

(No Model.)

2 Sheets—Sheet 1.

C. J. GADD.  
BICYCLE.

No. 599,058.

Patented Feb. 15, 1898.

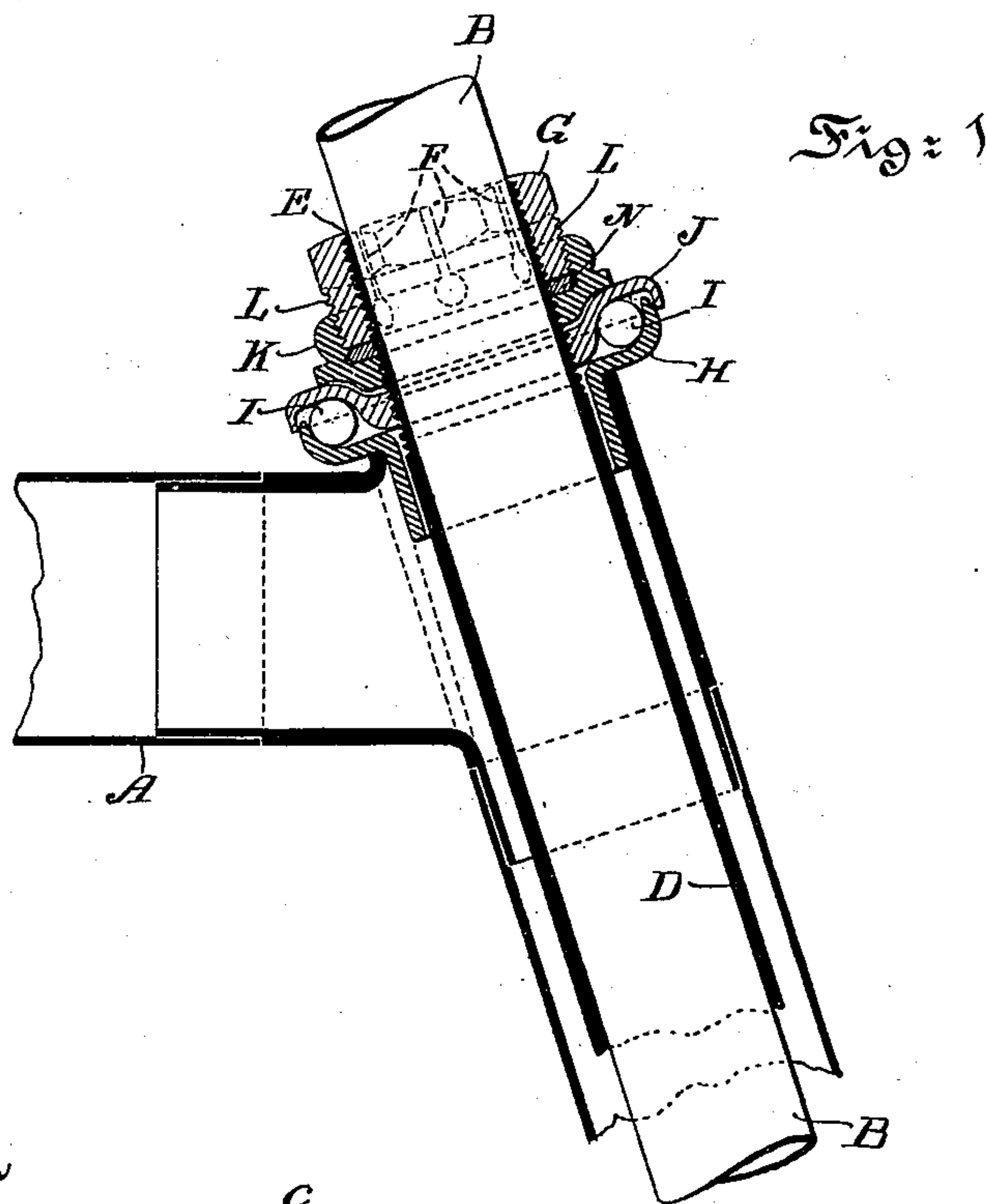
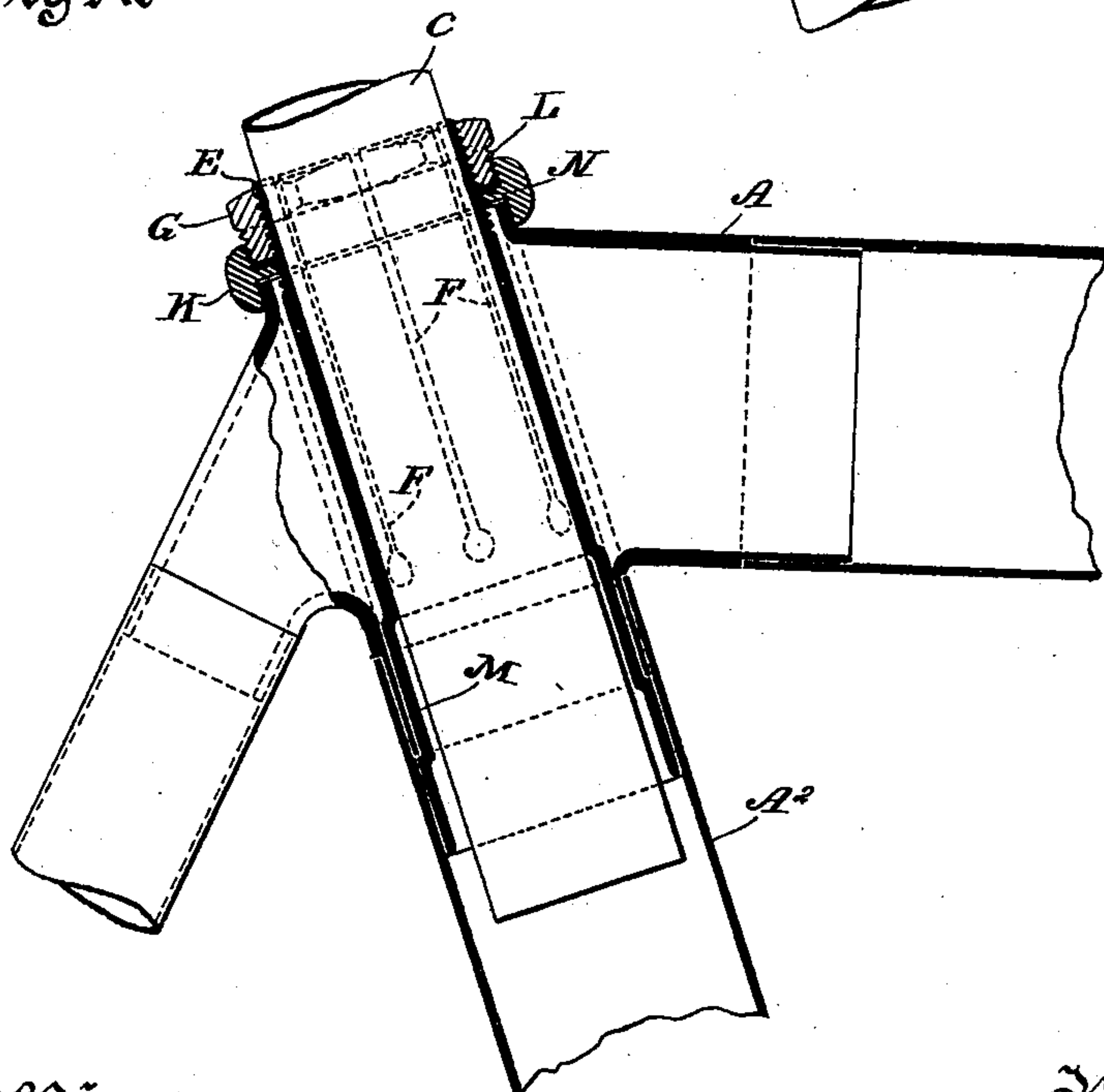


Fig: 2



Witnesses:  
W. A. Schaefer.  
J. L. Moister.

Inventor.  
Charles J. Gadd.

By his Attorney Chas A. Butler.

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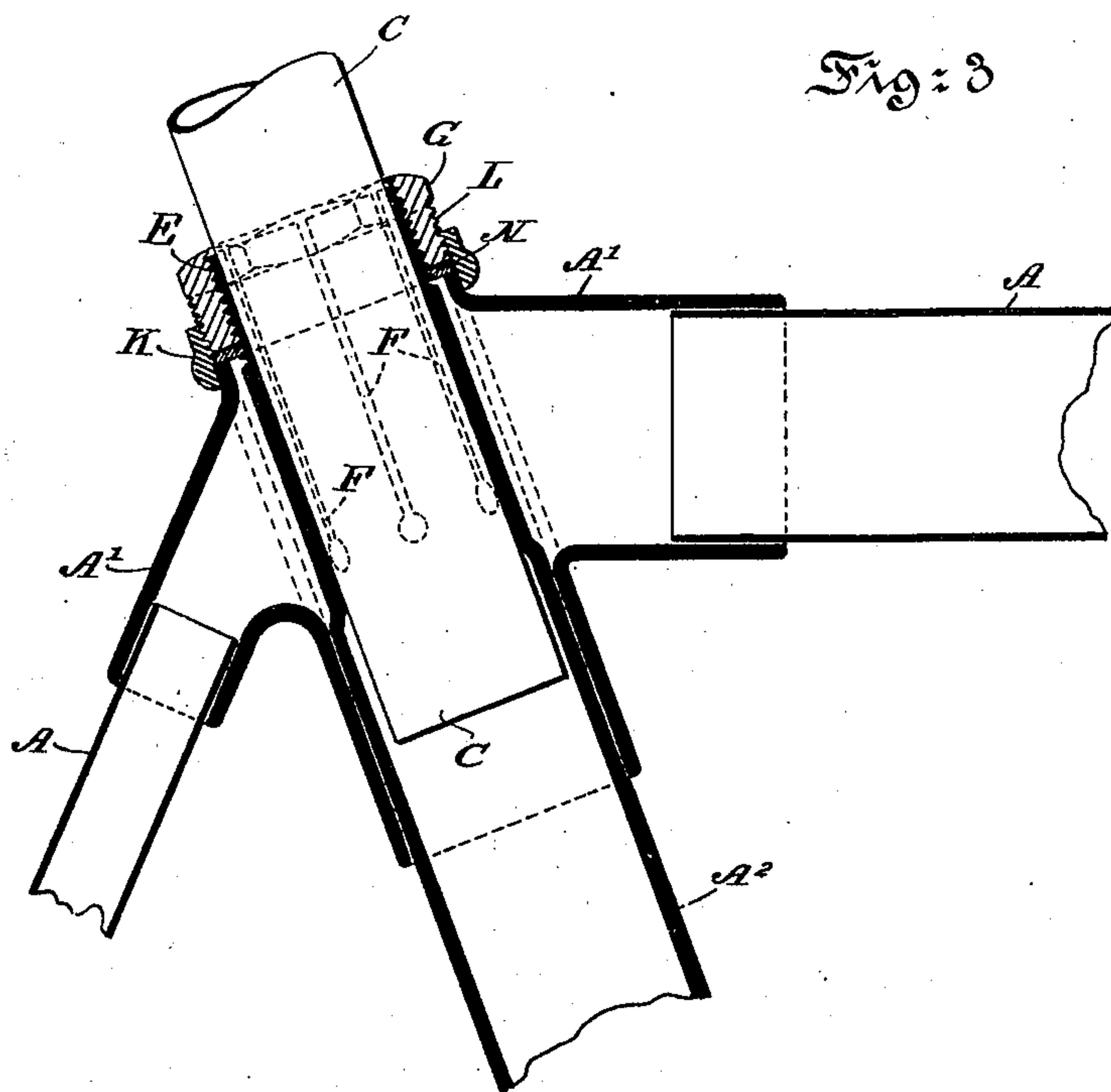
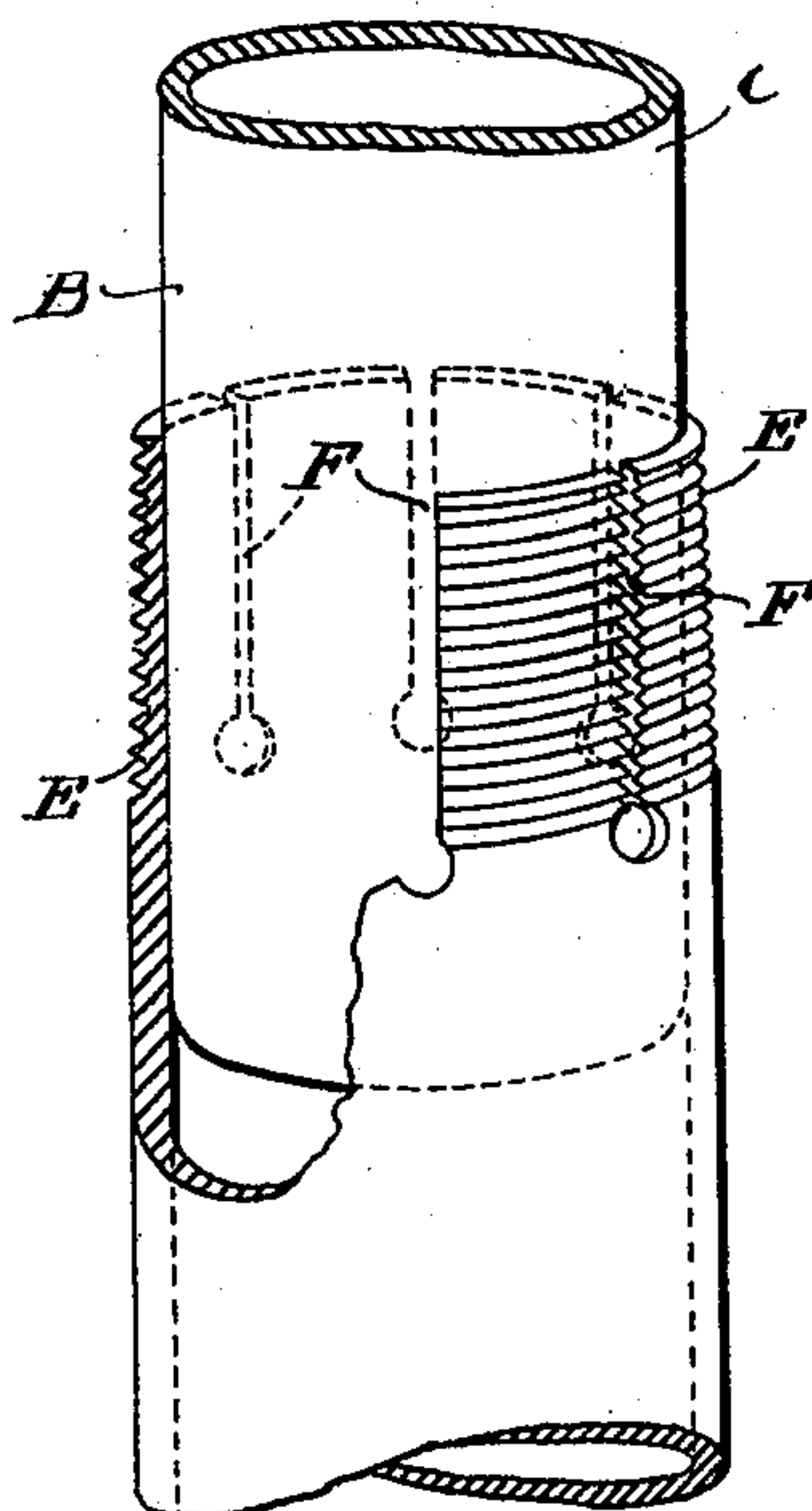


Fig: 4



Witnesses:  
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J. L. Noister

Inventor.  
Charles J. Gadd.  
By his Attorney, Chas. A. Rutter



# UNITED STATES PATENT OFFICE.

CHARLES J. GADD, OF PHILADELPHIA, PENNSYLVANIA.

## BICYCLE.

SPECIFICATION forming part of Letters Patent No. 599,058, dated February 15, 1898.

Application filed January 18, 1897. Serial No. 619,528. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES J. GADD, a subject of the Queen of Great Britain, and a resident of the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Bicycles or other Vehicles, of which the following is a specification.

My invention relates to improvements in bicycles or other vehicles, and more particularly to improvements in means for securing in place in the frame the saddle-post or the handle-bar post; and the object of my invention is to furnish, first, an improved adjustable means for locking the saddle or handle-bar post to the frame of the vehicle; second, to furnish, in connection with said adjustable locking means, an improved means for adjusting and locking on the steering-bar the movable cup which retains the balls of the steering-head in place.

In the accompanying drawings, forming part of this specification, and in which similar letters of reference indicate similar parts throughout the several views, Figure 1 is a central sectional elevation of the steering-head and part of the frame of a bicycle furnished with my improvements; Fig. 2, a central sectional elevation of the upper portion of the rear tube of a bicycle, which carries the saddle-post, and the parts of the frame connected therewith, showing a reinforcing-tube carried by the rear or saddle-post tube and my improved means for clamping said tube to the seat-post; Fig. 3, a similar view showing the rear or saddle-post tube prolonged and adapted to be clamped to the saddle-post; and Fig. 4, a perspective view of the upper end of my tube for grasping and holding in place the saddle or handle-bar post, part of the latter being shown within the tube.

A is the frame of a bicycle; B, Figs. 1 and 4, the handle-bar post; C, Figs. 2, 3, and 4, the saddle-post.

D, Fig. 1, is the steering-bar. The upper end of this bar is furnished with a number of slits F and with a male thread E, which may be slightly tapered, if desired, toward the upper end of the bar, as shown in the drawings.

G is a nut with a female thread of suitable taper, adapted to be screwed down on

this thread to force inward the parts of the bar D between the slits F to cause the bar to engage and hold the post securely in place. 55

H is the lower stationary cup, which carries the balls I of the steering-head.

J is the upper adjustable cup, which is carried by the steering-bar and which rests upon the balls I. This cup is furnished with a female thread adapted to be screwed down on thread E on the steering-bar. 60

K is a nut acting as a jam-nut, which is furnished with two female threads, the one of the smallest diameter being adapted to be screwed on the thread E on the steering-bar and the one of the largest diameter being adapted to engage a male thread L, cut on the lower end of the nut G. 65

N is a washer that may be placed between nut J and lock-nut K, suitable means being employed to prevent said washer from turning. The adjustable cup J having been screwed down against the balls I, the nut K is screwed down until it engages the top of the cup J firmly. The nut G is now screwed down, clamping the split ends of the steering-bar against the handle-bar post, its threaded end L engaging the corresponding female thread in nut K, this latter nut acting as a jam-nut to both nuts G and J. 70 75 80

In Figs. 2 and 3 my invention is shown arranged for holding a saddle-post in place, in Fig. 2 a flush-joint frame being shown, in Fig. 3 the ordinary coupling or raised-joint construction. In Fig. 2, M is a reinforcing piece or bushing, the lower end of which is brazed or otherwise suitably fastened to the frame A. The upper end of this pipe is free, and it is split at F F and furnished with a male thread E, which may be tapered, if desired, as described in connection with Fig. 1. G is a nut adapted to be screwed down on thread E in order to force the split ends of tube M against the saddle-post C. K is a jam-nut similar to that already described in connection with Fig. 1, which also serves the purpose of covering the joint between nut G and top of frame A, taking strain off reinforcing piece or bushing M and transferring it to the frame of the machine, giving a finish to this part of the machine. 85 90 95 100

The construction shown in Fig. 3 is similar to that of Fig. 2, with the exception that the



ends of the frame A are secured by a fitting A', and in that the bushing or pipe M is done away with and the upright part A<sup>2</sup> of the frame continued up through fitting A' and its upper end split and threaded, as already described.

The device herein described and illustrated is very neat in appearance, and by its employment the machine presents a more elegant and mechanical appearance at the junction of the saddle and handle-bar posts and the frame than has heretofore been possible.

Having thus described my invention, I claim—

15 1. The combination with the seat or handle-bar post of a bicycle, of a tube the upper end of which is externally threaded, which is furnished with longitudinal slots running from its upper end downward, and which is adapted  
20 to receive said seat or handle-bar post, a nut furnished with a tapered female thread, adapted to be screwed down on the male thread on said tube in order to close its split end on said post, and with a male thread upon  
25 its lower portion, and a jam-nut carried on said latter thread, said latter nut serving both as a fastening for said former nut and as a covering for the joint between said nut and the frame of the machine.

30 2. The combination with the seat or handle-bar post of a bicycle or other vehicle, of a

tube adapted to receive said post the end of said tube being threaded and furnished with longitudinal slits, a nut with a tapered female thread adapted to be screwed down on said male thread to close the split end of said tube on said post, a male thread on said nut, and a nut or washer furnished with two female threads one of which is adapted to engage the thread on said post-carrying tube and the other the male thread on said nut.

3. In a bicycle, in combination, a steering-bar the upper end of which is threaded and furnished with a number of slits, a stationary ball-carrying cup, an adjustable ball-cup adapted to be screwed down on said thread on said steering-bar, a nut furnished with two female threads of different diameters the smallest of which is adapted to be screwed down on said thread on said steering-bar to cause the lower part of said nut to engage the upper part of said adjustable cup, and a nut with a tapered female thread adapted to be screwed down on said tapered thread on said steering-bar and a male thread adapted to engage the larger female thread in said former nut, all substantially as and for the purposes set forth.

CHARLES J. GADD.

Witnesses:

CHARLES A. RUTTER,  
GEO. K. WANNEMACHER.