

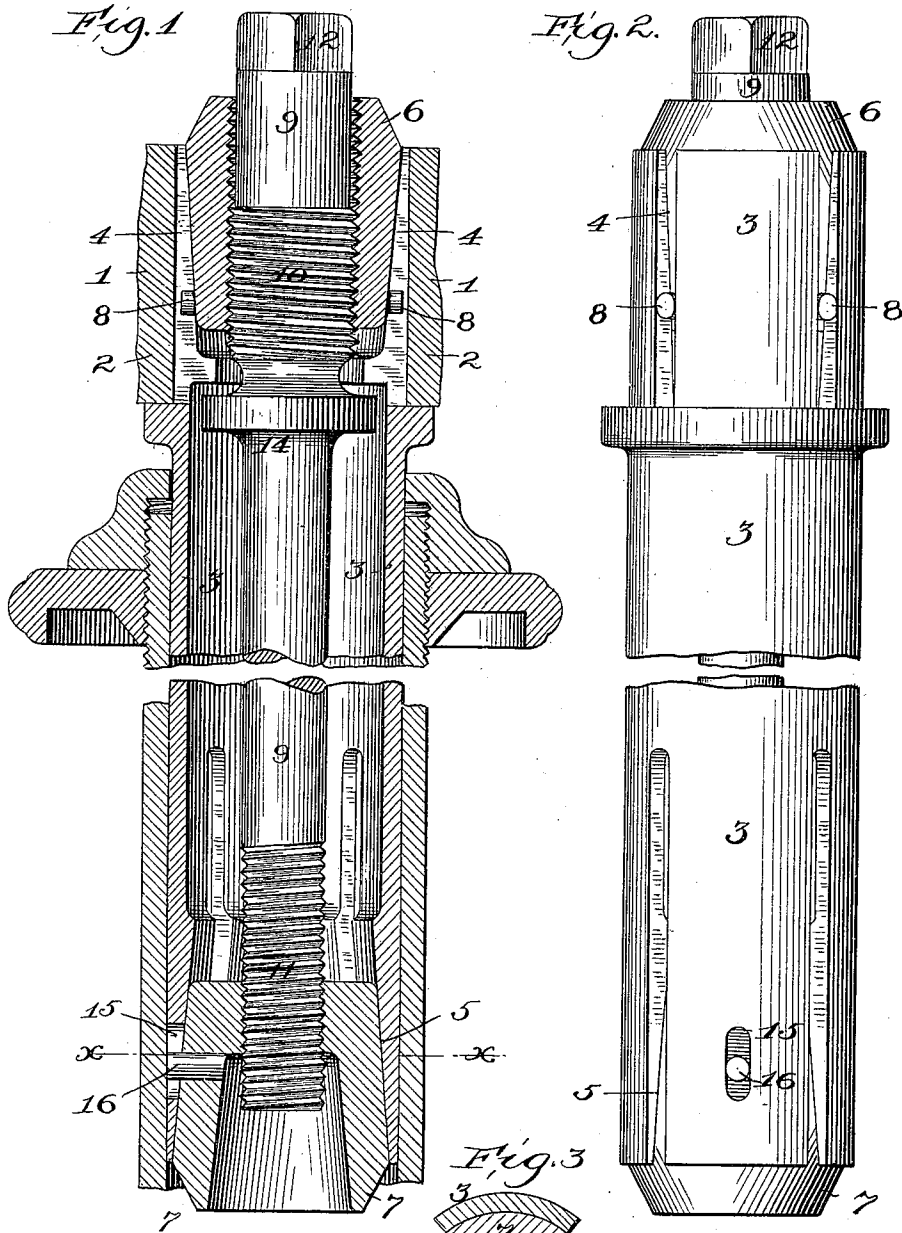
No. 620,848.

Patented Mar. 7, 1899.

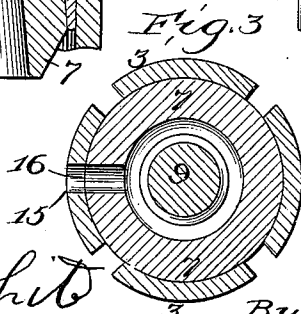
A. JEROME.
HANDLE BAR FASTENING.

(Application filed Nov. 7, 1898.)

(No Model.)



Attest:
 Louis White
 Clerk of the Court



Inventor:
 Anthony Jerome,
 By Robert Burns Atty.

UNITED STATES PATENT OFFICE.

ANTHONY JEROME, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE A. FEATHERSTONE & COMPANY, OF SAME PLACE.

HANDLE-BAR FASTENING.

SPECIFICATION forming part of Letters Patent No. 620,848, dated March 7, 1899.

Application filed November 7, 1898. Serial No. 695,789. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY JEROME, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Handle-Bar Fastenings; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to that type of handle-bar fastenings for bicycles and the like in which the one operation of the mechanism performs a dual function—to wit, securing the handle-bar proper in fixed relation to the handle-bar stem and the handle-bar stem in fixed relation to the steering-stem or arbor of the bicycle.

The object of the present improvement is to provide a simple, durable, and effective combination and arrangement of parts by which the above-mentioned dual fastening of the parts is attained in a ready and substantial manner, as will hereinafter more fully appear, and be more particularly pointed out in the claims. I attain such objects by the construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is an enlarged detail central sectional elevation of a bicycle-handle and connections, illustrating the present invention; Fig. 2, an enlarged detail side elevation of the duplex expanding-stem and its operating mechanism; Fig. 3, an enlarged detail horizontal section of the same at line *x x*.

Similar numerals of reference indicate like parts in the different views.

Referring to the drawings, 1 represents the handle-bar proper, provided with a central head 2, through which is formed a central vertical bore that fits upon the outer and upper end of the handle-bar stem 3 in a removable manner, so that such handle-bar may be capable of removal and reversal, as required.

In the present improvement the handle-bar stem 3 is separate from the handle-bar proper, and its upper and lower ends are of a longitudinally-slitted nature, as shown, and each end is formed with a tapering counterbore 4

and 5, which counterbores taper or flare outwardly and in opposite directions, as shown.

6 and 7 are exteriorly-tapering nuts or expanders fitting the counterbores 4 and 5 of the handle-bar stem, and the nut 6 is held against independent rotation by individual studs 8 on said nut or plug engaging in the longitudinal slits in the stem, as shown.

9 is the operating-bolt of the present mechanism, formed with screw-threaded portions 10 and 11, that have engagement in axially-screw-threaded orifices in the respective nuts or expanders 6 and 7, said screw-threads being of a right and left hand nature, respectively, or other equivalent differential nature, so that the rotation of the bolt 9 will move said nuts or expanders 6 and 7 longitudinally in opposite directions. At its upper end the bolt 9 is formed with a projecting angular head 12 for convenience in operating the same.

14 is a collar on operating-bolt 9 of the same and adapted to make contact with the under surface of the counterbore 4 to form an abutment for the operating-bolt, and with further rotation of the bolt in a release direction will cause in a positive manner the lower nut or expander 7 to be forced downward out of its engagement with its counterbore 5 to release the handle-bar stem from its engagement with the fork-post. For the above purpose the collar 14 is located upon the operating-bolt 9 a short distance below the upper screw-threaded portion thereof and is of a diameter somewhat larger than that of the lower end of the counterbore 4, as shown in Fig. 1.

15 is a vertically-elongated slot formed, preferably, in the handle-bar stem 3 near its lower end, and 16 is a projecting stud upon the lower nut or expander 7, that projects into said elongated slot to limit the vertical movement of said nut or expander. It is within the province of the present invention to reverse the arrangement of the said elongated slot and stud, as well as to employ any well-known equivalent means to limit the vertical movement of the lower nut or expander 7.

With the present construction the two nuts or expanders may be made of counterpart ta-

pering formation, as illustrated in the present drawings, or they may be made of a relative differential taper, as set forth in my aforesaid prior application.

5 Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

10 1. The combination with the fork-post, of the handle-bar stem, having top and bottom slits and tapering counterbores, the handle-
bar formed with a vertical bore that fits the
upper end of the stem, tapering nuts or ex-
panders individual to the respective counter-
bores of the stem, and an operating-bolt com-
15 mon to both nuts or expanders, substantially
as set forth.

20 2. The combination with the fork-post, of the handle-bar stem, having top and bottom slits and tapering counterbores, the handle-
bar formed with a vertical bore that fits the
upper end of the stem, tapering nuts or ex-
panders individual to the respective counter-
bores of the stem, an operating-bolt common
to both nuts or expanders, and provided with
25 an enlarged collar and an abutment therefor
formed within the interior of the handle-bar
stem, substantially as set forth.

30 3. The combination with the fork-post, of the handle-bar stem having top and bottom slits and tapering counterbores, the handle-
bar formed with a vertical bore that fits the
upper end of the stem, tapering nuts or ex-
panders individual to the respective counter-
bores of the stem, an operating-bolt common
35 to both nuts or expanders, and means for lim-

iting the vertical movement of the lower nut or expander, substantially as set forth.

40 4. The combination with the fork-post, of the handle-bar stem having top and bottom slits and tapering counterbores, the handle-
bar formed with a vertical bore that fits the
upper end of the stem, tapering nuts or ex-
panders individual to the respective counter-
bores of the stem, an operating-bolt common
to both nuts or expanders, and provided with
45 an enlarged collar, an abutment therefor
formed within the interior of the handle-bar
stem, and means for limiting the vertical
movement of the lower nut or expander, sub-
stantially as set forth. 50

55 5. The combination with the fork-post, of the handle-bar stem having top and bottom slits and tapering counterbores, the handle-
bar formed with a vertical bore that fits the
upper end of the stem, tapering nuts or ex-
panders individual to the respective counter-
bores of the stem, an operating-bolt common
to both nuts or expanders and provided with
an enlarged collar, and means for limiting the
vertical movement of the lower nut or ex-
60 pander, the same comprising a vertically-
elongated slot in the handle-bar stem, and a
stud on the lower nut engaging said slot, sub-
stantially as set forth.

In testimony whereof witness my hand this 65
2d day of November, 1898.

ANTHONY JEROME.

In presence of—
ROBERT BURNS,
JAMES LAVALLIN.