

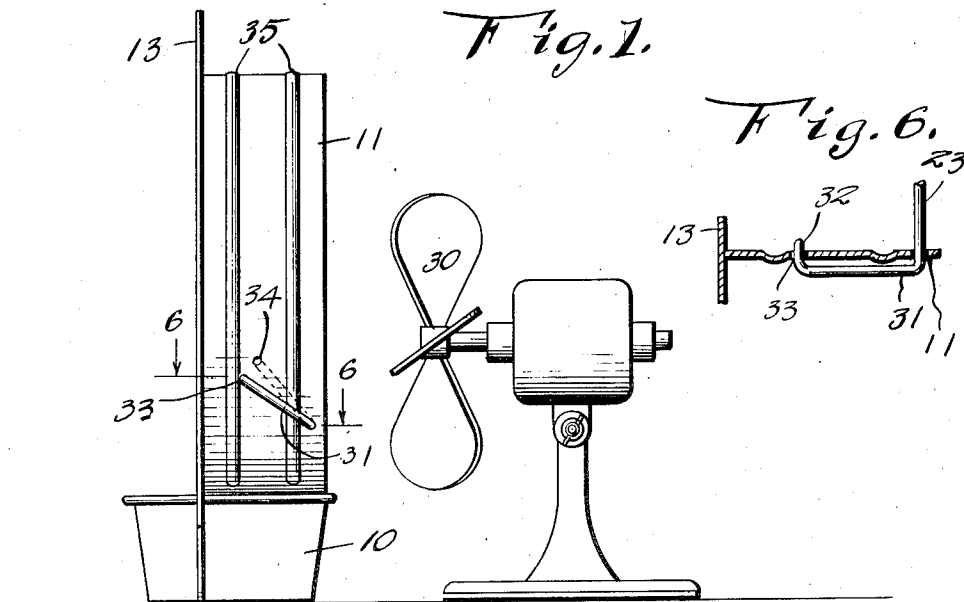
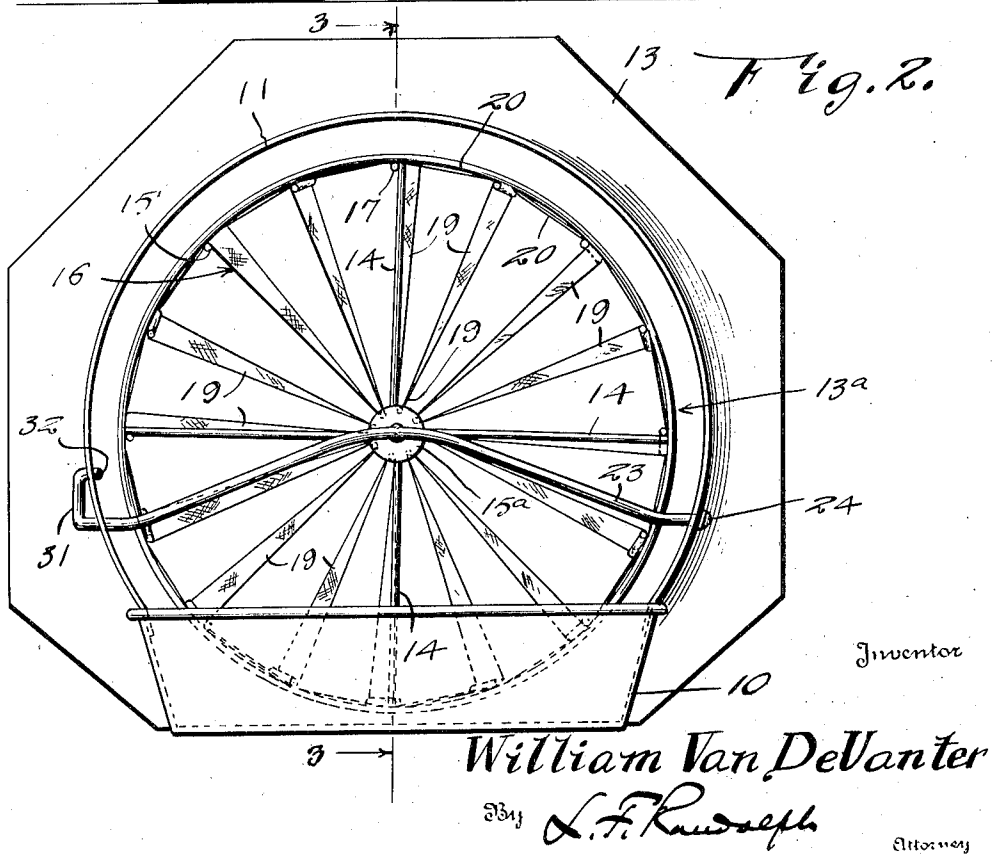
Oct. 4, 1938.

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AIR CONDITIONER FOR FANS

2,132,288

Filed Sept. 2, 1937

2 Sheets-Sheet 1



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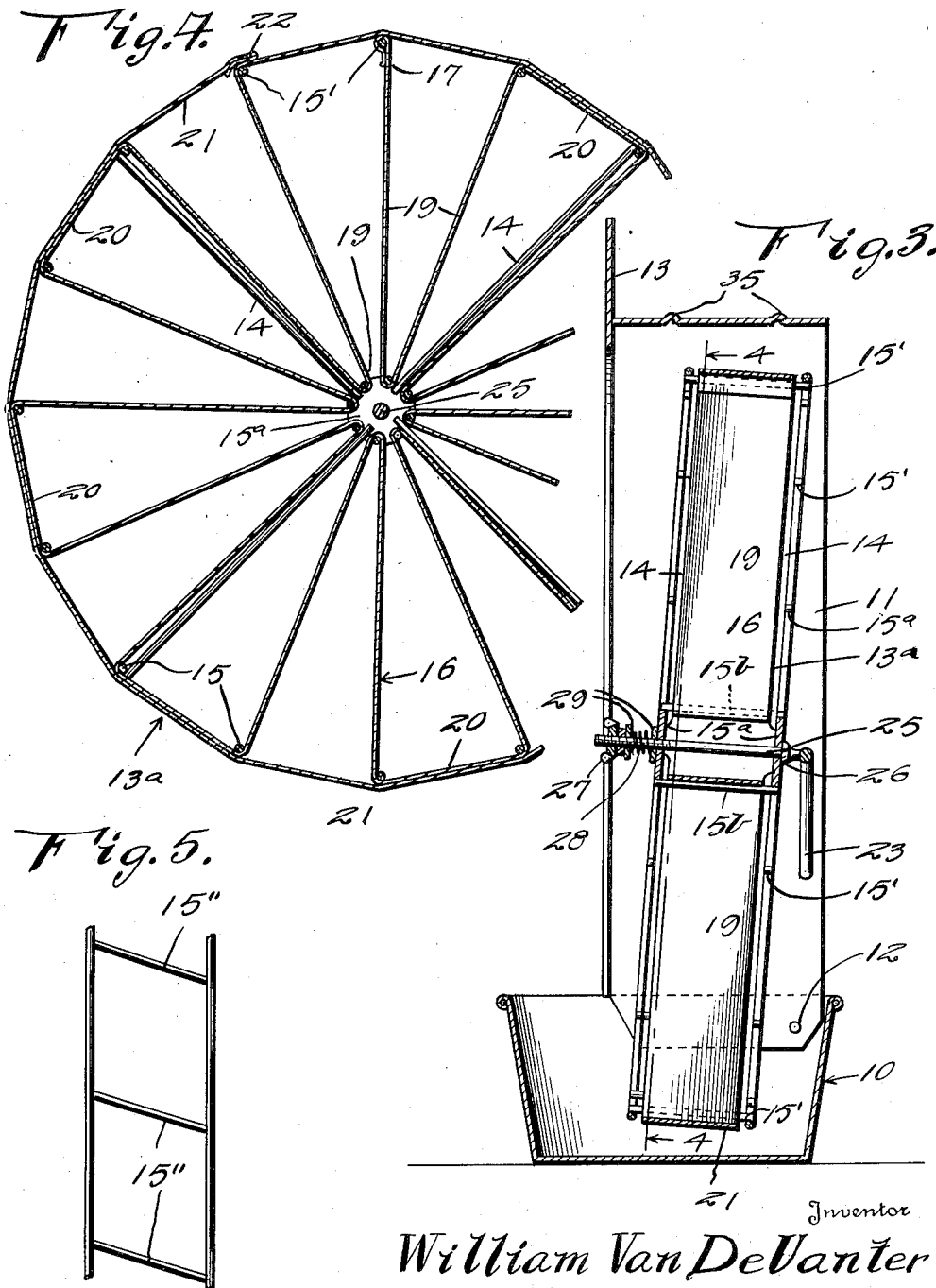
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AIR CONDITIONER FOR FANS

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2 Claims. (Cl. 261—92)

This invention relates to an air conditioner particularly adapted for use adjacent to or in connection with an air circulating fan.

It is aimed to provide an exceedingly simple construction capable of manufacture and upkeep at low cost, which is portable so as to be moved from room to room or from building to building, which will occupy minimum space and which will be advantageous in the relief of asthma, hay-fever and the like.

The more specific objects and advantages will become apparent from a consideration of the description following taken in connection with accompanying drawings illustrating an operative embodiment.

In said drawings:—

Figure 1 is a view in edge elevation showing my improvements in connection with an air circulating fan;

Figure 2 is a front elevation of the humidifier;

Figure 3 is a vertical sectional view taken on the plane of line 3—3 of Figure 2;

Figure 4 is a vertical sectional view taken on the plane of line 4—4 of Figure 3;

Figure 5 is a fragmentary edge elevation of the wheel frame and

Figure 6 is a detail section taken on the line 6—6 of Figure 1.

Referring specifically to the drawings wherein like reference characters designate like or similar parts, a suitable pan or receptacle is provided at 10, adapted to contain water. A hood or arch shaped wall 11 has its lower ends riveted or otherwise fastened as at 12 to opposite sides of the receptacle 10. Wall 11 is narrower than the receptacle and at the rear edge has a right angularly disposed flange or reinforcing plate 13 extending interiorly and exteriorly of the wall 11 and also extending below the top of the receptacle and in engagement with the sides of the latter as best shown in Figures 1 and 2, so as to generally rigidify the structure.

A wheel or frame 13a is rotatably mounted within the wall 11 and it extends into the water within receptacle 10. Such frame is of skeleton form being made up of various wires 14 extending outwardly from connected hub plates 15a, the radial rods 14 being connected by lateral rods 15' which may be parallel to the axis of rotation of the wheel but which are preferably at an angle to such axis of rotation as shown in Figure 5 at 15'', and inclining forwardly and downwardly.

A wick in the form of an elongated one piece band or strip of cloth or other absorbent mate-

rial 16 has a hook 17 at one end thereof adapted to detachably engage one of the rods 15 and then be wrapped over the remaining rods 15 and rods 15b connecting hub plates 15a, to provide radial portions 19, peripheral portions 20 and a peripheral portion 21, practically completely surrounding the frame which is terminally attached by a pin or the like as at 22 to the adjacent portion of the wick. Such wick is adapted to travel through the water in the receptacle 10, absorb the same and through the rotation of the wheel or frame, condition the air.

An arch shaped rod or bracket 23 extends across the openings of the wall 11, being journaled therein and held against displacement by a head 24 on one end of the bracket. Such bracket has a central spindle 25 disposed within the space of the wall 11 on which the wheel or frame is journaled. Such wheel or frame has an abutment 26 thereon engaged by one of the hub plates 15a and at the opposite end has a nut 27 adjustably screw threaded thereon, between which and the other hub plate an expansive spring 28 and washers 29 are mounted. The freedom of rotation of the wheel on the spindle 25 is controlled through the tension of the spring 28, which is varied through the adjustment of the nut 27.

At times it is preferred to have the wheel rotate on a horizontal axis and at other times it is preferred that the axis be inclined in order to increase or decrease the effective action of a fan 30. It will also be realized that when the bars 15'' are inclined as in Figure 5, more of the surface will be exposed to the blast from the fan 30.

In order to fasten the wheel in different positions, one at an angle to the horizontal, the bracket 23 as best shown in Figures 1, 2 and 6 has an angular arm 31 whose free end 32 is disposable selectively in openings 33 and 34 in the wall 11, according to whether the spindle 25 should be horizontal or inclined.

Preferably the wall 11 is reinforced by struck-out ribs 35.

It will be realized that the device is portable and may be used in connection with any fan of which that disclosed at 30 is representative, the same being a portable electric fan. The air from the fan impinges against the wick or other portions of the wheel, causing the same to rotate through the water in the receptacle 10, the wick absorbing the same and due to the contact of the air from the fan therewith, the air is effectively conditioned. The wheel rotates

usually rather slowly, the speed governed by the tension of the spring 28.

Various changes may be resorted to provided they fall within the spirit and scope of the invention.

5 I claim as my invention:—

1. An humidifier device for use in connection with a fan or the like, the device comprising a receptacle adapted to contain water, an arch
10 shaped hood having its terminals connected to the receptacle, a wheel surrounded by the hood, said wheel being of skeleton form and having a wick threaded thereover and operable through the water, a bracket journaled by said hood, said
15 bracket having a spindle on which the wheel is journaled, and co-acting means between the bracket and the hood to secure the spindle at different angles.

2. An humidifier device for use in connection with a fan or the like, the device comprising a receptacle adapted to contain water, an arch shaped hood having its terminals connected to the receptacle, a wheel surrounded by the hood, 5 said wheel being of skeleton form and having a wick threaded thereover and operable through the water, a bracket journaled by said hood, said bracket having a spindle on which the wheel is journaled, co-acting means between the 10 bracket and the hood to secure the spindle at different angles, and means on the spindle operable against the wheel to control its speed of turning.

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