No. 609,634. Patented Aug. 23, 1898.

# W. J. TANNER.

## BICYCLE.

(Application filed May 24, 1897.)

(No Model.)

Fig. 1.

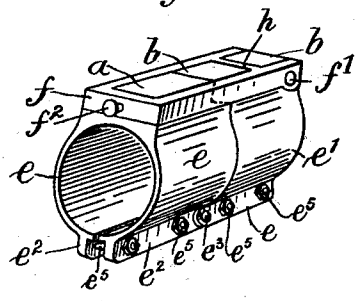



Fig. 2.

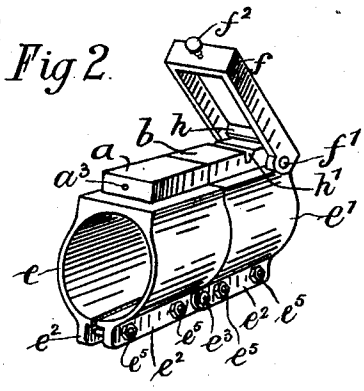



Fig. 4.

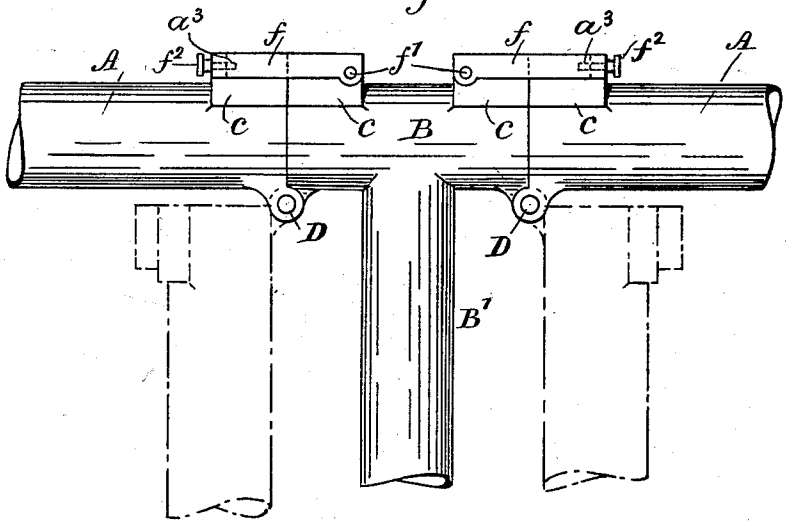
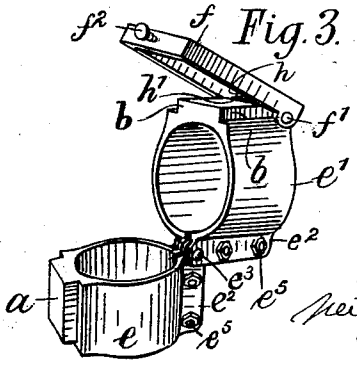



Fig. 3.




Witnesses

Chas. H. Smith

J. Staib.

Inventor

Wm. John Tanner

per L. W. Serrell & Son

Attys.

# UNITED STATES PATENT OFFICE.

WILLIAM JOHN TANNER, OF LONDON, ENGLAND.

## BICYCLE.

SPECIFICATION forming part of Letters Patent No. 609,634, dated August 23, 1898.

Application filed May 24, 1897. Serial No. 637,861. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM JOHN TANNER, a subject of the Queen of Great Britain and Ireland, residing at London, England, have invented new and useful Improvements in Bicycles, of which the following is a specification.

My improvements in bicycles have reference more particularly to improved means or locking-joints for permitting the handle-bar to be folded downward on each side of the steering-post and for locking such handle-bar when raised into position for use. By means of my invention the machine can be more readily stored or carried.

In carrying out my invention the handle-bar is divided at each side of the T-piece and hinges employed for connecting such handle-bar sections to the T-head, and abutting blocks are applied to the handle-bar at opposite sides to the hinges, and stirrups pivoted to the abutting blocks are fitted to close down around such blocks and permanently connect the parts together.

In the drawings, Figure 1 is a perspective view of the locking-joint ready for application to a handle-bar. Fig. 2 is a similar view showing the parts unlocked. Fig. 3 shows one member of the joint turned at an angle to the other, and Fig. 4 shows parts of the handle-bar with the invention applied thereto.

When this invention is to be applied to a handle-bar while being constructed, the parts are in the form shown in Fig. 4—that is to say, the T-head B upon the steering-head B′ and the handle-bar sections A A are hinged together at D and the locking devices hereinafter described are applied upon the top surfaces of the bars or tubes—but when the present invention is applied to a cycle already constructed the handle-bars are sawed off or separated, leaving the T-head as illustrated in Fig. 4, and the tubular clamps (shown in Figs. 1, 2, and 3) are applied thereon. These tubular clamps are composed of the parts $e$ $e'$ with downwardly-projecting flanges $e^2$, and connections or bolts $e^5$, passing through the flanges, serve to clamp or secure the divided tubular portions $e$ $e'$ upon the respective parts of the handle-bar, and the hinges $e^3$ are represented as joining the flanges $e^2$ together, and these hinges occupy substantially the positions of the hinges D, Fig. 4, and by this device the clamps can be firmly connected upon the handle-bar sections, so that such sections can be turned down into the dotted position shown in Fig. 4.

The locking-blocks $a$ $b$ are rigidly connected to the respective parts of the handle-bar either by such locking-blocks being formed with or connected to the tubular sections $e$ $e'$ or being upon the base-pieces $c$, that are brazed or otherwise attached to the handle-bar sections, as in Fig. 4.

The loop or stirrup $f$ is pivoted at $f'$ near one end of the locking-block $b$, and it can be swung up into the position indicated in Figs. 2 and 3 to allow the handle-bar sections to swing or turn down on their hinges, or they can be closed down in the position shown in Figs. 1 and 4 to grasp the locking-blocks $a$ and hold the parts tightly together, and any suitable device can be employed for holding the loop or stirrup $f$ in its closed position. I have shown a pin $f^2$ entering a hole at $a^3$ in the block $a$.

To relieve the pivot $f'$ of the stirrup $f$ from unnecessary strain, a cross-bar $h$ is provided between the two sides of the stirrup and near the pivot end thereof, which cross-bar passes into a groove $h'$ in the locking-block $b$ at the time the stirrup is closed down to hold the parts together.

I claim as my invention—

1. The combination with the handle-bar T and the end sections, of divided tubular clips and means for securing the clips to the handle-bar sections, a hinge for connecting the clips, locking-blocks upon the clips, a stirrup pivoted near one end to one of the locking-blocks and closing down and holding the other locking-block for rigidly connecting the parts together, substantially as set forth.

2. The combination with the handle-bar T and the end sections, of divided tubular clips and means for securing the clips to the handle-bar sections, a hinge for connecting the clips, locking-blocks upon the clips, a stirrup

pivoted near one end to one of the locking-blocks and closing down and holding the other locking-block for rigidly connecting the parts together, and a cross-bar between the sides of the stirrup and near the pivot thereof passing into a groove in one of the locking-blocks, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

WILLIAM JOHN TANNER.

Witnesses:

GEORGE ERNEST MINTERN,

FRED C. HARRIS.