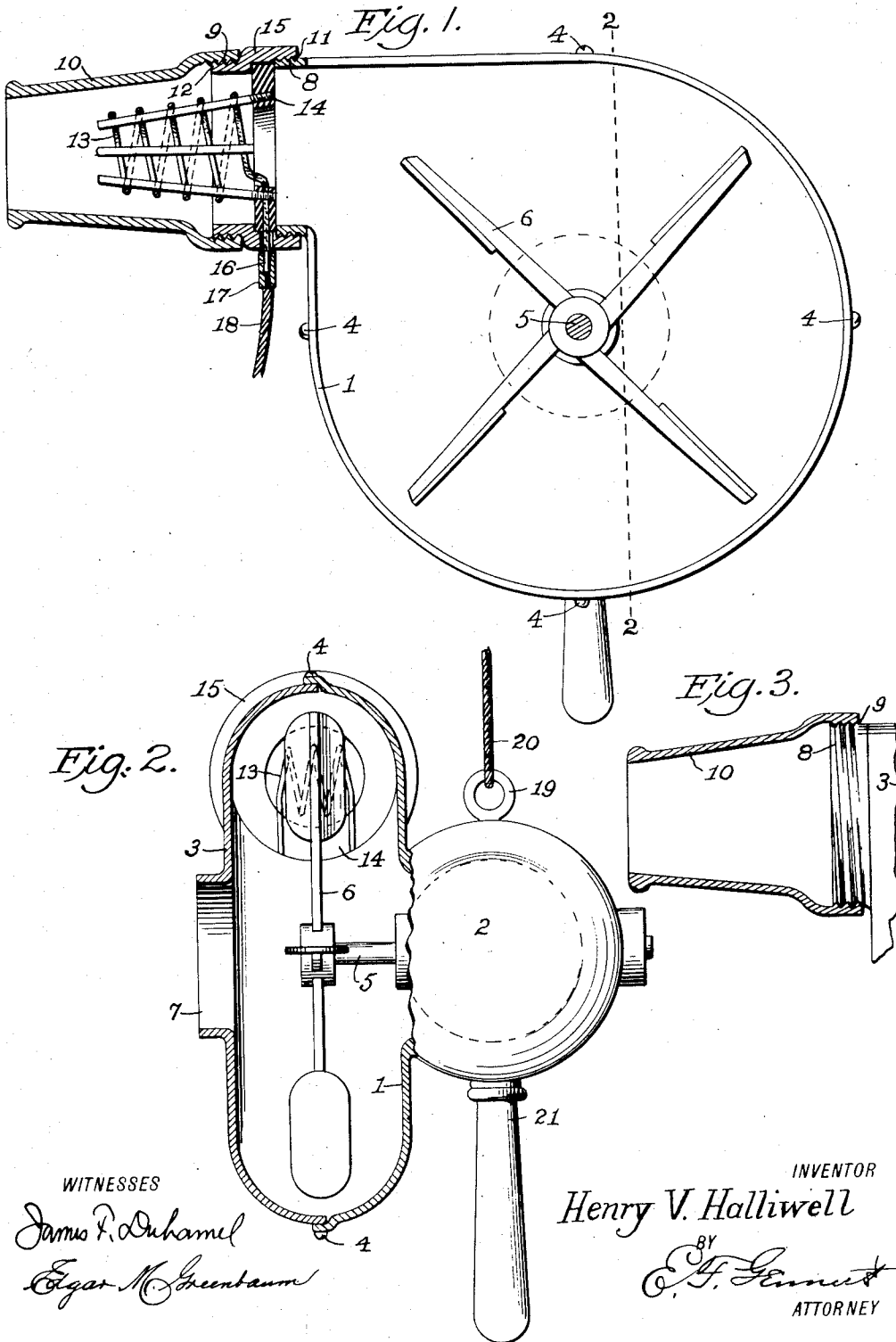


H. V. HALLIWELL.
MACHINE FOR HAIR DRYING AND THE LIKE.
APPLICATION FILED JUNE 23, 1910.

981,641.

Patented Jan. 17, 1911.



UNITED STATES PATENT OFFICE.

HENRY V. HALLIWELL, OF NEW YORK, N. Y.

MACHINE FOR HAIR-DRYING AND THE LIKE.

981,641.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed June 23, 1910. Serial No. 563,431.

To all whom it may concern:

Be it known that I, HENRY V. HALLIWELL, a citizen of the United States, and resident of the city, county, and State of New York, have invented certain new and useful Improvements in Machines for Hair-Drying and the Like, of which the following is a specification.

This invention relates to machines for hair-drying and other purposes and has for its object to provide a machine of such a class in a manner as hereinafter set forth, whereby a small and convenient device is produced for domestic purposes.

A further object of the invention is to provide an electric attachment to heat the air after leaving the fan drum, which attachment is removably placed in the discharge nozzle.

With the foregoing and other objects in view the invention consists of the novel construction, combination, and arrangement of parts as hereinafter more specifically described and illustrated in the accompanying drawings, wherein is shown the preferred embodiment of the invention but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claims hereunto appended.

In the drawings, wherein like reference characters denote corresponding parts in the several views: Figure 1. is a side elevation, the nozzle, heating attachment and outlet end of the drum being in center section. Fig. 2. is an end view, the drum being shown in section on line 2—2, of Fig. 1. and Fig. 3. is a center sectional view of the nozzle in position on the drum, the heating attachment being removed.

In Letters Patent No. 738,136 granted to me September 8th, 1903, is shown, what may be called a professional machine adapted solely for hair dressers' use, the air heating device being attached to the air inlet, the drum mounted on a stand, and the outlet being adjustable to give direction to the air.

In the present invention, the entire device is considerably reduced in size so as to be suspended in a lady's boudoir for instance the weight of the machine being suspended or counterbalanced by a weight, and provided with a handle so direction can be given to the air passing through the nozzle,

while for cooling a room, the heating attachment may be removed, if desired.

The drum, 1, is attached to the motor casing, 2, in any preferred manner; the cover, 3, is removably fastened to the drum by screws 4. The motor shaft 5 extends into the drum on which shaft a fan, 6, is mounted. The drum cover has an opening, 7, for the entrance of air; the outlet end of the drum has a male thread, 8, adapted to receive the female end, 9, of the nozzle, 10, or the female end 11, of the heating attachment, which attachment has a male thread, 12, on its outlet end upon which the nozzle screws when the heating attachment is in use.

The heating means consists of a suitable resistance coil, 13, mounted on an insulated heat resisting support, 14, which in turn is inclosed in a male and female coupling, 15, threaded as stated above.

Suitable terminals, 16, extend outwardly from the coupling, 15, to which a detachable plug, 17, may be connected for the purpose of carrying an electric current to and through the heating coil by wires, 18.

An eye, 19, is provided in the motor case by which it may be suspended by a rope, 20; a handle, 21, is placed below the motor case.

Such being the construction, the operation is as follows:—We will assume that the electric motor is connected up with an electric system, and suspended to a suitable height by a counterbalance or otherwise. If the air is to be heated for drying hair—or other purposes,—the heating attachment is placed between the drum and the nozzle, the attachment plug is connected up and the current turned on. Air will be drawn in at the center of the fan and by centrifugal force thrown out through the heating coil and nozzle, the degree of heat being regulated by suitable switches—not shown—whereby the speed of the fan and the current to the heating coil can be controlled and as the machine is suspended and free to be moved in any direction by means of a handle, it leaves one hand free for the operator.

When used for cooling purposes, for convenience, or comfort in a sick room, for instance, the heating coil may be removed or the detachable plug pulled off from the terminals so that no electric current will pass through the coils; the nozzle may be pointed in any desired direction and the

current turned on to the motor; the machine may hang free to rotate at will or it may be held in a fixed position to give positive direction to the air issuing from the nozzle.

5 What I claim is,

1. In a device of the class described, an electric motor, a fan, a drum, an electric heating means detachably placed upon the outlet end of said drum, a nozzle detachably
10 placed upon said heating means and of means for suspending said device.

2. In a device of the class described an electric motor, a fan on said motor, a drum surrounding said fan, an outlet and an inlet
15 to and from said drum for the passage of air, a nozzle detachably fastened to the outlet end of said drum and of an electric heating means detachably placed within said nozzle whereby air passing through said
20 nozzle is heated.

3. In a device of the class described an electric motor provided with means of suspending by a rope and the like a handle for said motor, a fan mounted on said motor, a drum surrounding said fan and fastened to
25 the casing of said motor, a cover for said drum having an opening alined with the center of said fan, a tubular outlet end for said drum, an electric heater adapted to be detachably fastened to said tubular outlet,
30 and a discharge nozzle adapted to screw either on said heater or on said tubular outlet.

Signed at New York city in the county and State of New York this 22d day of
June, A. D. 1910.

HENRY V. HALLIWELL.

Witnesses:

JOSEPH J. KOLLHOFF,
CHARLES V. DWYER.