(No Model.)

W. J. BULLOCK.

HANDLE.

No. 596,049. Patented Dec. 28, 1897.

Fig. 1

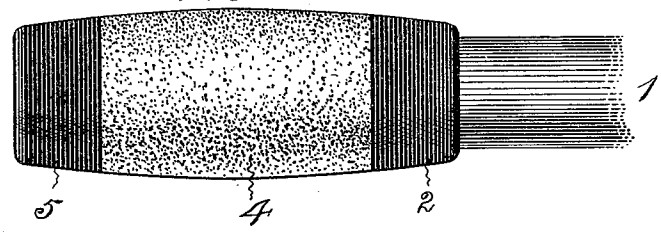


Fig. 2

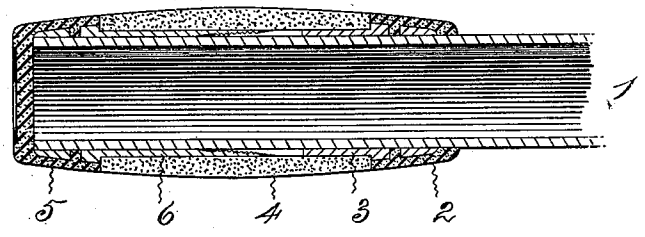


Fig. 3

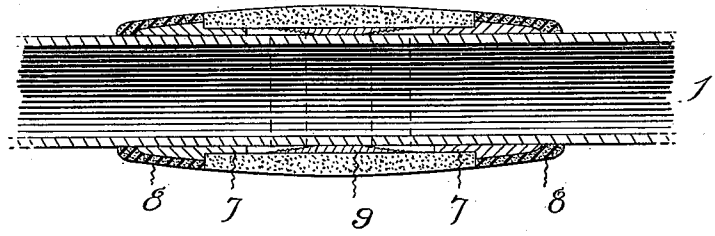
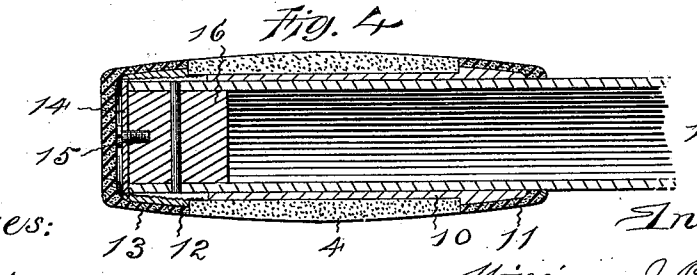


Fig. 4



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UNITED STATES PATENT OFFICE.

WILLIAM J. BULLOCK, OF HARTFORD, CONNECTICUT, ASSIGNOR TO FREDERICK C. ROCKWELL, OF SAME PLACE.

HANDLE.

SPECIFICATION forming part of Letters Patent No. 596,049, dated December 28, 1897.

Application filed September 12, 1896. Serial No. 605,591. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. BULLOCK, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Handles, of which the following is a specification.

The invention relates to the class of handles that are more particularly applicable for use in connection with the handle-bars of bicycles and similar machines.

The object of the invention is to provide an inexpensive, light, and durable handle, having a desirable and comfortable grip, which can be readily located along any part of the handle-bar and removed therefrom and replaced or renewed by any person when desired.

To this end the invention resides in a handle having suitable tips and a sectional core that can be manipulated and adjusted so as to tightly grasp the handle-bar at any desired point and at the same time hold the grip in a firm manner without the use of cement or other adhesive material, as more particularly hereinafter described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a side view of one of the handles. Fig. 2 is a longitudinal section of the same. Fig. 3 is a longitudinal section of a modified form of the handle, and Fig. 4 is a similar section of another modification.

The handle is formed of parts that when assembled and applied to a handle-bar for use are mechanically held together in such manner that they can be separated at any time and removed.

In the views, 1 indicates the bar of the vehicle to which the handle is shown as applied. This bar may of course be hollow or solid, wood or metal, either formed straight or bent on any curves. Slipped upon this bar to any desired locality is the ferrule 2. This ferrule is made of any common material and is permanently secured to the end of a sleeve 3, that is formed to loosely fit upon the bar. The sleeve 3 is preferably slitted for a short distance back from its outer end, and this end, which is made somewhat tapering, is provided with an exterior thread. Over this sleeve, which forms one of the sections of the core of the handle, is passed the grip 4. The grip may be made of cork pieces, compressed broken particles of cork and gum, or any other factitious material, or it may be cut, turned, or shaped from wood or any other solid substance. The exterior of the grip may be formed to any approved contour, and the central opening through it is made but slightly larger than the diameter of the handle-bar, so that the grip will fit closely upon the core.

The tip 5, which is usually made of the same material as the ferrule 2, is permanently secured to the end of the sleeve 6, which forms another section of the core of the handle. The interior of this sleeve is threaded and a portion is made tapering to receive the thread and the tapering end of the sleeve 3. These two sleeves when secured together form the core of the handle, and the engagement of the tapering exterior end of one with the tapering interior end of the other will so bind the parts that the part which is slitted will be sprung inward, and when on a handle-bar this will cause this part to so grasp the handle-bar that it will firmly hold in place. When the tip-sleeve is being screwed upon the ferrule-sleeve to attach them together and secure them to the bar, the grip is firmly held on the core between the edges of the tip and the ferrule, the slight elasticity of the material of the grip allowing for any irregularity of the length of the pieces, so that the parts will be tight.

Instead of fitting one of the ends of the handle with a tip and the other with a ferrule, as shown in Fig. 2, both of the ends may be provided with ferrules, as shown in Fig. 3, and this latter arrangement is necessary where the handle is to be slipped upon a handle-bar some distance from the end.

The sleeves which form the sections of the core shown in Fig. 2 are substantially the same length, but, if desired, one can be made much longer than the other, as shown in Fig. 4.

If the handle is to be put upon a curved bar beyond the curved section, the sleeves 7, connected with the similar ferrules 8, can be slitted, so that the sleeves will spring sufficiently to allow them to be passed around the curves. In this case a coupling 9 with interior threads and tapering ends would be

employed for connecting the ferrule-sleeves and causing them to grasp the bar, as shown in Fig. 3. With this construction the inner ferrule, with its sleeve, is slipped upon the bar to the desired locality and the coupling screwed on sufficiently to cause the sleeve to grasp the bar. Then after the grip has been put in place the outer ferrule, with its sleeve, is slipped upon the bar and screwed to the coupling. By means of this the bar is grasped by both of the sleeves and the grip is held between the edges of the ferrules.

In the form shown in Fig. 4 the sleeve 10, that is connected with the ferrule 11, is considerably longer than the sleeve 12, connected with the tip 13. With this construction a plate 14 may be connected with the end of the sleeve 10 and a screw 15 passed through a perforation in the plate into the end of the bar if it is solid or into a plug 16 driven into the end of the bar if it is hollow. The tip-sleeve is screwed upon the threaded end of the long sleeve after the grip has been placed in position. This long sleeve may be slitted, if desired. The screw that is used with this construction will aid in retaining the handle in place and preventing it from turning around when used.

One of these handles is easily placed in position by any person, who first slips the inner ferrule on the bar, then places the grip in position, and then sets the outer tip and turns it until the threaded sleeves engage each other and are caused to grasp the bar and hold the grip. To remove one of these handles from a handle-bar, it is only necessary to unscrew the outer tip or ferrule. Then the grip and the inner ferrule can be slipped off.

This handle is inexpensive to manufacture and simple to assemble, for all of the parts can easily be made separately in such manner that they will be interchangeable.

The handle is light in weight and is durable, for there are no thin sections at the ends of the grip for the attachment of the ferrules or tips, as with the handles now used, and all knocks or blows received by the tips or ferrules are transmitted to the metallic core and not to the composition grip, as is the case with the now common handle.

This handle is not cemented to the bar, nor is the grip cemented to the core, nor the tips or ferrules to the grip, so that the handles can be removed at any time for renewing any of the parts that become damaged or if it is desired to turn the handle-bar end for end, as in changing it from a downwardly-curved bar to an upwardly-curved bar, as is sometimes done, and, as stated, these handles can be located at any points along the bar, so that several can be used, if desired, on each side of the steering-head.

I claim as my invention—

1. A handle consisting of a sectional core, one of which sections of the core is slitted and fitted into another section of the core, parts of the sections being tapering so that the interior diameter will be lessened as they are forced together, with tips or ferrules connected with the core-sections, and a grip held by the core between the tips or ferrules, substantially as specified.

2. A handle consisting of a sectional core the parts of which are connected together by screw-threads, the inner screw-threaded part being slitted and the outer screw-threaded part being solid, so that when the parts are screwed together the central opening will be reduced in diameter, tips or ferrules connected with the core-sections, and a grip held upon the core between the tips or ferrules, substantially as specified.

3. A handle consisting of a sectional core, parts of the sections having inwardly-tapering portions and parts of the sections having outwardly-tapering portions which engage each other when the sections are put together, tips or ferrules connected with the core-sections, and a grip held upon the core between the tips or ferrules, substantially as specified.

4. A handle consisting of a core formed of a pair of sleeves bearing tips or ferrules, one of said sleeves having a tapering exterior thread and the other a tapering interior thread, and a grip held upon the core between the tips or ferrules, substantially as specified.

5. A handle consisting of a core formed of a pair of sleeves bearing tips or ferrules, one of said sleeves being slitted for a portion of its length and provided with an exterior thread and the other of said sleeves being provided with an interior thread, and a grip held upon the core between the tips or ferrules, substantially as specified.

WILLIAM J. BULLOCK.

Witnesses:
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E. J. HYDE.