

(No Model.)

A. L. ADAMS.
BICYCLE.

No. 578,130.

Patented Mar. 2, 1897.

Fig. 1.

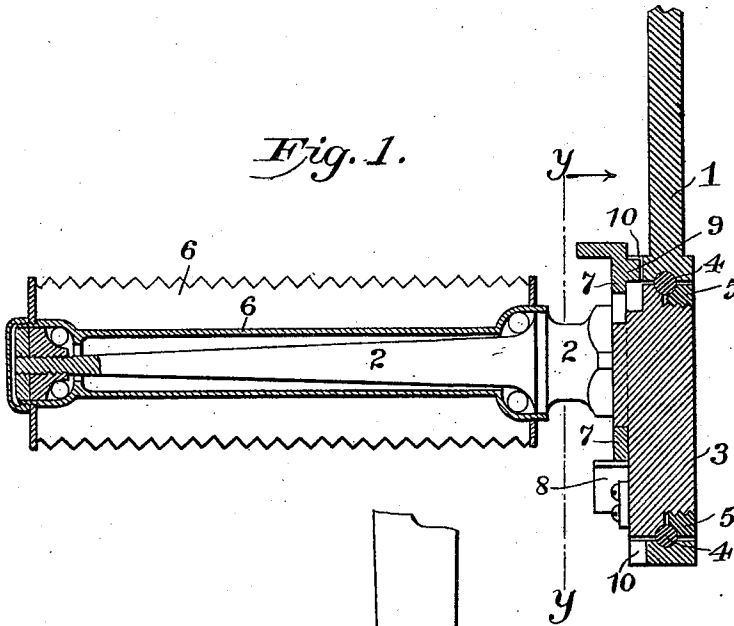
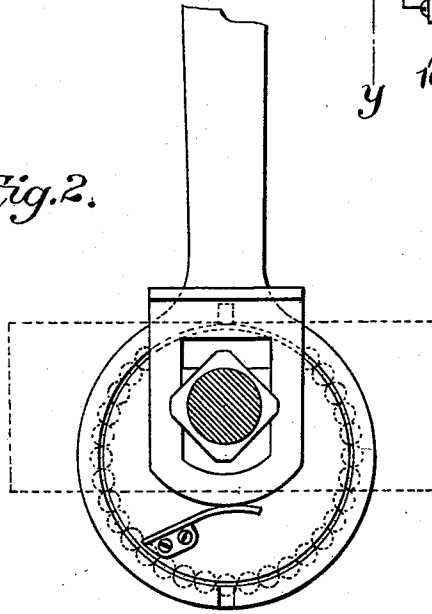


Fig. 2.



WITNESSES:

J. F. Finch.
M. J. Longden

INVENTOR

A. L. Adams

J. M. Smith Jr.
BY ATTY

UNITED STATES PATENT OFFICE.

ABRAHAM L. ADAMS, OF BRIDGEPORT, CONNECTICUT.

BICYCLE.

SPECIFICATION forming part of Letters Patent No. 578,130, dated March 2, 1897.

Application filed September 19, 1895. Serial No. 562,971. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM L. ADAMS, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Bicycles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain improvements in bicycles, but more particularly has reference to the crank propulsion, with the end in view to obtain a greater or less propelling leverage, at the will of the rider, without in the slightest degree disturbing the relative positions of the crank and crank-shaft or without the use of any specially-equipped pedal.

In the accompanying drawings, which form a part of this application, Figure 1 is a sectional elevation illustrating my improvement, and Fig. 2 a section at the line *y y* of Fig. 1.

Similar numbers of reference denote like parts in both figures of the drawings.

1 is the usual bicycle-crank, and 2 is the pedal-spindle, extending from the disk 3, eccentric to the axial center of said disk, which latter is journaled within the crank in any suitable manner, as, for instance, by ball-bearings 4, secured by means of the usual keeper-ring 5, so that it will be clear that when said disk is revolved the spindle 2 will be elevated or lowered, as the case may be. Journaled in any suitable and ordinary manner around this spindle 2 is the pedal 6.

7 is a plate suitably supported at the side of the disk and capable of a vertical play, which plate is kept in normally-elevated position by means of a spring 8, secured to the disk and bearing against the under side of the plate. The latch-stud 9 extends from this plate 7 toward the crank 1 and is normally projected by means of the spring within one of the notches 10 in the crank, so that it will be clearly understood that the crank, the disk,

and the spindle will be normally locked together. The position of the parts in Fig. 1 shows the pedal in its highest normal position, and the crank leverage is therefore at its lowest adjustment. This plate 7 is within easy access to the foot of the rider, and when it is depressed the latch-stud 9 will be thrown out of engagement with the crank, thereby permitting the disk 3 to turn independently within the crank until said stud has been thrown into the diametrically opposite notch 10, and the parts will then be in the position where the pedal is in its lowest normal plane, and the crank leverage is therefore at its longest adjustment. The spindle is detachably secured to the disk in any suitable and ordinary manner, so that it may be readily removed for the purpose of substituting any style of pedal desired by the rider, and in this connection I would call attention to the fact that my improvement is entirely independent of the pedal or the pedal-spindle, and that I effect the adjustments desired without disturbing the relative positions of the crank and crank-shaft.

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

The combination of the fixed crank having a plurality of notches, the disk journaled within said crank, the pedal-spindle extending from said disk eccentric to the axial center of the same, the sliding plate also carried by said disk and independent of the pedal and provided with a stud capable of engaging with said notches, and a spring acting against said plate whereby said stud is normally engaged with said notches while the depression of the plate disengages the stud from the notches, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ABRAHAM L. ADAMS.

Witnesses:

F. W. SMITH, Jr.,
M. T. LONGDEN.