

No. 661,563.

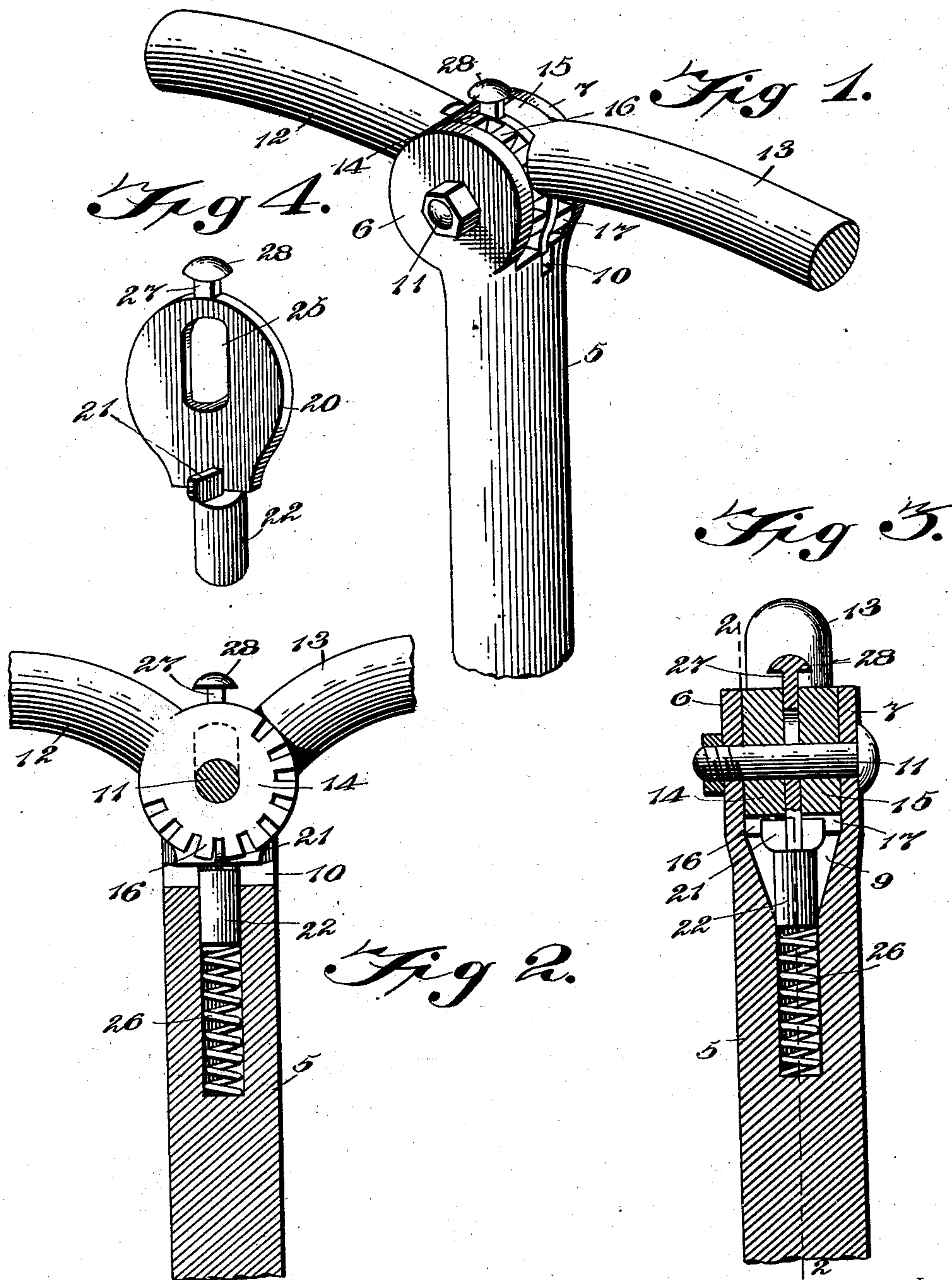
Patented Nov. 13, 1900.

W. F. STOCKFORD.

HANDLE BAR.

(Application filed Apr. 4, 1900.)

(No Model.)



Witnesses

John Maupin  
Geo H Chandler

By *his* Attorneys,

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# UNITED STATES PATENT OFFICE.

WILLIAM F. STOCKFORD, OF SOUTH BEND, INDIANA.

## HANDLE-BAR.

SPECIFICATION forming part of Letters Patent No. 661,563, dated November 13, 1900.

Application filed April 4, 1900. Serial No. 11,524. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM F. STOCKFORD, a citizen of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented a new and useful Handle-Bar, of which the following is a specification.

This invention relates to handle-bars for bicycles in general, and more particularly to adjustable handle-bars, one object of the invention being to provide a construction and arrangement whereby the handles may be raised and lowered independently of each other and to any desired extent within certain limits, and in which, moreover, when adjusted the handles will be held securely in position.

A further object of the invention is to provide a construction in which the parts may be quickly unlocked for adjustment and may be as quickly locked against adjustment.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing the stem having the handle-bar sections connected therewith in accordance with the present invention. Fig. 2 is a section on line 2 2 of Fig. 3 and showing the locking-bolt in elevation, as also its spring. Fig. 3 is a central longitudinal section taken in the plane of the pivot of the handle-bar sections and showing parts in elevation. Fig. 4 is a perspective view showing the locking-bolt.

Referring now to the drawings, 5 represents the stem of the handle-bar, which is adapted for engagement in the socket of the head of the bicycle in the usual manner, the upper end of the stem having parallel ears 6 and 7 extending longitudinally therefrom and separated by an interspace, as shown. Formed longitudinally of the stem and opening into the interspace between the ears 6 and 7 is a recess 9, the upper end of which is broadened in the direction at right angles to the inner faces of the ears 6 and 7. A slot 10, formed in the upper end of the stem, lies midway between the ears and communicates with the recess 9, as clearly shown in Figs. 1 and 2.

In the ears 6 and 7 are formed alining perforations with which is engaged a pivot-pin or screw-bolt 11, and upon this bolt is mounted the inner ends of the two handle-bar sec-

tions 12 and 13. Each of these handle-bar sections is in the form of half of a handle-bar, having a handle at its outer end, the inner ends of the sections being provided with annular terminals 14 and 15, of substantially disk shape and of the same diameter, and each terminal disk has peripheral teeth 16 and 17, respectively, while perforations are formed in the disks concentric therewith, the pivot-bolt being engaged with these perforations to pivotally mount the handle-bar upon the stem. It will be thus seen that with the construction described the handle-bar sections may be pivotally adjusted to raise and lower the handles.

It is of course necessary to provide means for holding the handle-bar sections at different points of their adjustment, and for this purpose a locking-bolt is disposed in the slot and recess of the stem. The bolt consists of an upper flat plate 20, of substantially disk shape, the lower side of which is distended, and of a stem portion 22. The upper end of the stem portion 22 is flattened and extended laterally beyond the faces of the stem to form a web 21, and this web is engaged in a slot in the lower distended portion of the plate or disk 20. The disk-shaped portion of the bolt is disposed to lie between the ears 6 and 7 and has an elongated slot 25, through which the pivot-bolt 11 is passed, the slot permitting sliding movement of the disk, which in practice lies between the disk-shaped ends 14 and 15 of the handle-bar sections 12 and 13. The stem 22 lies in the recess 9, and the web 21 is adapted to enter the slot 10 when the locking-bolt is depressed against the tendency of a helical spring 26, which is disposed in the recess 9 and against which the lower end of the stem 22 rests. When the locking-bolt is released, this spring acts to move it upwardly and engage the web 21 with the interspaces between the teeth upon the disk-shaped end portion of the handle-bar sections and thus to hold said sections from pivotal movement.

To facilitate depression of the locking-bolt, a lug 27 extends from the upper end thereof to a point above the disks of the bar-sections and has a head 28, forming a thumb-piece. With this construction it will be seen that by depressing the thumb-piece, and therewith the locking-bolt, the handle-bar sections may be



raised and lowered at their outer ends, and when the thumb-piece is released the locking-bolt rises and engages its web 21 between two of the teeth of each handle-bar section, thus holding such sections against further pivotal movement.

It will be understood that in practice various modifications of the structure shown may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention. Furthermore, it will be seen that with the present construction the handle-bar may be unlocked and adjusted to any desired position and then locked without necessitating the rider leaving the wheel. This is particularly valuable when riding in a hilly country and it is desired to lower the handles when pulling a hill and to raise the handles when riding on a level or slight grade.

What is claimed is—

In a handle-bar, the combination with a stem having a bifurcated upper end and a recess opening into the interspace between the bifurcations, the lower portion of the recess being cylindrical and the upper portion being flared, of two bar-sections, each having a notched disk at one end disposed in axial

alinement between the bifurcations of the stem and in contact with the latter, a locking-bolt comprising a plate disposed between the disks and having a central slot, and a stem having its upper end flattened to form a web extending longitudinally from the stem and projecting laterally beyond the side faces thereof, said web having a slot therein in which the plate is engaged, and said stem lying with its lower portion in the cylindrical portion of the recess of the handle-bar stem and with its webbed portion in the flared upper portion of said recess, a spring in the recess below the bolt and bearing thereagainst to hold the bolt normally raised with the web in engagement with the notched disks, a finger-piece upon the plate, and a pivot-pin for the disks passed through the bifurcations of the handle-bar stem, the disks and the central opening of the bolt-plate.

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

WILLIAM F. STOCKFORD.

Witnesses:

BENJAMIN F. STOCKFORD,  
JNO. E. FISHER.