

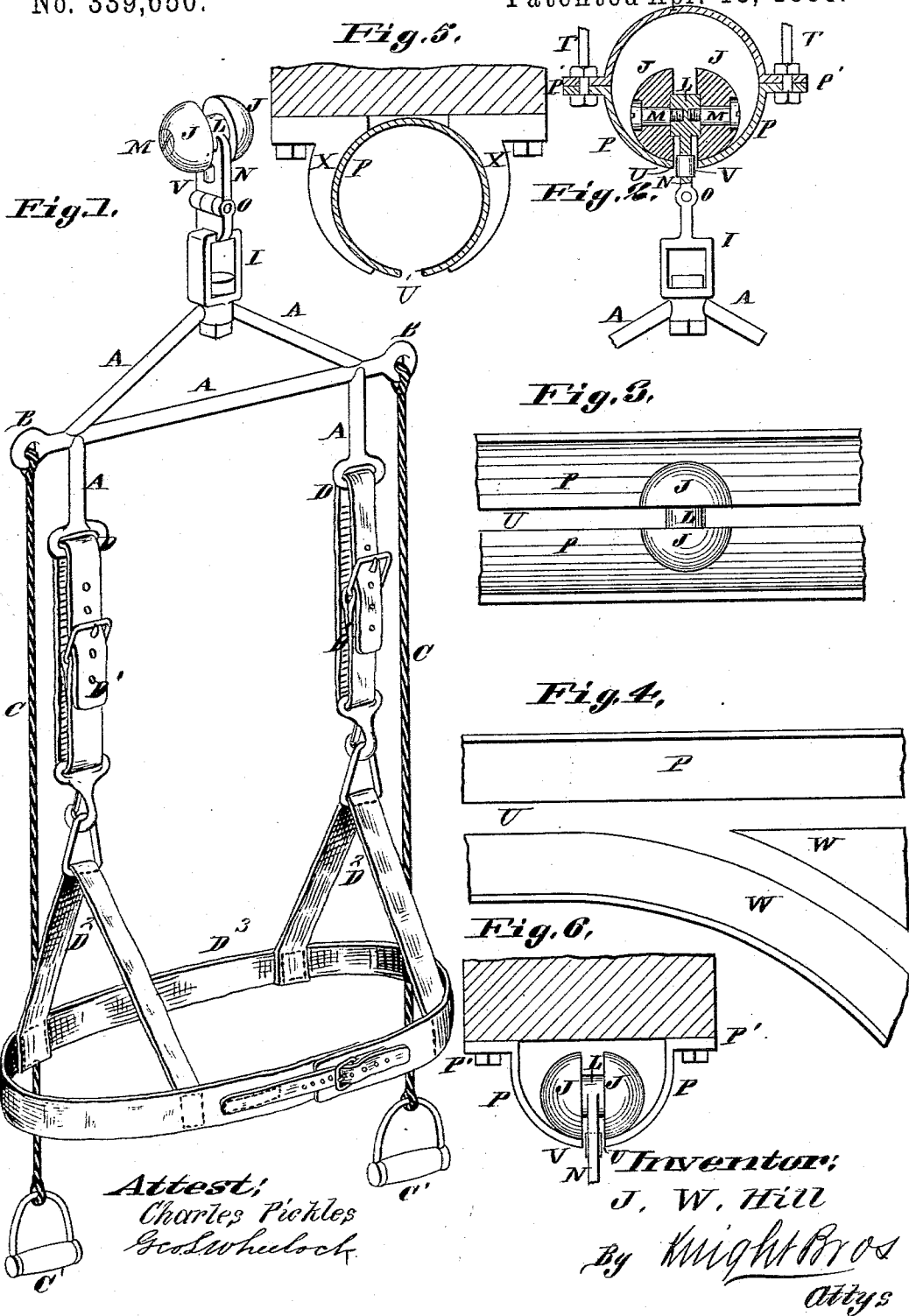
(No Model.)

J. W. HILL.

APPARATUS FOR ASSISTING SKATERS AND SWIMMERS.

No. 339,650.

Patented Apr. 13, 1886.



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# UNITED STATES PATENT OFFICE.

JAMES W. HILL, OF ST. LOUIS, MISSOURI.

## APPARATUS FOR ASSISTING SKATERS AND SWIMMERS.

SPECIFICATION forming part of Letters Patent No. 339,650, dated April 13, 1886.

Application filed December 26, 1884. Serial No. 151,180. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES W. HILL, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Apparatuses for Supporting Skaters and Swimmers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a perspective of my improved device removed from its support. Fig. 2 is a transverse section of a supporting track and rollers, the upper portion of the frame being shown in elevation. Fig. 3 is an inside view of the lower part of the track and a top view of the rollers. Fig. 4 is a detail view of a switch. Figs. 5 and 6 are modifications of the track and the manner of supporting it.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, A represents a bar or frame, having eyes B, for the attachment of ropes C, with hand-holds C' on their lower ends, and eyes D, for the attachment of ropes or straps D', connected to shoulder-straps D<sup>2</sup> of a belt, D<sup>3</sup>, adapted to fit around the person just beneath the arms.

I represents a swivel connected to the frame A.

J represents a roller made in two parts, between which fits a block, L. The roller is made fast to the block by a journal or journals, M. (See Fig. 2.) The block has a downward extension, N, hinged at O to the swivel I.

P represents the track, consisting of a tube or pipe divided horizontally to permit the insertion of the block and roller. The two parts are connected together by bolts T, passing through their flanges P', which may act as hangers (see Fig. 2) to suspend the track from. The bottom of the track has a slot, U, through which passes the extension N of the block, and the extension is provided with a friction-roller, V, to bear against the track upon any lateral movement of the extension which is caused by a side movement of the person using the apparatus. The shape of the track, the shape of the roller J, and the hinge O all permit the side movement of the person, and the swivel allows him to turn around and go in the opposite direction.

In Fig. 4 is shown a switch, W, permitting the person, by a side movement of his body as he approaches the switch, to change his course, if he so desires.

In Fig. 5 I have shown a one-part track secured to its support by brackets X, and in Fig. 6 I have shown just the lower half of the track shown in Fig. 4 bolted to its support.

In Fig. 5 the roller and block would have to be inserted at the end of the track, and in Fig. 6 they would be inserted before the track be secured to its support.

I claim as my invention—

1. The combination of the frame A, having eyes B, ropes C, hand-holds C', eyes D, straps D', shoulder-straps D<sup>2</sup>, and belt D<sup>3</sup>, and the swivel-support, substantially as set forth.

2. In combination with a frame, ropes or straps depending therefrom, track, roller in the track, block to which the roller is journaled, and having a downward projection, and a swivel hinged to the projection of the block and made fast to the frame, substantially as set forth.

3. The combination of a frame, ropes or straps depending therefrom, track, roller in the track, block to which the roller is journaled, having a downward extension provided with a friction-roller, and swivel secured to the projection and to the frame, substantially as set forth.

4. The combination of the tubular track having a slot in its lower portion, roller within the tube, frame supported by said tube and said roller, and means depending from the frame for the support of the person using the apparatus, substantially as set forth.

5. The combination of the tubular track having a slot in its lower portion, two-part roller within the tube, block between the two parts of the roller and having an extension protruding through the slot in the tube, provided with a friction-roller running in the slot, and means for the support of the person using the apparatus, substantially as set forth.

JAMES W. HILL.

In presence of—  
GEO. H. KNIGHT,  
SAML. KNIGHT.