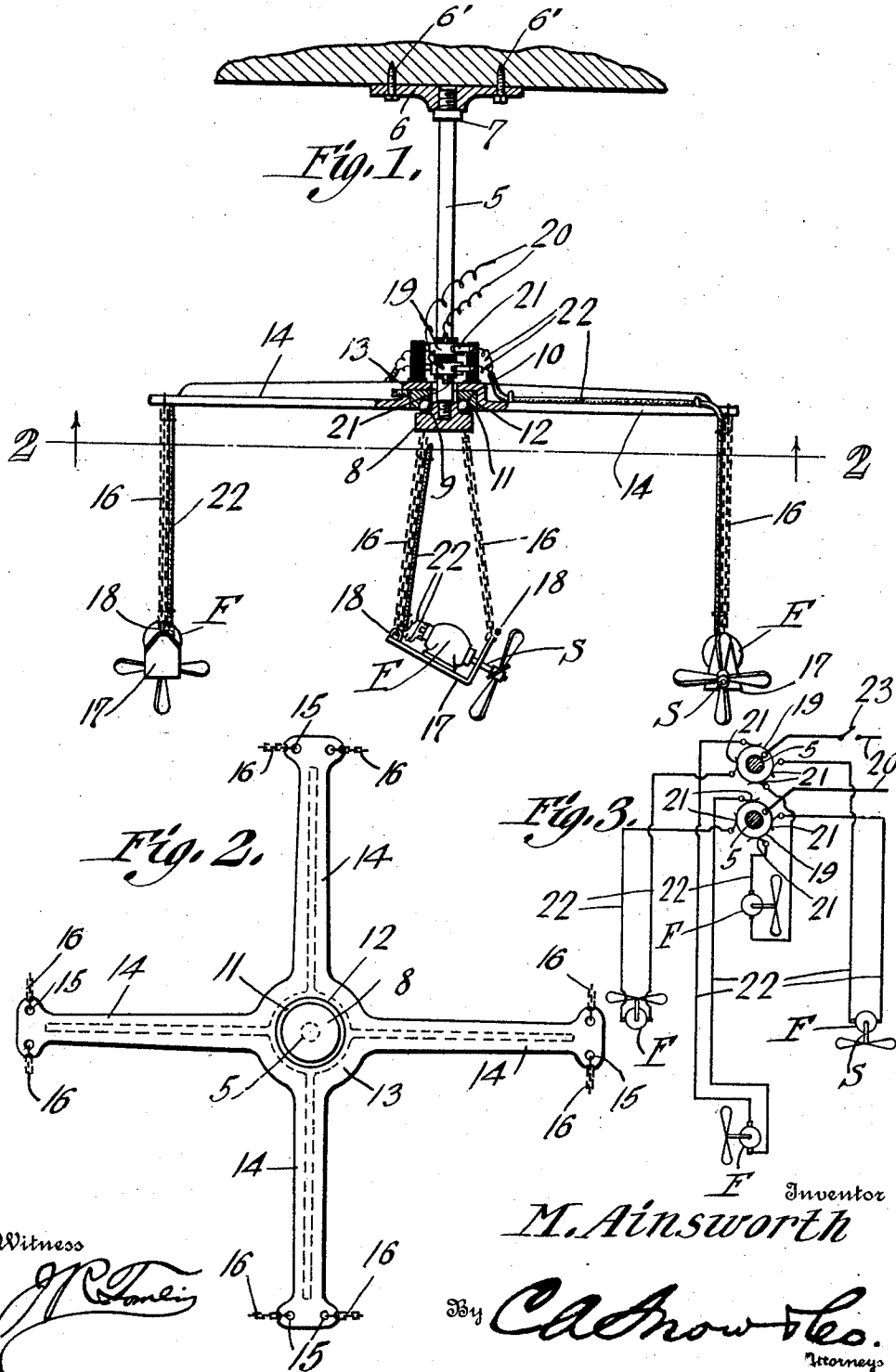


M. AINSWORTH.
FAN SUPPORTING DEVICE.
APPLICATION FILED SEPT. 2, 1919.

1,332,875.

Patented Mar. 9, 1920.



UNITED STATES PATENT OFFICE.

MARK AINSWORTH, OF KANSAS CITY, MISSOURI.

FAN-SUPPORTING DEVICE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MARK AINSWORTH, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Fan-Supporting Device, of which the following is a specification.

This invention relates to supporting devices and more particularly to rotary fan-supporting devices.

An object of this invention is to provide means for supporting a plurality of fans, the fans depending from a rotary frame and being so disposed that the reaction of the current of air from the fans will cause the entire supporting frame to rotate about a fixed support.

Another object of this invention is to provide a fan support of generally improved construction, whereby the device will be simple, durable, and inexpensive in construction, as well as convenient, serviceable, practical and efficient in its use.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed without departing from the spirit of the invention.

The invention has been illustrated in its preferred embodiments in the accompanying drawings, wherein:

Figure 1 is a side elevation, parts appearing in section of the fan supporting device.

Fig. 2 is a horizontal sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is a diagrammatic view showing the wiring circuit.

Referring to the drawing, there is shown a stationary support comprising a rod or stem 5, which is secured at its upper end to a plate 6, by screwing the upper end of the rod 5 into a threaded aperture formed in the plate 6, and a shoulder 7 carried by the rod 5 engages the plate 6 to hold the rod 5 against rotation with respect to the plate 6, which plate is secured to the ceiling of a room by suitable securing devices 6'. A bearing member 8 is threaded to the lower end of the stem 5, and the upper face of the bearing member 8 engages a shoulder

formed adjacent a lower threaded terminal of the stem 5.

The bearing member 8 is provided with a ball race 9, which coöperates with a complementing ball race 10 formed on a bearing ring or annulus 11.

This bearing ring 11 is received in an axial socket 12 formed in a rotary supporting member or spider 13, and a plurality of radially extending arms 14 are formed on the rotary supporting member. Spaced apertures 15 are formed at the outer end of each arm 14 and separate chains or flexible members 16 are secured to the outer end of each arm by passing the end link of each chain through the apertures 15. An L-shaped bracket 17 is supported by each arm 14 through the instrumentality of the chain 16 which are secured at their lower ends to the bracket 17, as shown at 18. Each bracket supports an electric fan F of conventional form, and each bracket and fan is so disposed with relation to the rotary supporting member 13, that the axis of the fan shaft S is positioned tangentially with respect to this rotary supporting member or spider, or perpendicularly to each arm.

In order to convey the electric current to each fan, separate insulated distributing rings 19 are carried by the vertical stem 5 and each lead of the line wires 20 contacts with one of the rings 19. Separate resilient fingers or brushes 21 are carried by each arm 14 and yieldingly engage the rings 19, and leads, or conductors 22 extend from these resilient fingers to the fans F.

In use, the fans are put in operation by closing the electric circuit by means of a conventional switch 23, and the reaction of the current of air put in motion by the operating fans, will cause the rotary supporting member to revolve about the stem 5 on its ball bearings 10 and thereby uniformly circulate the air throughout the entire room or hall in which the device is employed.

Having thus described my invention, what is claimed is:—

1. A device of the class described including a stationary supporting member, a rotary member supported by the stationary member, flexible members depending from the rotary member, electric fans supported by the flexible members, and means for transmitting an electric current from the usual line wires to the said fans.

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2. A device of the class described including a stationary supporting member, a bearing member secured to the stationary supporting member, a ball race formed on the said bearing member, ball bearings engaging the said ball race, a rotary supporting member having an axial socket formed therein, a bearing ring positioned within the said socket and engaging the ball bearing, radial arms extending from the rotary supporting member, opposed chains secured to the outer terminal of each arm, a bracket supported by the said chains, an electric fan secured to the said brackets and positioned

tangentially with respect to the rotary supporting member, separate distributing rings carried by the stationary supporting member, said rings being in contact with line wires, and movable conductors extending from the said distributing rings to the said fans. 15 20

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

MARK AINSWORTH.

Witnesses:

R. J. COSTELLO,
C. C. TOLIVER.