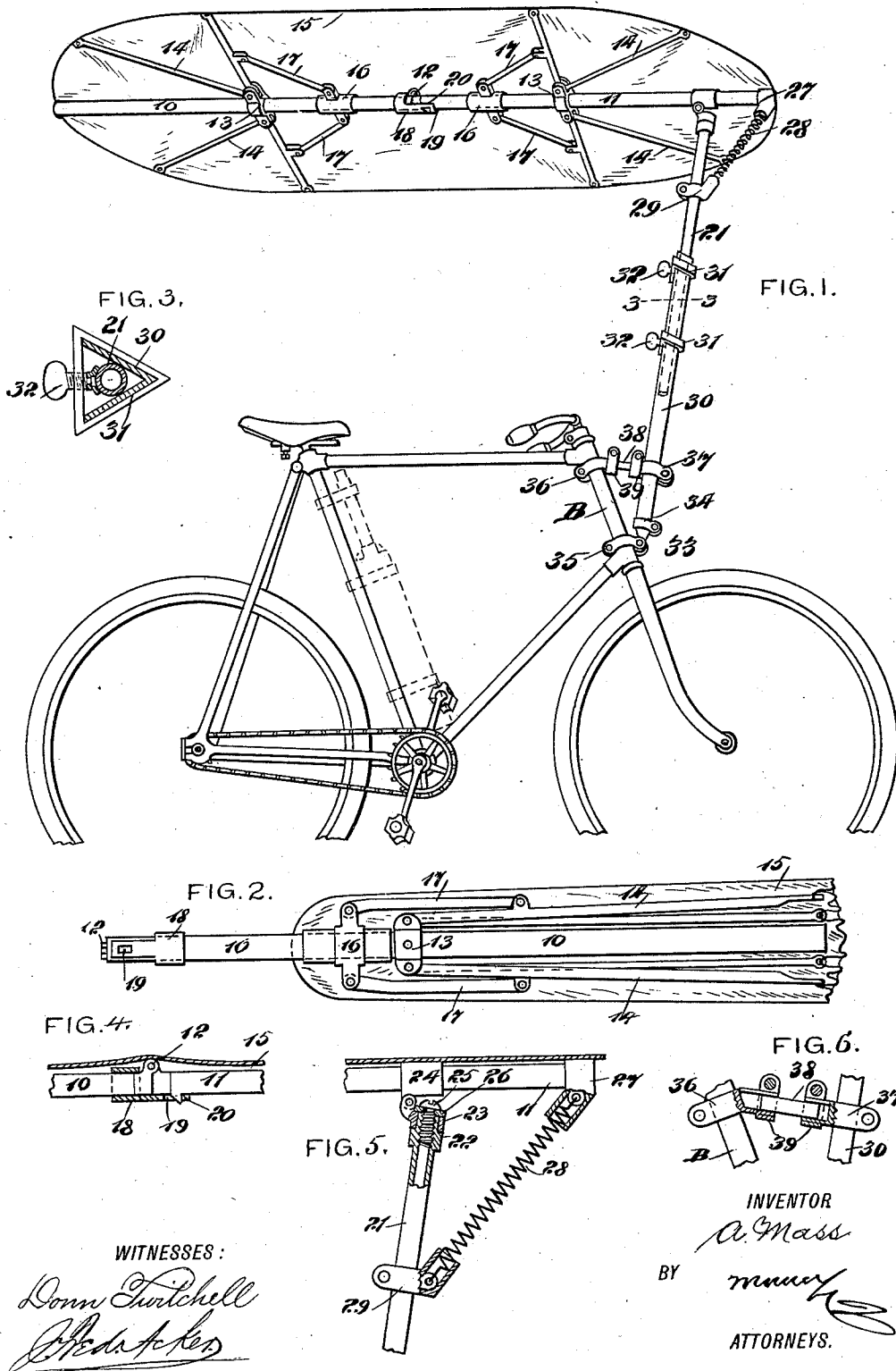


(No Model.)

A. MASS.
BICYCLE CANOPY.

No. 578,649.

Patented Mar. 9, 1897.



UNITED STATES PATENT OFFICE.

ADOLPH MASS, OF CARBONDALE, PENNSYLVANIA.

BICYCLE-CANOPY.

SPECIFICATION forming part of Letters Patent No. 578,649, dated March 9, 1897.

Application filed November 3, 1896. Serial No. 610,914. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH MASS, of Carbondale, in the county of Lackawanna and State of Pennsylvania, have invented a new and Improved Bicycle-Canopy, of which the following is a full, clear, and exact description.

The object of my invention is to construct a canopy for bicycles in a light, simple, and durable manner, and so that it may be folded up when not required and compactly strapped to the frame of the machine.

A further object of the invention is to provide a means for adjusting the canopy vertically or laterally and to so shape and support the canopy that it will automatically shift its position to face the wind edge on, returning to its normal position when the wind abates.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a bicycle and a perspective view of the canopy applied thereto. Fig. 2 is a view of the canopy folded. Fig. 3 is a transverse section taken substantially on the line 3 3 of Fig. 1. Fig. 4 is a detail sectional view illustrating the hinged connection between the two main rods of the canopy-frame. Fig. 5 is a detail sectional view illustrating the standard attached to the canopy and the spring connection between the said standard and the forward end of the canopy, and Fig. 6 is a detail sectional view of the device employed for holding the standard fast to the bicycle-frame.

In constructing the frame of the canopy two longitudinal rods 10 and 11 are used, connected at their abutting ends by a hinge 12, the hinge being at the upper portions of the rods, and upon each rod 10 and 11 a flanged sleeve 13 is secured, and in the flanges of each sleeve a series of ribs 14 is pivoted, the cover 15 of the canopy being attached to the said ribs at their outer ends. A runner 16 is mounted upon each rod 10 and 11 of the frame near its inner end, and each runner is

provided with projections from opposite sides, links 17 being pivoted to the projections of the runners and to the innermost of the ribs 14, adjacent to which the runners are located.

When the rods 10 and 11 of the frame are end to end, they are held in such position by means of a locking device, which may consist, as shown in the drawings, of a sleeve 18, held to slide, for example, on the rod 10, which sleeve is provided with a projection extending along the under side of the rod, the said projection of the sleeve being made to cross the joint between the two rods, as shown in Figs. 1 and 4, and the projection of the sleeve 18 has an opening 19 therein, which receives a beveled lug 20, projected downward from the forward rod 11.

When the canopy is to be folded up, the rod 10 is folded over on the rod 11, and the ribs are then closed together around the rods by carrying the runners 16 in an outwardly direction, causing the canopy to be brought into the compact form shown in Fig. 2, enabling it to be readily attached to a bicycle-frame, as illustrated in dotted lines in Fig. 1.

A standard 21 is adapted as a support for the forward portion of the canopy. This standard has its upper end reduced to form a shoulder 22, and upon this shoulder a collar 23 is loosely placed, the said collar having a hinged connection with a second collar 24, which is firmly secured to the forward rod 11 of the canopy-frame. The loose collar 23 is held in position by a washer 26, which is located at the top of the standard 21 and extends from the collar, and a screw 25, which is passed through the washer and into the upper portion of the standard, as best shown in Fig. 5.

A socket 27, having a downward and rearward inclination, is secured to the forward extremity of the forward rod 11 of the canopy-frame. A spring 28 is secured in the socket 27 at one of its ends, and the opposite end of the spring is attached to a second socket 29, which is adjustably secured upon the standard 21, the socket 29 having an upward and a forward inclination. The spring 28 serves to hold the canopy in a horizontal position, while the collar 23, connecting the standard 21 with the canopy, admits of the automatic movement of the canopy from side to side, so

as to face the wind, and as the canopy is moved from one side to the other the spring 28 is placed under tension. Therefore when the wind abates the spring will restore the canopy to its normal position, which will be immediately over the saddle.

The standard 21 is adjustably secured in an upright 30, and this upright, as shown in Fig. 3, is usually somewhat V-shaped or triangular in cross-section, being surrounded at intervals in its length by similarly-shaped straps 31, adjustable upon the upright, and each strap 31 is provided with a set-screw 32, adapted for engagement with the standard 21 when introduced into the upright.

At the lower end of the upright 30 a preferably conical tip 33 is secured by means of a strap 34 or its equivalent, and the conical lower end of the upright 30 is hinged to a strap 35, which encircles the head B of the bicycle-frame immediately over the front fork, as illustrated in Fig. 1. A second support is provided for the upright 30, the second support being so constructed that the upright may be brought quite close to or carried forwardly and away from the head B of the bicycle-frame. This second support is shown in Figs. 1 and 6 and consists of two straps 36 and 37, one of the straps being secured to the upper portion of the head B of the bicycle-frame and the other strap being secured to the upright 30. The opposing ends of the straps terminate in sockets, and the straps are connected by a rod 38, which is introduced into the sockets of both straps, and the standard is held in its adjusted position by means of clamps 39 of any approved construction, located around the sockets of the straps and arranged to hold the said sockets in frictional engagement with the connecting-rod 38.

The standard 21 may be adjusted upward or downward in the upright 30 in a convenient and ready manner, and the entire device may be attached to a bicycle-frame with little cost and without adding materially to the weight of the machine.

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

1. The combination, with a canopy for a bicycle or for other vehicles, of an upright, a

swivel connection between the upright and the forward portion of the canopy, and a spring attached to the upright and to the canopy in advance of its connection with the upright, as and for the purpose specified.

2. The combination, with a canopy for bicycles or other vehicles, of an upright having a swivel connection with the forward portion of the canopy, a spring attached to the upright and to the canopy in advance of its connection with the upright, a standard, means for adjusting the upright in the said standard, and devices carried by the standard and arranged for engagement with the frame of the bicycle, as and for the purpose specified.

3. The combination, with a canopy for bicycles or other vehicles, of an upright having a swivel connection with the forward portion of the canopy, a spring attached to the upright and to the canopy in advance of its connection with the upright, a standard, means for adjusting the upright in the said standard, clamps adapted one for attachment to the upright and the other for attachment to the bicycle-frame, an adjustable rod connecting the two clamps, and a third clamp having a hinged connection with the lower portion of the aforesaid upright, as and for the purpose specified.

4. The combination of a support, a canopy having loose connection therewith, and a spring connected to the canopy and to the support and holding the canopy yieldingly in its normal position, substantially as described.

5. The combination of a support, a canopy pivoted thereon, and a spring connected to the canopy and to the support and exerting an influence on the canopy in a line transverse to the pivot thereof, substantially as described.

6. In a canopy, the combination of two pivotally-connected rods, a sleeve fixed to each rod, ribs pivoted to the sleeves, a cover connected to the ribs, a runner carried by each rod, and links respectively connected to the runners and to portions of the ribs, substantially as described.

ADOLPH MASS.

Witnesses:

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