J. A. BERGMANN.

AIR COOLING DEVICE.

APPLICATION FILED MAR. 21, 1911.

1,005,927.

Patented Oct. 17, 1911.

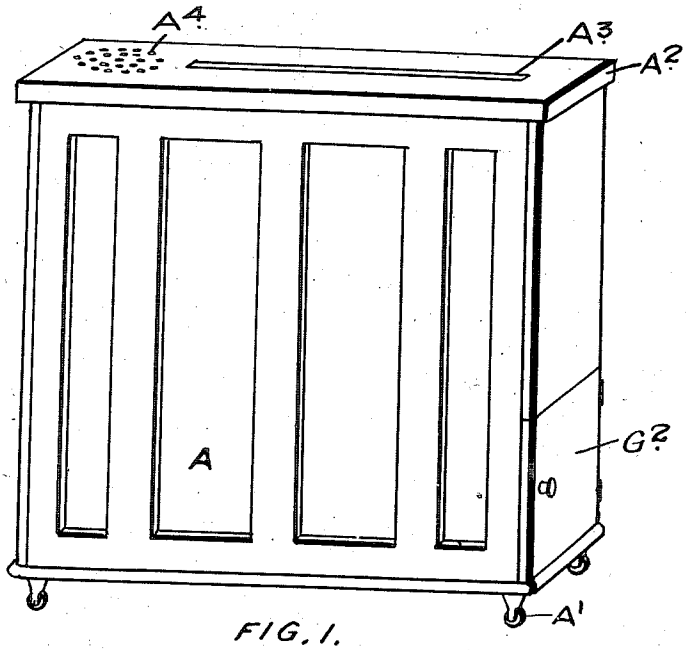

FIG. 1.

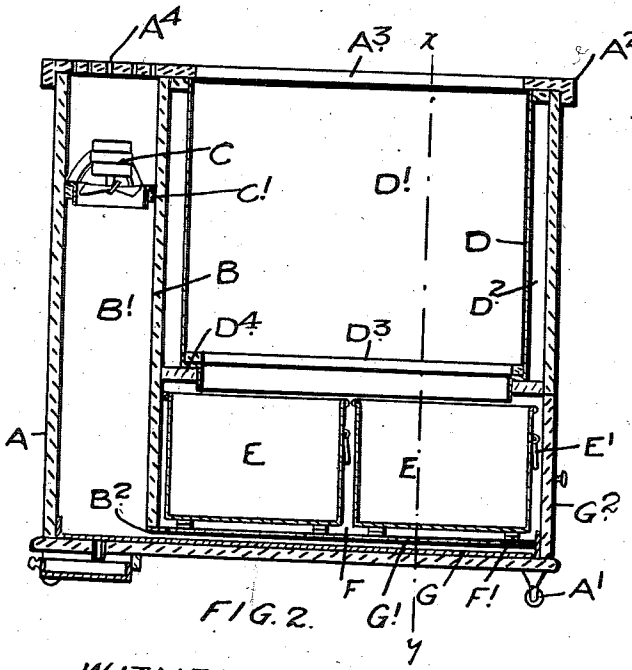

FIG. 2.

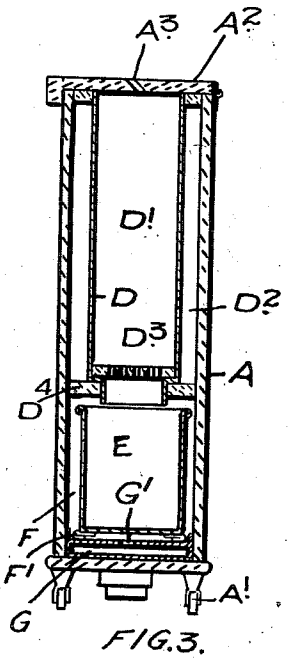

FIG. 3.

WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHANNES ADOLF BERGMANN, OF TORONTO, ONTARIO, CANADA.

AIR-COOLING DEVICE.

1,005,927. Specification of Letters Patent. Patented Oct. 17, 1911.

Application filed March 21, 1911. Serial No. 615,864.

To all whom it may concern:

Be it known that I, JOHANNES ADOLF BERGMANN, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Air-Cooling Devices, of which the following is the specification.

My invention relates to improvements in air cooling devices, and the object of the invention is to devise a simple, cheap, and efficient apparatus, whereby the air of the room particularly in warm weather may be cooled and fresh air at the proper temperature, and moisture supplied at a minimum expense.

The invention includes the novel features of construction and arrangement and combination of parts as defined by the appended claims.

An embodiment of the invention is illustrated in the accompanying drawing in which—

Figure 1, is a perspective view showing my improved fresh air generator. Fig. 2, is a longitudinal section. Fig. 3, is a cross section on the line *x—y* Fig. 2.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the casing of my air cooling device, which may be made of any suitable material. I preferably make it of wood and finish it in good style and provide it with casters A′. The top A^2 is provided with a slot A^3 at an incline as indicated and with a plurality of perforations A^4 near one end of the top.

B is a partition separating the casing into two main compartments and C is a fan motor supported on a suitable ledge C′ and located near the top of the chamber B′ formed by partition B. The partition B is provided with an opening B^2 at the bottom.

D is an inner wall, which extends around the compartment D′ formed between the partition B and the opposite end of the casing, and forming a dead air space D^2.

D^3 is a slatted bottom for the chamber D′ and D^4 are ledges extending around the bottom of the chamber D′ on which the slatted bottom is supported.

E are receptacles for the water, which are provided with handles E′, such receptacles being located in the bottom compartment F. The receptacles rest on feet F′ secured to the double metallic bottom G. The double metallic bottom extends beneath the bottom compartment F and communicates with the compartment B′ through the opening B^2. The double metallic bottom G is also provided with a central slot G′ at the top.

The ice is placed in the top compartment D′. Air is drawn by means of the motor fan C through the perforations A^4 and such air passes downwardly through the opening B^2 and underneath the double bottom G and up through the slot G′ thence underneath the receptacles E and around both sides of the same up through the slatted bottom D^3 and thence through the ice compartment D′ and finally out through the inclined slot A^3 at the top of the casing. The air it will be seen in its passage is cooled and the degree of coolness may be effected by the rapidity at which the fan and motor C is driven. The casing is provided with an end door G^2, so that the receptacles may be readily removed when they are filled with water.

What I claim as my invention is:

1. A casing having an opening at the top communicating with the air, a partition dividing the casing at one end into a vertical compartment with which the opening at the top of the casing communicates, and having an opening at the bottom, a fan and a motor located intermediately of the height of the compartment and an adjacent upper ice compartment provided with suitable heat non-conducting walls and a slotted top and a slatted bottom, a bottom compartment located beneath the ice compartment, a double bottom located in the bottom compartment and so arranged that the opening of the partition leads into the space beneath the double bottom having a slot at the top portion of the double bottom and water receptacles supported over the slot in the double bottom, as and for the purpose specified.

2. A casing having an opening at the top communicating with the air, a partition dividing the casing at one end into a vertical compartment with which the opening at the top of the casing communicates and having an opening at the bottom, a fan and a motor located intermediately of the height of the compartment, and an adjacent upper ice compartment provided with suitable heat non-conducting walls, and a slotted top, and a slatted bottom, a bottom compartment located beneath the ice compartment, a doubl

bottom located in the bottom compartment, and so arranged that the opening of the partition leads into the space between the double bottom and having a slot at the top portion of the double bottom and water receptacles, and suitable feet so as to support the water receptacles clear above the slot of the double bottom, as and for the purpose specified.

JOHANNES ADOLF BERGMANN.

Witnesses:
H. PRESTON,
B. BOYD.