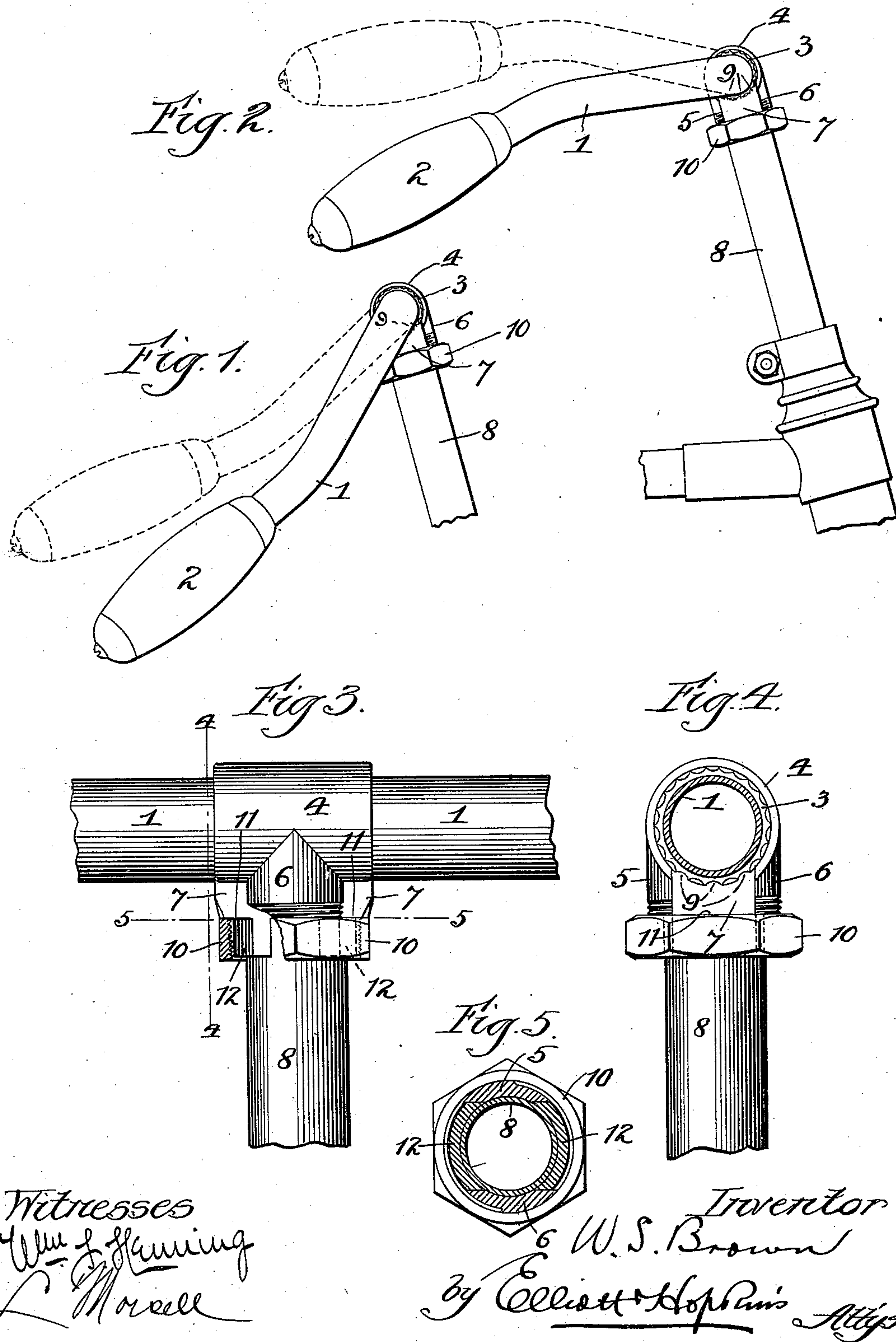


(No Model.)

W. S. BROWN.
HANDLE BAR FOR VELOCIPEDES.

No. 556,132.

Patented Mar. 10, 1896.



UNITED STATES PATENT OFFICE.

WILLIS S. BROWN, OF BELVIDERE, ILLINOIS, ASSIGNOR TO THE NATIONAL SEWING MACHINE COMPANY, OF SAME PLACE.

HANDLE-BAR FOR VELOCIPEDES.

SPECIFICATION forming part of Letters Patent No. 556,132, dated March 10, 1896.

Application filed April 27, 1895. Serial No. 547,291. (No model.)

To all whom it may concern:

Be it known that I, WILLIS S. BROWN, a citizen of the United States, residing at Belvidere, in the county of Boone and State of Illinois, have invented certain new and useful Improvements in Handle-Bars for Velocipedes, of which the following is a full, clear, and exact specification.

My invention relates to improvements in that class of handle-bars for bicycles and other velocipedes which are capable of adjustment, whereby the handles may be raised and lowered by rotating the bar so as to produce a medium-drop or full-drop handle-bar by turning the handles below the horizontal or by turning the handles above the horizontal to produce either a medium-raised or full-raised handle-bar.

The object of my invention is to provide simple and effective means whereby the handle-bar may be readily rotated and firmly locked to the desired adjustment for producing a full-drop or a medium-drop handle, or when turned on its upright or transverse axis may be adjusted to produce either a medium-raised or a full-raised handle-bar.

With these ends in view my invention consists in certain features of novelty hereinafter described with reference to the accompanying drawings, and more particularly pointed out in the claims.

In the said drawings, Figure 1 is a side elevation of my improved handle-bar, showing it in its full-drop position in full lines and its medium-drop position in dotted lines. Fig. 2 is a similar view showing the bar turned around and in its medium-raised position in full lines and its full-raised position in dotted lines. Fig. 3 is an enlarged detail front view of a part of the handle-bar and the upper end of the head or steering-stem. Fig. 4 is a transverse sectional view taken on the line 4 4, Fig. 3; and Fig. 5 is a plan section taken on the line 5 5, Fig. 3.

In carrying out my invention I employ a handle-bar 1, whose ends are curved rearwardly and downwardly in the peculiar form shown in the drawings, and the handles 2 are secured to such ends so that each will be substantially in a straight line with the end to which it is secured. The purpose of this pe-

culiar curve, it will be seen, is to hold the handles in the proper position to be grasped when the handle-bar is rotated to either the full-drop or the medium-drop position, and when the handle-bar is rotated on the axis of the steering-stem or head of the machine the handles will be in proper position to be grasped when in either the full-raised or medium-raised position.

I will now describe my preferred and improved means for readily locking the handle-bar in either of the described adjustments.

Secured to or formed on the handle-bar at an intermediate point is a hub or sleeve 3 provided with a number of longitudinal corrugations, and surrounding this hub or sleeve is a strap 4 having a split shank or stem whose bifurcations 5 6 fit one on each side of a block 7, which is formed on or rigidly secured to the upper end of the head or steering-stem 8 and has its upper face formed on the arc of the circle upon which the sleeve 3 is struck, so as to fit accurately against the under side of such sleeve, and extending longitudinally along its said concave surface are a number of lugs or ribs 9 which are complementary in form to the corrugations in the sleeve or hub 3, such form being preferably that shown in the drawings, which is round or beveled, whereby the sleeve or hub may rotate within the inclosure formed by the strap 4 and block 7, when the parts have been loosened, without hanging on the ribs 9; but of course any other form of corrugation and rib may be employed without departing from the spirit of my invention.

The bifurcations 5 6 of the strap 4 are screw-threaded at their lower ends and project downward beyond the lower edge of the block 7, and encircling the stem or head 8 and also the portions 5 6 is a nut 10, which, however, engages with only the threads on the portions 5 6, the head 8 being plain, and takes its abutment against the under side of the block 7, so that by turning the nut 10 in one direction the strap 4 will be drawn downward firmly against the hub or sleeve 3, and clamping its corrugations securely in engagement with the ribs 9 of the block 7 will hold the handle-bar at the desired adjustment.

The block 7 has flattened or squared sides against which the two parts of the bifurcated

shank 5 6 rest, and which thus securely hold the shank 5 6 from turning or twisting on the stem 8 without depending upon the lugs 9 for this purpose. The block 7 also has lateral extensions forming shoulders 11 on each side of the stem or head 8, under which extensions the nut 10 bears, and located on the sides of the stem or head 8 under each of these shoulders 11 is a filling-block 12, which is provided for the purpose of forming a continuation of the arcs of the threaded extremities 5 6. Such filling-blocks 12, however, have plain surfaces, whereby they will fill the nut without engaging with its threads.

With a handle-bar thus constructed it will be seen that the handles may be readily adjusted to any degree of drop position by simply loosening the nut 10 so as to permit the handle-bar to rotate on its longitudinal axis, and by loosening such nut and turning the bar over with the handles to the front and then rotating the stem 8 so as to turn the bar end for end the handles may be adjusted to either of the extreme raised positions or to any intermediate point.

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

1. The combination with the steering stem or head provided with a block having a concave face along which a lug or rib is formed, a handle-bar having a corrugated hub resting in said block, a strap embracing said hub and having threaded extremities extending down past said block, and from between which threaded extremities the ends of said block project and a nut encircling said threaded extremities and bearing under the ends of said block, substantially as set forth.

2. The combination with a steering stem or head, of a block secured thereto and having a concave face provided with ribs, a handle-bar having a corrugated hub and having threaded extremities extending down over said block, said block having lateral shoulders 11, protruding between said extremities, filling-blocks arranged under said shoulders and filling the space between said threaded extremities, and a nut encircling said filling-blocks and threaded extremities and bearing under said shoulders 11, substantially as set forth.

WILLIS S. BROWN.

Witnesses:

E. E. MANNING,
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