

R. D. WEBSTER.
 BACK PEDALING COASTER BRAKE.
 APPLICATION FILED JUNE 18, 1909.

961,187.

Patented June 14, 1910.

FIG. 1.

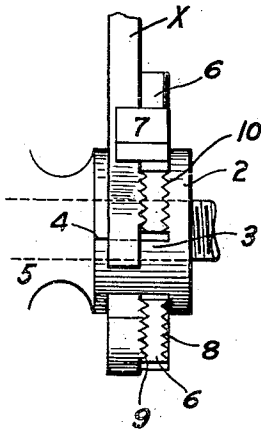


FIG. 2.

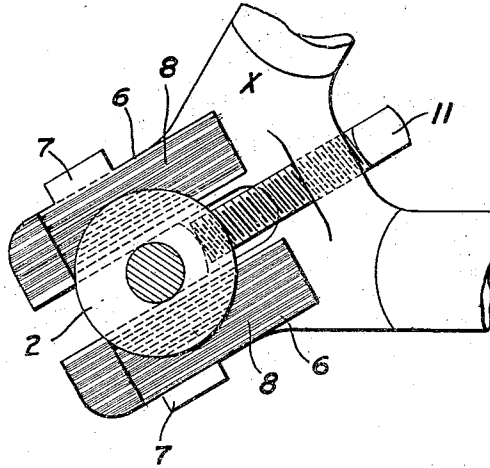


FIG. 3.

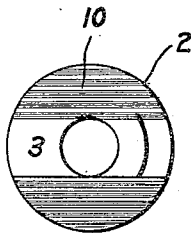


FIG. 5.

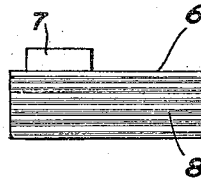


FIG. 4.

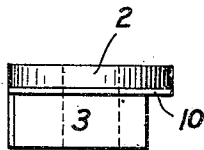
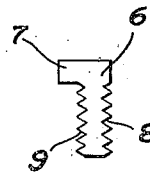


FIG. 6.



WITNESSES:

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UNITED STATES PATENT OFFICE.

RALPH D. WEBSTER, OF ELMIRA, NEW YORK.

BACK-PEDALING COASTER-BRAKE.

961,187.

Specification of Letters Patent. Patented June 14, 1910.

Application filed June 16, 1909. Serial No. 502,624.

To all whom it may concern:

Be it known that I, RALPH D. WEBSTER, a citizen of the United States, and resident of Elmira, in the county of Chemung and State of New York, have invented certain new and useful Improvements in Back-Pedaling Coaster-Brakes, of which the following is a specification.

This invention relates to back pedaling coaster brakes, and has for its object to dispense with the brake arm ordinarily used for holding the brake member against rotation.

In the drawings: Figure 1 is an end view of the improvement applied to the rear fork of a bicycle; Fig. 2 is a side view; Figs. 3 and 4 show the washer in side and end views, respectively; and Figs. 5 and 6 are similar views of one of the jaw-carrying plates in question.

This invention is an improvement upon the lock-washer shown and described in the pending application of Frederick S. Ellett, Serial No. 462,822, filed November 16, 1908. It has been found in practice that when the axle nut (not shown in the drawing) is allowed to work loose so that the lock washer 2 is not in close frictional contact with the fork X of the velocipede frame, then the projection 3, which extends through the slot in said fork and enters a recess 4 in the non-rotary brake member 5, is apt to spread the fork on strong back-pedaling. To provide against this contingency is the object of this invention, which consists of one or more, preferably two similar jaw-carrying plates 6, 6. The heads 7, 7 of these plates overhang the sides of the forks, as shown in Fig. 2, and both its sides are finished with lateral projections, preferably in the form of rib-shaped teeth 8 that are parallel with the branches of the fork. The outer surface of the fork 9 and the inner surface 10 of the lock-washer 3 are also finished in parallel rib-shaped teeth, which mesh with those on the plates 6, 6 for the plates 6, 6, lie between and are contiguous with the outer surface of the fork 9 and the inner surface 10 of the lock washer 3. In this way the resistance to the spreading effect of the lock-washer is met by the frictional contact between the comparatively long plates 8 and the fork, and, furthermore, the intermeshing teeth make it possible for the parts to separate as far as is likely to occur through the loosening of the retaining lock

nut (not shown), without the loss of this frictional resistance.

The plates 6 are readily adjustable to fit forks of different sizes and different parts of the fork, as the axle Y is adjusted by the bolt 11, the distance between the ribs representing the differential.

It is obvious that even when the part 3 has no connection with the washer, but is attached to the brake element, these new devices will prevent the fork from spreading, for the heads 7 serve as jaws to grip the fork on each side, and the intermeshing ribs prevent them from being drawn apart.

What I claim is:—

1. In an anchoring device for coaster brake mechanism, the combination with a bifurcated fork, of a brake element that is held against rotation by a part that enters the fork from one side; a washer; and a plate that is adapted to lie between and contiguous with the washer and that side of the fork that is farthest from the brake element, said plate having lateral projections that engage shoulders on a contiguous part; substantially as shown and described.

2. In an anchoring device for coaster brake mechanism, the combination with a bifurcated fork, of a brake element that is held against rotation by a part that enters the fork from one side; a washer; and a plate that is adapted to lie between and contiguous with that side of the fork that is farthest from the brake element, said plate having lateral projections on both its sides that engage shoulders on the fork and washer, respectively; substantially as shown and described.

3. In an anchoring device for coaster brake mechanism, the combination with a bifurcated fork, a brake element held against rotation by a part that enters the fork from one side and a washer, of a plate that is adapted to lie between and contiguous with the washer and fork, on the side of the latter opposite said brake element, each plate having lateral projections that engage shoulders on a contiguous part and a part adapted to overhang the fork; substantially as shown and described.

4. In an anchoring device for coaster brake mechanism, the combination with a bifurcated fork having on its outer face ribs parallel with the slot, of a brake element held against rotation by a part that lies within the fork; a washer, having par-

allel ribs on its inner face; and one or more plates, having parallel ribs on each side, adapted to mesh with those on the fork and washer, respectively; substantially as shown
5 and described.

5. In an anchoring device for coaster brake mechanism, the combination with a bifurcated fork having on its outer face ribs parallel with the slot, of a brake element
10 held against rotation by a part that lies within the fork; a washer, having parallel

ribs on its inner face; and a plate for each branch of the fork, each plate having parallel ribs on each side, adapted to mesh with those on the fork and washer, respectively, 15 and a head adapted to overhang the fork; substantially as shown and described.

RALPH D. WEBSTER.

Witnesses:

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