 6, the yoke 10 slotted at 11 to pass the crank-shaft, the stem 12 depending from said yoke 10, and the bar or head 13 anchored to said crank-shaft hanger 3 by

nutted bolts 14 and having a socket receiving to the lower end of said stem 12, substantially as described.

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

CHARLES J. TRAMBURG.

Witnesses:
JAS. F. WILLIAMSON,
E. H. KELEHER.