

No. 702,003.

Patented June 10, 1902.

P. E. HANNUM.  
FAN ATTACHMENT FOR BICYCLES.

(Application filed May 18, 1901.)

(No Model.)

Fig. 1.

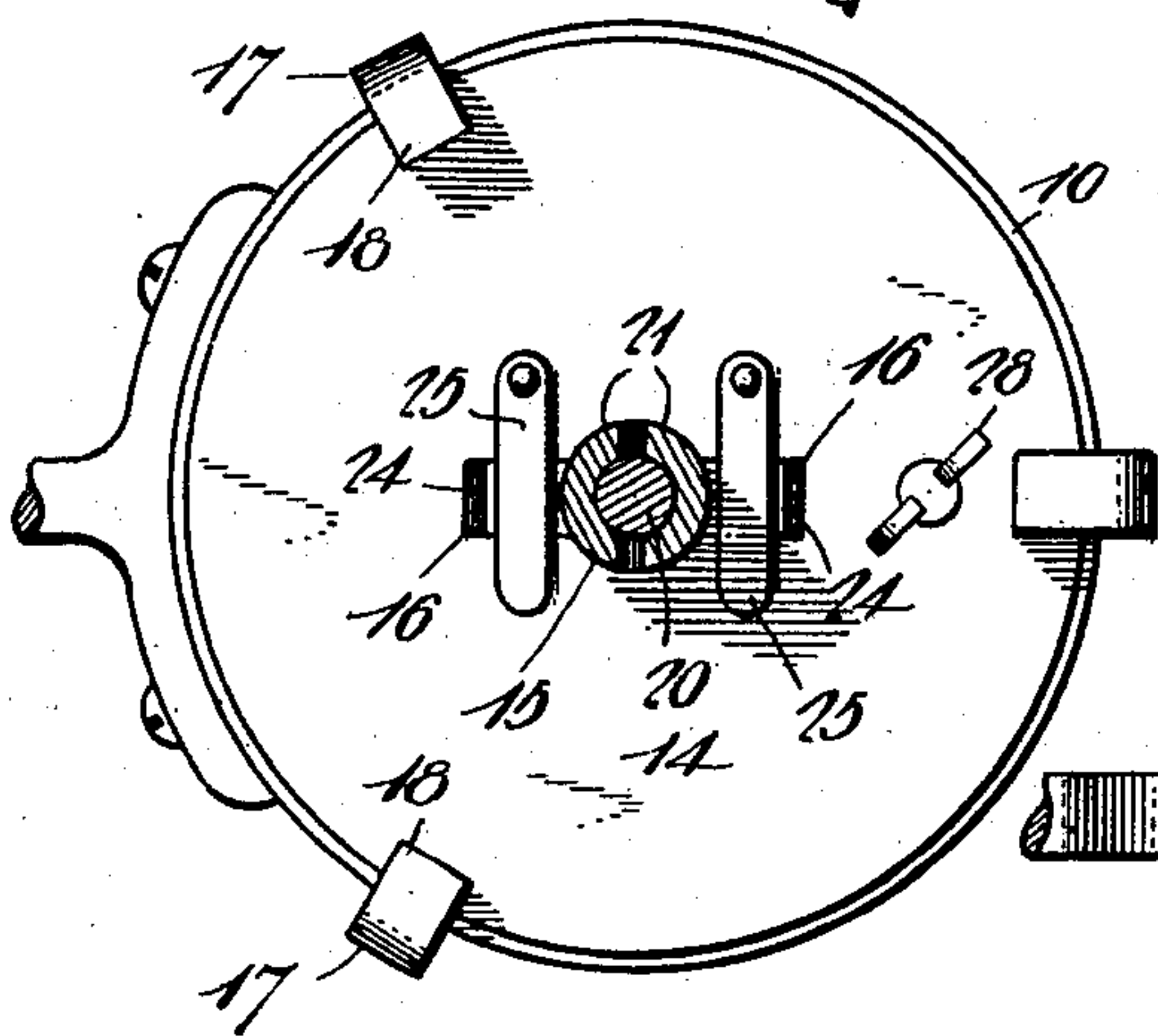
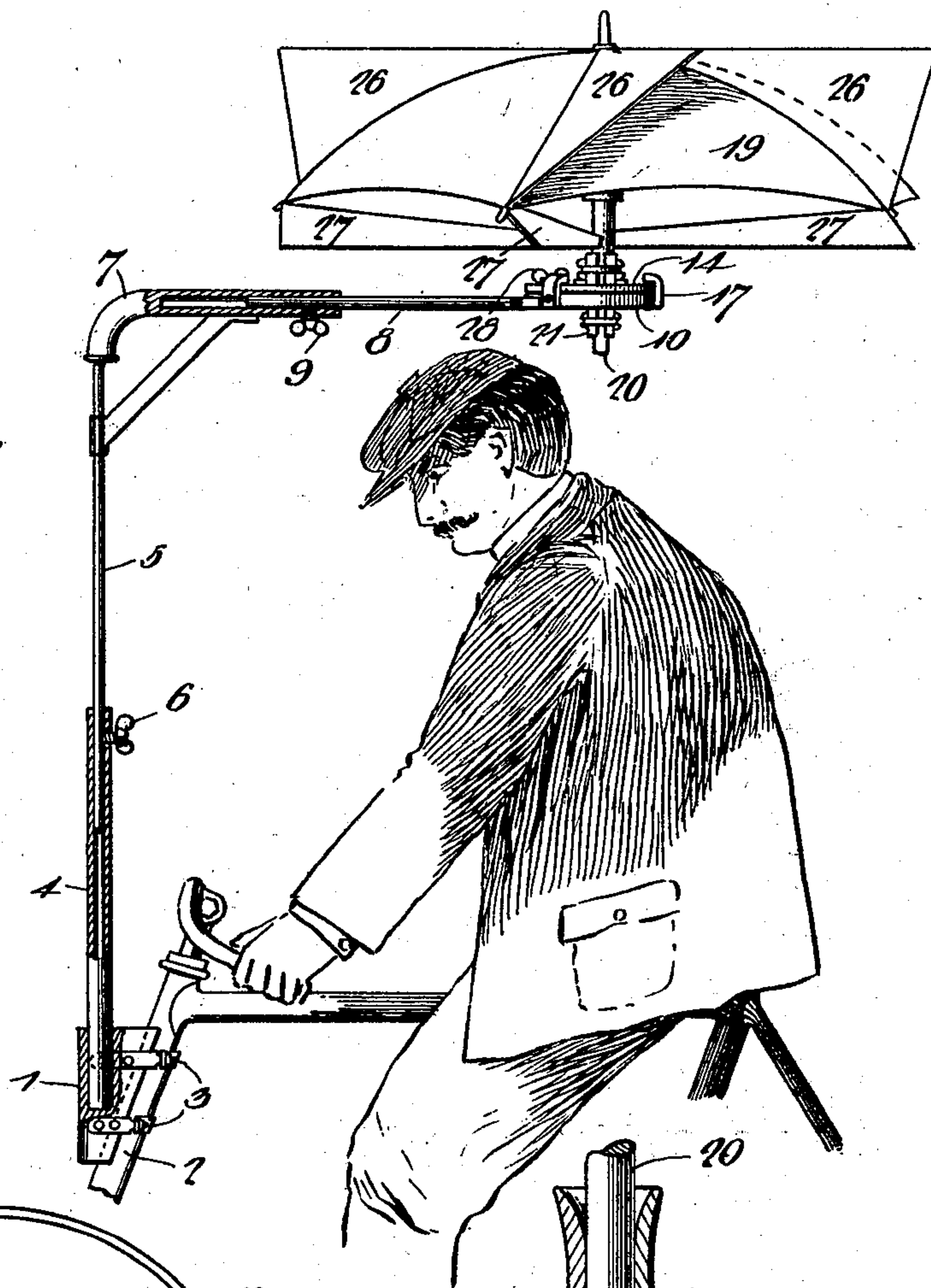


Fig. 3.

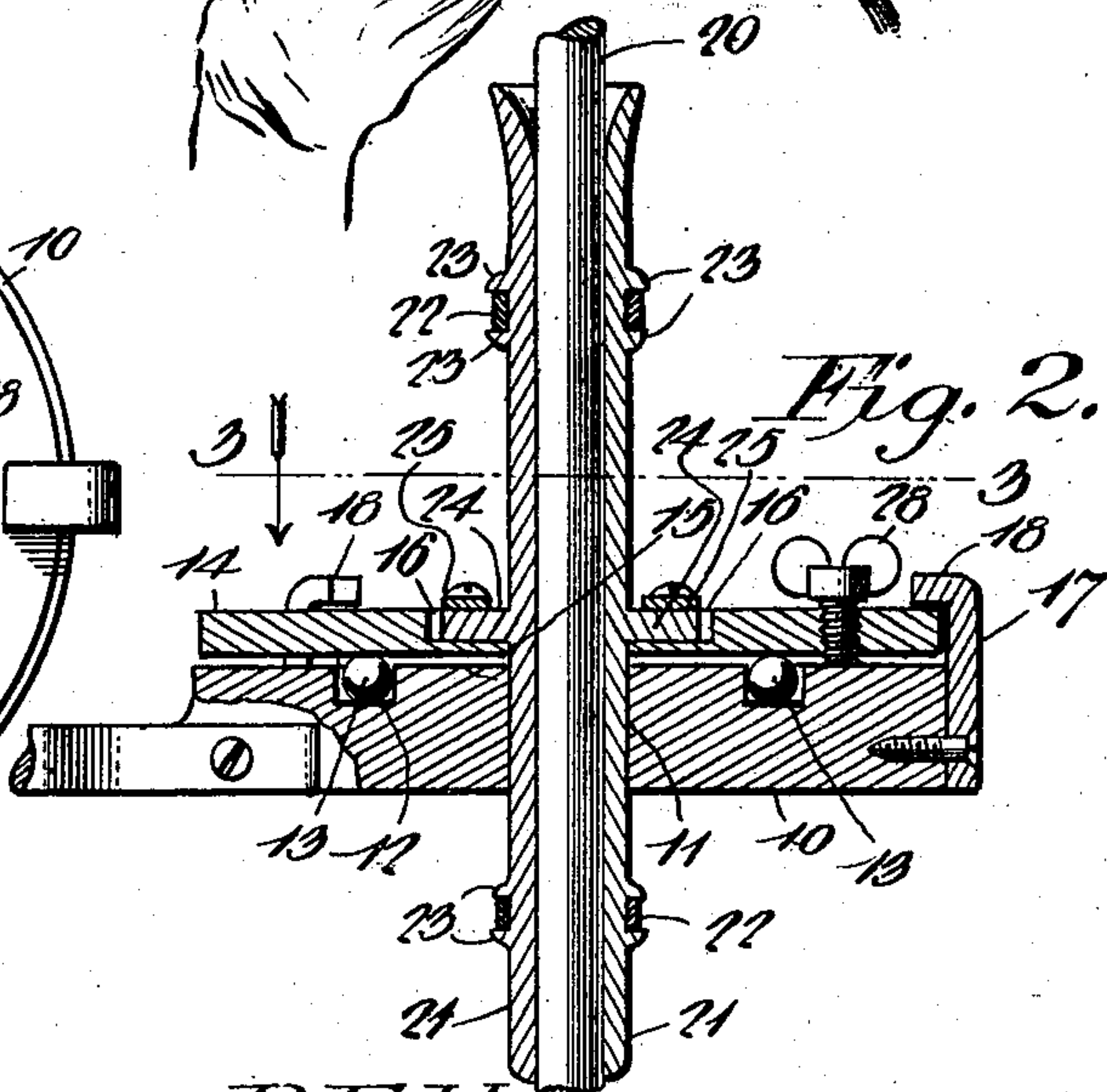


Fig. 2.

Witnesses

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# UNITED STATES PATENT OFFICE.

PHILIP EDWARD HANNUM, OF CARTHAGE, MISSOURI.

## FAN ATTACHMENT FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 702,003, dated June 10, 1902.

Application filed May 18, 1901. Serial No. 60,912. (No model.)

*To all whom it may concern:*

Be it known that I, PHILIP EDWARD HANNUM, a citizen of the United States, residing at Carthage, in the county of Jasper and State of Missouri, have invented a new and useful Fan Attachment for Bicycles, of which the following is a specification.

This invention relates to fan attachments for bicycles, and has for its object to provide a novel form of combined fan and canopy adapted to be operated by the current of air produced by the movement of the bicycle and to direct such current in part downward upon the rider.

With this and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a side elevation of a portion of the frame of a bicycle having the present device applied thereto, parts being broken away to show the adjustable connections thereof. Fig. 2 is an enlarged detail sectional view to show the rotatable support for the canopy. Fig. 3 is a plan section taken on the line 3 3 of Fig. 2.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

In carrying out the present invention there is provided a substantially triangular supporting-bracket 1, the front side of which is vertical and the rear side of which is inclined upwardly and rearwardly and also provided with a longitudinal groove forming a seat for the reception of the front side of the head-tube 2 of any ordinary bicycle-frame, there being suitable clamps 3 carried by the bracket and constructed to embrace the head-tube, so as to rigidly connect the bracket thereto. In the top of the bracket there is provided a socket for the reception of a tubular standard 4, rising rigidly from the bracket and extending to a suitable height above the handle-bars of the bicycle. Within the upper end

of this tubular standard there is telescopically mounted an extension-rod 5, which may be held at any adjustment by means of a set-screw or clamp 6, piercing the upper portion of the tubular standard and designed to engage the rod. At the upper end of the rod there is provided a tubular elbow 7, which is fixed to the rod and is projected rearwardly therefrom, the horizontal arm thereof being extended for the adjustable reception of a rod 8 and having a set-screw 9 for the adjustment of the rod.

At the rear and outer end of the horizontal rod 8 there is provided a fixed substantially horizontal bracket 10 (best shown in Fig. 2) and preferably in the form of a flat circular plate having a central opening 11 and a concentric groove 12, formed in the upper face thereof and for the reception of a plurality of antifriction-balls 13. Upon the top of this flat bracket there is provided a circular rotatable head 14, supported upon the antifriction-balls and provided with a central opening 15, corresponding to that of the bracket, there also being opposite notches 16, formed in the top of the head and intersecting the central opening. A plurality of upstanding hooked or shouldered projections 17 rise from the marginal edge of the bracket, so that the upper terminal shoulders or lips 18 may overhang the marginal edge of the rotatable head, thereby preventing lateral displacement of the latter and permitting of the same rotating upon the bracket.

The canopy is preferably in the form of an ordinary umbrella 19, having the usual stick 20, which is designed to be received through the corresponding central openings in the rotatable head and the bracket. For connecting the stick to the head, so that it may rotate therewith, there is provided a socket consisting of opposite substantially semitubular members 21, which are designed to embrace the stick and are clamped thereon by means of elastic bands or clamps 22, that normally lie between pairs of lateral projections 23, formed integrally with the respective socket-sections, whereby displacement of the clamps is prevented. This socket is first inserted through the openings in the head and bracket, the members thereof being in mutual contact, so as to pass the lower projec-



tions through the openings, after which the umbrella-stick or canopy-standard is thrust into the upper end of the socket, which frictionally grips the stick, so as to be connected therewith. The intermediate portion of each socket-section is provided with a lateral projection 24, which is of a size to fit snugly within the corresponding notch in the top of the rotatable head, thereby to interlock the socket and the head against independent rotation, there being a pivotal finger or latch 25 mounted upon the head and adjacent to each notch, so as to be swung across the same and the projection therein to prevent upward displacement of the socket from the head.

To provide for rotating the circular canopy, a plurality of radial and laterally-inclined blades 26 are arranged upon the top of the canopy, so that when the bicycle is in motion the current of air generated thereby will act upon the blades to rotate the canopy. Upon the under side of the canopy there are provided a plurality of radial fan-blades 27, whereby the rotation of the canopy will carry the fan-blades therewith and direct a current of air downwardly toward the bicycle-saddle and for the comfort of the rider. In order that the speed of the fan may be regulated, there is provided a brake device consisting of a set-screw 28, piercing the rotatable head, with its inner end in frictional relation to the upper face of the bracket 11, so as to retard the motion of the head when the screw is in engagement with the bracket.

What is claimed is—

1. A bicycle attachment comprising a support adapted for application to the frame of a bicycle, and a bladed fan-carrying canopy revolubly mounted upon the support.
2. A bicycle attachment comprising a revoluble canopy or sunshade provided on its upper side with blades and on its under side with a fan.
3. A bicycle attachment comprising a support adapted for application to a bicycle-frame, a rotatable socket mounted upon the support, and a bladed fan-carrying canopy having a standard detachably mounted in and rotatable with the socket.
4. A bicycle attachment comprising a support, adapted for application to the frame of a bicycle, and provided with a vertically-disposed opening, a rotatable head having a central opening corresponding to the first-

named opening, and provided in its outer face with recesses intersecting the opening, a socket fitted in the corresponding openings and provided with lateral projections to engage the respective recesses to interlock the socket with the head, and a bladed fan-carrying canopy having a standard detachably mounted in the socket and rotatable therewith.

5. A bicycle attachment having a circular bracket provided with a central circular opening, a circular rotatable head mounted upon the bracket and provided with a central opening corresponding to that in the bracket, and with recesses intersecting the opening, a plurality of upstanding marginal guards rising from the bracket and embracing the margin of the head, a socket fitted through the corresponding openings and provided with lateral projections fitting in the recesses, pivoted latches upon the head and constructed to lie across the recesses and the projections, a standard removably fitted in the socket and rotatable therewith, and a bladed fan-carrying canopy mounted on the standard.

6. A bicycle attachment having a support provided with a vertical opening and a concentric groove in its upper face, antifriction-balls movable in the groove, a rotatable head mounted upon the balls and provided with a central opening registering with that of the support, a standard removably fitted in the said openings and connected with the head, and a bladed fan-carrying canopy mounted on the standard.

7. A bicycle attachment having a support provided with vertical openings, a sectional socket rotatably mounted in the openings, one or more elastic bands embracing the sections of the socket, and a bladed fan-carrying canopy having a standard clamped within the socket.

8. A bicycle attachment having a support, a rotatable head mounted thereon, a bladed fan-carrying canopy supported upon the head, and a set-screw piercing the head and frictionally engaging the support.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

PHILIP EDWARD HANNUM.

Witnesses:

J. W. MEREDITH,  
J. D. HARRIS.