

No. 667,232.

E. S. LEAYCRAFT.
BICYCLE.

Patented Feb. 5, 1901.

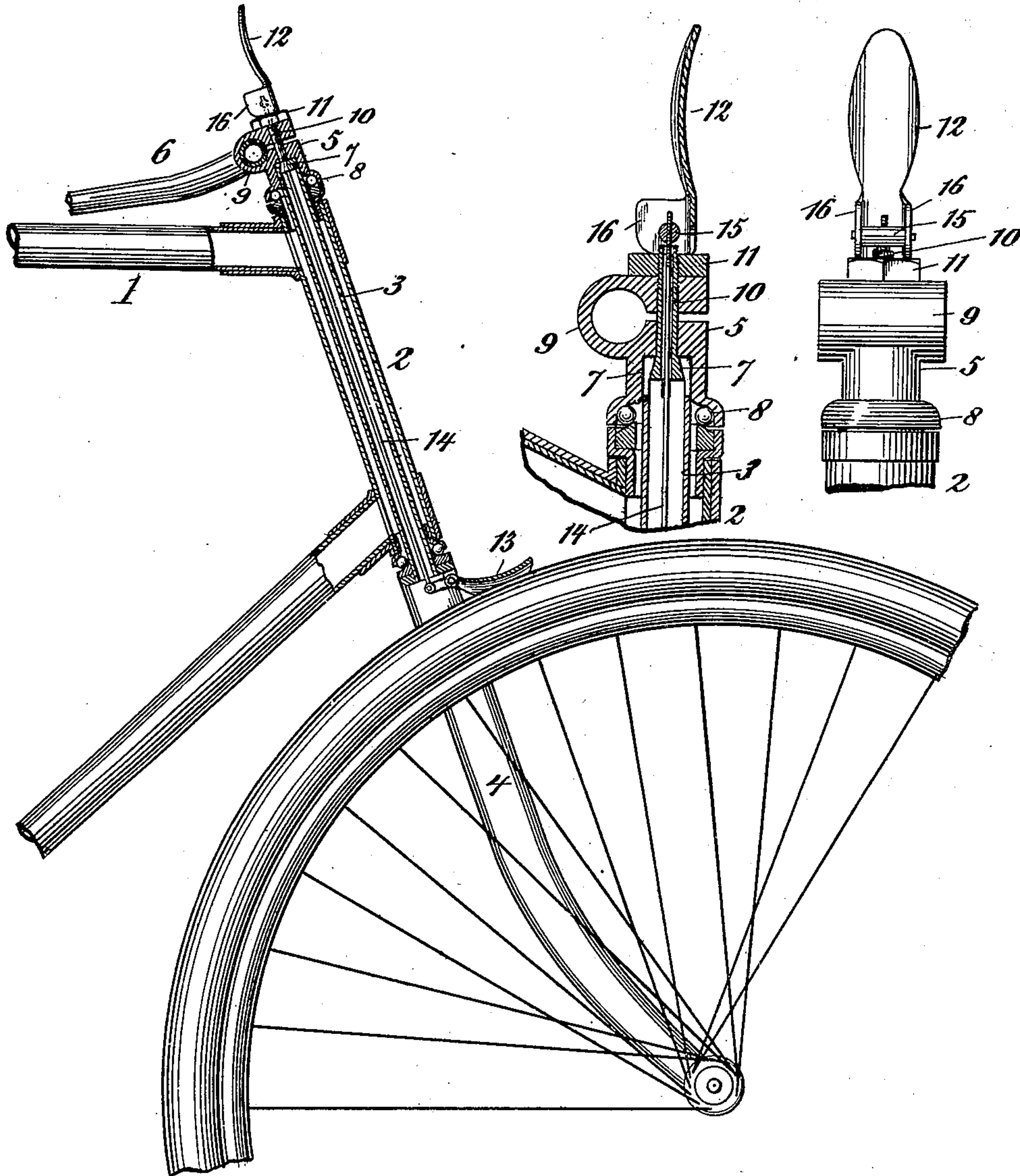
(Application filed Feb. 28, 1898.)

(No Model.)

Fig. 1,

Fig. 2,

Fig. 3,



WITNESSES:

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BICYCLE.

SPECIFICATION forming part of Letters Patent No. 667,232, dated February 5, 1901.

Application filed February 28, 1898. Serial No. 671,894. (No model.)

To all whom it may concern:

Be it known that I, EDWIN S. LEAYCRAFT, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Bicycles and Similar Vehicles, of which the following is a specification.

The present invention relates to bicycles and similar vehicles, and is especially designed to provide a new and improved means of securing the steering-post and handle-bar, as well as an improved construction of brake-operating mechanism.

In the drawings I have illustrated a construction embodying the features of the present invention, in which—

Figure 1 is a view of a portion of a bicycle, partly in section and partly in side elevation. Fig. 2 is a central vertical section of some of the parts shown in Fig. 1, illustrated on an enlarged scale. Fig. 3 is a view in rear elevation of the parts shown in Fig. 2.

Like figures of reference refer to like parts throughout the several views of the drawings.

Referring to the drawings in detail, 1 designates the frame of the machine, of which 2 constitutes the front post, through which runs the steering-post 3, to the lower end of which is secured the branches 4 of the front fork. The steering-post 3 consists of a tube whose upper end substantially fits into the head 5, in which is clamped the handle-bar 6. The special features of invention reside in the peculiar form of this head, as also in the manner of clamping the handle-bars therein and at the same time securing the steering-post. The end of the steering-post 3 which fits into the head 5 is thickened or provided on its inner surface with a beveled face, and this thickened or inwardly-beveled portion, which is designated by the numeral 7, is provided with diametrically opposite saw-cuts, providing for the expansion of the end of the steering-post in the head 5 in order to clamp the same thereto. The head 5, as shown in the drawings, preferably consists of a single piece having one member of a ball-race 8 and a split ring 9, adapted to receive and clamp the handle-bars. Centrally located over the steering-post the head 5 is provided with an opening, through which passes a hollow clamp-

ing-sleeve 10, provided at its upper end with threads, upon which screws a nut 11, and at its lower portion with an outwardly-flaring clamping-head, whose sides are shaped to fit the correspondingly-shaped inward taper of the end of the steering-post, whereby upon screwing the nut 11 the handle-bar is clamped in the desired position and the steering-post 3 is clamped to the head at one operation. Also located centrally above the steering-post upon the nut 11 is a brake-operating handle 12, which is connected to the brake-shoe 13 by means of a connecting-rod 14, passing up through the steering-post and the clamping-sleeve and having its upper end threaded into a cross-bar 15, suitably journaled in the sides 16 of the brake-operating handle. The sides 16 are cut away, so that the edges are of varying distances from the center of the cross-bar to which the connecting-rod 14 is secured, thus providing means for suddenly applying the brake, if desired.

The mode of operation and the advantages of the construction will now be apparent. After the parts are assembled as shown in Fig. 2 and the handle-bar is inserted in the desired position the nut 11 is screwed on the sleeve 10, whose first action is to clamp the end of the steering-post and head together and then clamp the handle-bar securely in position at the one operation. The operation of the brake device will also be apparent. Assuming the brake parts to be in the position shown in Fig. 2 and it is desired to apply the brake, the brake-operating handle is turned down through a quarter of a circle, thus drawing up the connecting-rod 14 and applying the brake-shoe 13. If this pressure is insufficient, additional pressure is given to the shoe by turning the brake-handle around on the nut 11, thus threading the connecting-rod 13 through the cross-bar and drawing up the same to apply the brake-shoe with still greater pressure. This pressure can be immediately released by turning the brake-handle to its original upright position, as shown in Fig. 2.

It will be seen that in this construction the ring in which the handle-bar is secured is out of line with the steering-post and in rear thereof. This constitutes a preferable construction in that additional leverage is obtained by the handle-bars on the steering-post. It

will be apparent that this ring may be located at any convenient distance in rear of the front post to enhance this feature and also bring the point of securing the handle-bars nearer to the rider.

5 What is claimed as new is—

1. In a bicycle, a head provided with means for engaging a handle-bar, a steering-post fitting into said head and provided at its upper end with an integral interiorly-beveled face, a clamping-piece consisting of a hollow sleeve having an integral tapered portion at its lower end fitting into and engaging the beveled portion of the steering-post and having an integral exteriorly-threaded end extending above the head, and a nut secured on said threaded end for clamping the head, steering-post and handle-bar together at one operation.

2. In a bicycle, a head provided with means for engaging a handle-bar, a steering-post fitting into said head having its upper end slotted and provided with an integral interiorly-beveled face, a clamping-piece consisting of a hollow sleeve having an integral tapered portion at its lower end fitting into and en-

gaging the beveled portion of the steering-post and having an integral exteriorly-threaded end extending above the head, and a nut screwed on said threaded end for clamping the head, steering-post and handle-bar at one operation.

3. In a bicycle, a head provided with means for engaging the handle-bar, a hollow steering-post fitting into said head, a hollow sleeve extending through the clamping portion of the head, means whereby said hollow sleeve coacts with the hollow post to clamp the same, a brake connection passing through the hollow sleeve and steering-post, means for clamping the handle-bar and steering-post at one operation, and a brake-operating handle located directly above the hollow sleeve and connected with said brake connection.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWIN S. LEAYCRAFT.

Witnesses:

IDA A. HOPKINSON,
M. MARTIN.