

(No Model.)

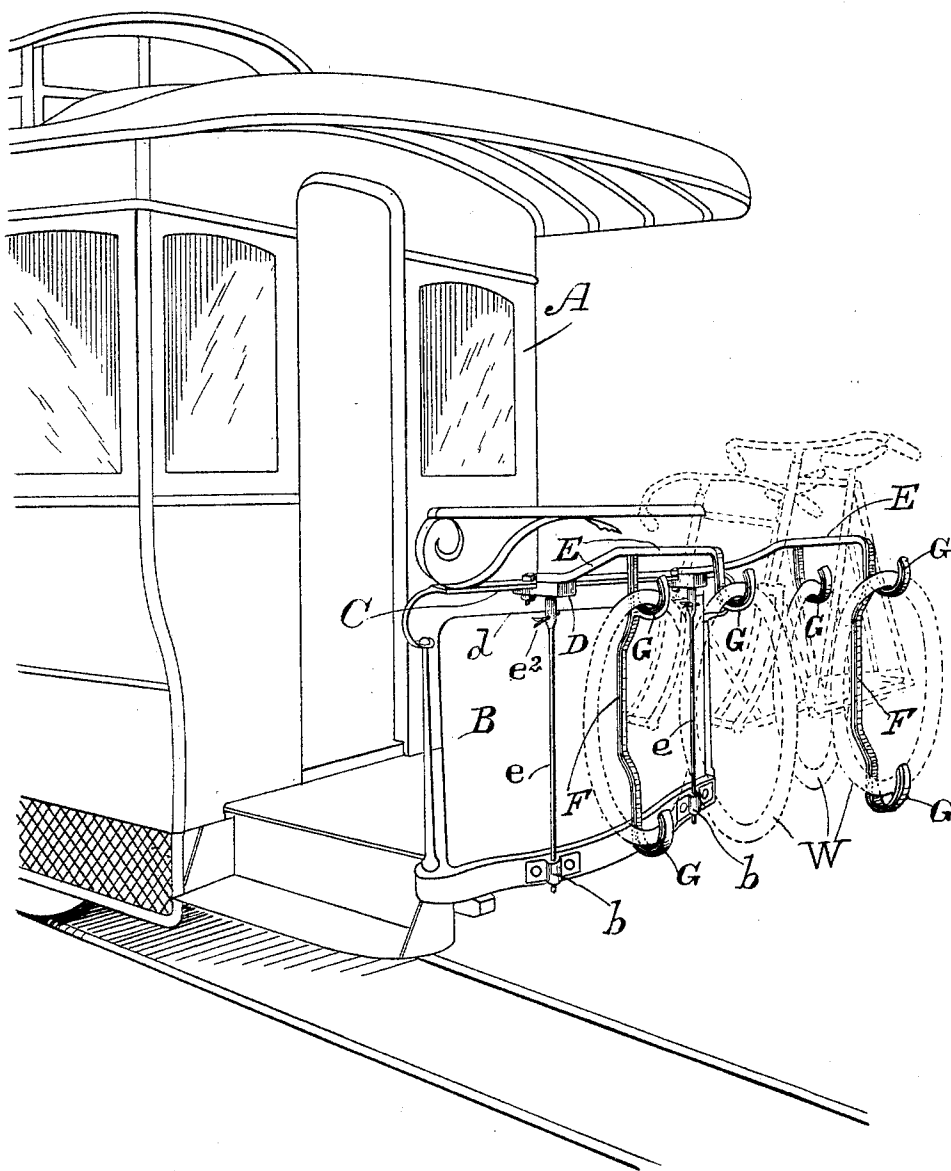
2 Sheets—Sheet 1.

G. W. DOUGLAS.
BICYCLE HOLDER.

No. 586,681.

Patented July 20, 1897.

Fig 1



WITNESSES

Walter Vane.

J. A. Bayless

INVENTOR

George W. Douglas
by Wm F. Booth
his Attorney

2 Sheets—Sheet 2.

Patented July 20, 1897.

Technical drawing of a rectangular plate with a central hole and a smaller square hole. Dimensions are labeled: d^2 for the outer diameter, d^1 for the inner diameter, and D for the plate thickness.

Walter Crane.
J. A. Bayless

George W. Douglas
by Wm F. Booth
his Attorney

UNITED STATES PATENT OFFICE.

GEORGE WILLARD DOUGLAS, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR
TO THE MARKET STREET RAILWAY COMPANY, OF SAME PLACE.

BICYCLE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 586,681, dated July 20, 1897.

Application filed February 19, 1897. Serial No. 624,106. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WILLARD DOUGLAS, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented certain new and useful Improvements in Bicycle-Holders; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the class of holders or carriers for bicycles; and its object is to conveniently suspend these machines by means which can readily be extended for use and easily folded back out of the way, thereby adapting the device for many situations and places, requiring economy of space, or necessitating a folded and inconspicuous position when not in action. Therefore, though my invention is adapted for many places, fixed or moving, it is especially intended for use in connection with vehicles, and more particularly street or other cars, and for the sake of illustration I have herein shown and described it in connection with a street-car, though I do not confine myself to such application.

My invention consists in the novel bicycle-holder and in the construction, arrangement, and combination of its parts, which I shall hereinafter fully describe by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of the end of a car with my holder attached and shown carrying two bicycles. Fig. 2 is a view of the holder and a section of the clamp D and the rail C. Fig. 3 is a top view of the clamp D. Fig. 4 is a side view of the same. Fig. 5 is a plan of the end of the car, showing my holder.

A is the end of a street-car, of which B is the dash, having a top rail C.

D is a clamp made to fit up under the top rail C and to be secured thereto, as by the lag-screw or bolt *d* or other fastening. The end of this clamp projects backwardly from the rail and has made in it a hole *d'*, the upper portion of which is made into a square socket *d''*.

E is the suspension-bracket, the inner end of which is provided with a rod *e*, which passes down through the socket *d''* and hole *d'* of clamp D and down on the outer side of the dashboard to a guide socket or bearing *b* be-

low. This rod forms the hinge pintle or pivot, with which the suspension-bracket may turn to a position at right angles to the dash and to one parallel therewith. In order to hold said bracket in the position to which it is turned, the upper end of the rod *e*, as shown at *e'*, is made square and adapted to engage with the square socket *d''*. Therefore to turn or swing the suspension-bracket it is only necessary to lift it, thereby raising the square portion *e'* out of the socket *d''*, whereupon the bracket can turn. Then by dropping the bracket the engagement of the square portion with the socket is made again and the bracket is held in position extended or folded. A small cotter-pin *e''*, through rod *e*, prevents the bracket from being raised too high in getting ready to turn it. By removing this pin the bracket can be removed wholly from the car by lifting the rod *e* out of its fastenings. Thus the whole device can be readily fitted to and removed from the car.

Depending from the suspension-bracket E is a hanger F, made of any suitable material. It is best formed of a leather strap riveted to a steel backing. It will thus be strong enough and yet will not injure the enamel of the machine. The hanger is provided with means for engaging and supporting the bicycle. The best means are hooks, such as G, formed with or attached to the hanger. The arrangement of these hooks is such as to engage the wheels of the machine. In practice there are two such swinging suspension-brackets, each with its hanger, or in case two machines are to be carried each bracket will have two hangers. Each hanger may have one or two hooks.

The use of the device is as follows: When not in action, the brackets with their hangers are swung in against the dash and are there out of the way. For use they are swung out to an extended position and are there held by means heretofore described. Then the bicycle is lifted in an upright position and so placed that the lower portion or tread of one or both wheels rests in the lowermost hooks, while the upper hooks pass under and hang up the wheels by the upper portions of their rims. I have herein indicated the bicycle as being carried, the wheels being represented

by W. Thus one or more bicycles may be quickly placed in the holder and carried safely and conveniently.

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

1. A bicycle-holder, consisting of a pair of separated suspension-brackets, horizontally disposed and having, at their inner ends, pivotal connections with their support, whereby they may be swung in horizontal planes to extended and folded positions, a vertically-disposed hanger depending from each of said brackets, and hooks on said hangers in position and adapted to engage the bicycle by both wheels, to suspend it.

2. A bicycle-holder, consisting of suspension-brackets, horizontally disposed and having, at their inner ends, pivotal connections with their support, whereby they may be swung in horizontal planes to extended and folded positions, vertically-disposed hangers depending from said brackets, and hooks carried by the hangers in different vertical planes, and adapted to engage the bicycle-wheels both above and below, whereby the bicycle is suspended and carried.

3. A bicycle-holder, consisting of suspension-brackets, horizontally disposed and having, at their inner extremities, downwardly-extending rods forming hinge-pintles, said rods having square upper ends, clamps secured to the support and in which the pintles

are mounted and vertically movable, said clamps having square sockets for engaging the square upper ends of the rods and holding the brackets in an extended or a folded position, as desired, a vertically-disposed hanger depending from each of said brackets, and hooks on said hangers in position and adapted to engage the bicycle by both wheels and to support it.

4. A bicycle-holder, consisting of suspension-brackets, horizontally disposed and having, at their inner extremities, downwardly-extending rods with square upper ends, guide-bearings below and above, said rods being vertically movable and axially rotatable in said bearings and clamps, and said clamps having square sockets for the engagement of the square upper ends of the rods, whereby the brackets may be held in an extended or folded position as desired, removable cross-pins in the rods to limit the lifting of the brackets when in the act of turning, vertically-disposed hangers depending from said brackets, and hooks on said hangers in position and adapted to engage the bicycle by both wheels and to suspend it.

In witness whereof I have hereunto set my hand.

GEORGE WILLARD DOUGLAS.

Witnesses:

J. D. JESSUP,

GEO. B. WILLCUTT.