

No. 648,657.

Patented May 1, 1900.

C. S. DIKEMAN.  
BICYCLE FRAME.

(Application filed Sept. 27, 1899.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.

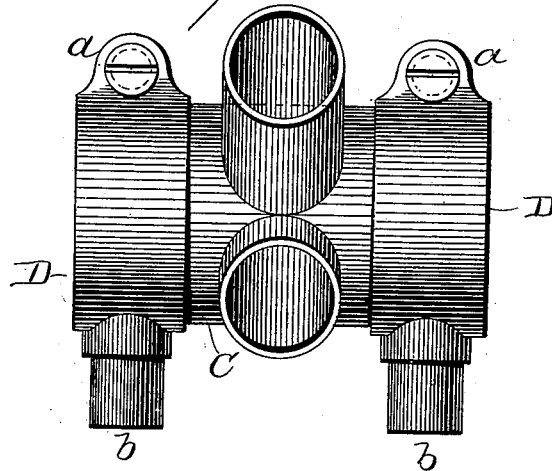
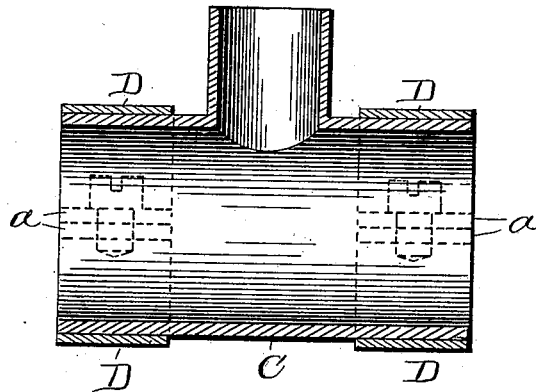


FIG. 2.



WITNESSES

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FIG. 3.

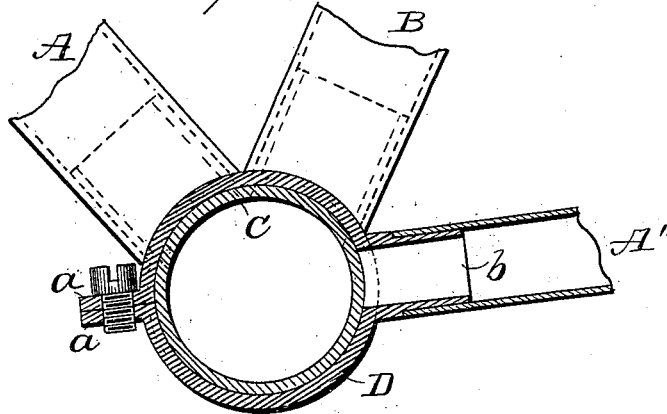


FIG. 4.

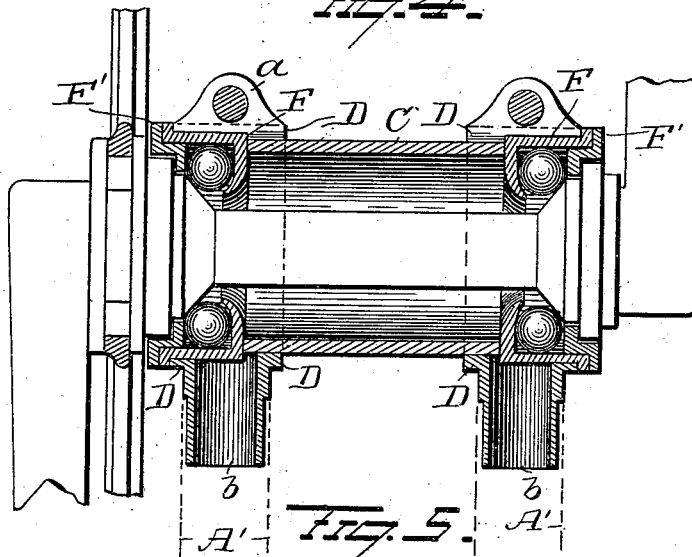
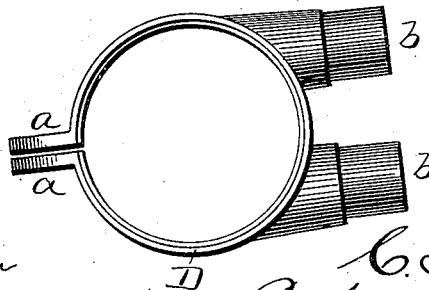


FIG. 5.



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# UNITED STATES PATENT OFFICE.

CHARLES S. DIKEMAN, OF TORRINGTON, CONNECTICUT.

## BICYCLE-FRAME.

SPECIFICATION forming part of Letters Patent No. 648,657, dated May 1, 1900.

Application filed September 27, 1899. Serial No. 731,825. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES S. DIKEMAN, of Torrington, in the county of Litchfield and State of Connecticut, have invented certain  
5 new and useful Improvements in Bicycle-Frames; 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 it appertains to  
10 make and use the same.

My invention relates to an improvement in bicycle-frames.

In the bicycles now universally used the transverse tube which supports the crank-bearings is built into or between the front  
15 and rear sections of the reach and forms an integral part of the reach. In the manufacture of such frames it is absolutely necessary to leave one joint connecting the rear  
20 section of the reach and transverse tube or crank-hanger unbrazed, so that the frame can be put into the lining-up jig in order to bring the several parts into their proper positions, after which this one joint or connection is drilled, pinned, and brazed. This closing  
25 of the one rear joint after all the other joints have been brazed and the frame properly lined up adds considerable to the cost of manufacture; and the object of my invention is to simplify the present method of assembling and truing the machines without detracting from the efficiency of the finished  
30 product; and it consists in making the rear end of the reach or that portion thereof in rear of the crank-hanger separate and independent from the hanger and adjustably secured thereto.

My invention further consists in the parts and combinations of parts, as will be more  
40 fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in elevation of my improved hanger, showing the clamps thereon. Fig. 2 is a view  
45 in section of the same. Fig. 3 is a view in section through one of the clamps and showing a portion of the frame. Fig. 4 is a view of a modified construction in section through the hanger and clamps, showing the shaft-bearings carried by the clamps; and Fig. 5 is  
50 a view of a modified form of clamp.

A represents the front section of the reach,

and B the central brace, both of which are secured to the transverse tube C in the usual or any desired manner. The transverse tube  
55 C may be shorter than that usually employed on bicycles and need project laterally only sufficiently far to form firm seats or bearings for the clamps or bands D. These clamps or bands are split, as shown, and provided at  
60 their split ends with forwardly-projecting lips or flanges *a*, through which the screws pass for locking the clamps or bands to the tube, and each is provided on its rear face with a rearwardly-projecting lug *b*, to which  
65 the rear stay or rear section A' of the reach is secured by brazing. These rear stays constitute the rear section of the reach, and being secured to the adjustable clamps it will be seen that it will be a comparatively-easy  
70 matter to attach and aline up the rear stays or rear section of the reach and the rear fork carried thereby after the front section of the frame has been lined up, and thus avoid the warping or springing of the rear frame, which  
75 frequently occurs during the operation of brazing the latter to the front section of the frame.

If desired, I can, as shown in Figs. 4 and 5, counterbore the outer ends of the clamps and  
80 secure the bearings F F' for the crank-shaft therein. With such a construction the bearings F could be applied to the clamps before the latter are clamped to the tube, and hence would be removable with the clamps.

In Fig. 5 I have shown the clamps or bands each with two rearwardly-projecting lugs for the attachment of two stays such as are shown  
85 in my Patent No. 631,282, granted to me August 22, 1899.

It is evident that changes in the form and construction of the several parts might be made without avoiding my invention, and hence I would have it understood that I do not restrict myself to the particular construction and arrangement of parts shown and described; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a bicycle-frame, the combination with the front reach, central brace and rear stays, of a transverse tube having lugs or nipples to which the front reach and central stay

are secured, bands secured to the respective  
ends of said tubes, each band made of a single  
piece of metal separate from the frame  
and secured to the ends of said transverse  
5 tube, said bands having integral lugs or nipples  
having the rear stays of the frame secured  
to them.

2. In a bicycle-frame, the combination with  
the transverse tube permanently fixed to the  
10 front section of the reach, of bands secured  
over the ends of said tube and overhanging  
said ends, crank-supporting bearings located  
within the projecting ends of the bands, and  
the rear section of the reach secured to said  
15 bands.

3. In a bicycle-frame, the combination with  
the transverse tube permanently fixed to the  
front section of the reach, of split clamping-  
bands secured to the tube and overhanging  
said ends, crank-supporting bearings secured 20  
within the projecting ends of the bands, and  
the rear section of the reach secured to said  
bands.

In testimony whereof I have signed this  
specification in the presence of two subscrib- 25  
ing witnesses.

CHARLES S. DIKEMAN.

Witnesses:

HAROLD E. MUNSON,  
WILLARD A. COWLES.