(No Model.)

A. F. HOOD.

HANDLE BAR ATTACHMENT.

No. 549,792. Patented Nov. 12, 1895.

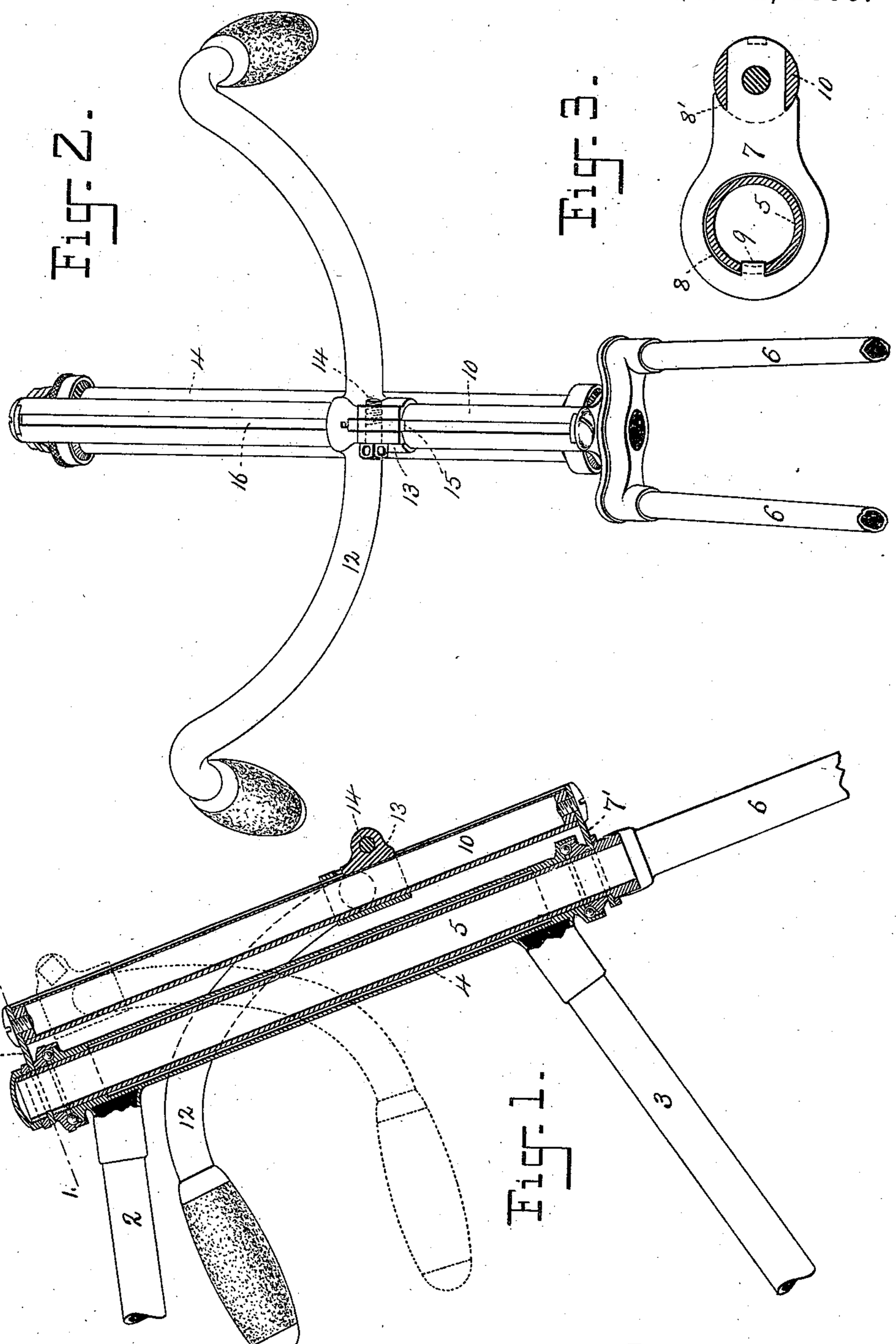

Fig. 1.

Fig. 5.

Fig. 2.

Witnesses.
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UNITED STATES PATENT OFFICE.

ARTHUR F. HOOD, OF JAMESTOWN, NEW YORK.

HANDLE-BAR ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 549,792, dated November 12, 1895.

Application filed June 13, 1895. Serial No. 552,658. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR F. HOOD, a citizen of the United States, residing at Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Handle-Bar Attachments; 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 make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in the manner of attaching and adjusting handle-bars for bicycles.

My improvements consist in the construction and arrangement of the steering apparatus, comprising a post in advance of the head-tube, said post being attached to the fork-spindle, and in adjustably securing the handle-bar thereupon, so that it may slide up and down. Further, in so interlocking said post and handle that the latter always maintains control of the spindle of the fork. Hence change in the position of the handle-bar can be effected by the rider while in motion.

The drawings represent, in Figure 1, a sectional elevation of a bicycle equipped with a handle-bar attachment embodying my invention; Fig. 2, a front elevation. Fig. 3 is a detail view of the upper arm, showing its connection with the spindle of the fork on line 1 1 in Fig. 1.

This handle-bar attachment may be considered as relating to a similar device under Serial No. 522,412, now on file, wherein the handle-bar was provided with similar movements, but was attached directly upon the front fork-spindle, which was bare. This necessitated a peculiarly-constructed form of machine.

My present improvements are intended to embody all advantages equally with my first improvements; but are furthermore adapted for use as an attachment on every class and description of machine.

In the drawings I have shown the forward portions of a bicycle-frame of any approved construction, here comprising a top bar 2, a bottom bar 3, and a head-tube 4. This latter is tubular, as in general, and contains the spindle 5, likewise tubular, and which extends longitudinally therethrough, terminating at the lower portion in twin-legs 6 6, which serve as journals for the front wheel. In many instances the top extremity of said spindle has been split in part and clasped by a clamping-band, which forcibly compresses the split portion about a post. This latter element is surmounted by a cross-piece termed the "handle-bar." Thus this latter may be raised or lowered by relaxing the pressure of the band and sliding said post up or down within the spindle 5. This particular form of adjustment has certain objections, among which is lack of stiffness when the post is pulled out to any extent; secondly, when the clamping-band is released the handle-bar has no control over the fork and the adjustment must be done when the wheel is at rest.

My invention provides for control of the spindle of the fork at all times, even when changes in the position of said handle are being made. It likewise enables the handle-bar to be reversed or turned upside down if the rider so wishes.

To enable my improvements to be carried out I construct two similar arms or brackets 7 7′, upper and lower, respectively. These are apertured at both ends, the rear end at 8, the forward end at 8′. The rear apertures are adapted to rigidly clasp the spindle 5 in such manner that the two are interlocked and no twist can take place. The rear aperture in the present instance is formed with an inwardly-projecting teat 9, which engages the split upper part of the spindle, and thereby positive interlocking of these pieces is effected. The corresponding aperture in the lower arm is preferably forced down into position, by which means movement of said arms controls the axial motion of the spindle. At the forward ends of said arms is rigidly secured a post 10, which is preferably in parallelism with the head-tube, while adjustably mounted upon said post is the handle-bar 12. This latter is generally affixed to a split clamping-band 13, held together by means of a locking-screw 14 or other means. The band 13 and the handle-bar 12 are interlocked for sliding movement, in the present case, by a spline-and-groove connection, re-

spectively, 15 16, the spline being created on the band 12. By this construction it will be seen that without changing the proper proportions of the frame constructed for a forty-four-inch-wheel base (admittedly the best length) the handle-bar may be changed in position and advanced a greater or less distance in front of the head-tube by varying the length of the arms 7 7'. It will be further noticed that the arms, when applied to a bicycle of ordinary construction, are disposed at each end of the head-tube, against which they rest, the spindle passing through them, as before premised. Thus they can be readily adapted to fit the spindle of any bicycle and are easily applied.

What I claim is—

1. In combination with a bicycle frame, a handle bar post in front of the head tube, means for uniting said post at two points with the spindle of the fork, a handle bar adapted to slide on the post between the points of support, and mechanism for locking the handle bar to prevent its movement on the post, substantially as specified.

2. In a bicycle frame, a head tube, a front fork, and a spindle therefor axially movable within the head tube, combined with two arms rigidly secured to said spindle at points proximate to the bearings of said spindle, a post mounted in said arms and parallel to the spindle, a handle bar to clasp said post and slide upon it without rotation, together with means by which to clamp the bar upon the post between the points of support to prevent sliding movement of said bar, substantially as stated.

3. The combination with a bicycle frame, a fork spindle within the head tube, and two arms affixed to said spindle and projecting forwardly of the head tube, of a post secured to said arms, a handle bar having spline and groove connection with the post, and means for locking the handle bar at any point on the post, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ARTHUR F. HOOD.

Witnesses:
H. E. LODGE,
IRVING L. BLOSSOM.