

No. 751,485.

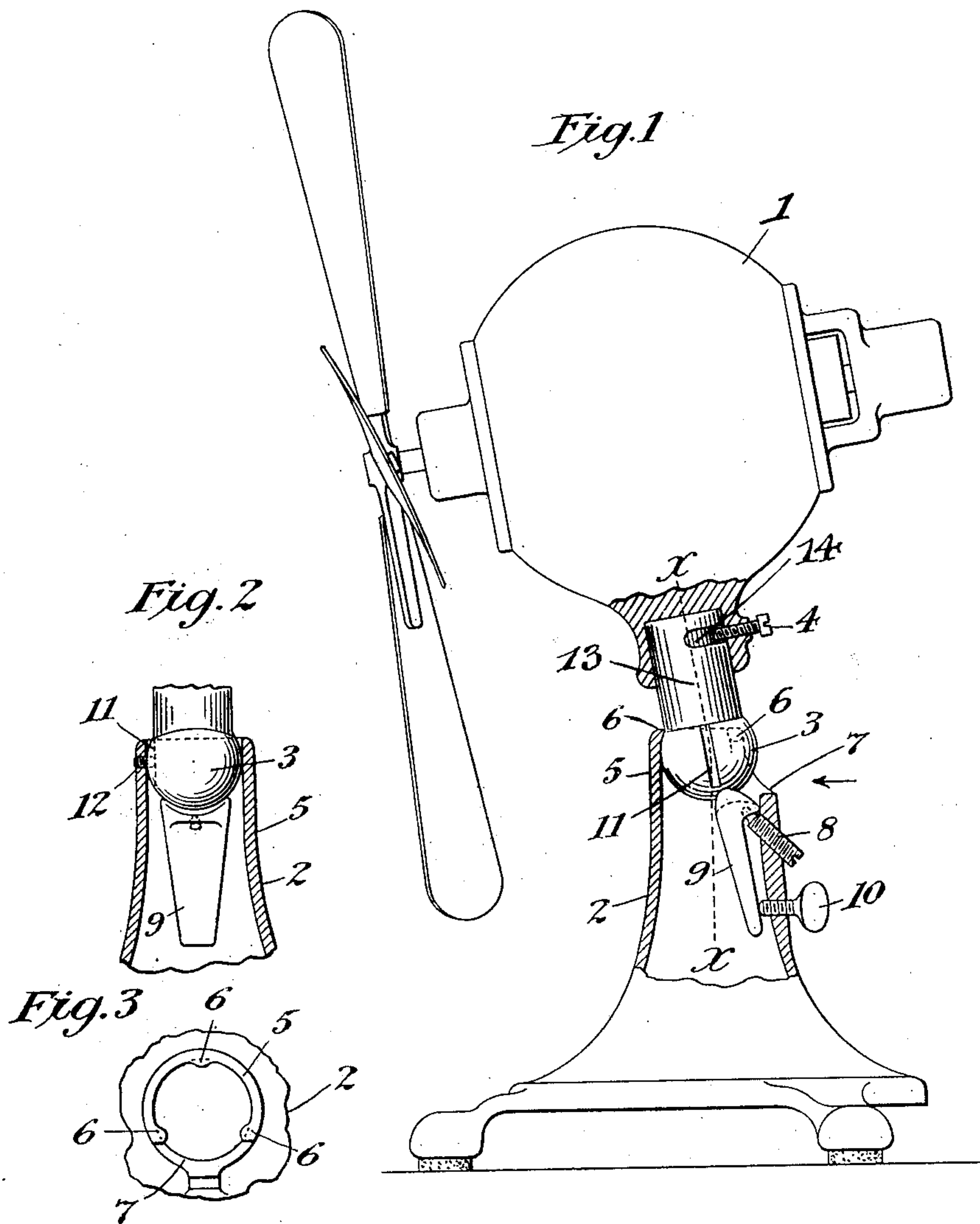
PATENTED FEB. 9, 1904.

C. A. ECK.

FAN.

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NO MODEL.



Witnesses:

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SPECIFICATION forming part of Letters Patent No. 751,485, dated February 9, 1904.

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To all whom it may concern:

Be it known that I, CHARLES A. ECK, a citizen of the United States of America, and a resident of Newark, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Fans, of which the following is a specification.

My invention relates generally to fans, and has more particular reference to means for permitting a fan-motor to be adjusted with relation to its base.

The object of the invention is to make such an adjustment of a simple and effective construction; and to this end my invention comprises the hereinafter-described features of construction and combination of parts.

In the accompanying drawings I have embodied my invention in a suitable form; but changes of construction may of course be made without departing from the scope of my invention.

In the said drawings, Figure 1 is a side elevation, partly in section, of a fan embodying my invention. Fig. 2 is a sectional view on the line *xx* of Fig. 1. Fig. 3 is a plan view of the upper end of the base.

Similar characters of reference indicate corresponding parts in the different views.

1 indicates a fan-motor of any suitable construction, and 2 is the base.

3 denotes the ball, having an extension 13, supporting the fan-motor. This ball is embraced by the socket 5 of the base, which to that end is provided with three lugs 6 above the said ball, the function of which will appear later. As will be seen, the ball can be adjusted at an angle to the base in the said socket. When adjusted rearwardly and substantially at right angles to the base, it can be used as a wall-fan. This extensive rearward adjustment is permitted by the cut-out 7 in the base.

When the fan-motor has been properly adjusted, means must of course be provided for fastening it in the position to which it has been adjusted. To this end I provide a loosely-pivoted lever in the base below the said ball, together with means for moving the said lever into contact with the ball, so as to tighten the said ball up against the socket.

This feature can conveniently be constructed as shown in the drawings, where 8 represents an adjustable screw in the base below the ball upon which is loosely supported at one of its ends a lever 9.

10 is a set-screw adapted when manipulated to engage with the lower end of the said lever so as to move the upper end of the said lever into contact with the ball, thereby tightening it up against the lugs 6 of the socket.

By the use of a lever a very small amount of force need be applied to the set-screw 10 in order to secure the ball in position, and an efficient and quick adjustment can therefore be obtained.

To prevent the ball from being adjusted horizontally in the socket, I provide the said ball with a groove 11, into which extends a pin 12, carried by the base. In order, however, to obtain a circumferential adjustment of the fan-motor with relation to the base, I provide the extension of the ball with a circumferential slot 14, extending part of the way around, and the fan-motor with a set-screw 4, extending into the said slot. By this means it will be seen the fan-motor can be adjusted circumferentially, but cannot be turned all the way around on account of the slot which only extends part of the way around, thereby preventing the wires which lead up through the center of the fan from becoming twisted.

Having thus described my invention, what I claim is—

1. The combination with a fan-motor and a base, of means permitting the said fan-motor to be adjusted at an angle to the said base comprising: a ball supporting the said fan-motor, a socket on the base adapted to embrace the ball, a loosely-pivoted lever in the base below the said ball, and means for moving the said lever into contact with the ball so as to tighten the said ball up against the socket.

2. The combination with a fan-motor and a base, of means permitting the said fan-motor to be adjusted at an angle to the said base comprising: a ball supporting the said fan-motor, a socket on the base adapted to embrace the ball, a loosely and adjustably piv-

oted lever in the base below the said ball, and means for moving the said lever into contact with the ball so as to tighten the said ball up against the socket.

5 3. The combination with a fan-motor and a base, of means permitting the said fan-motor to be adjusted at an angle to the said base comprising: a ball supporting the said fan-
10 motor, a socket on the base adapted to embrace the ball, an adjustable screw in the said base below the said ball, a lever loosely supported at one end on the said adjustable screw, and a set-screw in the said base adapted to
15 so as to move the upper end of the same into contact with the ball to tighten the said ball up against the socket.

4. The combination with a fan-motor and a base, of means permitting the said fan-motor
20 to be adjusted at an angle to the said base comprising: a ball having an extension supporting the said fan-motor, a socket on the base adapted to embrace the ball, a loosely-pivoted lever in the base below the said ball,
25 and means for moving the said lever into contact with the ball so as to tighten the said ball up against the socket, means for preventing the ball from turning horizontally in the socket, a circumferential slot extending part
30 of the way around the extension of the ball, and a set-screw in the fan-motor extending into the said slot whereby the fan-motor can be adjusted circumferentially with relation to the base on the extension of the said ball.

35 5. The combination with a fan-motor and a base, of means permitting the said fan-motor to be adjusted at an angle to the said base comprising: a ball having an extension supporting the said fan-motor, a socket on the
40 base adapted to embrace the ball, a loosely and adjustably pivoted lever in the base below the said ball, and means for moving the said lever into contact with the ball so as to tighten the said ball up against the socket, means for pre-
45 venting the ball from turning horizontally in the socket, a circumferential slot extending part of the way around the extension of the ball, and a set-screw in the fan-motor extending into the said slot whereby the fan-motor
50 can be adjusted circumferentially with relation to the base on the extension of the said ball.

6. The combination with a fan-motor and a base, of means permitting the said fan-motor
55 to be adjusted at an angle to the said base comprising: a ball having an extension supporting the said fan-motor, a socket on the base adapted to embrace the ball, an adjustable screw in the said base below the said ball, a
60 lever loosely supported at one end on the said adjustable screw, and a set-screw in the said base adapted to engage with the lower end of the said lever so as to move the upper end of the same into contact with the ball to tighten
65 the said ball up against the socket, means for

preventing the ball from turning horizontally in the socket, a circumferential slot extending part of the way around the extension of the ball, and a set-screw in the fan-motor extend-
70 ing into the said slot whereby the fan-motor can be adjusted circumferentially with relation to the base on the extension of the said ball.

7. The combination with a fan-motor and a base, of means permitting the said fan-motor
75 to be adjusted at an angle to the said base comprising: a ball supporting the said fan-motor, a socket on the base adapted to embrace the ball, a cut-out in the said socket, a loosely-pivoted lever in the base below the said ball,
80 and means for moving the said lever into contact with the ball so as to tighten the said ball up against the socket.

8. The combination with a fan-motor and a base, of means permitting the said fan-motor
85 to be adjusted at an angle to the said base comprising: a ball supporting the said fan-motor, a socket on the base adapted to embrace the ball, a cut-out in the said socket, a loosely and adjustably pivoted lever in the base below the
90 said ball, and means for moving the said lever into contact with the ball so as to tighten the said ball up against the socket.

9. The combination with a fan-motor and a base, of means permitting the said fan-motor
95 to be adjusted at an angle to the said base comprising: a ball supporting the said fan-motor, a socket on the base adapted to embrace the ball, a cut-out in the said socket, an adjustable screw in the said base below the said ball, a
100 lever loosely supported on one end on the said adjustable screw, and a set-screw in the said base adapted to engage with the lower end of the said lever so as to move the upper end of the same into contact with the ball to tighten
105 the said ball up against the socket.

10. The combination with a fan-motor and a base, of means permitting the said fan-motor
to be adjusted at an angle to the said base comprising: a ball having an extension support-
110 ing the said fan-motor, a socket on the base adapted to embrace the ball, a cut-out in the said socket, a loosely-pivoted lever in the base below the said ball, and means for moving the said lever into contact with the ball so as to
115 tighten the said ball up against the socket, means for preventing the ball from turning horizontally in the socket, a circumferential slot extending part of the way around the extension of the ball, and a set-screw in the fan-
120 motor extending into the said slot whereby the fan-motor can be adjusted circumferentially with relation to the base on the extension of the said ball.

11. The combination with a fan-motor and a
125 base, of means permitting the said fan-motor to be adjusted at an angle to the said base comprising: a ball having an extension supporting the said fan-motor, a socket on the base adapted to embrace the ball, a cut-out in the
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said socket, a loosely and adjustably pivoted lever in the base below the said ball, and means for moving the said lever into contact with the ball so as to tighten the said ball up against the socket, means for preventing the ball from turning horizontally in the socket, a circumferential slot extending part of the way around the extension of the ball, and a set-screw in the fan-motor extending into the said slot whereby the fan-motor can be adjusted circumferentially with relation to the base on the extension of the said ball.

12. The combination with a fan-motor and a base, of means permitting the said fan-motor to be adjusted at an angle to the said base comprising: a ball having an extension supporting the said fan-motor, a socket on the base adapted to embrace the ball, a cut-out in the said socket, an adjustable screw in the said base below the said ball, a lever loosely sup-

ported at one end on the said adjustable screw, and a set-screw in the said base adapted to engage with the lower end of the said lever so as to move the upper end of the same into contact with the ball to tighten the said ball up against the socket, means for preventing the ball from turning horizontally in the socket, a circumferential slot extending part of the way around the extension of the ball, and a set-screw in the fan-motor extending into the said slot whereby the fan-motor can be adjusted circumferentially with relation to the base on the extension of the said ball.

Signed at Newark, New Jersey, this 11th day of June, 1903.

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Witnesses:

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