

No. 670,414.

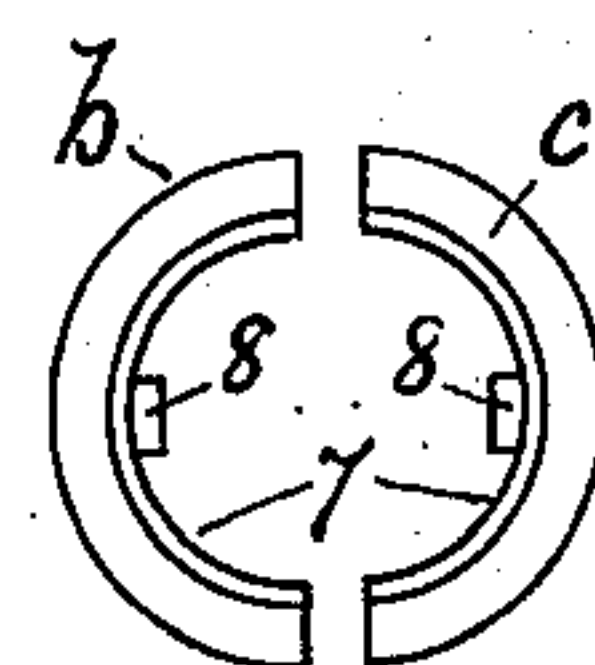
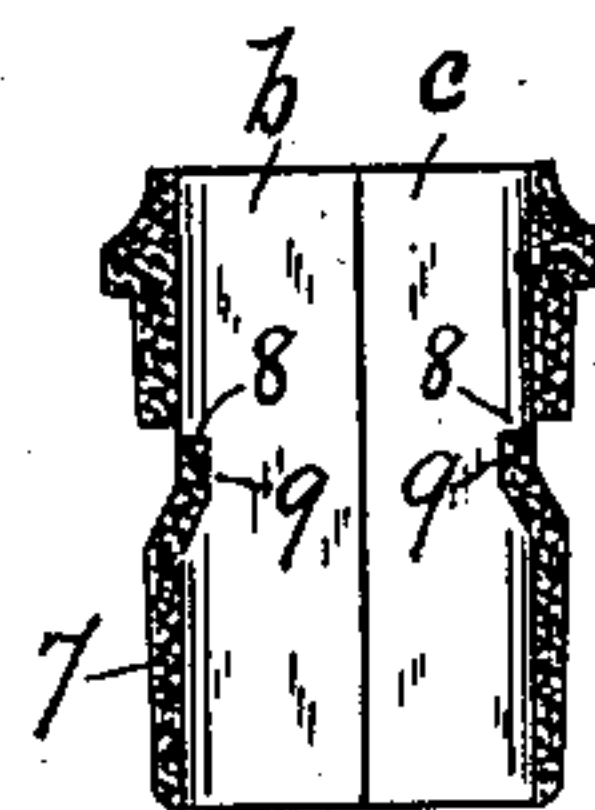
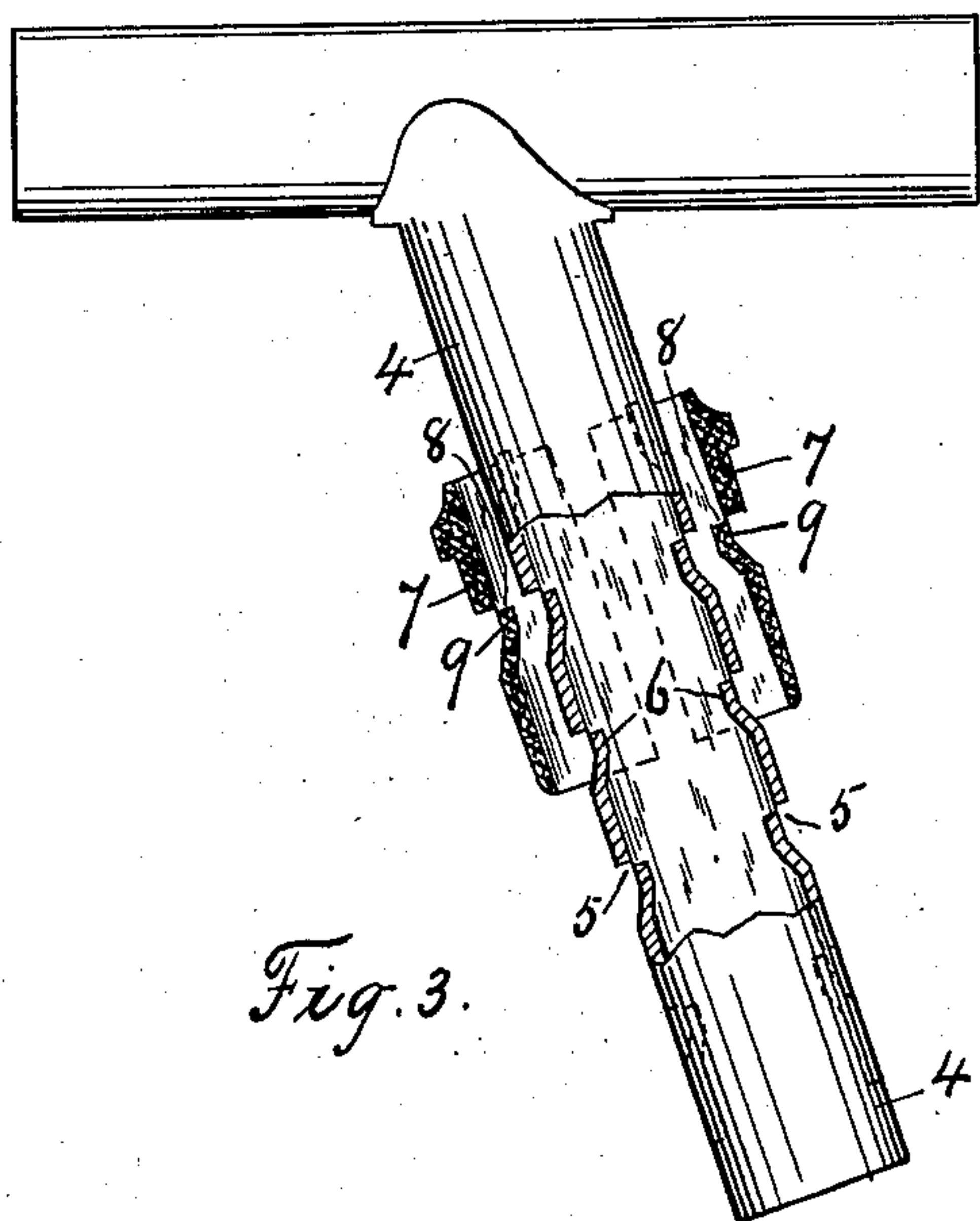
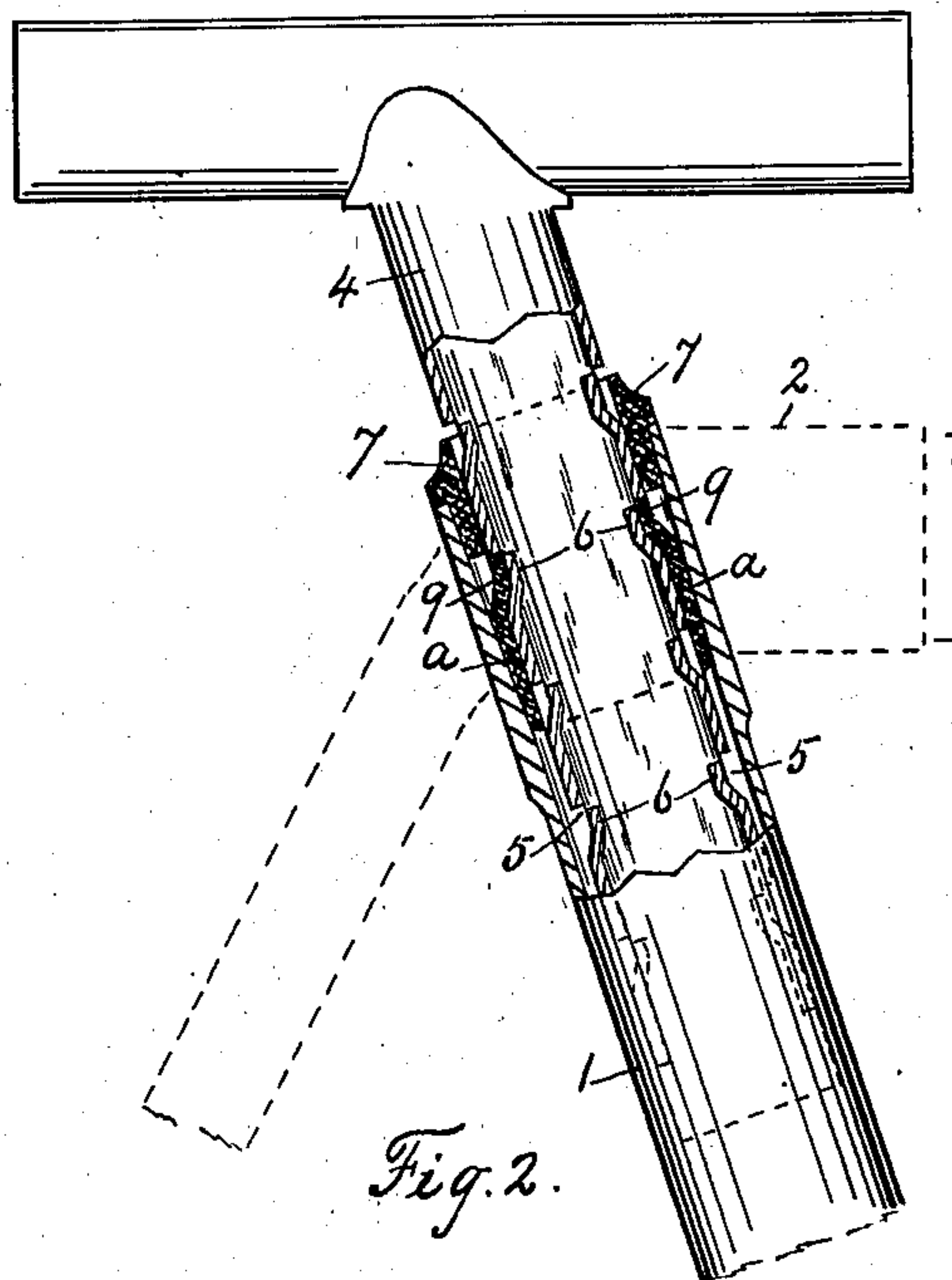
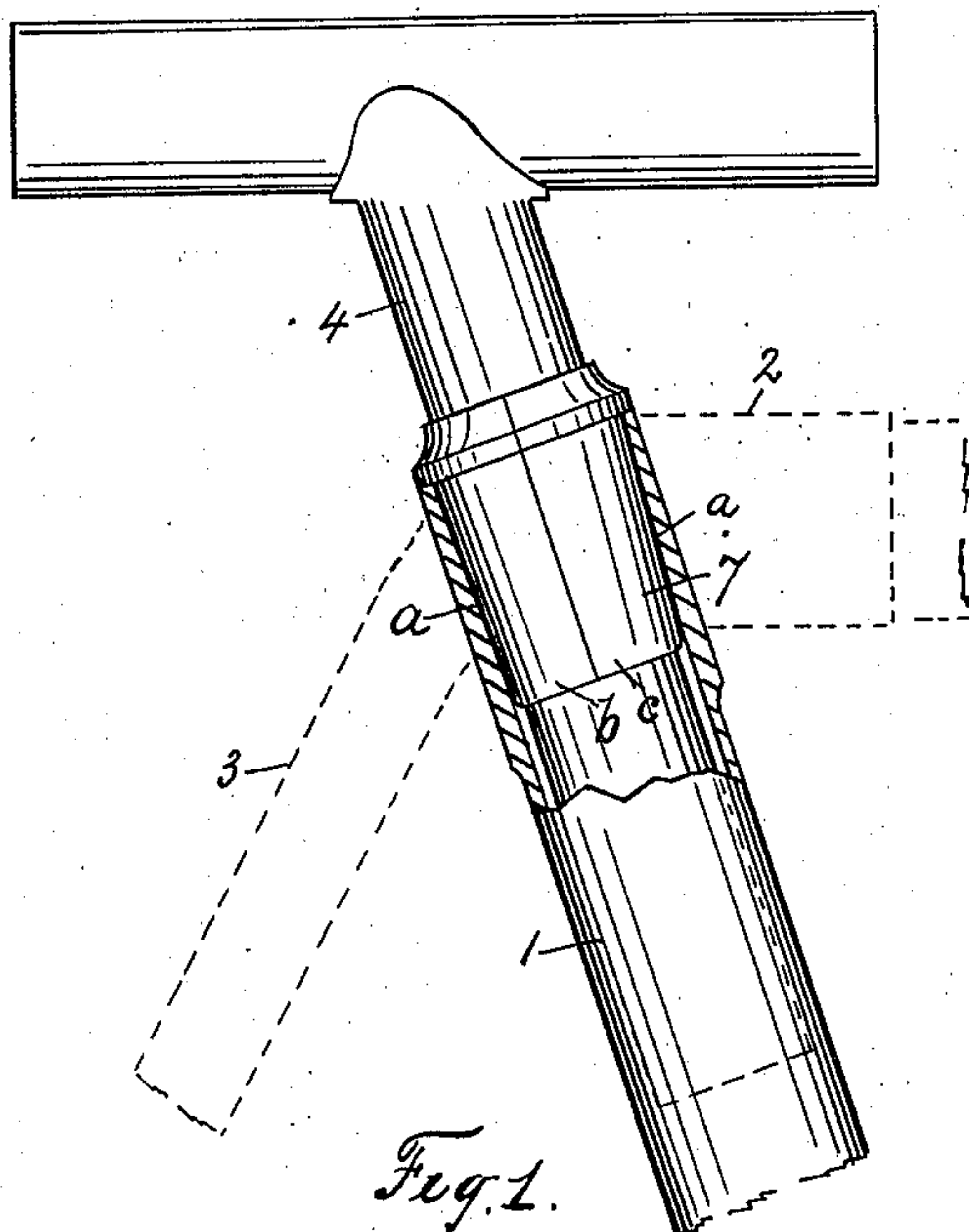
Patented Mar. 19, 1901.

J. ENGLAND & M. HUTCHINSON.

SEAT POST AND CLAMP.

(Application filed Aug. 4, 1900.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

JOHN ENGLAND AND MOSES HUTCHINSON, OF LONDON, CANADA.

## SEAT-POST AND CLAMP.

SPECIFICATION forming part of Letters Patent No. 670,414, dated March 19, 1901.

Application filed August 4, 1900. Serial No. 25,960. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN ENGLAND, a resident of London township, and MOSES HUTCHINSON, a resident of the city of London, in the county of Middlesex, in the Province of Ontario, Canada, subjects of the Queen of Great Britain, have invented a certain new and useful Seat-Post and Clamp, of which the following specification, taken in connection with the accompanying drawings, forms a full, clear, and exact description.

This invention relates to the construction of a device for firmly clamping and holding the seat-post at any desired elevation in a seat-post mast; and it consists in so constructing the seat-post and providing it with a tapered sleeve or clamp formed in sections whereby the seat-post may be adjusted at any desired elevation in the seat-post mast and by which said seat-post when properly adjusted is firmly clamped and held at said elevation and by which without the use of tools the seat-post may be readily and easily removed from or adjusted and clamped at any desired elevation in the seat-post mast, all of which will be hereinafter first fully set forth and described and then pointed out in the claims.

Reference is had to the accompanying drawings, wherein—

Figure 1 is a side elevation of the seat-post, tapered sleeve or clamp, and the adjacent portion of a bicycle-frame embodying our invention. In this view a portion of the seat-post mast is shown in section and the adjacent parts of the bicycle-frame in dotted lines. Fig. 2 is another view of same, showing a central sectional view of a portion of the seat-post and tapered sleeve or clamp. Fig. 3 is a detail side elevation of the seat-post, partly in section, and a central sectional view of the tapered sleeve or clamp, the seat-post and clamp being slightly separated in order to more clearly illustrate the construction of these parts. Fig. 4 is a detail central sectional view of the tapered sleeve or clamp; and Fig. 5 is a plan view of same, showing the sections of which the clamp is composed separated.

In the accompanying drawings the numeral 1 designates the seat-post mast, 2 the top bar, and 3 the backstays of a bicycle-

frame, the upper internal face of the seat-post mast 1 being tapered at *a*.

4 designates the seat-post, to the upper end of which the seat or saddle is secured. 55

5 5 designate two rows of shoulders formed in the seat-post 4, and these shoulders 5 are preferably formed in said seat-post by swaging or pressing inward a portion of the metal of which the seat-post is composed, thus leaving the inwardly-projecting tongues 6, as shown particularly in Fig. 3. 60

7 designates a tapered sleeve or clamp preferably formed in two segmental sections *b c*, each of which is provided with a stop 8, preferably formed by swaging or pressing inward a portion of the metal of which the sections of said clamp are composed, thus providing a tongue 9, the end of which forms the stop 8, as shown particularly in Figs. 3 and 4, and the upper internal face *a* of the seat-post mast 1 is formed tapering to correspond with the taper on the sleeve or clamp 7, in order that said sleeve may bear on a large area of the adjacent face of the seat-post mast, and thus provide a wide and strong support for the seat-post. 75

By engaging the two opposite stops 8 of the tapered sleeve or clamp 7 with two opposite shoulders 5 in the seat-post 4 and then inserting said tapered sleeve or clamp 7 and seat-post 4 in the seat-post mast 1 until they fit snug in the upper tapered end thereof the seat-post 4, to which the saddle or seat is attached, will be firmly clamped and secured in the seat-post mast. Again, by removing the seat-post 4 and tapered sleeve or clamp 7 from the seat-post mast 1 and adjusting the sections of the clamp 7 so that the stops 8 will engage with higher or lower shoulders 5 in the seat-post the latter will be at a corresponding higher or lower elevation, according to the direction the tapered sleeve or clamp is adjusted on the seat-post. By adjusting said tapered sleeve or clamp 7 upward on the seat-post the seat-post and saddle or seat will be at a lower elevation, and by adjusting said tapered sleeve or clamp 7 downward on the seat-post the latter, as well as the saddle or seat secured thereto, will be at a higher elevation. 80 85 90 95 100

The frictional contact of the tapered sleeve



or clamp 7 with the tapered upper end *a* of the seat-post mast will firmly hold it in place and prevent it from turning. At the same time, both surfaces being tapered, the seat-  
5 post may be readily and easily removed without the use of tools for repair or renewal or to adjust it at a different elevation. Again, by forming the tongues 6 in the seat-post so that the tongues 9 of the tapered sleeve or  
10 clamp will bear against them throughout their whole length a substantial support is given to said tongues 9, the upper ends of which form the stops 8.

Having thus described our invention, we  
15 claim—

1. A seat-post in the stem of which two series of shoulders are formed, in combination with a tapered sleeve or clamp formed in sep-

arate and independent sections, each provided with a stop, and a seat-post mast, substantially as and for the purpose set forth. 20

2. A seat-post, in the stem of which two series of shoulders are formed, and which is provided with two series of tongues, in combination with a tapered sleeve or clamp formed  
25 in separate and independent sections, each provided with a tongue and stop, and a seat-post mast tapered at the upper end, substantially as and for the purpose set forth.

In testimony whereof we have signed in the  
presence of the two undersigned witnesses. 30

JOHN ENGLAND.  
MOSES HUTCHINSON.

Witnesses:

P. J. EDMUNDS,  
M. BRAUND.