(No Model.)

L. STURGES.

FORK FOR BICYCLES.

No. 589,147. Patented Aug. 31, 1897.

Fig. 1.

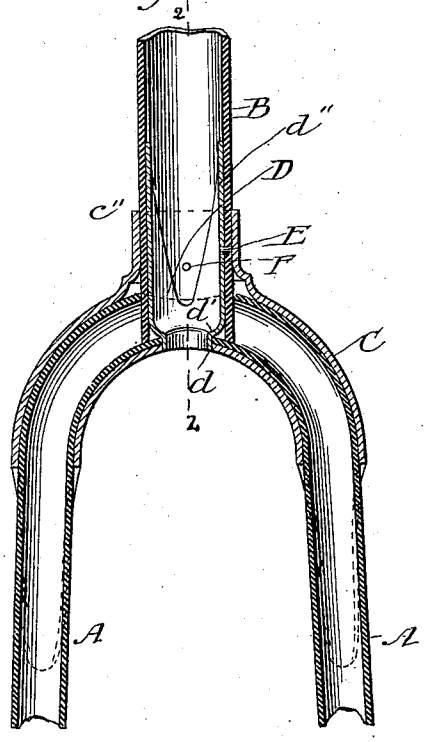


Fig. 2.

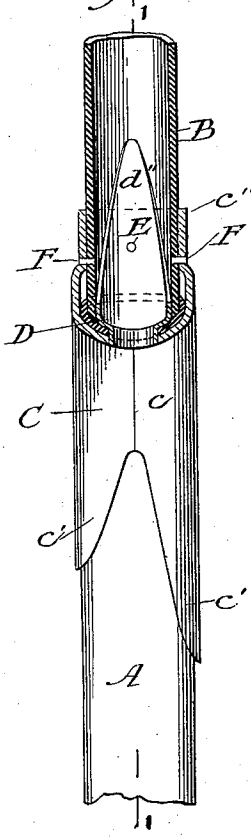
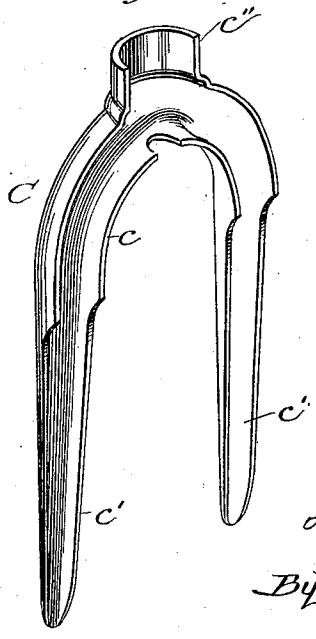


Fig. 3.



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UNITED STATES PATENT OFFICE.

LEE STURGES, OF CHICAGO, ILLINOIS.

FORK FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 589,147, dated August 31, 1897.

Application filed January 11, 1897. Serial No. 618,766. (No model.)

To all whom it may concern:

Be it known that I, LEE STURGES, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Forks for Bicycles or other Vehicles, of which the following is a specification.

The invention consists in the features of novelty that are hereinafter fully described with reference to the accompanying drawings, which are made a part of this specification, and in which—

Figure 1 is a vertical section of a fork embodying the invention, on the line 1 1, Fig. 2. Fig. 2 is a vertical section thereof on the line 2 2, Fig. 1. Fig. 3 is a perspective view of one of the two similar parts of which the crown-piece is preferably formed.

The two fork-arms A are integral and are formed of a single piece of tubing, preferably of oval cross-section, which is bent at its middle to U shape, or substantially so, for the purpose of forming a curved crown. In the top of the crown is an opening through which the fork-stem B projects into the interior of the crown, the extremity of the fork-stem being preferably dressed off to conform to the curvature of the interior surface of the bottom of the crown, upon which it bears.

C is a part herein called the "crown-piece," which is formed of two parts, the edges of which meet in a plane which cuts the fork-stem and fork-arms longitudinally. It has a curved socket *c*, in which the curved crown fits, and beyond this socket it is provided with reinforcing-tongues *c'*, which extend along the fork-arms. This crown-piece is also provided with a socket *c''*, in which the fork-stem B fits. The fork-stem is tubular and in its lower end is secured a plug D, having a portion *d* of reduced diameter, which projects through an opening in the bottom of the crown and through a corresponding opening in the bottom of the crown-piece. The shoulder *d'* resulting from the reduction bears against the bottom of the crown, on the inside thereof. The plug D is also provided with reinforcing-tongues *d''*, which project a suitable distance into the fork-stem B.

In assembling the parts the plug D is first secured within the fork-stem B by a rivet E. The fork-stem is then inserted through the opening in the top of the fork-crown and the reduced portion *d* made to project through the opening in the bottom of the crown. The two parts of the crown-piece are then put in place and temporarily secured, each by a rivet F, to the fork-stem B. The parts are all permanently united by brazing, which is preferably done at a single operation after they have been assembled in the manner described. I desire to have it understood, however, that, if preferred, the brazing may be done in a number of operations as the assembling of the parts proceeds. Preferably the crown-piece is constructed of two forgings of similar shape, one of which is shown in perspective view in Fig. 3. In Fig. 2 I have shown the reinforcing-tongues *c'* as being of different lengths, but this is not essential, and, if desired, they may be of the same length.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. The combination of a pair of fork-arms made of a piece of tubing bent to form a curved crown, said crown being provided in its top with an opening, a fork-stem fitting in said opening, and a crown-piece having a curved socket in which the curved crown fits, said crown-piece being formed in two parts the edges of which meet in a plane which cuts the fork-stem and fork-arms longitudinally, and all of the parts being permanently secured together, substantially as set forth.

2. The combination of a pair of fork-arms made of a piece of tubing bent to form a curved crown, said crown being provided in its top side with an opening, a fork-stem fitting in said opening, and a crown-piece having a curved socket in which the curved crown fits and a socket in which the fork-stem fits, the parts being permanently secured together, substantially as set forth.

3. The combination of a pair of fork-arms made of a piece of tubing bent to form a curved crown, said crown being provided in its top with an opening and in its bottom with

a smaller opening, a hollow fork-stem fitting in the opening in the top of the crown, a plug secured within the lower end of the fork-stem and having a reduced portion fitting in the opening in the bottom of the crown and a crown-piece having a curved socket in which the curved crown fits and a socket in which the fork-stem fits, the parts being secured together, substantially as set forth.

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