

No. 666,187.

Patented Jan. 15, 1901.

J. S. DIKEMAN.
BICYCLE FRAME.

(Application filed Mar. 7, 1900.)

(No Model.)

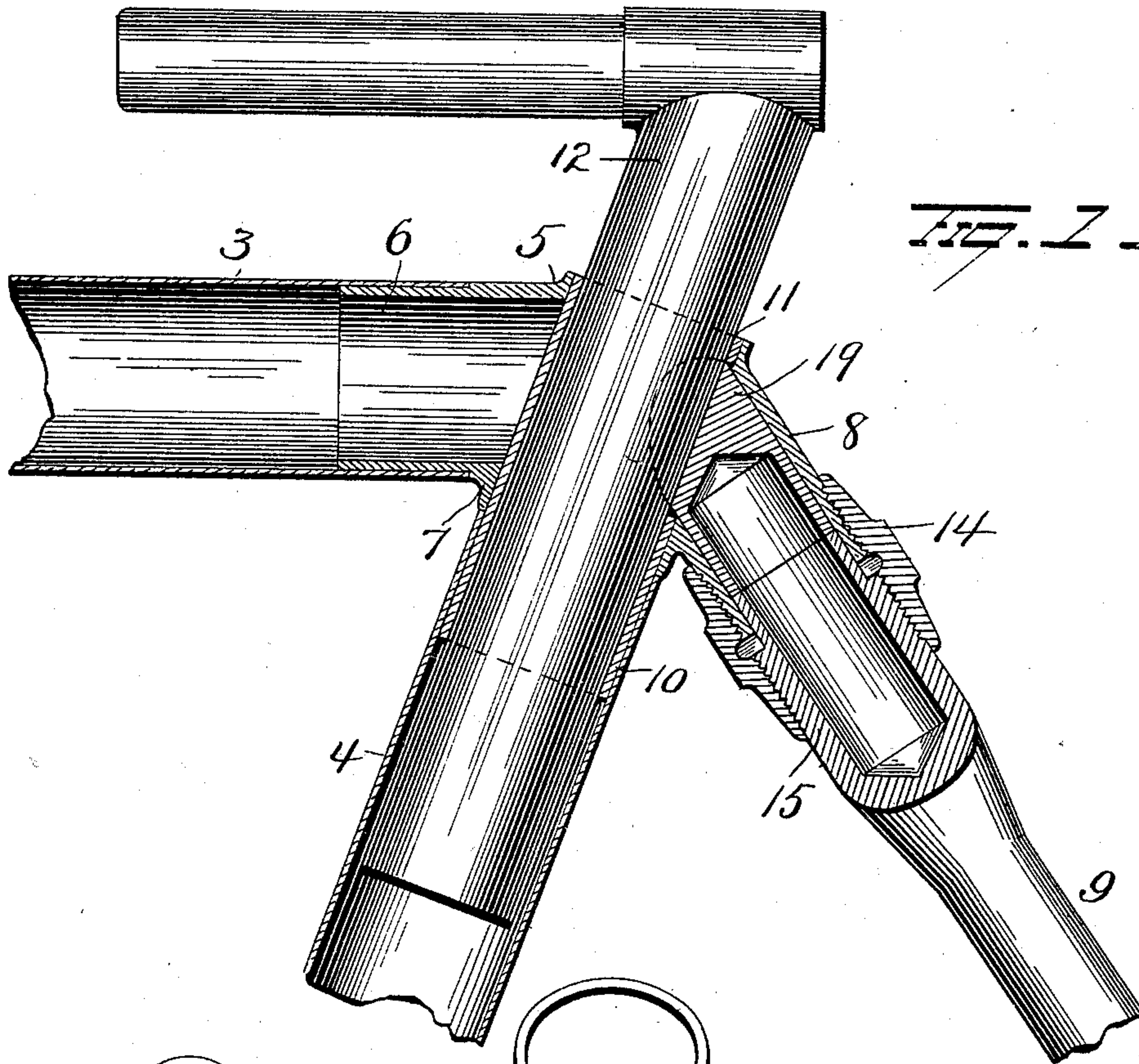


Fig. 1.

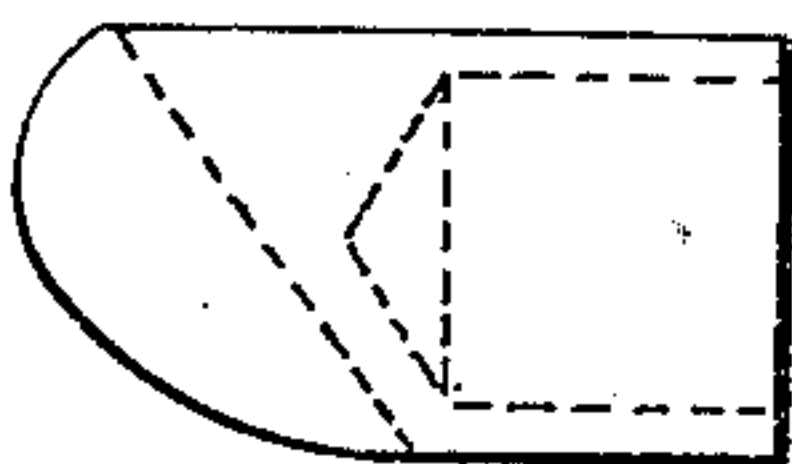
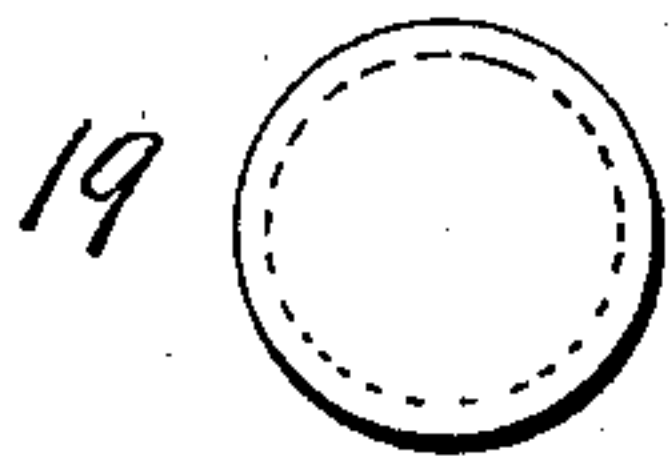


Fig. 2.

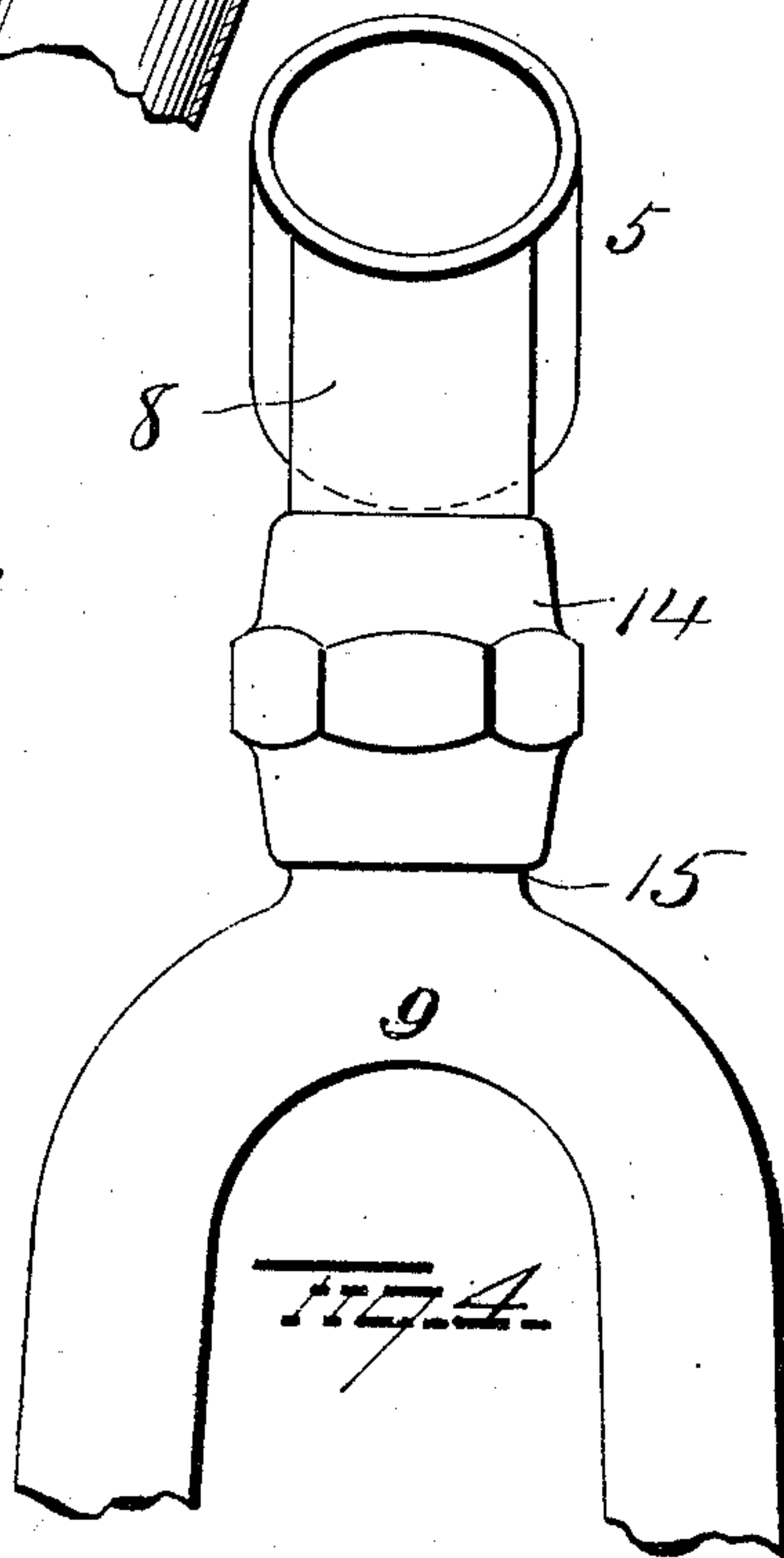


Fig. 4.

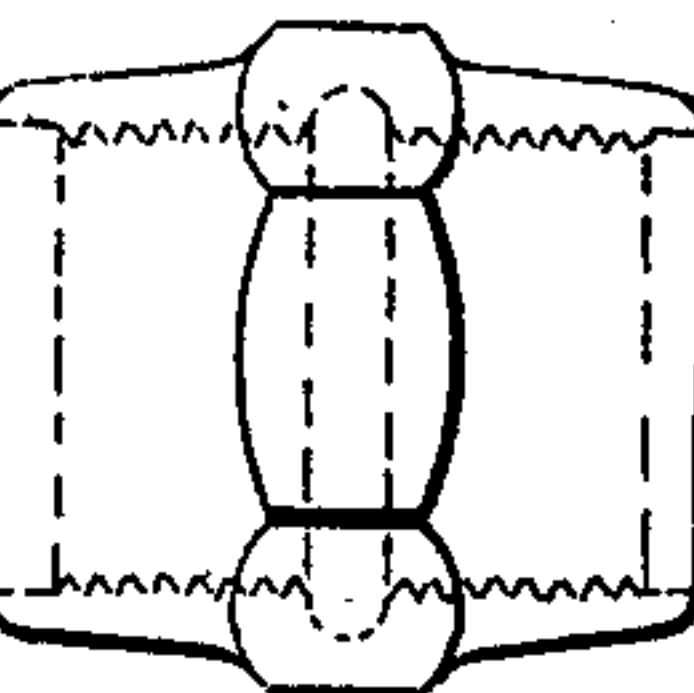


Fig. 5.

WITNESSES
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UNITED STATES PATENT OFFICE.

JOSEPH S. DIKEMAN, OF TORRINGTON, CONNECTICUT, ASSIGNOR OF ONE-HALF TO CHARLES S. DIKEMAN, OF SAME PLACE.

BICYCLE-FRAME.

SPECIFICATION forming part of Letters Patent No. 666,187, dated January 15, 1901.

Application filed March 7, 1900. Serial No. 7,660. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH S. DIKEMAN, of Torrington, in the county of Litchfield and State of Connecticut, have invented certain
5 new and useful Improvements in Bicycle-Frames; 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
10 make and use the same.

My invention relates to an improvement in bicycles; and it consists in a connection for securing the rear fork in place and also locking the seat-post in proper position.

15 My invention further consists in the parts and combinations of parts, as will be more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view, partly in section, showing the coupling and seat-post lock. Fig. 2 is a view showing the clamping-block. Fig. 3 is a view in elevation of the coupling-sleeve, and Fig. 4
20 is a view showing the upper end of the rear fork.

25 3 represents the backbone or top tube, and 4 the seat-supporting tube united by forging 5, to which the tubes are preferably brazed.

The forging 5, which unites the tubes 3 and 4, is provided with three projections 6, 7, and
30 8, so arranged as to aline with the tubes 3 and 4 and the rear fork 9 and is brazed or otherwise secured to the tubes 3 and 4 and is detachably connected to the fork 9, as will hereinafter be explained. I prefer to secure

35 a reinforcing-piece 10 to the forging 5 to enter the tube 4; but this is not essential, as the tube 4 can be brazed direct to (and to the outside or inside of) the projection 7. The portion 11 of this forging or the interior of
40 the reinforcing-piece 10, which constitutes the seat-post socket, is machined internally to make a snug fit for the seat-post 12, while the rear projection 8 of the forging is externally threaded to receive or engage one end
45 of the female-threaded sleeve 14. The opposite end of this sleeve 14 is provided with threads to engage the crown 15 of the rear fork 9, the threads in one end of the sleeve 14 being right hand and the threads in the

50 other end left hand, so that by turning the sleeve in one direction the parts connected

hereby are drawn together and by turning it in the other direction the parts are separated or moved away from each other.

The lower ends of the tubes 9, constituting
55 the members of the rear fork, are connected in the usual manner to the rear stays or rear sections of the reach. (Not shown.)

The rear projection 8 of the forging 5 is machined internally to snugly receive the
60 seat-post-clamping block 19. This block 19, which is preferably made hollow in order to reduce the weight, is closed at one end, and this closed end is grooved at an angle, so as to bear solidly against the rear face of the
65 seat-post 12 and also at its sides, and thus bind the post between the front of the forging 5 or the reinforcing part 10 inside said forging and the block 19. The upper end of the crown 15 of rear fork 9 is slightly reduced
70 in diameter, so as to enter within the projection 8 and bear against the rear end of block 19. Hence it will be seen that by turning the sleeve in one direction the crown 15 is moved away from the projection 8, thus loosening
75 the block 19 and permitting the seat-post 12 to be adjusted or removed, and by turning it in the opposite direction the parts are locked against movement. It will also be seen that the rear fork can be disconnected
80 entirely from the forging 5, and the rear stays or reaches from the bottom bracket, thus permitting the machine to be packed in a small compass for exportation.

The sleeve 14 is preferably provided with
85 an angular surface, as shown, to engage a wrench or spanner, or it may be milled or roughened so as to permit it to be turned by hand.

It is evident that many slight changes might
90 be resorted to in the relative arrangement of parts herein shown and described without departing from the spirit and scope of my invention. Hence I would have it understood that I do not wish to limit myself to the exact construction herein shown and described;
95 but,

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

1. The combination with the front section
100 of a bicycle-frame having a seat-post socket

and a projection in rear of the socket, of the rear fork, a female threaded sleeve connecting said projection and the rear fork and means actuated by the rotation of said sleeve 5 for clamping the seat-post in the socket.

2. The combination with the front section of a bicycle-frame having a seat-post socket, and a hollow projection in rear of said socket, of a rear fork, a clamping-block located within 10 said hollow projection and resting in contact with the upper end of said rear fork, and a screw-threaded sleeve mounted on the rear fork and the hollow projection and adapted to force the end of the rear fork against the 15 clamping-block.

3. The combination with a seat-post tube and a rear fork, of a clamping-block carried by the tube and resting against the upper end of the rear fork, and means for forcing the 20 latter against the block, for clamping the seat-post within the tube.

4. The combination with a seat-post socket,

and a seat-post-clamping block therein, of a rear fork the upper end of which is adapted to bear against said block, and means connecting the socket and fork for drawing the 25 latter against the block.

5. The combination with a seat-post socket having a rear projection screw-threaded externally, and a seat-post-clamping block located within said projection, of a rear fork 30 the end of which projects within the projecting portion of the seat-post socket and engages the block, and a screw-sleeve connecting the upper end of the rear fork to the 35 frame and for forcing the end of the fork against the clamping-block.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOSEPH S. DIKEMAN.

Witnesses:

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CHAS. L. MCNEIL.