No. 691,830. Patented Jan. 28, 1902.

W. N. WHITELY & W. N. WHITELY, JR.

BICYCLE HANDLE BAR.

(Application filed Jan. 24, 1900.)

(No Model.)

Fig. 1

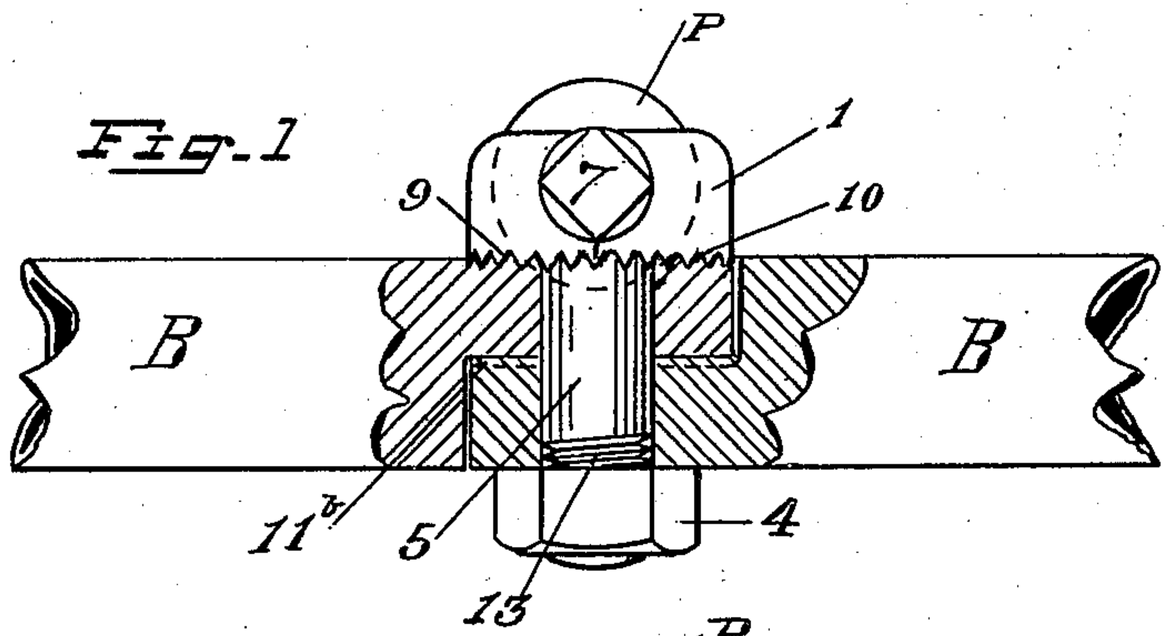


Fig. 2

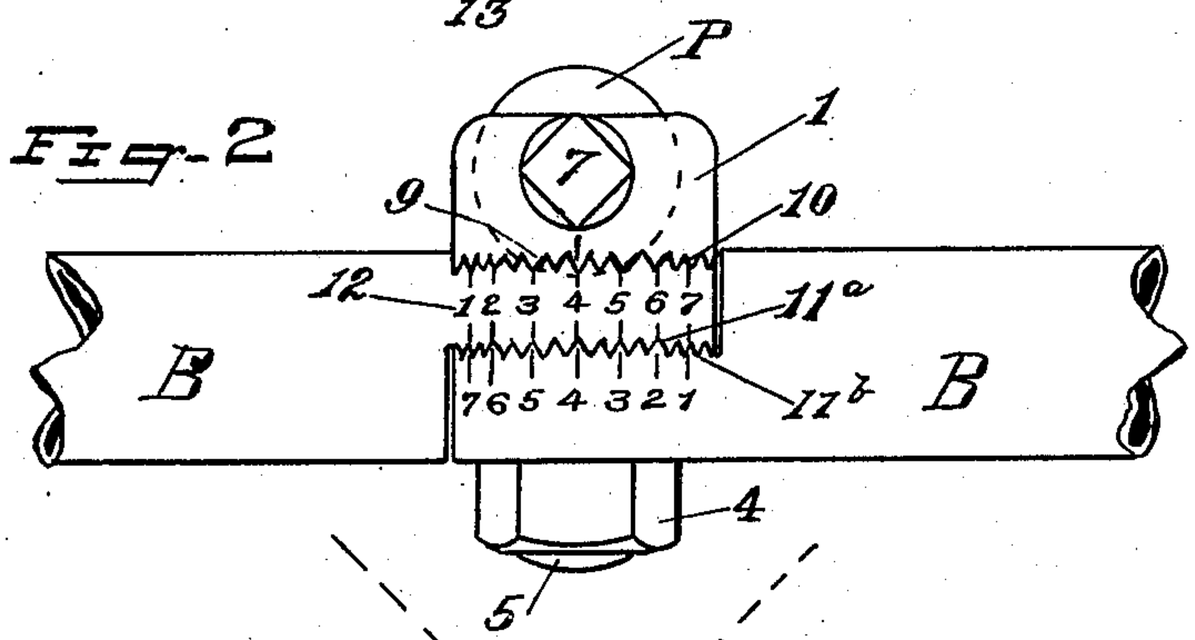
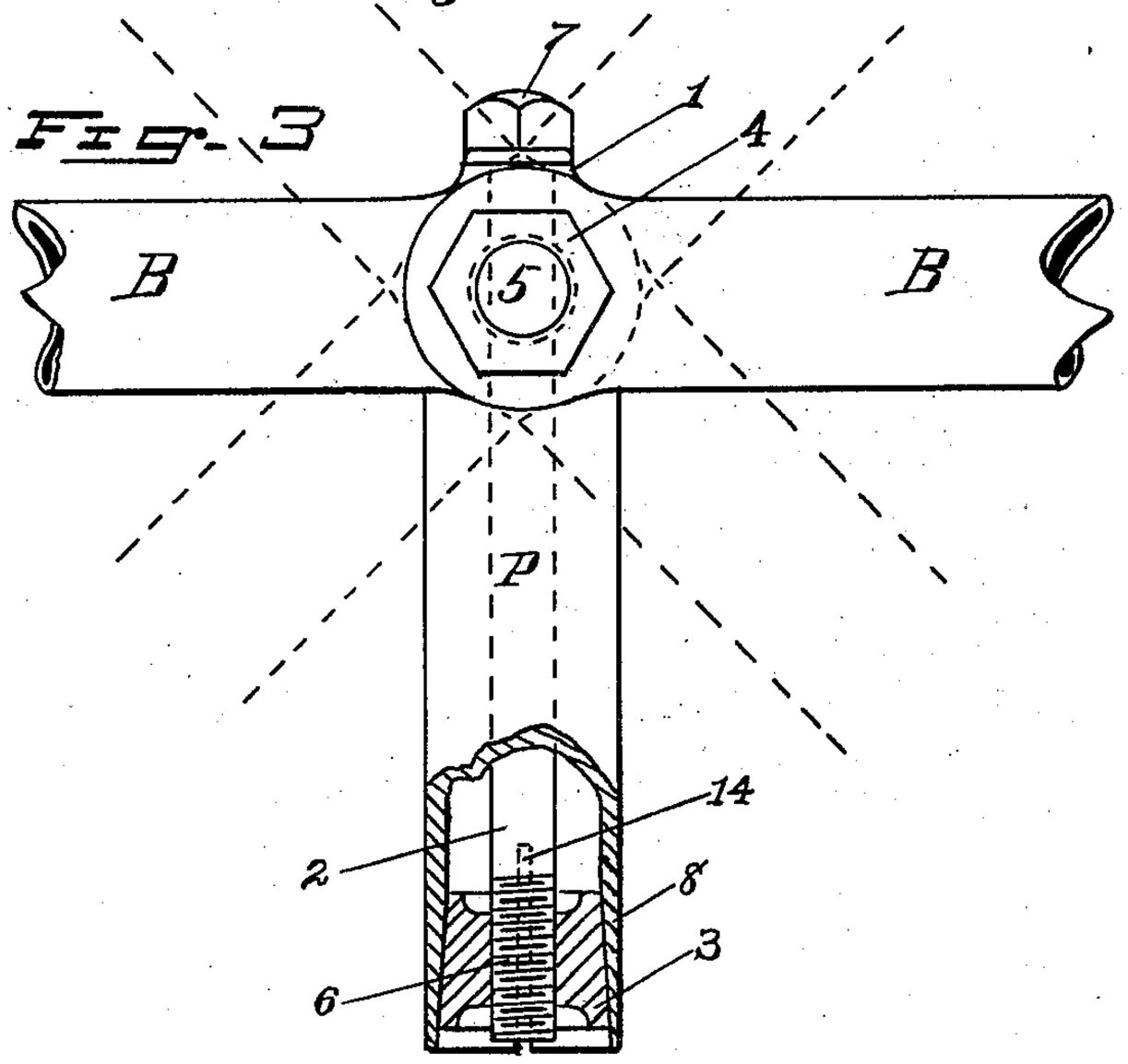


Fig. 3



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BICYCLE HANDLE-BAR.

SPECIFICATION forming part of Letters Patent No. 691,830, dated January 28, 1902.

Application filed January 24, 1900. Serial No. 2,563. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM N. WHITELY and WILLIAM N. WHITELY, Jr., citizens of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Bicycle Handle-Bars; and we do 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 the letters and figures of reference marked thereon, which form a part of this specification.

Our invention relates to bicycle handle-bars; and it consists of the devices hereinafter described and claimed.

Our invention comprises the independently vertically adjustable handle-bars, pivoted to the handle-bar post on a common center, and the longitudinal clamping-rod for the post expander-clamp, combined with the said post in such manner that it may both be manipulated to release, adjust, and secure the post within the steering-fork tube and may be removed from the post independently and irrespective of the handle-bars and their clamping devices.

It further comprises a post, two handle-bars individually pivoted and adjustable thereon, and means for clamping said bars, said post being longitudinally perforated from the top to one side of the pivot for the bars, a clamping-rod in said perforation and removable therefrom independently of and past the pivoted ends of the bars, and an expander or clamp for the post actuated by said rod.

It further comprises a simple means by which independently-adjustable handle-bars may be vertically adjusted within certain limits to any position and retain their vertical alinement.

In order to make our invention more clearly understood, we have shown in the accompanying drawings means for carrying the same into practical effect without limiting our improvements in their useful applications to the form in which for the sake of illustration we have delineated them.

In said drawings, Figure 1 is a plan view, partly in section, of a form of bicycle handle-bar construction showing the clamping means for the bars. Fig. 2 is a plan view of a form of bicycle handle-bar construction showing the means for maintaining vertical alinement of the adjustable handle-bars. Fig. 3 is a rear elevation, partly in section, of the handle-bars and post of the form shown in Figs. 1 and 2, showing the removable clamping-rod and the clamping-expander actuated by the clamping-rod by means of which the post is adjusted and clamped within the steering-fork tube, (not shown,) also by dotted lines the extreme vertical adjustments of the handle-bars.

Referring to the drawings, P indicates the handle-bar post having a head 1. The post is adapted to be secured within the steering-fork tube, (not shown,) as by making its lower end expansible by slots, as shown by dotted lines at 14, and interiorly beveled or tapered, as at 8, and combining therewith a conical clamping-expander 3, adapted to expand said post by longitudinal or other movement when actuated by the clamping-rod 2. In the construction shown said rod effects the expansion and clamping of the post by longitudinal movement of the expander 3. To this end said rod is formed with a screw-thread 6, by which such movement is effected. The clamping-rod 2 turns loosely in the head 1 of the post and is held in position by a collar formed of its square head 7, which is adapted to be turned by an ordinary wrench, and it will be seen that the head 7 is readily accessible for manipulation and that the rod 2 is removable upwardly through the head 1 of the post P. The post is thus secured within the steering-fork tube at any desired height of adjustment independently of the handle-bars B B or their adjusting and securing means. It is obvious that any of the clamping means well known to the art may be used for securing the post in connection with our removable adjusting-rod 2, although we prefer the construction shown in drawings for clamping the post in the steering-fork tube.

We will now describe the means by which the handle-bars B B are supported and secured.

Referring to the drawings, the post P is formed with a head 1, from which extends

rearwardly the pivot 5, integral or rigid with the head 1. On the head 1 are formed corrugations 9, which engage corresponding corrugations 10, formed around the inner end of one of the handle-bars. The inner ends of the handle-bars B B pass over the pivot 5 and are pivoted and supported thereon for the purposes of clamping and adjusting them. The handle-bar member engaging with the post by means of corrugations 10 also engages by means of corrugations 11^a with the corresponding corrugations 11^b around the end of the other handle-bar member. The nut 4 screws upon the threads 13 of the pivot 5, thus securely clamping the bars in any desired position of adjustment.

It is desirable to provide means whereby independently vertically adjustable handle-bars of the common-center type may be separately and quickly adjusted with ease to the same vertical height without employing an expensive or complicated mechanism for that purpose. To this end the head 1 and the contiguous portions of the handle-bars are provided with indicating-marks, appropriately distinguished, as by one or more of a series of numbers, as at 12. Where such series of marks are formed on the handle-bars, a single indicating guide-mark may be formed on the head 1 in a suitable position. It will be readily seen that upon turning the bars to a position in which like marks correspond one with the other on each handle-bar and with the indicating guide-mark on the head their vertical parallelism will be maintained and that the annoyance of securing the handle-bars at an unequal height of vertical adjustment will have been avoided. It will be understood, however, that we do not limit ourselves to the exact manner in which the indicating-marks are applied, as shown and described. The use of such scale, indicating, or guide marks for maintaining the same vertical height of adjustment in independently vertically adjusting handle-bars is one of the important objects of our invention.

We claim—

1. In a vertically-adjustable divided handle-bar construction, a handle-bar post having integral therewith a head, two vertically-adjustable handle-bars pivoted thereon on a common center, corrugations on the face of said head around said pivot-center for one of the bars, corresponding corrugations on one of said bars to engage the head-corrugations and means for clamping said bars and head together, a clamping-rod passing through an orifice common to both head and post independent of said bars and wholly to one side thereof and engaging a clamping device located at the lower end of said post whereby said post may be vertically adjusted within the steering-fork tube for the purpose shown and described.

2. In an adjustable handle-bar construction, the combination of a handle-bar post having thereon an indicating-mark for a fixed guide for two handle-bars pivoted on said post, two independently-adjustable handle-bars pivoted as described each bar having a series of independent and corresponding marks thereon so arranged that upon the swinging of both bars upon the post to a position in which like marks on each bar will be in line with the guide-mark on the post they will be parallel in their vertical height, and means for positively locking and clamping said bars and post together at any desired height of vertical adjustment.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM N. WHITELY.
WILLIAM N. WHITELY, JR.

Witnesses:
H. N. LOW,
WM. H. DE LACY.