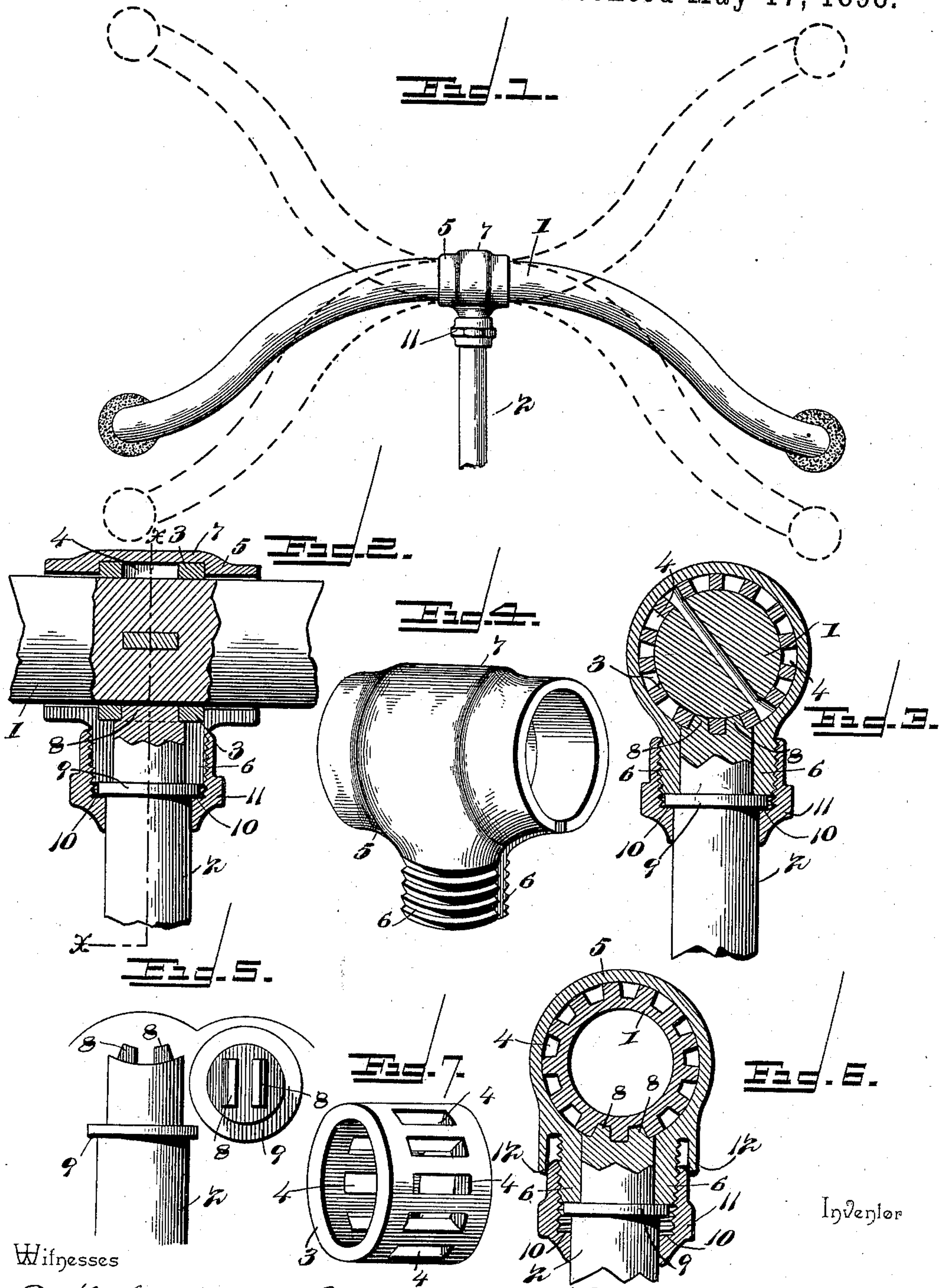


(No Model.)

O. B. MOSHER.
HANDLE BAR.

No. 604,071.

Patented May 17, 1898.



Witnesses
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UNITED STATES PATENT OFFICE.

ORIN B. MOSHER, OF JOLIET, ILLINOIS.

HANDLE-BAR.

SPECIFICATION forming part of Letters Patent No. 604,071, dated May 17, 1898.

Application filed November 30, 1896. Serial No. 613,966. (No model.)

To all whom it may concern:

Be it known that I, ORIN B. MOSHER, a citizen of the United States, residing at Joliet, in the county of Will and State of Illinois, have invented a new and useful Handle-Bar, of which the following is a specification.

This invention relates to adjustable handle-bars for vehicles, such as bicycles and velocipedes, and aims to provide a handle-bar which can be turned to raise or lower the grips and reversed end for end to change the style of handle-bar, whereby the bent end portions may curve upwardly or downwardly to suit the fancy of the rider according to the character of riding.

The invention consists of a clamp fitted to the handle-bar and a clamp-nut fitted upon the steering-head and adapted to cooperate with the threaded portion of the clamp to cause the latter to grip the handle-bar and at the same time to hold the steering-head in interlocking relation with the handle-bar.

The improvement also consists of the novel features, details of construction, and combinations of parts which hereinafter will be more fully set forth, illustrated, and finally claimed.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a front elevation of a handle-bar constructed in accordance with this invention, the dotted lines showing different adjustments thereof. Fig. 2 is a longitudinal section of the middle portion of the handle-bar, showing the relation of the securing means between the handle-bar and steering-head. Fig. 3 is a transverse section about on the line X X of Fig. 2. Fig. 4 is a detail view of the handle-bar clamp. Fig. 5 is a detail view of the upper end of the steering-head in side and end elevation. Fig. 6 is a sectional detail showing the invention applied to a tu-

bular handle-bar and the clamp having a guard to overlap the upper end of the clamp-nut. Fig. 7 is a detail view of the band which is secured to the handle-bar.

Corresponding and like parts are referred to in the following description and indicated in the several views of the drawings by the same reference characters.

The handle-bar 1, which may be of wood, metal, or of any suitable material, has its end portions bent in the usual manner and is reversibly connected with the steering-head 2, so that its end portions may either curve downwardly or upwardly, according to the style of handle desired, and the parts are so constructed that in either position—that is, whether the ends curve upwardly or downwardly—the handle-bar can be turned to vary the elevation of the grips to suit the character of riding or the convenience of the user.

When the handle-bar is formed of wood, a band 3 is secured thereto at a middle point and is provided in its circumferential length with a series of cavities 4 to interlock with the extremity of the steering-head 2. These cavities 4 are elongated lengthwise of the handle-bar, so as to provide an extended engagement between them and the interlocking portion of the steering-head.

A clamp 5 is fitted to the middle portion of the handle-bar and consists of a split sleeve having segmental portions 6 bordering upon the split and which unitedly form a neck having an exteriorly-threaded portion and adapted to receive the upper end portion of the steering-head. The middle portion of the sleeve is enlarged, as shown at 7, to receive the band 3, thereby retaining the parts in an adjusted position, as will be readily understood.

The steering-head is formed with one or more cogs 8 at its upper end to interlock with the cavity 4 and is formed with an annular shoulder 9, which is engaged by an inner flange 10 of a clamp-nut 11, loosely fitted upon the steering-head and adapted to make screw-thread connection with the neck portion of the clamp 5, so as to draw the segmental portions 6 together, whereby the clamp grips the handle-bar, and to hold the cogs 8 within the cavities 4, thereby fixing the position of the parts. The internally-threaded portion

of the clamp-nut tapers slightly, so that upon screwing the clamp-nut home the segmental portions 6 of the clamp 5 are drawn together, whereby the handle-bar is firmly and securely gripped.

When it is required to adjust the handle-bar, the clamp-nut 11 is backed sufficiently to permit the disengagement of the cogs 8 from the cavities 4 upon lifting the handle-bar, thereby permitting the said handle-bar to be turned or to be reversed, the turning of the handle-bar within the clamp changing the elevation of the grips, whereas the reversing of the handle-bar end for end changes the relative curvature of the end portions and the consequent style, whereby the end portions may be caused either to curve upwardly or downwardly, as desired. When the handle-bar has been adjusted, it will rest upon the end of the steering-head and thereby have its position fixed prior to the tightening of the clamp-nut, which latter can be turned up without danger of disturbing the position of the handle-bar, the weight of which may be assisted by a downward pressure thereon of one hand, while the other hand is occupied in screwing home the clamp-nut to lock the parts in the adjusted position.

For metallic handle-bars the cavities 4 may be formed directly therein, thereby obviating the necessity of providing the metal band 3, which is necessary for wooden handle-bars in order to prevent the cogs 8 from stripping the same. This construction is clearly indicated

in Fig. 6. This figure also shows the clamp having a depending rim 12, which forms a guard to extend over and overlap the upper portion of the clamp-nut, thereby concealing the thread of the neck of the clamp and preventing dirt or foreign matter entering between the clamp-nut and steering-head and at the same time providing a neat finish.

Having thus described the invention, what is claimed as new is—

In combination, a steering-head having a cog at the extremity of the steering-stem, a handle-bar having a series of cavities at intervals in its circumferential length to interlock with the aforesaid cog, a split sleeve fitted about and receiving the handle-bar and having its end portions brought together forming a neck which is exteriorly threaded, and a clamp-nut mounted upon the steering-head and interlocking therewith, and having its threaded opening tapering to receive and draw together the separated portions forming the neck of the split sleeve to cause the latter to grip the handle-bar and at the same time hold the said cog in engagement with any one of the aforesaid cavities, whereby the handle-bar is locked, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ORIN B. MOSHER.

Witnesses:

JOHN H. SIGGERS,
H. H. SIMMS.