

F. P. MIES.
HEATING AND DRYING MACHINE.
APPLICATION FILED MAY 16, 1910.

999,241.

Patented Aug. 1, 1911.

2 SHEETS—SHEET 1.

Fig. 1

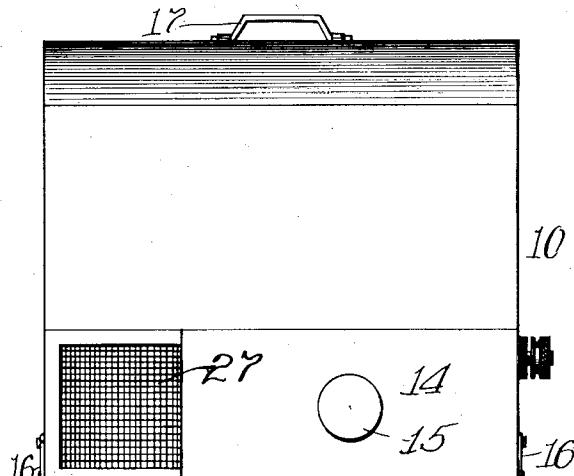


Fig. 2

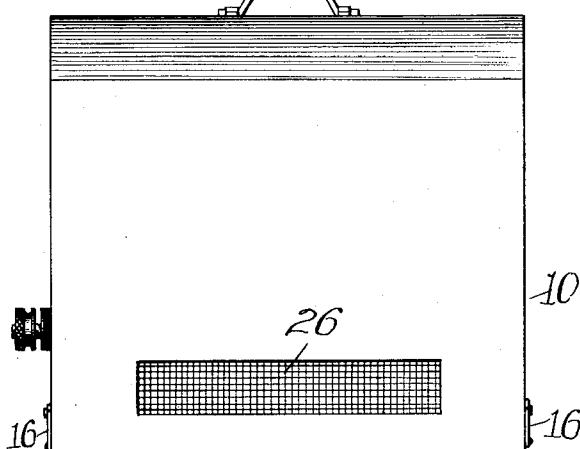
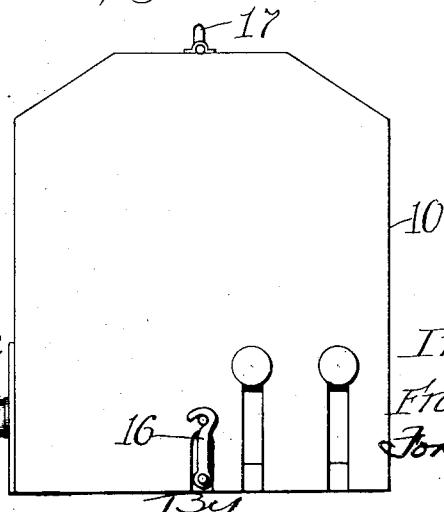


Fig. 3



Witnesses:

G. R. L. White

R. A. White.

Inventor:

Frank P. Mies

Donee Bain May

Attest.

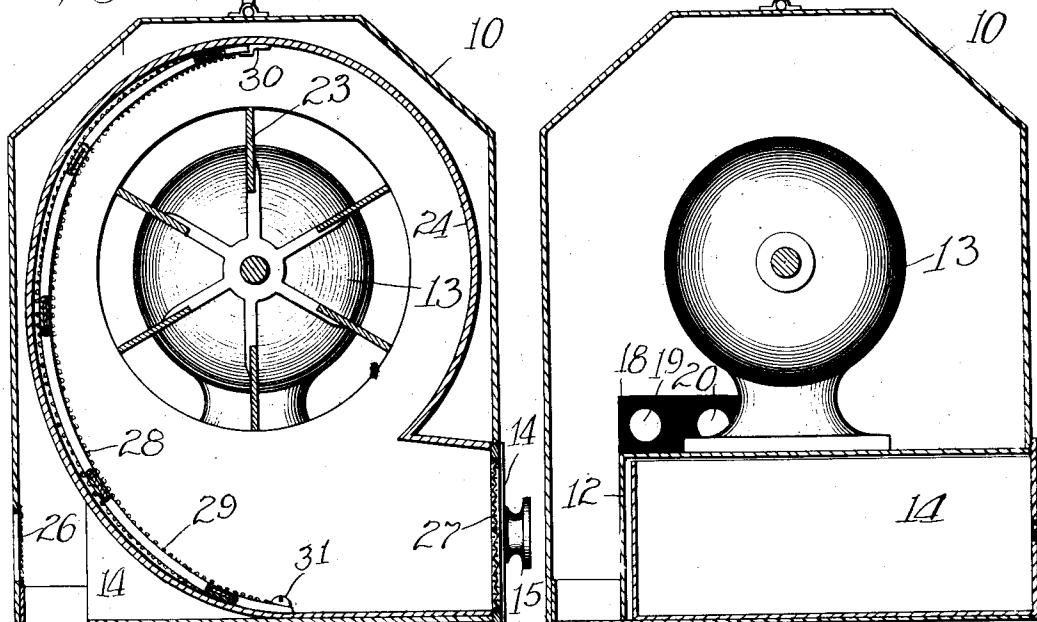
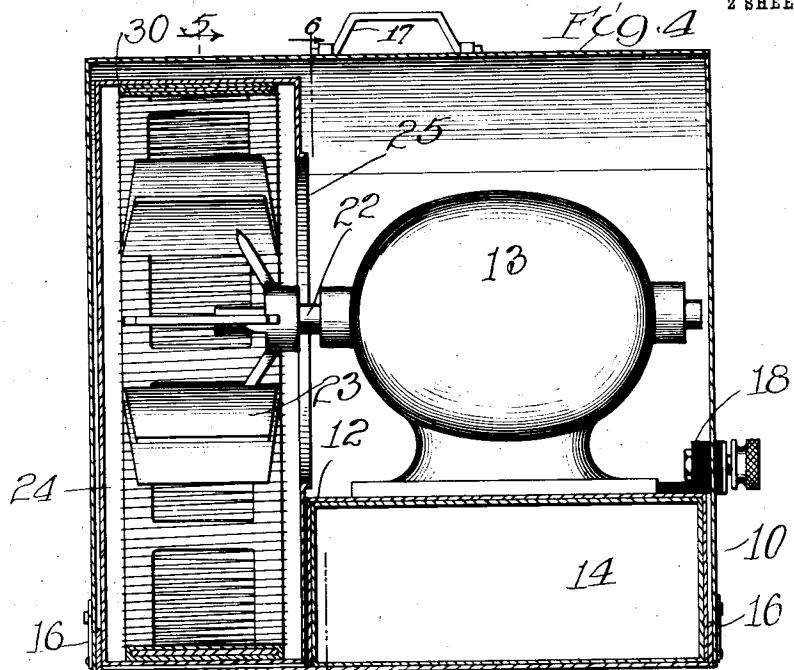
F. P. MIES.

HEATING AND DRYING MACHINE.
APPLICATION FILED MAY 16, 1910.

999,241.

Patented Aug. 1, 1911.

2 SHEETS—SHEET 2.



Witnesses:

H. R. L. White
R. A. White.

11. Inventor: 15
Frank P. Mies.

Be Free Rain May 15, 1915

UNITED STATES PATENT OFFICE.

FRANK P. MIES, OF CHICAGO, ILLINOIS.

HEATING AND DRYING MACHINE.

999,241.

Specification of Letters Patent. Patented Aug. 1, 1911.

Application filed May 16, 1910. Serial No. 561,616.

To all whom it may concern:

Be it known that I, FRANK P. MIES, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Heating and Drying Machines, of which the following is a specification.

My invention relates to improvements in heating and drying machines, and has more particularly reference to a portable machine operated by an electric motor, adapted to propel and heat a current of air which may be thereby conveniently applied for various purposes.

One of the objects of my invention is to provide a machine of the character described, which is small, portable, and which may be connected to the electric service circuits by a flexible cord or wire, whereby a current of electricity may be employed for heating the air and for operating the motor to propel the air through the device.

In the drawings, Figure 1 represents an elevation showing one side of the device; Fig. 2 is an elevation showing the opposite side of the device; Fig. 3 is an end view; Fig. 4 is a longitudinal central section; Fig. 5 is a section taken on line 5—5 of Fig. 4; and Fig. 6 is a section taken on line 6—6 of Fig. 4.

In all of the views, the same reference characters indicate similar parts.

10 indicates, generally, a casing, containing the apparatus, 11 is the base part, provided with a bracket, 12, upon which an electric motor, 13, is mounted.

14 is a drawer for containing toilet articles, or the like, the drawer being adapted to be contained under the bracket, 12, and may be withdrawn and returned to position by means of the knob, 15. The casing part, 10, is adapted to be secured to the base, 11, by means of hooks, 16, and may be lifted from the base by means of a handle, 17. A bracket, 18, of insulating material is secured to the motor support, 12. The insulating bracket, 18, carries two binding posts, 19 and 20, which are the terminals of the electric circuits to which the electric motor 13

is connected. The electro-heating device to be hereinafter described is also connected to these terminals. A flexible duplex conducting cord or wire is connected to said terminals, and is provided with an attachment 55 plug for insertion into an ordinary lamp socket.

On the end of the shaft, 22, of the motor 13, a fan is fixed. A fan casing, 24, is provided in the main casing, 10, the intake 25 opening into the main chamber. The screened intake, 26, is made in the rear part of the main casing, for admission of the air, which enters the main casing and passes into the eye of the fan 23, and is therein 65 heated and thereby propelled and exhausted through the screened opening, 27.

A heating device, 28, is provided which is secured to the rear peripheral wall of the fan casing, 24. The heating device consists 70 of two parallel supports of insulating material, around which a conducting wire 29 is wound, thus exposing a maximum surface of the wire to contact with the air that is brought into the fan casing. The operation of the fan is to push or press the air back against this peripheral wall and into contact with the surfaces of the heating element, 28, by means of which it is heated before it is exhausted through the opening, 80 27. The heating element, 28, is secured near the top of the casing by a cleat, 30, and by a screw, 31, near its bottom limit.

My device is especially adapted for general household use. It may be employed for 85 producing heated air under motion for drying hair of the head; for directing a draft of air to any other portion of the human body for the purpose of warming or drying such portions, such for instance as relieving 90 discomfort arising from cold feet. The device is light, portable, and of great convenience, capable of being used for many purposes, especially in sleeping apartments or ladies' boudoirs. 95

Having described my invention what I claim is:

A portable heating device comprising a generally rectangular main casing, provided with an air opening on one side, an electric 100

motor located within said main casing, a generally circular fan casing within said main casing provided with a tangential extension opening without the main casing 5 and with an opening to said main casing, a fan in said fan casing connected to said motor, and a heating device secured to the rear peripheral wall in the said fan casing to

heat the air passing through said fan casing.

In testimony whereof I hereunto set my hand in the presence of two witnesses.

FRANK P. MIES.

In the presence of—

GEO. T. MAY, Jr.,

MARY F. ALLEN.