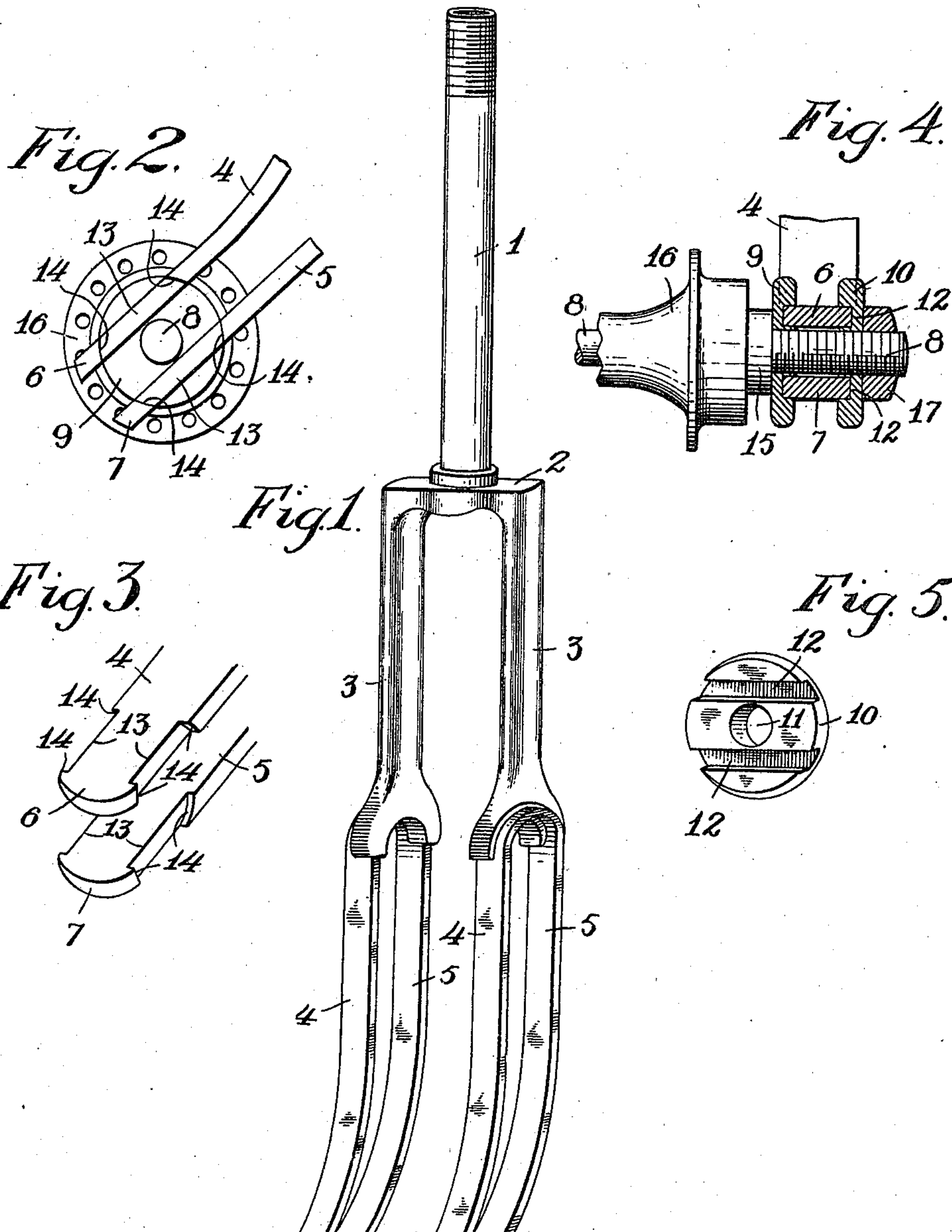


L. H. COBB.
 SPRING FORK FOR BICYCLES.
 APPLICATION FILED MAY 29, 1909.

963,993.

Patented July 12, 1910.



Witnesses.

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SPRING-FORK FOR BICYCLES.

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To all whom it may concern:

Be it known that I, LYMAN H. COBB, a citizen of the United States, residing at Fitchburg, in the county of Worcester and Commonwealth of Massachusetts, have invented a new and useful Improvement in Spring-Forks for Bicycles, of which the following is a specification accompanied by drawings, forming a part of the same, in which—

Figure 1 represents a detached perspective view of a spring fork embodying my improvement. Fig. 2 is a side view of the wheel hub and tips of the spring fork, with one of the retaining washers removed. Fig. 3 is a perspective view of the tips of the spring fork. Fig. 4 is a front view shown in section of one of the supports for the wheel spindle, and Fig. 5 is a perspective view of one of the retaining washers.

Similar characters refer to similar parts in the different figures.

My present invention relates to a bicycle fork in which the opposite ends of the wheel spindle are supported at the tips of a pair of elastic arms, and it has for its object to provide an improved connection between the tips of the elastic arms and the wheel spindle, which I accomplish by the construction and arrangement of parts as hereinafter described and pointed out in the annexed claims.

Referring to the accompanying drawings, 1 is the steering post of a bicycle, 2 the fork crown and 3, 3, the prongs of the fork, which extend downward from the crown and, in the present instance, terminate in elastic arms 4 and 5. Between the tips 6 and 7 of the elastic arms I support a wheel spindle 8, by a connection which embodies my present invention.

The support for the wheel spindle, in accordance with my improvement, consists of two washers 9 and 10 which are duplicates of each other, one being shown in perspective view in Fig. 5. The washers are provided with central holes 11 to receive the screw threaded end of the wheel spindle 8, and on opposite sides of the holes 11 are transverse slots 12, 12, adapted to receive the edges of the elastic arms 4 and 5. The elastic arms 4 and 5 at the tips 6 and 7 are notched on opposite sides as shown at 13, 13, Fig. 3. The length of the notches 13 are of the same length as the slots 12. The ends 14 of the notches are curved to fit the periphery

of the washers so that, when the washers are applied on opposite sides of the elastic arms, the arms will be rigidly held between the washers with their tips spaced the distance between the slots 12, 12, and the washers themselves will be interlocked with the elastic arms and held from lateral movement, with the holes 11 in each pair of washers in alinement to receive the wheel spindle 8.

In assembling the parts, a ball bearing cone or sleeve 15 is screwed upon the wheel spindle in proper position to form a bearing for a wheel hub 16. The end of the wheel spindle is then inserted in the washers 9 and 10 and a nut 17 applied to the screw threaded end of the wheel spindle bearing against the washer 10, crowding the washer 9 firmly against the ball bearing sleeve 15. By closely fitting the notched arms 4 and 5 to the washers 9 and 10, the latter will be firmly held in the arms when the wheel spindle is removed.

I claim,

1. A bicycle fork, provided with prongs supporting the front wheel, each of said prongs having a pair of elastic arms, and a pair of washers interlocking the opposite sides of said arms provided with central holes to receive a wheel spindle.

2. A bicycle fork, having each of its prongs provided with a pair of elastic arms, with the tips of said arms provided with notches in their opposite edges, and a pair of washers held in the notched edges of said arms having holes for the wheel spindle.

3. A bicycle fork, having prongs arranged to support the front wheel, each of said prongs terminating in a pair of arms, with the tips of said arms in contact with opposite sides of the wheel spindle, and washers upon opposite sides of said tips having slots arranged to engage the edges of said tips and also holes in alinement to receive the wheel spindle.

4. A bicycle fork, having prongs arranged to support the front wheel, each prong comprising a pair of arms in contact with opposite sides of the wheel spindle, washers upon opposite sides of said arms in engagement with the edges of said arms and having holes in alinement between said arms to receive the wheel spindle.

5. A bicycle fork, having prongs arranged to support the front wheel each prong comprising a pair of parallel arms arranged to

contact with opposite sides of the wheel spindle, a pair of washers provided with parallel notches engaging the opposite edges of said arms and having holes in alinement
5 to receive the wheel spindle, with said opposite edges of said arms provided with notches to engage said washers, said notches having

curved ends to fit the periphery of said washers.

Dated this 25th day of May 1909.

LYMAN H. COBB.

Witnesses:

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ARTHUR H. BEAVERS.