

(No Model.)

F. S. GUY.
HANDLE BAR FOR CYCLES.

No. 604,981.

Patented May 31, 1898.

Fig. 1.

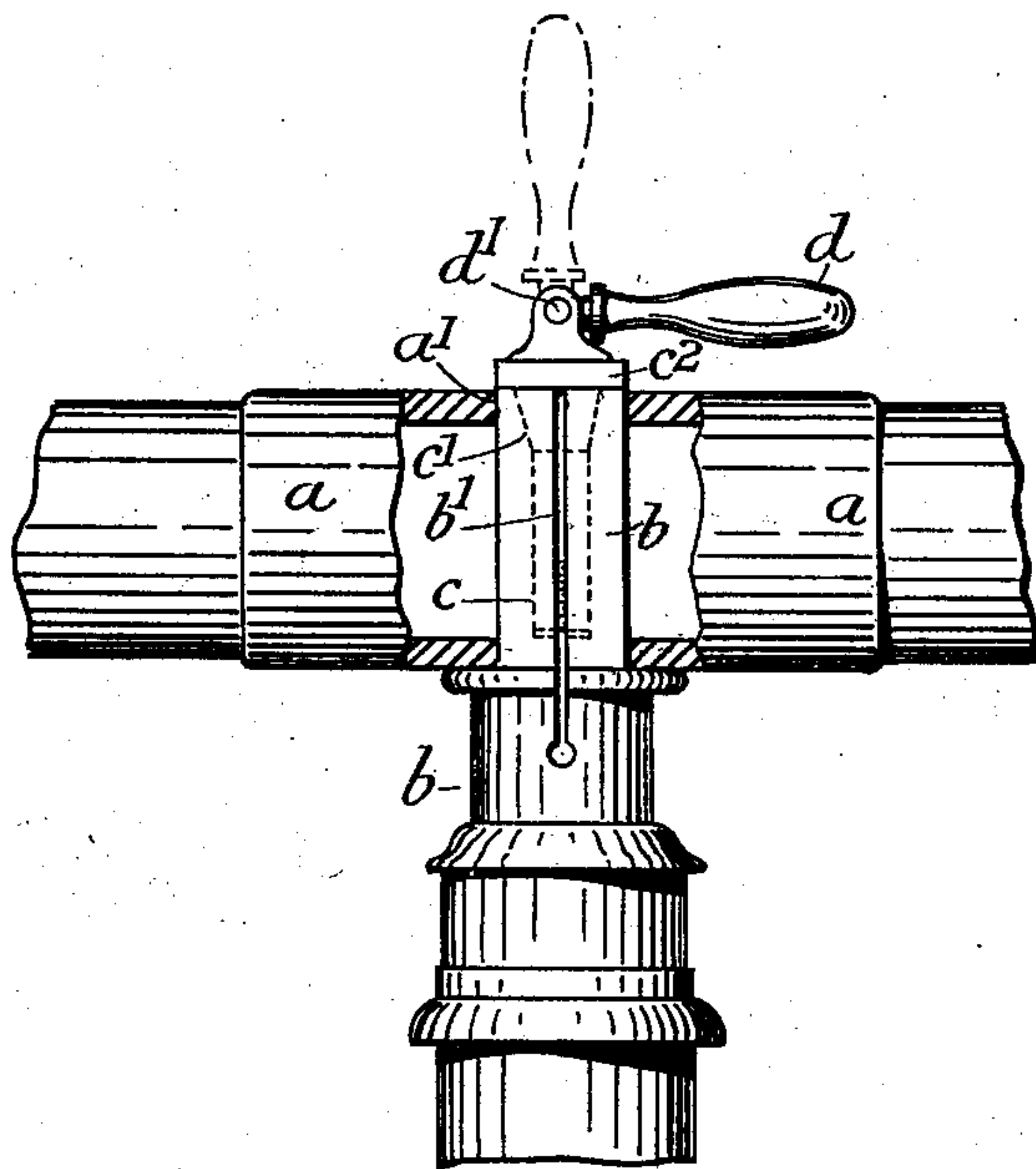


Fig. 2.

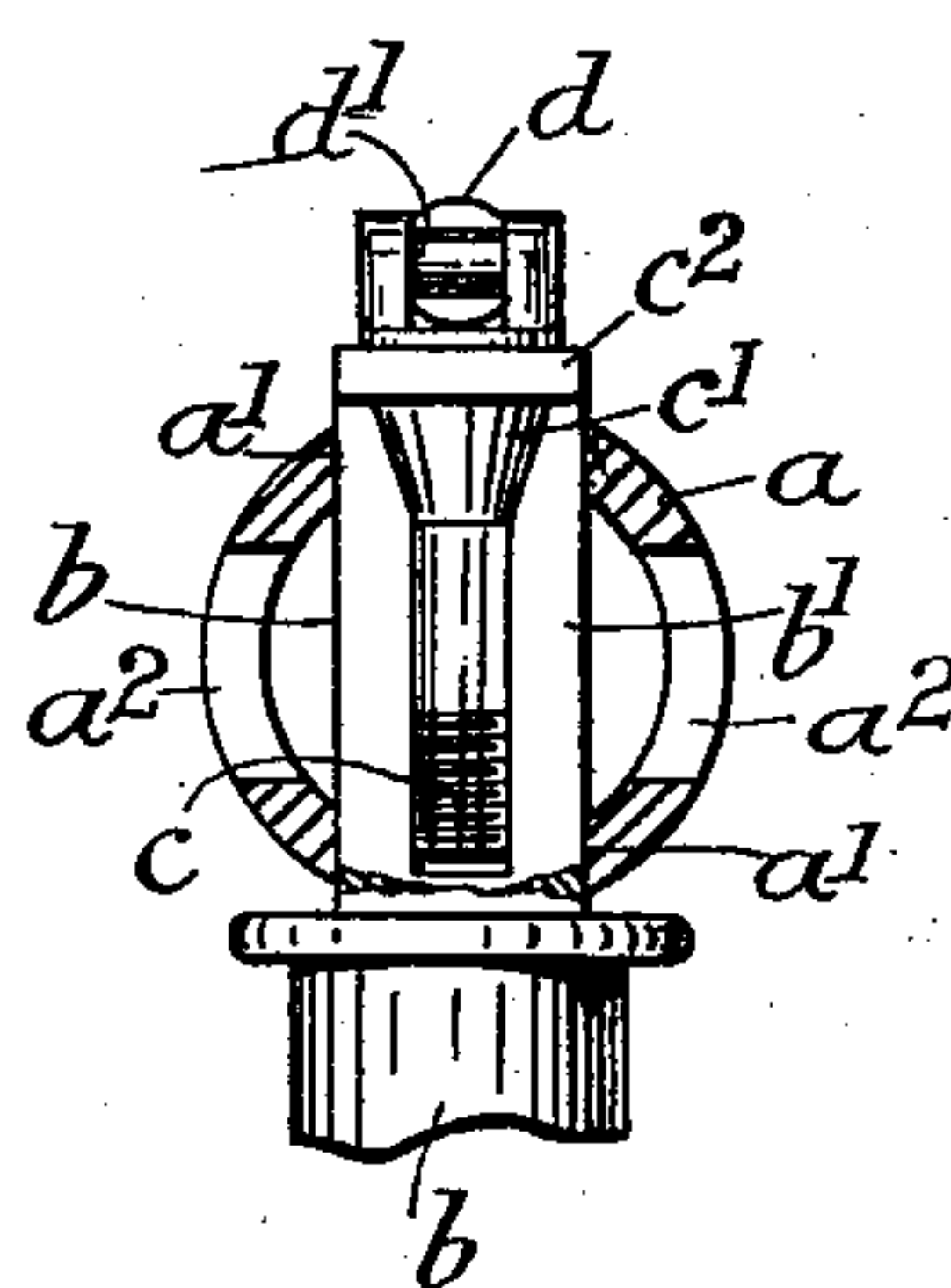


Fig. 3.

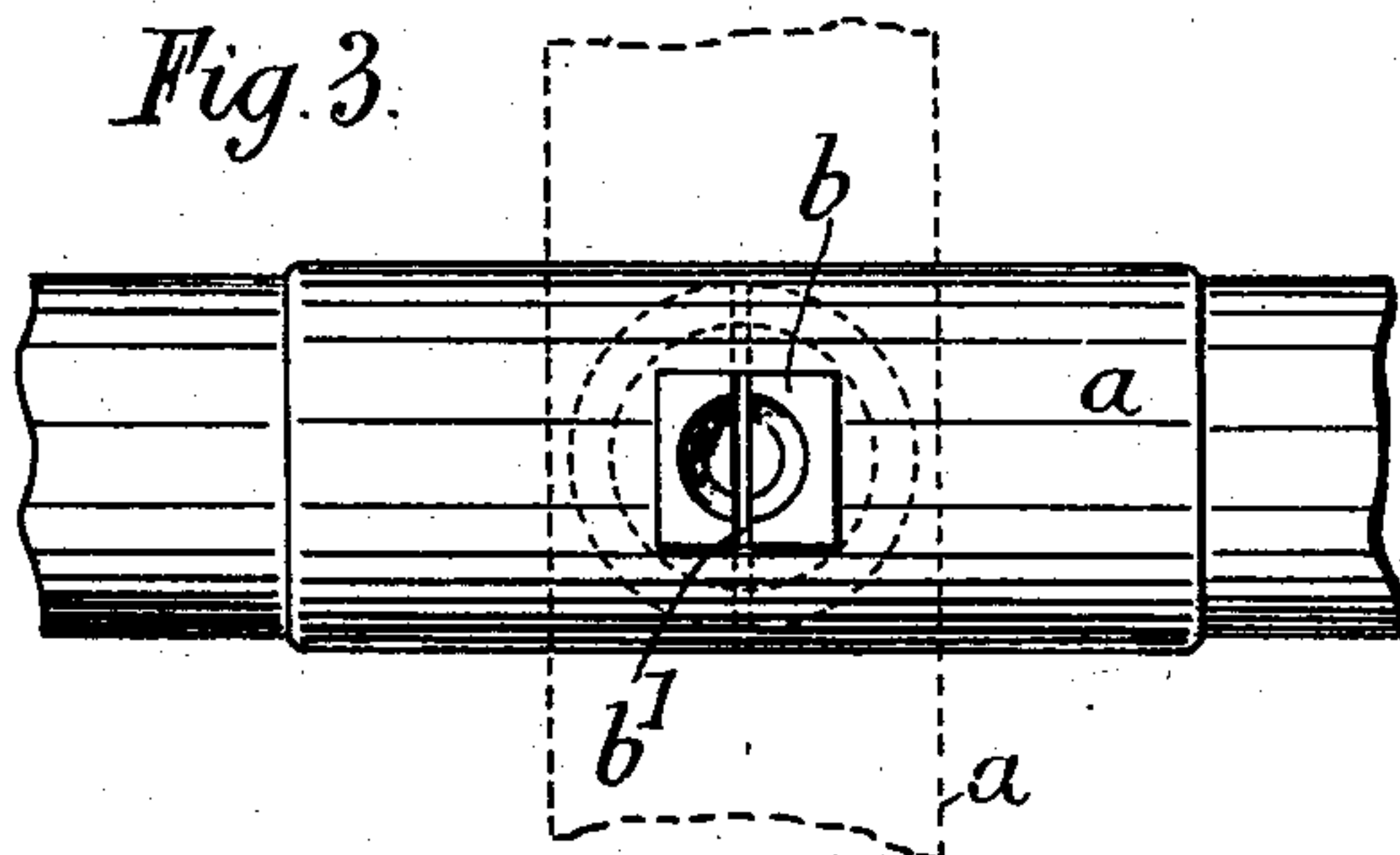
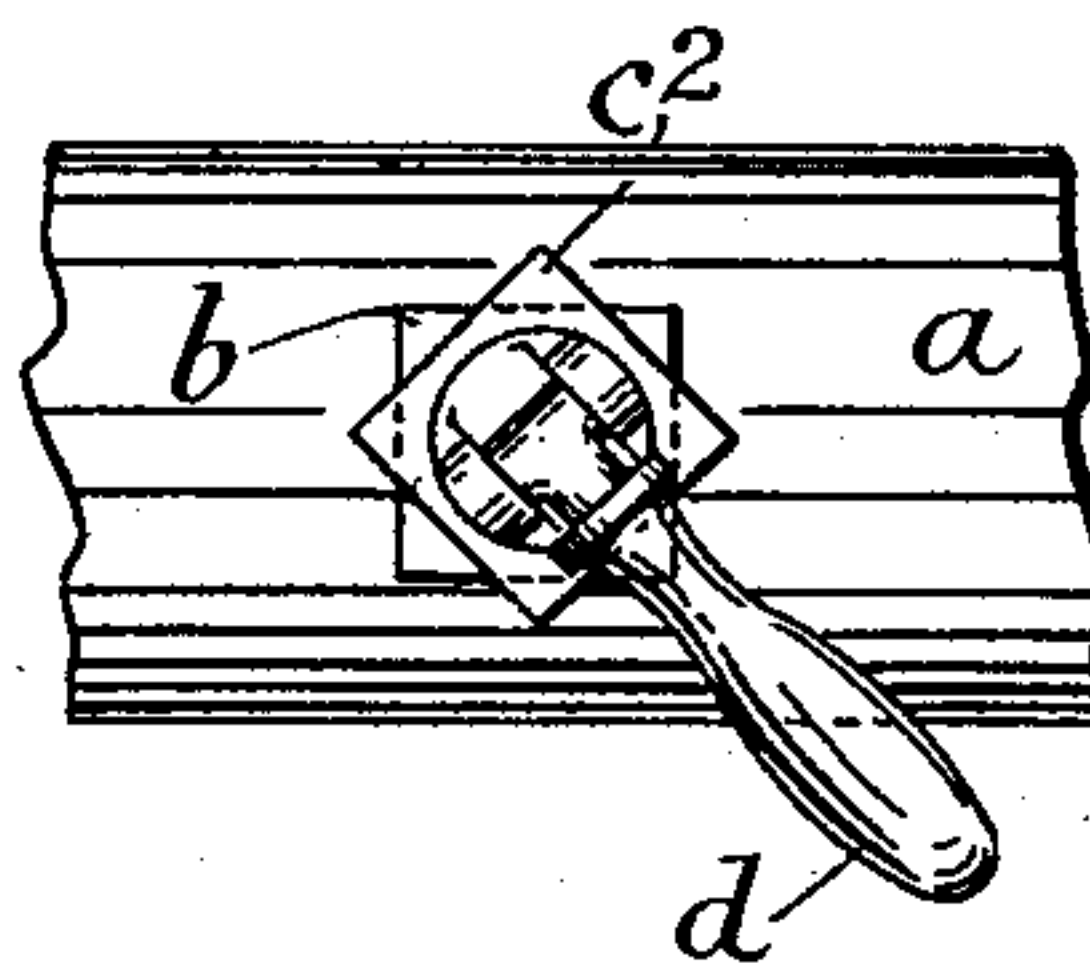


Fig. 4.



Witnesses

W. B. Steyer
Philip W. Selden

Inventor

Frederick Spencer Guy
By *James L. Norris*
Attorney

UNITED STATES PATENT OFFICE.

FREDERICK SPENCER GUY, OF LONDON, ENGLAND.

HANDLE-BAR FOR CYCLES.

SPECIFICATION forming part of Letters Patent No. 604,981, dated May 31, 1898.

Application filed July 19, 1897. Serial No. 645,092. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK SPENCER GUY, a subject of the Queen of Great Britain and Ireland, residing at London, in the county of Middlesex, England, have invented new and useful Improvements in Handle-Bars for Cycles, of which the following is a specification.

This invention relates to improvements in the handle-bars of cycles; and it has for its object to enable said handle-bars to lie lengthwise of the machine, either with the handles upward or downward, thereby avoiding the disadvantages that apply to handle-bars which cannot be moved from their normal position.

In carrying out my invention I form the handle-bar without the usual vertical stem; but I provide at the center of the bar, where such stem is usually situated, a pair of holes (or sets of holes in case the bar is hollow) arranged at right angles to each other. The upper end of the steering-post has fitted in it a rigid block or plug adapted to enter one or other of the holes, (or sets of holes.) This plug is split or divided, and a wedging-screw (or other suitable device) is fitted axially in it to enable it to be expanded to grip firmly in the hole, (or sets of holes.) The wedging-screw has a pivoted handle for turning it, and it may conveniently have a square or polygonal head to serve as a locking device, as hereinafter described.

In order that my invention may be readily understood, I will describe the same fully with reference to the accompanying drawings, in which—

Figure 1 is a side view, partly in section, showing the central portion of my improved handle-bar and the means for fixing the same. Fig. 2 is a transverse section thereof. Fig. 3 is a plan with the wedging-screw removed, and Fig. 4 is a plan showing the head of the wedging-screw in the locking position.

a is the handle-bar, which, as shown, is hollow and has two sets of holes a' a^2 , the set a' being situated at right angles to the set a^2 . If, however, the central part of the handle-bar were made solid, as in some cases it may be, there would simply be two holes or perforations passing through at right angles.

b is the plug, which is fitted in the upper end of the steering-post and which is divided, as indicated at b' .

c is the wedging-screw, which is fitted axially into the said plug and has a tapered or countersunk portion c' adjacent to its head c^2 , which latter corresponds exactly in shape to the top of the plug, so that its edges are normally flush with those of the said plug.

d is the pivoted handle for turning the wedging-screw. It is pivoted thereto, as shown at d' , and it normally occupies the position shown in full lines, but can be turned up vertically, as shown in dotted lines, when it is desired to take off the handle-bar to change its position. This plug is made of such a size that it forms a practically true fit in the holes a' a^2 before being expanded, so that only a very slight movement—say a quarter of a turn—of the wedging-screw c will force the tapered portion sufficiently far into the plug to give the necessary expansion for causing the latter to grip tightly and give a rigid connection without any shaking. In the arrangement shown the holes a' a^2 are square, and the other parts—namely, the plug b and the head of the wedging-screw—are made to correspond in shape; but hexagonal or other forms may be adopted, if desired.

The change of the handle-bar from one position to the other is effected by first turning back the wedging-screw slightly to withdraw the tapered part c' from the plug. The latter thus ceases to grip in the handle-bar, which can be removed after the handle d of the screw has been placed vertically and can be placed in the desired position. For example, in changing from the working position (shown in full lines in Fig. 3) to the position lengthwise of the machine (indicated by dotted lines) the handle-bar is taken off, turned through ninety degrees in its own plane, and replaced, so that the same set of holes a' receives the plug, which is reexpanded to fix the handle firmly in its new position. To turn the handles up or down, the plug is inserted into one or other of the holes a^2 .

The locking action, to prevent any possibility of the handle coming off the plug, is effected automatically by turning the wedging-screw to expand the plug so that the corners

of the head c^2 project over the handle-bar sufficiently to prevent its removal, as shown more clearly in Fig. 4.

The above-described improvements can be readily applied to existing machines.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

In a reversible handle-bar for cycles, the combination with a steering-head having a split plug b of angular shape in cross-section, provided with a centrally-threaded aperture having a tapered upper portion, of a handle-bar having angular holes extending transversely therethrough at right angles to each other and into either one of which the split

angular plug may pass, a screw c having a tapered portion c' and a head c^2 , said screw being tapped into the threaded aperture in the plug for the purpose specified, and a handle d pivoted in ears upon the top or head of the screw whereby the handle may assume a vertical position to allow of the handle-bar being slipped from the plug without removing the screw.

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

FREDERICK SPENCER GUY.

Witnesses:

E. GODDARD,

R. DUNNORE.