E. C. WATERMAN. BICYCLE SUPPORTING FRAME. No. 567,625. Patented Sept. 15, 1896.

WITNESSES

/NVENTOR

Fig.4.

United States Patent Office.

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BICYCLE-SUPPORTING FRAME.

SPECIFICATION forming part of Letters Patent No. 567,625, dated September 15, 1896. Application filed April 2, 1896. Serial No. 585,869. (No model.)

To all whom it may concern:

Be it known that I, EBENEZER C. WATER-MAN, a citizen of the United States, residing at Hanover, in the county of Plymouth and State 5 of Massachusetts, have invented certain new and useful Improvements in Bicycle-Supporting Frames; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable oth-10 ers skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

This invention relates to frames or holders in which to support bicycles when not in use. The characteristic features are embodied in a frame which can be easily folded up and readily packed away, if not in use, and, sec-20 ondly, in so constructing the frame that it can

be mounted on rollers or casters, and thus serve the purpose of a truck or carriage.

The drawings accompanying this specification represent in Figure 1 a side elevation of 25 a bicycle-supporting frame embodying my invention when in use. Fig. 2 is a side elevation of the same when folded up. Fig. 3 is an end elevation in direction of arrow 1. Fig. 4 is a modification.

In said drawings, 2 represents a longitudinal bar termed the "track-bar," and which is preferably composed of two members 33', separably and adjustably united by means of a strap or yoke 4 and a set-screw 5. By means 35 of this fastening device the length of the track-bar can be changed to suit the wheelbase of any bicycle. It will be noticed that the extension member 3' of the track-bar is to be positioned beneath the main member 40 3, in order to bring the under surface of said member 3 in the same plane with the corresponding surface of a cross-bar 6, for purposes | hereinafter explained. This cross-piece is | the right or left; hence the wheels are in 95 swiveled at 7, near the end of the member 3, 45 opposite that where the member 3' is attached, and said cross-piece is of sufficient length to give proper stability to the entire frame when a bicycle is to be supported thereby. In addition to this cross-bar a pair of parallel up-50 right arms or standards 88' are pivotally secured to the member 3 of the track-bar, at |

their upper ends by a transverse rod 10. These two standards straddle the track-bar, and are secured against the outside edge of 55 said track-bar. Thus, when placed in an upright or vertically-inclined position, they are adapted to extend into and interlock with the cross-bar by means of two transverse slots or grooves 12 12' on either side of the track-bar. 60 Thus, as shown in Fig. 3 of the drawings, when the cross-bar is in its active position, at right angles to the track-bar, the two standard-arms project below the under surface of said track-bar and engage in the grooves in 65 the cross-bar. In this way great rigidity is given these several parts, since the cross-bar is prevented from turning, while the base of the standard is given firm support and is prevented from rocking. To further stiffen the 70 standard-arms brace-rods 13 13 are provided. These rods extend from the ends of the crosspiece to the standard-arms, and are provided at one end with hooks, whereby they may be detached from the said cross-piece.

In some instances, as in Fig. 4, the trackbar may be extended beyond the foot of the standard-arms somewhat, and a swinging strut in the shape of a bent wire 15 may be employed, the length of this strut being such 80 that when swung into an inactive position it shall not extend very much beyond the end of the standard. The bicycle-wheels are shown in part at 16' 16, respectively front and rear, the latter being entered between 85 the standard-arms, while a chock or block 17 upon the top side of the track-bar serves to retain the wheel at this point in a fixed or locked position. The other wheel of the bicycle is intended to rest between side rests 90 18, of bent wire or other material of sufficient length, and to extend above the trackbar a sufficient height to grasp the wheel of the bicycle and prevent it from turning to alinement and the bicycle is readily held in an upright position. Very frequently it is desirable to move a bicycle from one part of a room to another, hence I have mounted the frame upon swiveled trucks 20, consequently 100 if the wheels of the bicycle are dirty, no injury or harm is done carpets or floors. A further advantage in the use of trucks is to pretheir lower extremities by the bolt 9 and at | vent the bicycle being overturned, since, if

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pressure is brought against the bicycle or the frame is struck by other objects, the frame is not apt to upset, but will yield to the pressure, since the bicycle and frame move easily away upon the rollers.

What I claim is—

1. A bicycle-supporting frame composed of a track-bar, a swiveled cross-piece, and a standard pivotally attached to the track-bar 10 and arranged to swing in line with the track-

bar, substantially as specified.

2. A folding bicycle holder and truck comprising an extensible track-bar, a swiveled cross-piece, and a swinging standard pivotally attached to the track-bar, together with tie-rods from the cross-piece to the standard, and rollers beneath the track-bar and cross-piece, substantially as set forth.

3. The combination with a track-bar composed of two members extensibly united, and a cross-piece swiveled to one member and formed with two transverse grooves, of a piv-

otal standard consisting of two parallel arms to straddle the track-bar and to engage the grooves in the cross-piece, and tie-rods from 25 the cross-piece to the standard, substantially as described.

4. In a bicycle-supporting frame, a track-bar consisting of two members extensibly united, a chock upon one member, side rests upon 30 the corresponding member, combined with a cross-piece swiveled to one member of the track-bar, a swinging standard pivotally secured to the same member and to interlock with said cross-piece, tie-rods to interconnect 35 the cross-piece with the standard, and rollers, substantially as explained.

In testimony whereof I affix my signature

in presence of two witnesses.

EBENEZER C. WATERMAN.

Witnesses:

JEDEDIAH DRULLEY, MELVIN S. NASH.