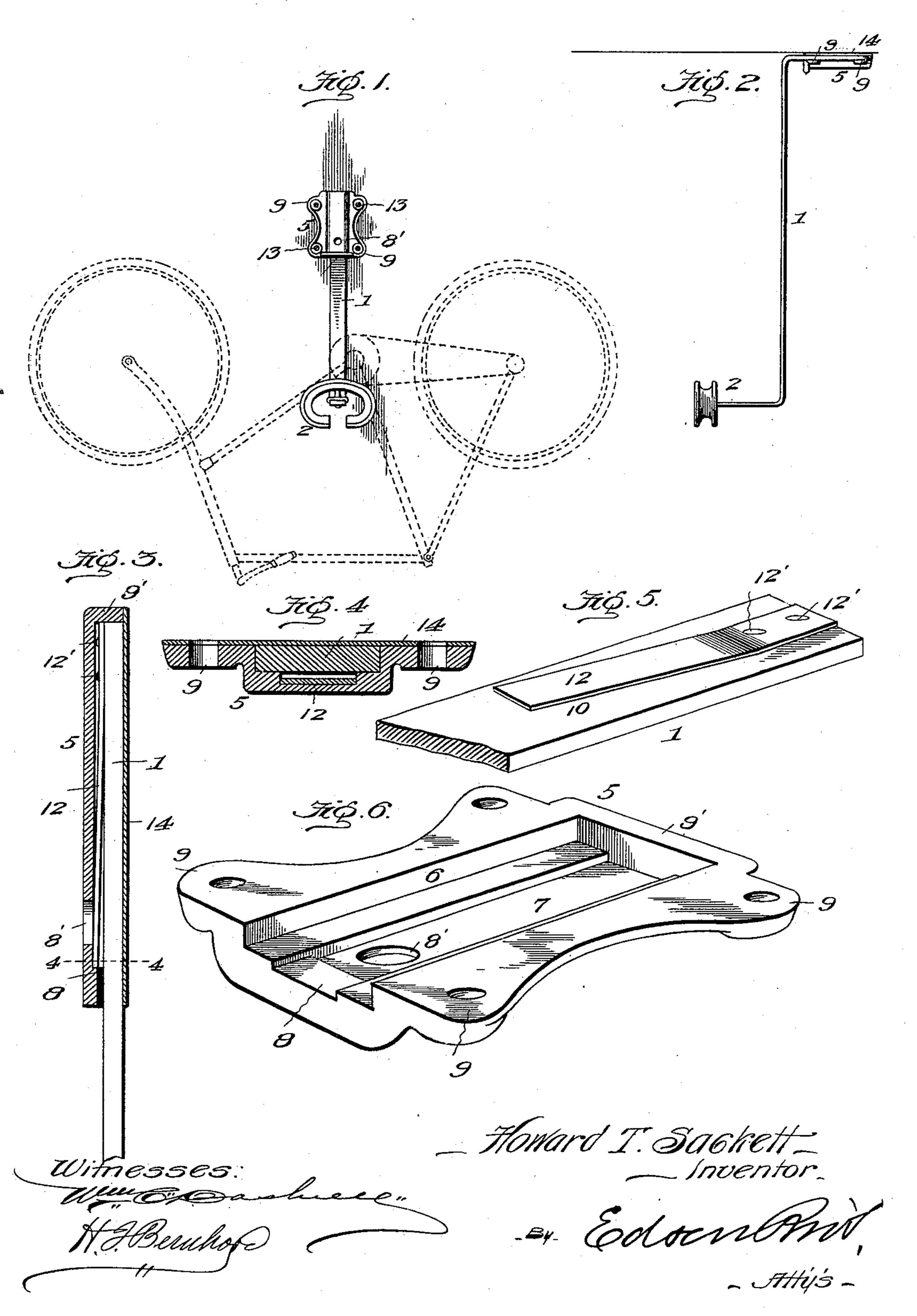
H. T. SACKETT.

BICYCLE SUPPORT ATTACHMENT.

(Application filed May 14, 1897.)

(No Model.)



United States Patent Office.

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BICYCLE-SUPPORT ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 614,503, dated November 22, 1898.

Application filed May 14, 1897. Serial No. 636,520. (No model.)

To all whom it may concern:

Be it known that I, HOWARD T. SACKETT, a citizen of the United States, residing at Fond du Lac, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in Bicycle-Support Attachments; 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 an attachment or holder for bicycle-supports of that kind in which an overhanging arm is used as a means for holding a bicycle on a wall or suspending it from a ceiling, the support being susceptible of use universally where it is necessary to economize space as much as possible, such as in baggage-cars of steam, electric, or cable railways or baggage-compartments in said cars, also for baggage-departments of public or private conveyances whether used on land or water, and for any or all spaces where it is necessary to store away bicycles.

The object of my invention is to provide a simple attachment or holder in which the arm or bar may be securely fastened and from which it may be quickly and easily removed, the attachment being cheap of manufacture and easily applied or removed from a wall or

ceiling. In an overhead support for a bicycle such as shown in my prior application for Letters Patent filed January 29,1897, Serial No. 621,224, 35 the carrying arm or bar is equipped with a saddle upon which a bicycle, when inverted, may be arranged to rest upon the saddle, and said arm or bar is attached to a wall or ceiling to remain a fixture thereon. It is fre-40 quently desirable to take down the carrying arm or bar, so as to put it away, and in my present invention provision is made for easily detaching the carrying arm or bar from the wall, ceiling, or fixture, for replacing the arm 45 or bar in the fixture, and for locking the parts securely together.

To these ends my invention consists in the construction and combination of parts, which will be hereinafter fully described and so claimed.

To enable others to understand my inven-

tion, I have illustrated a preferred embodiment in the accompanying drawings, forming a part of this specification, and in which—

Figures 1 and 2 are views showing my attachment used in connection with wall and ceiling supports, respectively. Fig. 3 is a vertical sectional view, on an enlarged scale, through the fixture and carrying-arm. Fig. 4 is a transverse sectional view on the plane 60 indicated by the dotted line 4 4 of Fig. 3. Fig. 5 is a perspective view of the fixture bracket or casting with its channeled or socketed face turned toward the observer. Fig. 6 is a detail view of part of the carrying arm 65 or bar.

Like numerals of reference denote corresponding parts in all the figures of the drawings.

I designates the carrying bar or arm, and 2 70 is the saddle mounted thereon, said devices being preferably of the character shown in my prior application, to which reference has been made; but I do not limit my invention to these particular devices, because I am aware 75 that my present invention may be used in connection with other kinds of supports.

The present invention contemplates the provision of a fixture bracket or plate 5 and the employment of a locking-detent 10, which 80 parts are constructed for service in connection with the carrying arm or bar 1 to detachably fasten the latter in place either on a wall or to a ceiling to which the bracket or plate 5 may be fastened.

As shown in the drawings, the carrying arm or bar is of rectangular or oblong form in cross-section, and the fixture 5 is constructed to accommodate said arm or bar; but the shape of the parts is immaterial, because 90 the bar and the channel in the fixture may be modified and changed as may be desired without departing from my invention.

The bracket-plate 5 is cast in a single piece of metal with a wide channel 6, a narrower 95 channel 7, an abutment 8, and the perforated lugs or ears 9. These channels are provided in the open rear face of the bracket or plate, and the channel 6 is open at one end of the plate. The inner narrow channel 7, however, is closed at one end by the locking-abutment 8, which is cast as a part of the plate or

bracket and arranged across the lower end of | said channel 7.

The upper ends of both channels 67 are closed by a rib or flange 9', which is formed 5 as a part of the plate, flush with the rear face thereof, and which lies in the path of the arm or bar when the latter is inserted in the plate or bracket, so as to limit the endwise movement of said arm or bar. The front or ex-10 posed side of the bracket is solid or unbroken, except for an opening 8', through which the finger or any suitable implement may be thrust to free the locking device from the abutment 8 when it is desired to withdraw 15 the carrying arm or bar from the fixture.

The channel 6 in the bracket is wide enough to receive the end of the carrying-arm 1, which is adapted to be inserted or thrust through the open end of the channel until it abuts 20 against the stop-flange 9', said bar or arm fitting snugly in the channel 6 as against any

lateral or sidewise movement.

In the simplest embodiment of my invention shown in the drawings the locking de-25 vice consists of a leaf-spring 12, which is of a width appropriate to fit in the channel 7 of the bracket, so that the parts are disposed compactly within the fixture. This lockingspring is applied laterally against one side of 30 the carrying arm or bar, and one end thereof is securely fastened to said arm or bar in a suitable way—as, for instance, by riveting the parts together, as indicated at 12'. The locking-spring is of the form known as a "leaf-35 spring," and it is bent or inclined laterally away from the arm or bar, so that its free end is adapted to engage with the locking shoulder or abutment 8 in the fixture 5. Although I prefer to employ this locking-spring 40 in connection with the abutment in the bracket, because it provides a simple and efficient device for holding the carrying-arm in the fixture, I do not desire to strictly limit my invention to this specific device, as I am 45 aware that equivalent devices may be substituted therefor by a skilled mechanic.

The bracket or plate 5 is intended to be fitted laterally against a wall to occupy a vertical position or to lie against a ceiling to 50 assume a horizontal position, and said plate or bracket is fastened in place by bolts or screws 13, which are passed through the perforated lugs in said plate. When the bracket is fastened in a vertical position on a wall, as 55 shown by Fig. 1, the lower end of the bracket is open for the insertion or withdrawal of the carrying-arm 1, and the latter has a straight vertical shank and an offset lower end for the attachment of the saddle 2, on which the 60 bicycle may be placed. In case the bracket is applied overhead, as to a ceiling, in the manner represented by Fig. 2 I prefer to provide the carrying-arm with a bent upper end of sufficient length to enter the bracket, 65 and the shank of the carrying-arm is long enough to extend down toward the floor within convenient reach, so as to support the sad-1 dle 2 in a position where the operator can easily place the machine on said saddle.

To connect the carrying-arm to the fixture, 70 the end of the arm is inserted endwise into the channel 6 in a position for the lockingspring to enter the channel 7, and the arm is forced home in the fixture until its movement is arrested by the boundary-flange 9', 75 at or before which time the spring engages with the abutment or shoulder 8. The carrying-arm is held by the bracket against lateral and sidewise play and against movement endwise in one direction, and the lock- 80 ing-spring holds it against endwise movement in the opposite direction. To remove the carrying-arm, it is only necessary for the operator to thrust the spring through the opening in the bracket provided for that purpose 85 until the spring clears the locking-abutment 8, whereupon the carrying-bar can be readily withdrawn from the bracket or fixture.

In some cases it is desirable to provide means whereby the wall or ceiling may be 90 protected from abrasion due to the rubbing of the carrying-arm thereon when inserting or withdrawing the same into or from the fixture. To meet this contingency, I provide the fixture with a back plate 14, which may 95 be made of light sheet metal struck up in a single piece of a size and shape corresponding to the fixture and perforated in a manner to have the openings therein coincide with the screw-openings in the lugs of the roo fixture. This back plate is adjusted to the rear face of the fixture previous to its application to the wall or ceiling, and the bolts or screws pass through the fixture and through the back plate, so as to hold the fixture rig- 105 idly in position. The back plate serves to close the open rear side of the fixture and as a wear-plate against which the carrying-arm may press and ride so as to protect the wall or ceiling from abrasion.

I am aware that changes and alterations in the form and proportions of parts and in the details of construction of the device herein shown and described as the preferred embodiment of my invention may be made by 115 a skilled mechanic without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such modifications as fairly fall within the scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

In a bicycle-hanger, the vertical bracketplate provided with a longitudinal bar-chan- 125 nel, 6, the parallel narrow spring-channel, 7, in a vertical plane at one side of the wider bar-channel, an abutment closing the channels at one end of the bracket, a transverse lip, 8, at the receiving end of the bracket and lying 130 across the narrow spring-channel, and a finger-aperture above the transverse lip and opening into the spring-channel, combined with a saddle-carrying bar inserted into the

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wide bar-channel, 6, and a locking-spring attached rigidly to the bar for movement therewith, said spring adapted for insertion into the spring-channel and sustaining the bar and its load by resting upon the transverse lip, 8, of the bracket, substantially as described.

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

HOWARD T. SACKETT.

Witnesses:

F. T. WARNINGTON, EMMA K. NAST.