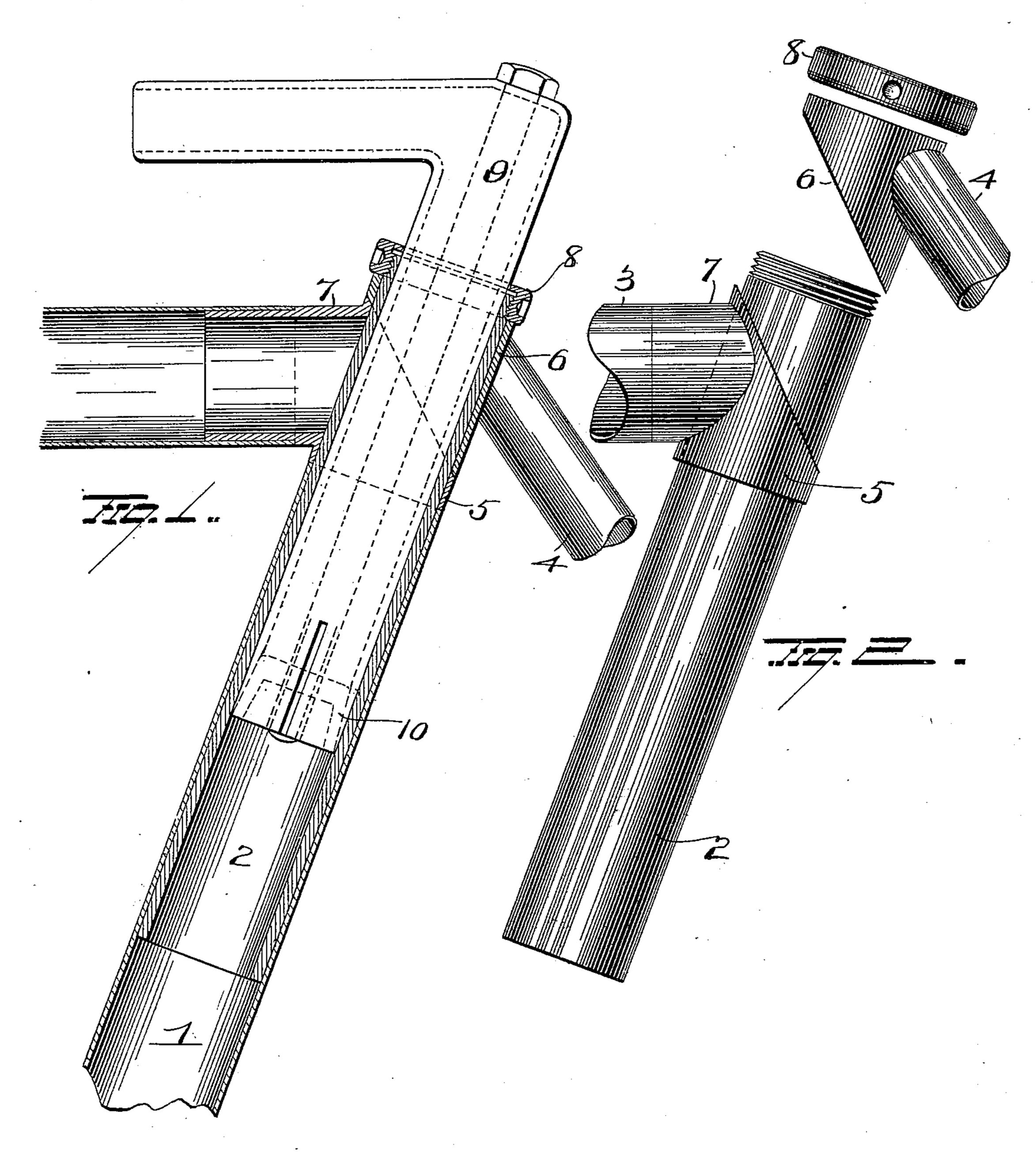
No. 689,467.

Patented Dec. 24, 1901.

## J. S. DIKEMAN. BICYCLE FRAME.

(Application filed June 22, 1901.)

(No Model.)



G. F. Downing.

J. Dikeman By H. a. Seymour Attorney

## United States Patent Office.

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

## BICYCLE-FRAME.

SPECIFICATION forming part of Letters Patent No. 689,467, dated December 24, 1901.

Application filed June 22, 1901. Serial No 65,655. (No model)

To all whom it may concern:

Be it known that I, Joseph S. Dikeman, a resident of Torrington, in the county of Litch-field and State of Connecticut, have invented certain 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 make and use the same.

My invention relates to an improvement in bicycle-frames, the object of the invention being to provide an improved frame which will permit the ready separation of the rear

15 fork from the main frame.

A further object is to provide improved means for securing the rear fork to the main frame which will be strong and durable and neat in appearance.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view, partly in section, illustrating my improvements; and Fig. 2 is a view illustrating

the several parts separated.

1 represents the main upright tube of the 30 frame, in the upper end of which a reinforcing-tube 2 is brazed and projects upward out of the same. To the upper end of the reinforcing-tube 2 the upper tube 3 of the frame and the rear-fork tube 4 are secured by sleeves 35 or collars 5 and 6, as will now be explained. These sleeves or collars 5 and 6 are formed from one tube cut diagonally, as shown, the lower sleeve 5 brazed onto tube 2 and made on one side with a teat 7, milled to receive the 40 upper tube 3 of the frame and in which it is brazed. The other sleeve 6 is brazed to the rear-fork tube 4 and is loosely disposed on tube 2; the upper end of which latter is screwthreaded to receive a clamping ring or collar 45 8, having sockets therein for the reception of a spanner-wrench to screw the same home and securely clamp the sleeve 6 on tube 2, and owing to the diagonal disposition of the meeting ends of sleeves 5 and 6 rotary movement 50 is impossible and the upper sleeve 6 is securely clamped onto tube 2. This ring 8 may, however, be made angular to receive an ordinary wrench, if desired.

The seat-post 9 is shown secured in tube 2 by an expansion-plug 10; but other means 55 may be employed which will permit of the

easy removal of the seat-post tube.

My improvements are preferably employed in connection with means whereby the lower portion of the rear frame can be separated 60 from the crank-hanger, so as to permit of the separation of the front and rear sections of the frame. To separate the rear fork, the seat-post tube is removed and clamping-ring 8 unscrewed and taken off, when the sleeve 65 6 can be easily lifted off tube 2.

Various slight changes might be resorted to in the general form and arrangement of the several parts described without departing from the spirit and scope of my invention, 70 and hence I would have it understood that I do not wish to limit myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of 75 my invention.

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

Patent, is—

1. In a bicycle-frame, the combination with 80 the main upright, of two sleeves disposed in line with each other, one of said sleeves secured to the top bar of the frame and said upright and the other sleeve removable from said upright and secured to the rear fork or 85 stay.

2. In a bicycle-frame, the combination with the central upright, and a reinforcing-tube secured in and projecting above the upright, of a sleeve secured to said reinforcing-tube 90 and the top bar of the frame, and a sleeve removably mounted on the reinforcing-tube and secured to the rear fork or stay of the frame.

3. In a bicycle-frame, the combination with 95 the central upright, and a reinforcing-tube secured in and projecting above the same, of a sleeve having a beveled upper end, secured to the reinforcing-tube and to the front portion of the frame and a sleeve having a lower 100 beveled end, removably disposed upon the reinforcing-tube and upon said first-men-

tioned sleeve, said removable sleeve secured

to the rear portion of the frame.

4. In a bicycle-frame, the combination with a main upright tube, of a reinforcing-tube secured in the upper end of said upright, and a rear fork removably secured to said reinforcing-tube.

5. In a bicycle-frame, the combination with a main upright tube, of a reinforcing-tube se10 cured in said upright and projecting out of the same and screw-threaded at its upper end, a sleeve secured on said reinforcing-tube and having an inclined upper edge, an upper tube secured to said sleeve, a rear fork, a

sleeve secured to said fork, disposed on the reinforcing-tube and having an inclined lower edge to rest on the inclined upper edge of the other sleeve, and a clamping-ring screwed onto the end of the reinforcing-tube and down against the upper sleeve.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

JOSEPH S. DIKEMAN.

Witnesses:

BERNARD E. HIGGINS; HAROLD A. MARVIN.