

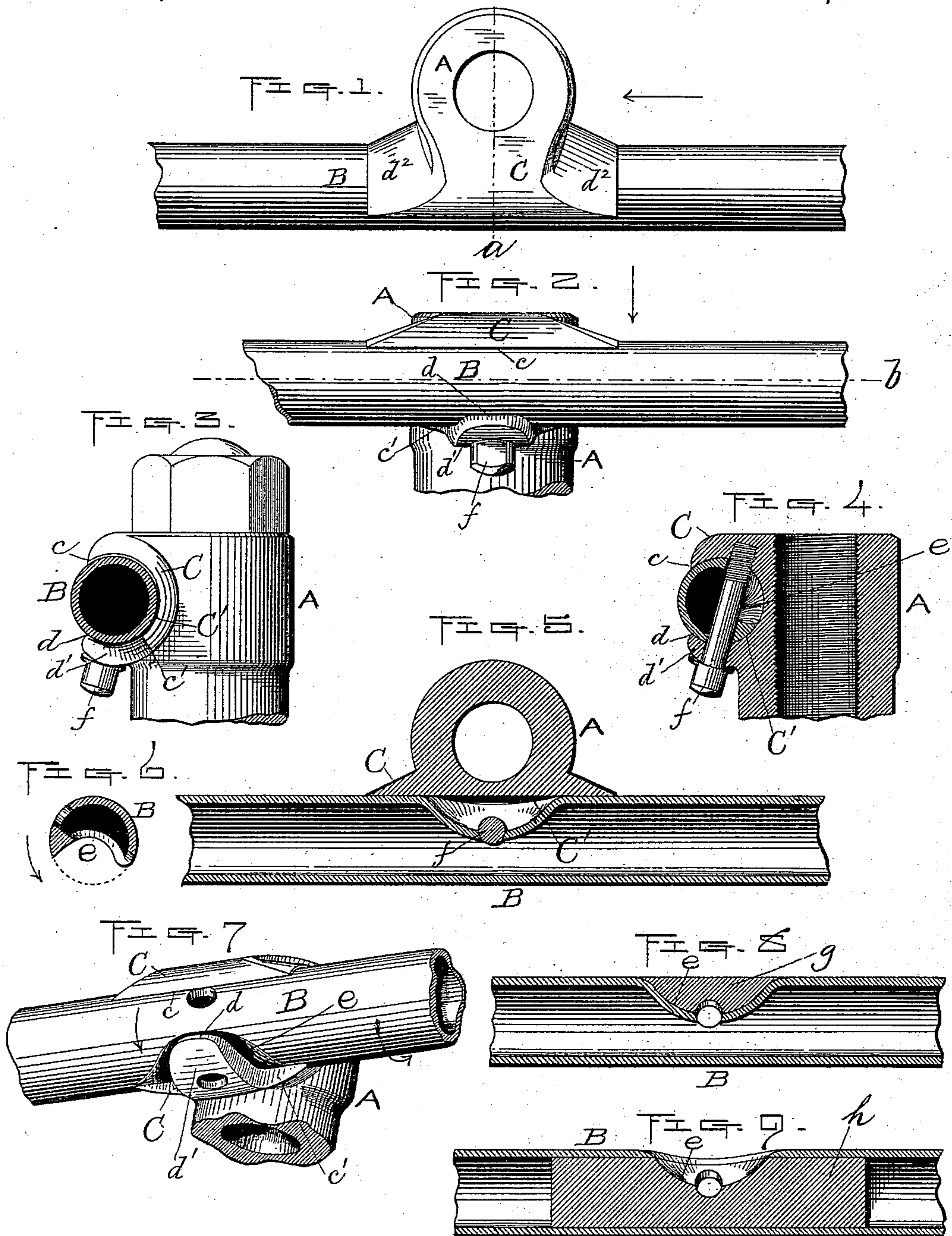
(No Model.)

I. JOHNSON.

VELOCIPEDÉ.

No. 379,224.

Patented Mar. 13, 1888.



Witnesses;

Walter B. Nourse.

Lucius W. Briggs.

Inventor;

Ivor Johnson.

By A. A. Barker. Atty.

UNITED STATES PATENT OFFICE.

IVER JOHNSON, OF WORCESTER, MASSACHUSETTS.

VELOCIPED.

SPECIFICATION forming part of Letters Patent No. 379,224, dated March 13, 1888.

Application filed August 1, 1887. Serial No. 245,876. (No model.)

To all whom it may concern:

Be it known that I, IVER JOHNSON, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain
5 new and useful Improvements in Velocipedes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification,
10 and in which—

Figures 1 and 2 represent a plan and front view, respectively, of a part of the head and handle-bar of a bicycle with my improvements applied thereto. Fig. 3 is a cross or transverse
15 section through the handle-bar, showing a side view of part of the head and my improvements. Figs. 4 and 5 are vertical and horizontal sections taken on lines *a* and *b*, respectively, Figs. 1 and 2, looking in the directions
20 indicated by the arrows. Fig. 6 is a cross or transverse section through the center of my improved handle-bar. Fig. 7 is a perspective view of the parts represented in Figs. 1 and 2, showing the handle-bar after having been in-
25 serted in its holding recess or socket in the head prior to being turned therein and fastened, as hereinafter described; and Figs. 8 and 9 represent modifications in the construction of the handle-bar, also hereinafter described.

30 My invention is designed more especially for bicycles, but may be applied, if desired, to other similar vehicles.

It relates to the handle-bar attachment of such vehicles, and consists in the novel construction and arrangement, hereinafter set
35 forth, whereby the handle-bar may be fastened in a secure and rigid manner, while at the same time being readily detachable when required.

40 To enable those skilled in the art to which said invention appertains to obtain a full and clear understanding thereof, I will now proceed to describe it more in detail.

Referring to the drawings, the part marked
45 A represents the upper end of the head, and B the central portion of the handle bar, of an ordinary bicycle. Said head A is made with a projection or bearing, C, projecting forward as well as laterally in opposite directions there-
50 from, to produce a cylindrical longitudinal opening, C', in which to receive and hold the

handle-bar. Said bearing is also provided with a longitudinal opening upon the front side thereof, whose central portion between the points *c* and *d* is about one-third smaller than
55 the diameter of the cylindrical opening, for the purpose hereinafter described.

From the point *c* of the bearing around the back side to a point, *c'*, opposite, about in line with the center of the cylindrical opening, the
60 bearing is made of one length; or, in other words, the outer ends of the lateral projections *d*² *d*² are extended around in a vertical line; but at the point above mentioned the front lower portion of the bearing is narrowed up
65 (less strength being required here than on the top) to about one-third the width of said top part, as shown at *d'*, and is extended up thus reduced in width to the point *d*, the purpose of which will be apparent from the description
70 now following of the handle-bar and the method of applying the same to said bearing above described. In order that said handle-bar may be inserted through the aforesaid narrow or contracted opening between the points
75 *c* and *d*, a recess, *e*, is formed therein, a little longer than the width of the holding part *d'*, as best shown in Fig. 6, by cutting out or compressing the metal, as preferred. In this instance said result is shown as being effected
80 by the latter method. (See Fig. 5.) Being thus formed, it is obvious that by holding the bar with its narrow or depressed portion in line with the opening it may be readily in-
85 serted, as shown in Fig. 7, and after having been thus inserted with its recess next to the part *d'*, by now turning the same in its bearing, as indicated by the arrows in said Fig. 7, said recess or weakened part is made to come
90 upon the back side thereof next to the head, thereby concealing the recess, and also, by bringing the solid portions of the handle-bar upon the front exposed side, rendering said bar nearly or quite as strong and effective for
95 use as if such recess were not made therein. Being thus turned or adjusted into the proper position for use, it may now be securely and rigidly fastened in said position by means of a bolt, *f*, passed through the bearing and said
100 handle-bar, preferably from the bottom up, openings being formed therein for the purpose, as shown in the drawings.

If desired, the handle-bar may be re-enforced or strengthened where recessed or cut out by inserting a solid piece of metal, *g*, of the proper shape, in said recess, as shown in Fig. 8; or a short rod, *h*, may be inserted into the interior of said bar, as shown in Fig. 9.

In applying the piece of metal *g* the handle-bar without said piece is first inserted in its bearing, then slipped endwise a sufficient distance to admit of fitting said piece in the recess, when the bar is slipped back again and adjusted into its proper position, to be fastened by the bolt *f*, as previously described.

Ordinarily the latter provisions would be unnecessary; but I reserve the right to thus make the handle-bar, if desired. I also reserve the right to make said handle-bar solid, with the recess formed therein in any convenient manner.

A handle-bar fastened as herein set forth, it is obvious, may be very conveniently and expeditiously detached, while at the same time, when thus fastened, it is held in a very firm and secure manner, and is not liable to be broken out of said fastening by any ordinary usage, for, as will be observed by the drawings, the strongest point in the holding-bearing is made to come over and back of the handle-bar, where, as is well known, the most strain is exerted by the rider in guiding his machine.

I do not limit myself to the particular shape of the projection or bearing *C* herein set forth, as the same may be varied to a certain extent and still effect the same result.

I am aware of United States Patent to E. G. Latta, No. 332,092, dated December 8, 1885, covering a depression to form flat surfaces bearing against a wedge or pin to prevent said bar from turning after having been inserted longitudinally into its bearing and fitted in position, and therefore make no claim, broadly, to a depression in a handle-bar.

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

1. The combination of the velocipede-head having a projection or bearing, *C*, made with a cylindrical-shaped longitudinal recess or hollow therein and a longitudinal opening in front considerably smaller at the center than the diameter of the handle-bar, with said handle-bar having a recess or depression therein, and the fastening-bolt *f*, substantially as and for the purpose set forth.

2. The combination of the velocipede-head having a projection or bearing, *C*, made with a cylindrical-shaped longitudinal recess or hollow therein and a longitudinal opening in front smaller at the center than the diameter of the handle-bar, with said handle-bar having a recess or depression therein, wedge *g*, adapted to fit in said depression, and fastening-bolt *f*, substantially as and for the purpose set forth.

3. The method of detachably fastening the velocipede handle-bar, having the recess in the side thereof, to the head, having a bearing made with a cylindrical longitudinal opening therein and a horizontal opening in front whose central portion is smaller than the diameter of said cylindrical opening, by inserting said handle-bar at its reduced part through the aforesaid narrow front opening into the cylindrical opening, then turning it so as to bring its recess upon the back side thereof next to the head, and there fastening it by passing a bolt through said bearing and handle-bar, substantially as shown and described.

IVER JOHNSON.

Witnesses:

ALBERT A. BARKER,
LUCIUS W. BRIGGS.