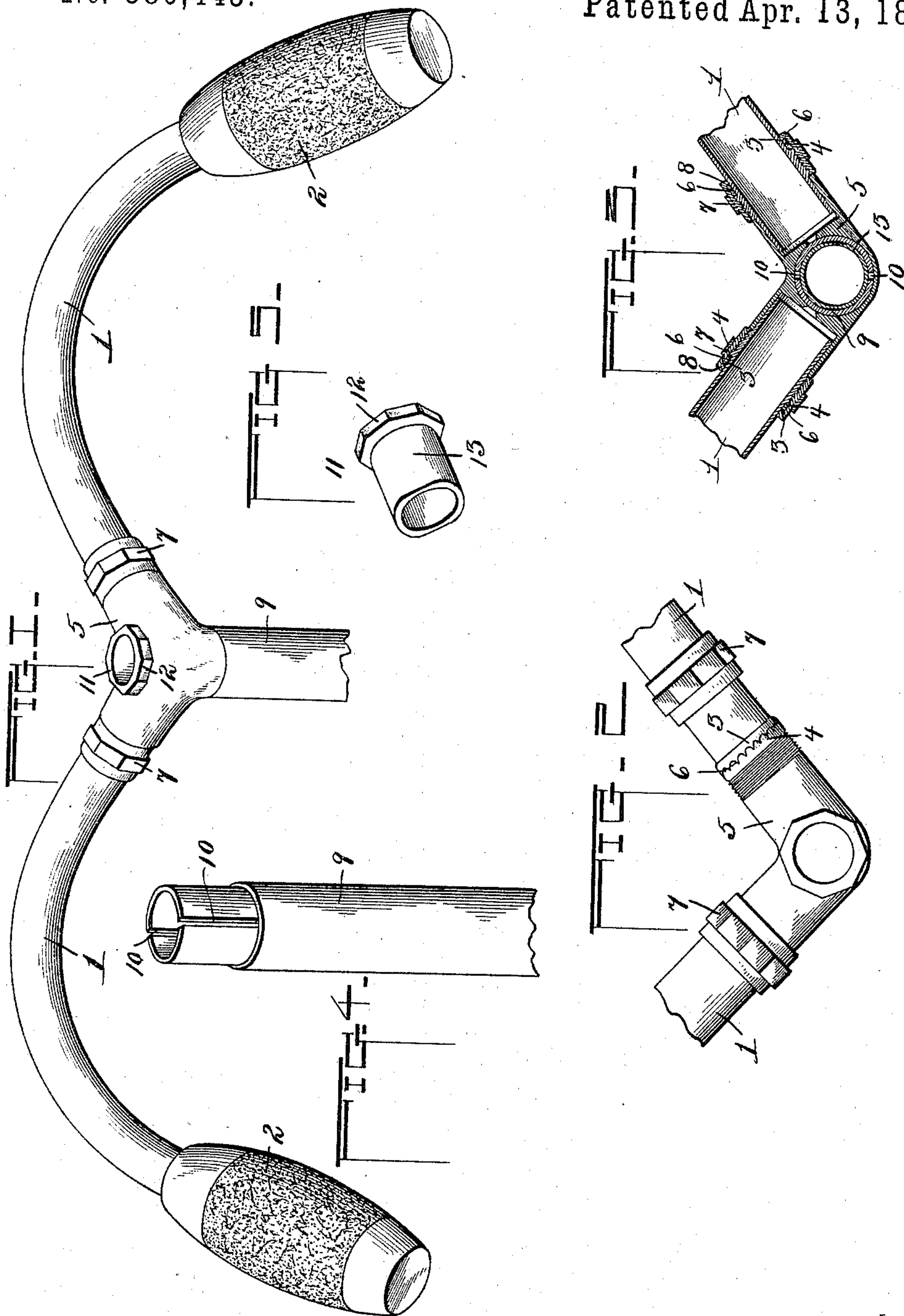


(No Model.)

G. F. YORK.
BICYCLE.

No. 580,443.

Patented Apr. 13, 1897.



Inventor

Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE F. YORK, OF ELGIN, ILLINOIS.

BICYCLE.

SPECIFICATION forming part of Letters Patent No. 580,443, dated April 13, 1897.

Application filed May 23, 1896. Serial No. 592,812. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. YORK, a citizen of the United States, residing at Elgin, in the county of Kane and State of Illinois, have invented a new and useful Bicycle, of which the following is a specification.

This invention relates to bicycles, and has reference to the manner of securing the several members of the handle-bar and the stem and lug of the handle-bar together, whereby the handle-bar lug may be reversed and the handle-bar sections adjusted to any desired height or relation to each other.

The invention consists in certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and finally incorporated in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a handle-bar and its stem, &c., constructed in accordance with the present invention. Fig. 2 is a plan view of a portion of the same with one of the nuts moved to one side to show the adjustable connection between one of the handle-bar sections and the lug. Fig. 3 is a horizontal section through the same. Fig. 4 is a detached perspective view of the handle-bar stem. Fig. 5 is a similar view of the hollow spreading-nut.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

The improved handle-bar contemplated in the present invention is constructed in two equal and similar sections 1, and each section is independently and adjustably connected to the lug at the upper end of the handle-bar stem. Each of the handle-bar sections is preferably made from steel tubing in the ordinary manner and provided at its outer end with a grip 2 and at a short distance from its inner end with a collar 3, which abuts against one of the laterally-projecting thimble or sleeve portions 4 of the handle-bar lug 5. The meeting edges or surfaces of the collar 3 and sleeve or thimble 4 are correspondingly scalloped, as shown at 6, or provided with interlocking alternate projections and recesses. The inner end of each handle-bar section is adapted to slide within its respective sleeve or thimble 4 in such manner as to bring the

scallops 6 into interlocking engagement or to throw them out of engagement for permitting the handle-bar section to be turned for adjusting the height and angle of the grips. When adjusted to the desired position, each handle-bar section is independently held fast to the lug 5 by means of an internally-threaded sleeve or nut 7, provided with an internal annular shoulder 8 for engaging the collar 3 and screwing upon its respective thimble 4, which is externally threaded to receive it. By means of this construction each of the handle-bar sections may be adjusted to the same height as the other section or to a different height or angle therefrom, so as to accommodate a person with a broken or shortened arm, and both of the handle-bar sections may be adjusted to adapt the wheel for ordinary level riding or touring or for racing or "scorching" purposes.

The handle-bar stem (indicated at 9) is constructed of a piece of tubing, and the upper end thereof is provided with diametrical slits 10, extending downward and longitudinally of the stem a short distance. The metal included between said slits is bent inward toward the axial center of the stem, so as to form an ellipsoidal bore to the upper end of the stem, after which such portion of the stem is turned round upon its outer surface, so as to fit snugly within the lug 5. After inserting the split end of the stem 9 in the lug 5 a nut 11 is placed in the upper end of the lug and inserted within the open end of the stem 9. This nut is provided with wrench-engaging surfaces 12 and comprises a depending sleeve portion 13, the exterior surface of which is ellipsoidal to correspond to the shape of the bore or opening in the upper end of the handle-bar stem 9. The sleeve 13 fits snugly within the stem, and when it is turned therein it serves, by reason of its external shape, to spread the stem 9 or the split portions thereof and cause the same to bind tightly within the lug 5, thus preventing relative turning between the stem and lug. The meeting or engaging surfaces of the stem and lug may be threaded or otherwise roughened, so as to prevent the possibility of the escape of the nut 11 due to the constant jarring of the machine. By removing the nut the lug 5 may be reversed, and as such lug has its sleeve or

thimble portions 4 arranged at an angle to each other, as shown in the drawings, and not diametrically opposite in the usual manner, the reversal of the lug 5 means an additional adjustment to the handle-bar sections 1, which adjustment will effect a variance of the distance between the grips or the setting of the grips farther back or farther forward, as the case may be.

10 The improved features above described add materially to the value of the machine to which they are applied. By them the handle-bars may be adjusted to any desired height or angle, and each of the handle-bar sections 15 is adjustable independently of the other. The handle-bar lug is also reversible for giving increased adjustability to the handle-bar sections. The handle-bar is applicable to the head of any ordinary safety-bicycle.

20 If desired, the fork-stem of a machine may be primarily made with its upper end split similarly to the handle-bar stem, thus dispensing with the latter, the handle-bar lug being fastened directly on the fork-stem.

25 It will be apparent that the parts referred to are susceptible of changes in the form, proportion, and minor details of construction, which may accordingly be resorted to without departing from the spirit or sacrificing 30 any of the advantages of this invention.

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

1. A handle-bar comprising a central lug

having laterally-projecting sleeve or finger portions disposed at an angle to each other, 35 two handle-bar sections independently and adjustably connected to said lug, the handle-bar stem detachably connected to said lug, and means whereby said lug may be reversed, substantially as and for the purpose de- 40 scribed.

2. The combination with a handle-bar stem having one end split, as described, and provided with a cross-sectionally-irregular bore, of a handle-bar having its central lug remov- 45 ably fitted on the split end of the stem, and a plug having an irregular cross-sectional form corresponding substantially to the bore of the stem for spreading the stem within the handle-bar lug, substantially as described. 50

3. The combination with a handle-bar having an opening in its central portion, of a handle-bar stem having one end split and formed with an ellipsoidal bore, and a nut having an ellipsoidal portion adapted to be inserted 55 within the split end of the stem and be turned for spreading the stem within the handle-bar, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature 60 in the presence of two witnesses.

GEORGE F. YORK.

Witnesses:

CHAS. WM. STORM,
ALB. A. HASSELQUIST.