

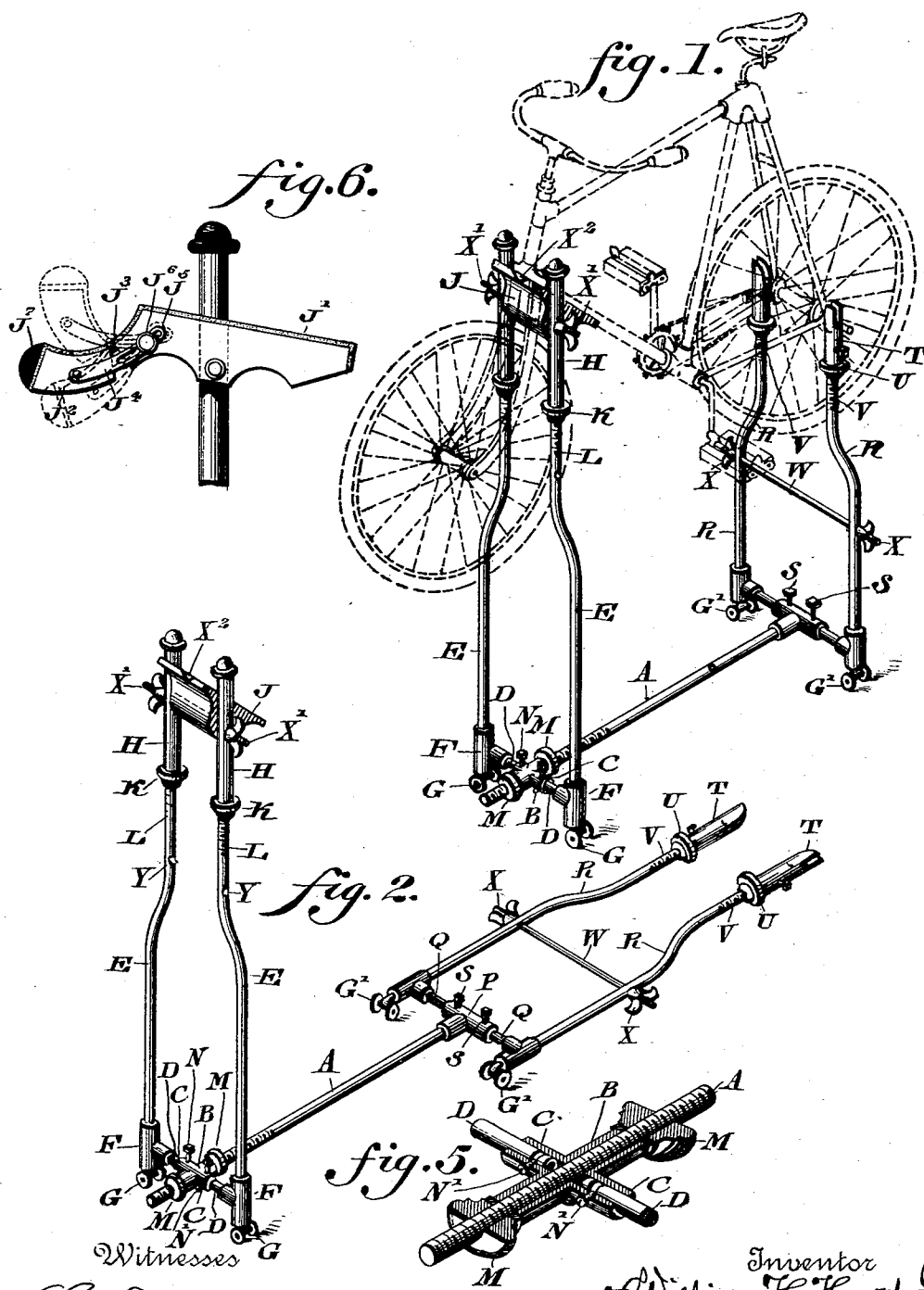
(No Model.)

2 Sheets—Sheet 1.

W. H. HART, Jr.
BICYCLE STAND.

No. 564,787.

Patented July 28, 1896.



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P. H. Chagles.

Inventor
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(No Model.)

2 Sheets—Sheet 2.

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fig. 3.

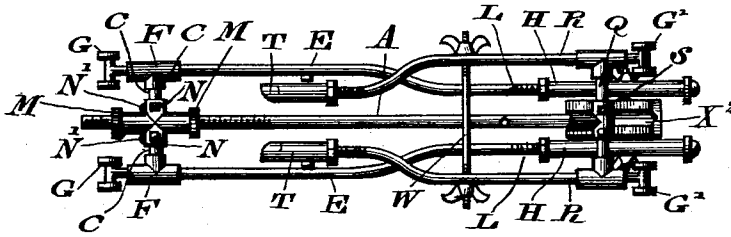


fig. 7.

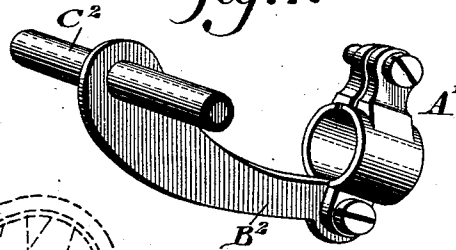
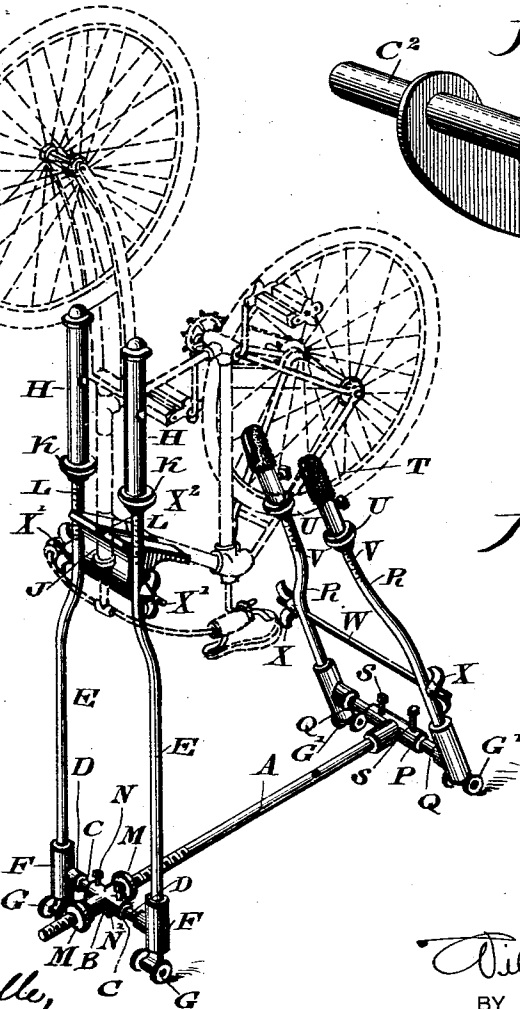


fig. F.



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UNITED STATES PATENT OFFICE.

WILLIAM H. HART, JR., OF PHILADELPHIA, PENNSYLVANIA.

BICYCLE-STAND.

SPECIFICATION forming part of Letters Patent No. 564,787, dated July 28, 1896.

Application filed June 20, 1895. Serial No. 553,391. (No model.) Patented in England June 29, 1895, No. 12,621.

To all whom it may concern:

Be it known that I, WILLIAM H. HART, Jr., a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Bicycle-Stands, (for which Letters Patent have been granted in Great Britain, bearing date June 29, 1895, No. 12,621,) which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a novel stand adapted for displaying bicycles, or for repairing and cleaning the same, the parts of the stand being formed as hereinafter described and claimed, whereby the same are readily adjustable relatively to different configurations and sizes of bicycles, and the stand may be folded in compact form for the purpose of storage, packing, transportation, &c.

Figure 1 represents a perspective view of a bicycle-stand embodying my invention, the same displaying a bicycle thereon. Fig. 2 represents a perspective view of the same in partly-folded condition. Fig. 3 represents a plan view of the same in folded condition. Fig. 4 represents a perspective view of the stand, showing a bicycle therein in inverted position, for purposes of repairs, &c. Fig. 5 represents a section of the lower portion of the connections of the front standard of the device. Fig. 6 represents a side elevation of the saddle of the stand. Fig. 7 represents a perspective view of a steadying device that may be employed.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a stringer at the base of the stand, one end of which is passed freely through the longitudinally-extending sleeve B, which latter is provided with transversely-extending branches C, the latter freely receiving the nipples D, which extend horizontally inwardly from the lower ends of the front standards E, said nipples being secured to said standards by the couplings F, which latter are mounted on the caster-rollers G.

Loosely fitted on the upper ends of the standards E are sleeves H, which support the saddle J, and are vertically adjustable on said standards by means of the nuts K, which

are fitted to the threaded portions L of said standards.

The end portion of the stringer A is screw-threaded, and has nuts M thereon on opposite sides of the sleeve B, whereby the standards E may be adjusted on said stringer and then retained in adjusted position by means of the nuts M. On the branches C are screws N, which are adapted to tighten against the nipples D for retaining said standards in upright position, and screws N', which freely engage necks or grooves in said nipples.

P designates a sleeve which is connected with the end of a stringer A, opposite to the sleeve B, and freely receives the nipples Q, which project inwardly from the lower end of the hind standards R, which, as is evident, are located on the stringer A opposite to the standards E, and mounted on rollers G'. The sleeve P is provided with screws S, which are adapted to tighten against the nipples Q for retaining the standards R in upright position.

On the upper ends of the standards R are cups or sockets T, which are vertically adjustable by means of the thumb-nuts U, which are fitted on the threaded portions V of said standards, and have said cups or sockets rest thereupon.

The standards R are connected by the transverse horizontal braces W, which are provided at their ends with thumb-nuts X, which tighten against said standards, whereby the standards may be stiffened and strengthened, and provision is made for lateral adjustment of said standards.

The standards E are provided with openings Y for supporting the saddle J in the lower position, when so desired. (Shown in Fig. 4). The saddle J is mounted on the standards E by means of the pivot or axis X', so that the angle of the face of said saddle may be changed relatively to the angle of the portion of the bicycle resting thereupon, said face having therein the groove X², in which said portion may be seated.

In Figs. 1, 2, and 3 the sockets or cups T are formed of metal or other suitable hard material, while in Fig. 4 they are shown as made of rubber or other elastic or flexible material.

It will be seen that when the stand is in the position shown in Fig. 1, the bicycle may

be readily supported thereon, the frame resting on the saddle J, and the ends of the axle of the hind wheel being seated in the cups or sockets T, while in Fig. 4 the bicycle is inverted, and has portions of its frame resting on the saddle J and the cups or sockets T, it being noticed that the standards may be adjusted to and from each other, and their angle changed, if so desired, and the saddle and cups or sockets are also vertically adjustable, as has been stated, by which means the stand may be made to adjust itself to varying shapes or configurations and sizes of bicycles.

15 In order to adapt the saddle J to different shapes of the portion of the reach or frame of the bicycle, which rests thereon, (see Fig. 6,) I form said saddle in sections J' J², which are connected by hinges J³, so that these sections may be adjusted or set at varying angles. In order to hold the section in their adjustment, one of the sections has a strap J⁴ connected therewith, the same having a slot J⁵ to receive the screw J⁶ on the other section, said screw when tightened holding the sections in adjusted position. One or both of the sections of the saddle is clad with a rubber or yielding cushion J⁷, to prevent abrasion of the part of the bicycle in contact with the same.

In order to further sustain the bicycle in a firm manner on the stand and prevent vibrations or wobbling thereof and to aline the wheels on the stand, I employ the device shown in Fig. 7, the same consisting of the sleeve A', adapted to be clamped on a suitable part of the reach or frame of the bicycle, and the arm B², which is pivotally connected at one end with said sleeve, so as to be adjusted thereon, and the cross-bar C², secured to the other end of said arm, said bar being covered with or formed of rubber or other suitable or elastic material and adapted to rest against the fork or other proper part of the standards E E, providing a firm bearing for the contacting parts.

When the screws or bolts S are loosened, the nipples D and Q may turn in the sleeves C and P, so as to adjust the angles of the standards E and R, after which said screws are tightened and the standards retain their adjustment. Again, when said screws are

loosened the standards R may be turned downwardly to a horizontal position, as shown in Fig. 2. Again, the standards may be folded down on the stringer A and the standards R folded over said standards E, thus placing the stand in compact form, as shown in Fig. 3.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A bicycle-stand having the stringer A with the interiorly-threaded sleeve B thereon, said sleeve having the laterally-extending branches C, the standards E', the coupling F, having the inwardly-extending nipples D freely fitting in said branches C, and screws in sleeve B bearing against said nipples, said parts being combined substantially as described.

2. A bicycle-stand consisting of a stringer, sleeves on said stringer at or near the ends thereof, having laterally-extending branches, sleeves having laterally-extending nipples rotatably fitted in said branches, standards secured to said nipples adjustable sleeves on the upper ends of said standards, a cross brace-bar connecting the standards which are at one end of said stringer and an adjustable saddle pivotally connected with the standards at the other end of the stringer, said parts being combined substantially as described.

3. In a bicycle-stand, the standards E, E, the saddle J pivotally connected with said standards and formed of the hinged sections J' J², one of said sections having a slotted strap connected by a screw with the other section, said parts being combined substantially as described.

4. In a bicycle-stand, two standards, a bicycle support or brace consisting of an arm, a sleeve pivotally attached to said arm, and adapted to embrace a portion of the frame of a bicycle held on said stand, and a cross-bar attached to said arm and adapted to rest against said standards, said parts being combined substantially as described.

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