(No Model.)

S. PALMITER.

BICYCLE HANDLE BAR.

No. 589,671. Patented Sept. 7, 1897.

Fig. 1.

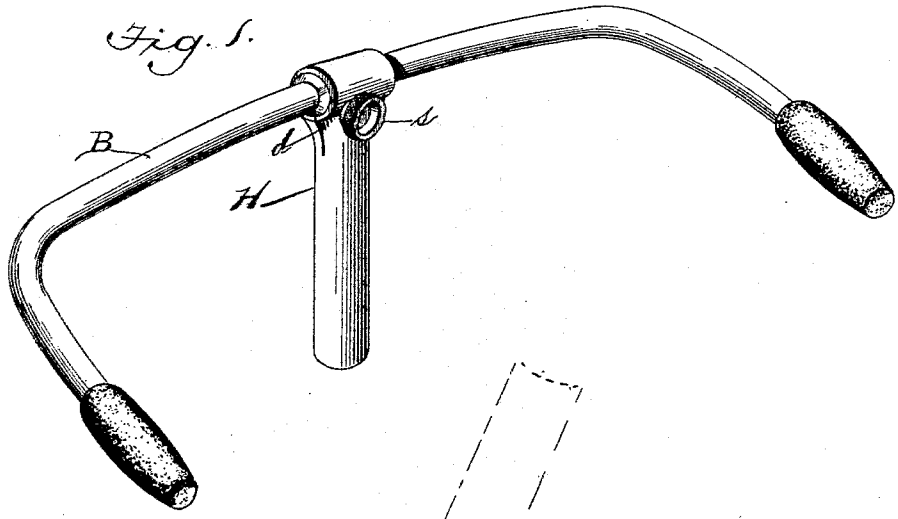


Fig. 2.

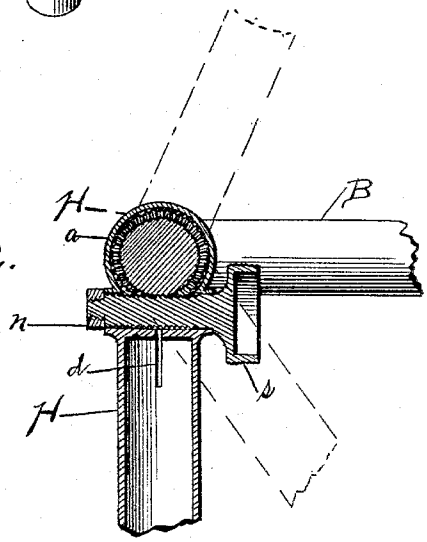


Fig. 3

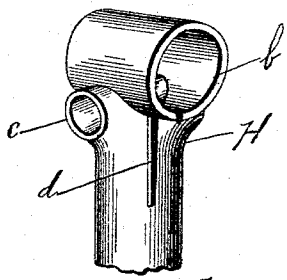
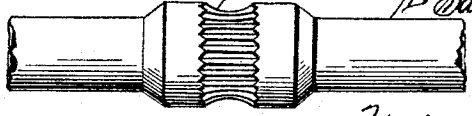


Fig. 4



Witnesses
J. Paul Lamine
L. A. Baldwin

Inventor
B Samuel Palmiter
By
Milo Harris Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

SAMUEL PALMITER, OF JAMESTOWN, NEW YORK, ASSIGNOR TO ROBERT M. KEATING, OF SPRINGFIELD, MASSACHUSETTS.

BICYCLE HANDLE-BAR.

SPECIFICATION forming part of Letters Patent No. 589,671, dated September 7, 1897.

Application filed October 10, 1894. Serial No. 525,534. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL PALMITER, a citizen of the United States, residing in the city of Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Bicycle Handle-Bars; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to provide bicycles with an adjustable handle-bar, one that may be readily adjusted to any desired position and held securely in place.

Wheelmen find the common rigid handle-bar, which can only be moved up and down in the standard, tiresome and unsatisfactory, since the rider desires to adjust the handles according to the work he desires to undertake—*i. e.*, low for racing and high for easy road-riding.

My invention entirely obviates the objections named, as the rider can adjust the handles instantly to any desired angle and hold them firmly wherever set, changing the curve from a downward to an upward or the reverse, as desired, as will be readily understood by this specification and the accompanying drawings, in which—

Figure 1 is a perspective view of a handle-bar and head. Fig. 2 shows the head, screw, and bar in cross-section. Fig. 3 shows head in detail. Fig. 4 shows section of bar which passes through the head.

In the drawings, B represents the handle-bar, which may be made of steel tubing or solid. Curved into desirable form this bar may be made of one or more parts, but should be made larger in the center, where it passes through the head H, to give it strength and to give room to concave the bar, as shown in Fig. 4. *a* is a coarse screw-thread or worm cut in this concave, as shown, the threads being nearly parallel to the bar.

s is a screw-bolt which passes through the hole *c* in the head and engages the thread *a* of the handle-bar B, the end of the screw being provided with a finer thread than the one engaging the bar and has a set-nut *n*, the head having a slot *d* for a short distance, so that the head will the more readily clamp the bar when tightened by the set-nut and hold more securely.

It is not essential that the screw-bolt have a finer thread at the end to receive the set-nut, as a good purpose might be served if the nut were screwed on the large thread, but I prefer to have it as shown.

The bar could be held by the screw without slotting the head, but it would not be as good. A very good purpose would be served if the threads of the handle-bar only extended part of the circumference of the bar, so the handles could be raised or lowered part of the way, but I prefer them as shown.

The same handle-bar may be turned over when it is desirable for ladies or any one wanting to sit erect on their wheel. It can be turned back and lowered for racing when wanted. It is also more convenient for shipping.

It will readily be seen that by loosening the set-nut *n* and turning the milled screw-bolt *s* that the handle-bar is readily moved any distance desired, and by tightening the nut is as easily secured. The form of this screw-head is not essential, but the one shown is found light and convenient.

The head H may be made in parts and brazed together when desired.

By removing the handle-grip and taking out the screw-bolt the bar is readily removed from the head.

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

1. In bicycle handle-bars the main bar provided with a worm-gear around said bar, said bar being inserted in a head and held in position by a worm on a bolt engaging the gear of the bar as shown and for the purpose set forth.

2. In bicycle handle-bars the main bar made in one or more parts and provided with a worm-gear around said bar, said bar being inserted in a head and held in position by a worm on a bolt which engages the worm-gear,

said worm-bolt being provided with a set-nut as shown, and for the purpose set forth.

3. A bicycle-handle adjuster, comprising the combination of an adjusting-screw having a spiral thread, with a handle-bar having a series of teeth in connection therewith, adapted to engage the spiral thread of said adjusting-screw.

In testimony that I claim the foregoing I sign my name in the presence of two witnesses.

SAMUEL PALMITER.

Witnesses:
N. E. THOMAS,
JAMES GILBERDS.