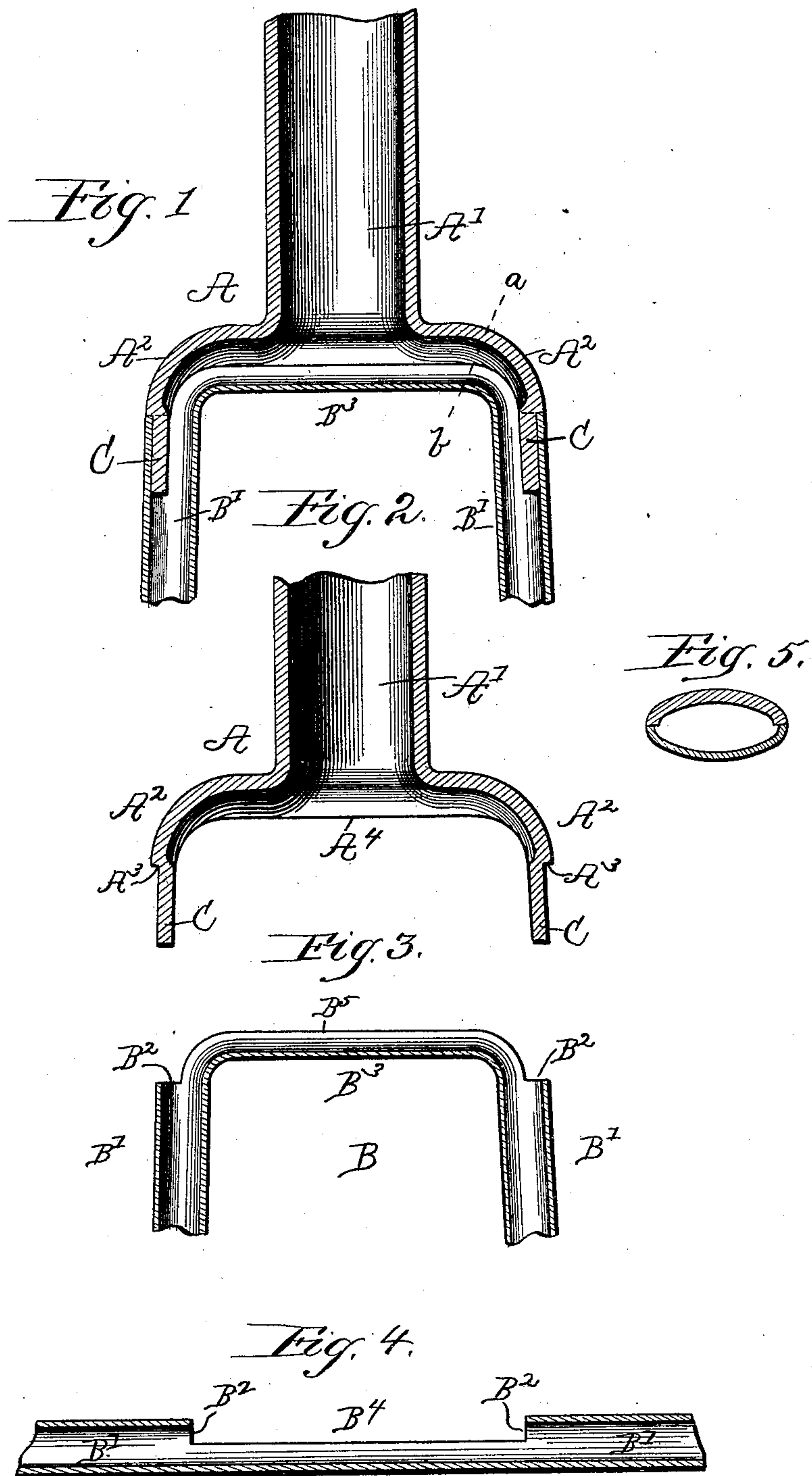


(No Model.)

C. KEHR.  
FORK FOR VELOCIPEDES.

No. 482,090.

Patented Sept. 6, 1892.



Witnesses:  
Frank L. Stevens.  
Robert Ryan

Inventor:  
Cyrus Kehr.

# UNITED STATES PATENT OFFICE.

CYRUS KEHR, OF LAKESIDE, ILLINOIS.

## FORK FOR VELOCIPEDES.

SPECIFICATION forming part of Letters Patent No. 482,090, dated September 6, 1892.

Application filed January 11, 1892. Serial No. 417,749. (No model.)

*To all whom it may concern:*

Be it known that I, CYRUS KEHR, a citizen of the United States, residing at Lakeside, in the county of Cook and State of Illinois, have  
5 invented certain new and useful Improvements in Forks for Velocipedes; 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  
10 it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of my invention is to produce a  
15 velocipede-fork which shall be light, as well as strong and economical in manufacture.

In the accompanying drawings, Figure 1 is a vertical section through the neck and the upper portion of the legs of the completed  
20 fork. Fig. 2 is a similar section of the crown of the fork detached from the legs. Fig. 3 is a similar section of the piece constituting the upper ends of the legs and the reinforcement for the crown. Fig. 4 shows the part illustrated in Fig. 3 before being bent. Fig. 5 is  
25 a section in line *a b* of Fig. 1.

A is the crown. This is shown detached in Fig. 2 and combined with the legs and reinforcement in Fig. 1.

30 A' is the neck.

The outer face of each of the shoulders A<sup>2</sup> of the crown extends to the substantially vertical portion of the legs, at which point there is on said crown a substantially horizontal  
35 downward-directed face A<sup>3</sup>. The lower face of the crown is concave and terminates at each side in a downward-directed edge A<sup>4</sup>. The faces A<sup>3</sup> and the edges A<sup>4</sup> are to meet, respectively, the faces B<sup>2</sup> of the legs B' and the  
40 upward-directed edges B<sup>5</sup> of the reinforcing member, to be hereinafter described.

B is an integral arch composed of the tubular legs B' and the reinforcing member B<sup>3</sup>. This arch is formed by taking a piece of  
45 metal tube and cutting out the upper half thereof at B<sup>4</sup> through a linear distance equal to the length of the edge A<sup>4</sup> between points opposite the faces A<sup>3</sup> of the crown A. (See Fig. 4.) Thus the tube will continue to be a

tube, excepting along B<sup>4</sup>, where it is a half-  
50 tube, the concave or open portion being directed upward. At each end of the cutting B<sup>4</sup> is a face B<sup>2</sup>, formed by the wall not cut away. The pipe is now bent downward at  
55 each side of the cutting B<sup>4</sup> until the uncut portions of the pipe are nearly perpendicular and the arch is formed, as shown in Fig. 3, the bending being done on the half of the pipe next to the faces B<sup>2</sup>. The arch now consists of the legs B' B' and a reinforcing mem-  
60 ber B<sup>3</sup>, integral with and connecting said legs, said reinforcing member being concave above and having the upward-directed edges B<sup>5</sup> and the faces B<sup>2</sup> of the legs B' being now directed upward and extending from the exte-  
65 rior of each leg to the middle thereof. The specific dimensions and shape of the several parts of the arch are such as to cause the faces B<sup>2</sup> to fit accurately upon the faces A<sup>3</sup>, while the edges B<sup>5</sup> fit accurately upon the  
70 edges A<sup>4</sup>, when the crown and said arch are brought together, as indicated in Fig. 1. After these edges are thus made to meet they are permanently brazed. The result is a light,  
75 graceful, and strong fork and one which is elastic at every point, so that strains resulting from jarring are not concentrated at any particular point. A reinforcing-tongue C may  
80 extend from each shoulder of the crown downward into and along the outer wall of the leg B', and such tongue may be brazed to said wall.

I claim as my invention—

1. In a velocipede-fork, the combination of a crown A, which is concave beneath and has  
85 faces A<sup>3</sup> and lateral down-directed edges A<sup>4</sup>, and an arch composed of the tubular legs B', having at their upper ends faces B<sup>2</sup>, meeting and brazed to the faces A<sup>3</sup>, and a reinforcing member B<sup>3</sup>, integral with said legs and con-  
90 cave, with-upward directed edges B<sup>5</sup>, meeting and brazed to the edges A<sup>4</sup>, substantially as shown and described.

2. In a velocipede-fork, the combination of the crown A, concave beneath and having the  
95 lateral downward-directed edges A<sup>4</sup>, faces A<sup>3</sup>, and reinforcing-tongues C, and tubular legs B', having faces B<sup>2</sup> meeting and brazed to



the faces  $A^3$ , and said tongues entering and being brazed to the outer walls of said legs, and a connecting member integral with said legs and concave above and having upward-  
5 directed edges  $B^5$  meeting and brazed to the edges  $A^4$  of the crown A, substantially as shown and described.

In testimony whereof I affix my signature, in presence of two witnesses, this 5th day of January, in the year 1892.

CYRUS KEHR.

Witnesses:

AMBROSE RISDON,  
FRANK L. STEVENS.