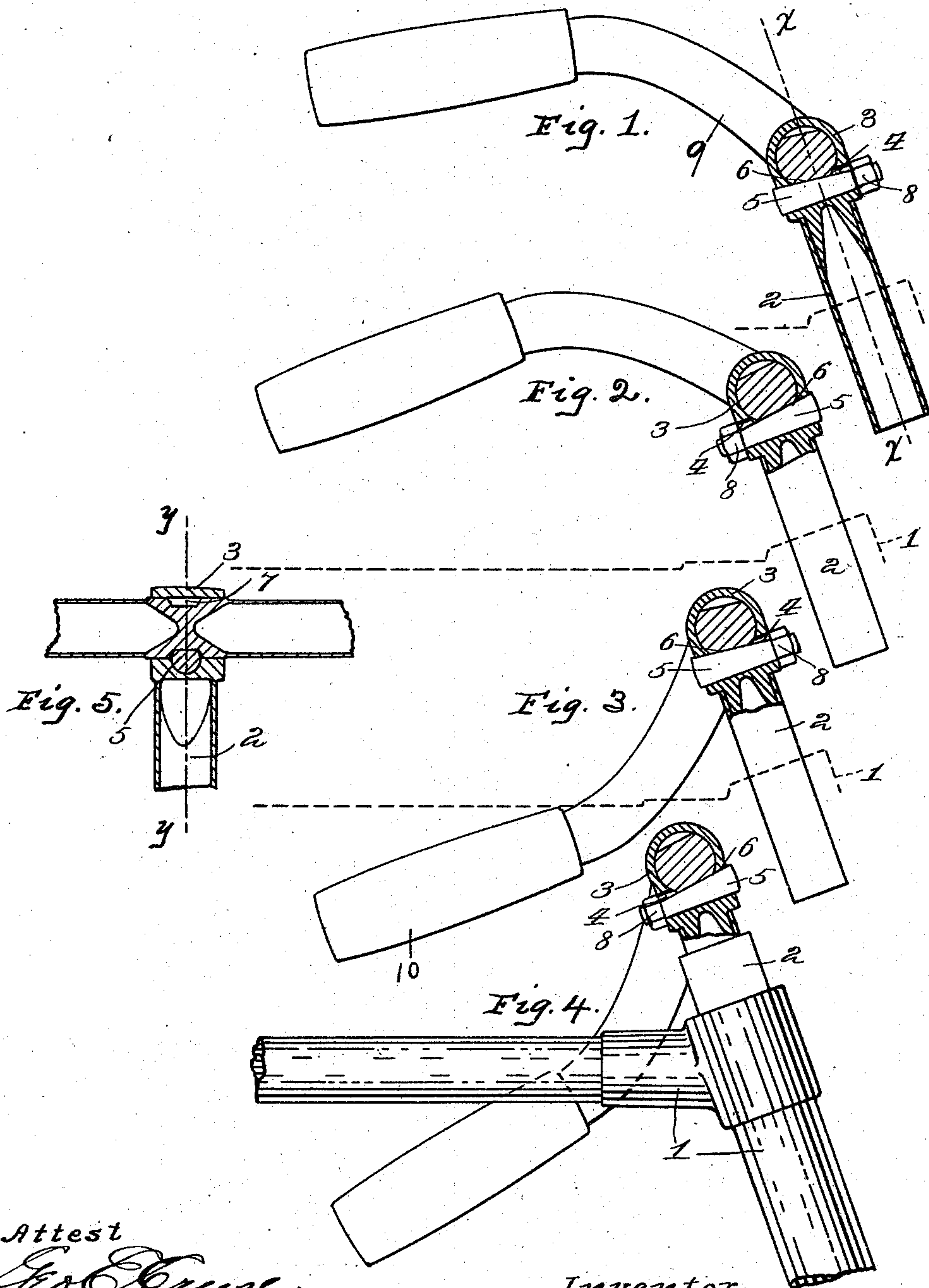


(No Model.)

J. D. RIGGS.
BICYCLE.

No. 571,397.

Patented Nov. 17, 1896.



Attest
Geo. C. Cruise.
James White.

Inventor
Jno. D. Riggs.

UNITED STATES PATENT OFFICE.

JOHN D. RIGGS, OF HIAWATHA, KANSAS.

BICYCLE.

SPECIFICATION forming part of Letters Patent No. 571,397, dated November 17, 1896.

Application filed June 24, 1895. Serial No. 553,798. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. RIGGS, a citizen of the United States, residing at Hiawatha, in the county of Brown and State of Kansas, have invented certain new and useful Improvements in Bicycles, of which the following is a specification.

My invention relates more particularly to the adjustment of the handle-bars in the stem in addition to the adjustment of the stem in the head; and it consists in forming suitable recesses in the handle-bar where it passes through the socket formed for it in the stem and fitting a key or pin in the recess. The pin is inserted through the socket from either side, according to the adjustment required, as hereinafter set forth.

In order that my invention may be fully understood, I will proceed to describe the same with reference to the accompanying drawings, in which—

Figure 1 is a detail view taken on the line *y y*, Fig. 5, partly in section, and showing one adjustment of the handle-bar. Figs. 2, 3, and 4 are views similar to Fig. 1 and showing various adjustments of the handle-bar; and Fig. 5 is a detail sectional view taken on the line *x x*, Fig. 1.

Referring to the drawings, 1 represents a portion of the head and frame of a bicycle; 2, the handle-bar stem; 9, the handle-bar proper, and 3 the socket formed at the top of the stem through which the handle-bar is passed. The socket is formed with a cylindrical opening 4, through which a key or pin is passed, and the opening 4 in the socket partially intersects the larger opening through which the handle-bar 9 passes. The pin or key 5 is formed cylindrical over most of its surface to snugly fit the opening 4 in the socket, and on one side it is made tapering and to fit the bottom of the recesses 7, formed in the handle-bar 9, and it has a smaller threaded end for the nut 8. The tapering side 6 of the pin 5 is preferably flat to fit against the flat-bottomed recesses 7, but may be slightly rounded and fit a rounded bottom of the recesses 7. The recesses 7 are formed, preferably, in cross-section, as shown in Fig. 5, so that when the key or pin is placed in them and tightened by any means, as

shown at 8, there will be no movement of the handle-bar in the socket.

10 represents the grips or handles.

The handle-bar 9 is cylindrical at the central portion when it fits into the socket 3, has two recesses 7 cut into this cylindrical portion, as shown, and has end portions to either side of socket 3, slightly smaller in diameter and preferably tapering toward the ends and bent in a compound curve, so that the center line of the grips lies in a plane below or above the socket 3.

In operation the handle-bar is turned to the desired position and the key or pin 5 inserted through the opening 4 and one of the recesses 7 and securely drawn into place by the nut 8 on threaded end.

In the drawings I have shown the handle-bar formed with two recesses 7 on opposite sides. Other recesses might be made, but unless the recesses all be made so small as to be of little use the additional recesses would be in such a position as to be useless. The four positions shown are altered in the following manner: In Fig. 1 the taper-pin is inserted from the back, which, with the curve of the handle-bar up, gives the highest position. Removing the taper pin or key and inserting it from the front side of the socket gives a lower position of the grips 10. Removing the taper pin or key and revolving the handle-bar in the socket through about half a revolution and then revolving the stem in the head through a half-revolution and inserting the taper pin or key from the back the position shown in Fig. 3 is attained. By removing the key and inserting it from the front the position shown in Fig. 4 is attained. If more or less adjustment is wanted between positions shown in Figs. 1 and 2, a taper pin or key, with more or less taper, is used. If more or less adjustment is wanted between positions, as shown in Fig. 1, raised and, as shown in Fig. 3, drop, more or less bend is given to the handle-bar.

It will be seen that by selecting a suitable curve for the handle-bar and by providing one or more suitable taper-keys quite a range of positions may be attained.

The stem 2 has vertical adjustment in the head in usual manner.

I claim—

1. The combination of a supporting-stem which is adapted to be turned and having a socket, a handle-bar curved in two planes
5 adapted to be passed through the stem and loosely fitting therein, an opening formed in the socket and recesses formed in the handle-bar, and a tapering pin adapted to enter the opening on either side of the socket and to fit
10 in the recesses with its tapering side bearing against the handle-bar so that by inserting the pin through either side of the socket into the opening and turning the stem the handle-bar may be adjusted to different positions,
15 substantially as shown and described.

2. The combination with the handle-bar of a bicycle, the stem for supporting it, a socket

formed on said stem and having the handle-bar loosely fitting therein, a suitable opening formed in the socket and suitable recesses 20 formed in the handle-bar at that point where it passes through the socket, and a removable key or pin formed with a tapering side adapted to be inserted in said opening and one of the recesses through either end of the said 25 opening in the socket with the tapering side bearing against the handle-bar whereby the position of the handle-bar may be changed, substantially as shown and described.

JOHN D. RIGGS.

Witnesses:

H. J. ATEN,
SOPHIA MEYER.