

No. 857,925.

PATENTED JUNE 25, 1907.

B. A. CURE.

SKATE.

APPLICATION FILED SEPT. 29, 1906.

FIG. 1.

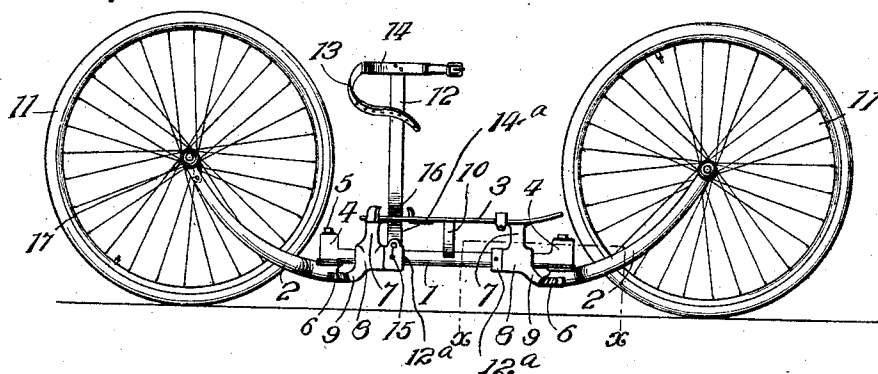


FIG. 2.

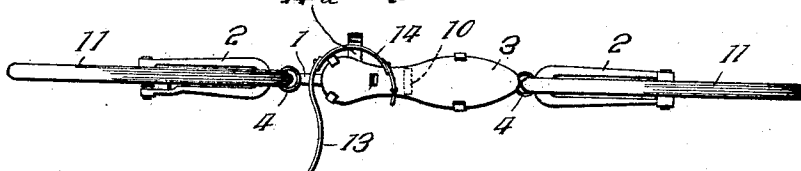


FIG. 3.

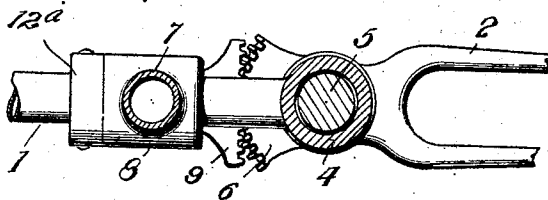
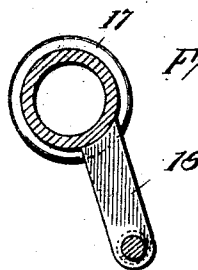


FIG. 4.



Witnesses

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SKATE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, BENJAMIN A. CURE, a citizen of the United States, residing at Clayton, in the county of Stevens and State of Washington, have invented certain new and useful Improvements in Skates, of which the following is a specification.

The object of the present invention is to provide an improved skate of that type which is mounted upon two rollers and are commonly designated as bicycle skates.

The improvement consists essentially in the provision of means whereby the supporting wheels can be adjusted with relation to the main frame of the skate for the purpose of guiding the latter.

To this end, the frame of the skate has both the foot plate and wheel receiving forks loosely connected thereto, and a suitable connection is formed between these members whereby any movement of the foot plate tends to swing the wheel receiving forks with relation to the frame.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a side elevation of the skate; Fig. 2 is a top plan view of the same; Fig. 3 is a sectional view on the line $x-x$ of Fig. 1; and, Fig. 4 is a detail view of the friction pawl for preventing the skate wheels from turning rearwardly.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The main frame of the skate is in the nature of a longitudinally disposed bar 1 having the wheel receiving forks 2 pivotally connected to the opposite ends thereof and the foot plate 3 adjustably connected to the upper side thereof so that any movement of the foot plate tends to swing the forks. At each end of the bar 1 is located an upwardly projecting sleeve 4 which serves as a bearing for the pintle 5 upon which the corresponding fork 2 turns. The outer portions of the forks 2 are curved or bent upwardly so as to throw the center of gravity as low as possible, while the inner ends of the forks are provided with the segmental gearing 6. The supports 7 upon which the front and rear portions of the foot plate 3 rest are pivotally

connected to the bar 1 so as to have a swinging movement with relation to the latter, and for this purpose are formed at their lower ends with sleeves 8 through which the rod 1 extends. These sleeves 8 are provided with the segmental gearing 9 which meshes with the before mentioned gearing 6 upon the forks 2 so that the latter will be given a swinging movement as the foot plate 3 moves from side to side. The usual clamping means are employed for securing the foot plate to the shoe of the wearer and a spring member 10 is employed which operates to hold the foot plate normally in an upright position with the supporting wheels 11 in alignment with each other.

In the specific construction of the spring 10, it will be observed that the same is secured at an intermediate point to the bar 1, and comprises two laterally and upwardly extending arms which engage with opposite sides of the foot plate. Ferrules 12^a are rigidly secured to the bar 1 against the inner faces of each of the collars 8, and these ferrules operate to prevent any longitudinal movement of the foot plate with relation to the frame of the skate. A brace member 12 is employed to reinforce the ankle of the wearer and is loosely connected to the skate frame so as to swing in the vertical plane thereof. The upper end of the brace 12 is adapted to be secured in position by means of the strap 13 and the semicircular metallic band 14, while the lower end of the brace is formed with the laterally disposed arm 14^a which is journaled in a suitable bearing within the rearmost of the ferrules 12^a, as indicated at 15 and enables the brace to swing forwardly and rearwardly in the longitudinal plane of the skate. As shown in the drawings, the brace 12 is bent outwardly at 16 so as not to interfere with the ankle of the wearer.

In order to prevent the wheels 11 from turning backward, one of the same, in the present instance, the rear wheel, has a friction disk 17 secured to the hub thereof, and a pawl 18 is pivotally mounted so as to have a frictional engagement with the collar 17 and prevent the wheel from turning backward.

In the operation of the skate, it will be apparent that the wearer can readily guide the skate by shifting his weight upon the foot plates 3 in such a manner as to throw the same either to the right or left and thereby swing the forks 2 with relation to the bar 1.

Having thus described the invention, what is claimed as new is:

1. In a skate, the combination of a bar having bearings at opposite ends thereof, 5 wheel supporting members journaled in the bearings and provided with gearing, a foot plate, a support at each end of the foot plate, the said supports being formed with sleeves through which the bar passes loosely, and 10 the sleeves having gearing thereon which meshes with the gearing on the wheel supporting members so that any lateral movement of the foot plate tends to swing the wheel supporting members with relation to 15 the bar, and a spring for normally holding the foot plate in such a position that the wheels are in alinement with each other.

2. A skate comprising a longitudinally extending frame bar provided with vertically 20 extending sleeves at its front and rear ends, wheel forks journaled in said sleeves and extending front and rear therefrom and provided with toothed segments, wheels mounted within said forks, sleeves 7 mounted to 25 turn axially upon the said bar and provided with toothed plates meshing with the toothed

segments of the forks, a foot plate supported by the sleeves 7, and a spring secured to the bar between the sleeve 7 and extending upwardly into engagement with the foot plate 30 and designed to maintain the foot plate in a true vertical position with respect to the bar, as and for the purpose set forth.

3. A skate comprising a longitudinal bar, wheel forks journaled at the ends of said bar 35 and provided with rack segments, wheels mounted in said forks, sleeves mounted to turn axially on the bar and provided with toothed plates meshing with said rack segments, ferrules on the bar and engaging with 40 the respective sleeves, a foot plate supported by said sleeves, and an ankle brace pivotally connected at its lower end to the rearmost ferrule and adapted to swing in the longitudinal plane of the foot plate. 45

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

BENJAMIN A. CURE. [L. s.]

Witnesses:

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