

## **Specification of Antoine Joseph Sax : distributing vapours for hygienic purposes.**

### **Contributors**

Sax, Adolphe, 1814-1894.

### **Publication/Creation**

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A.D. 1865, 13th JANUARY. N° 112.

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S P E C I F I C A T I O N

OF

ANTOINE JOSEPH SAX.

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DISTRIBUTING VAPOURS FOR HYGIENIC  
PURPOSES.

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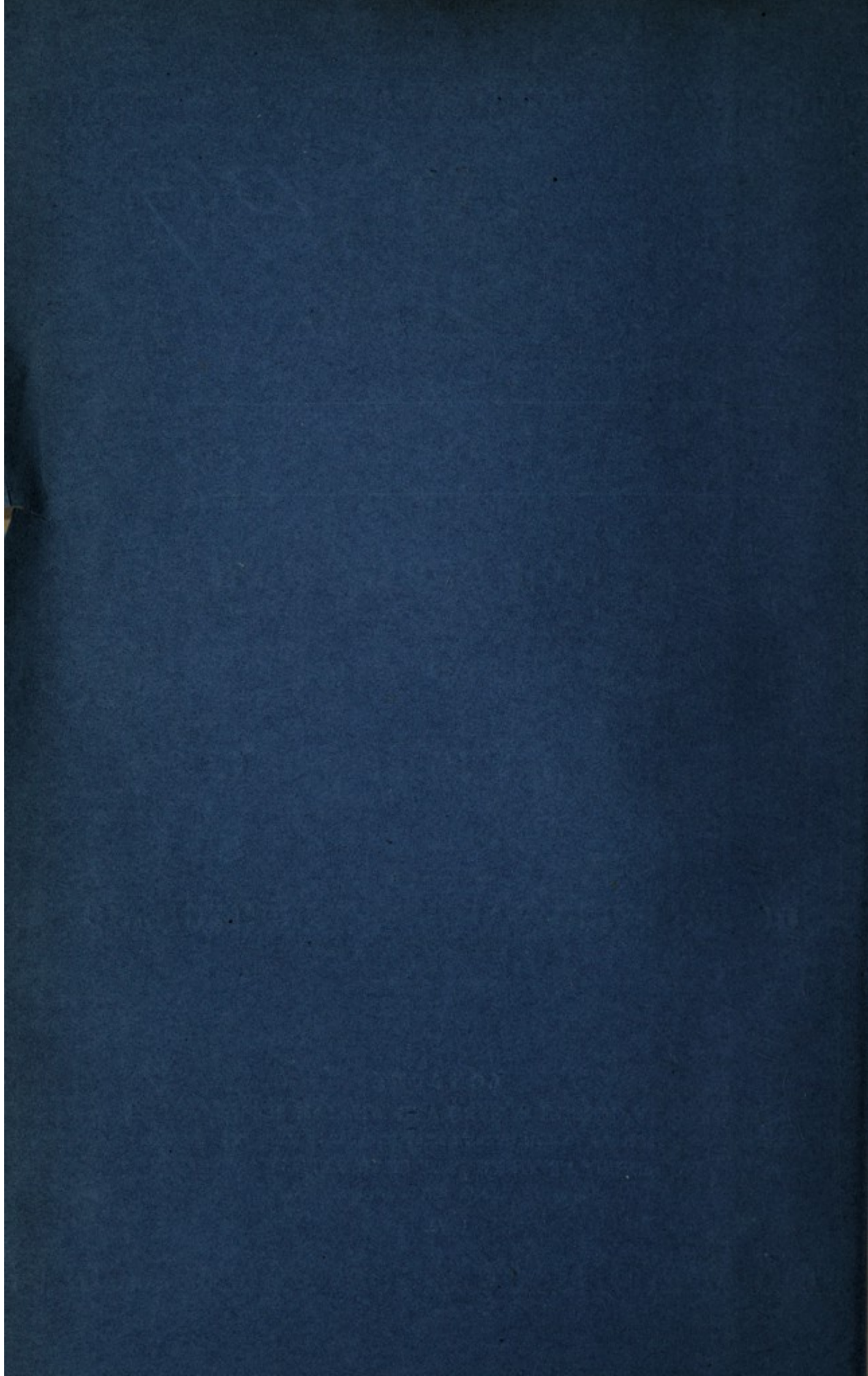
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A.D. 1865, 13th JANUARY. N° 112.

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**Distributing Vapours for Hygienic Purposes.**

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**LETTERS PATENT** to Antoine Joseph Sax, trading under the Firm of Adolphe Sax, of Paris, France, Musical Instrument Maker, for the Invention of "IMPREGNATING AIR FOR HYGIENIC OR THERAPEUTIC PURPOSES WITH THE VAPOURS OR EMANATIONS ARISING FROM TAR, CREOSOTE, OR OTHER SUITABLE LIQUID, ANTISEPTIC OR ANTIPUTRID SUBSTANCES, OR DISSEMINATING IN THE AIR FOR THE SAID PURPOSES SUITABLE PULVERIZED SUBSTANCES."

Sealed the 6th July 1865, and dated the 13th January 1865.

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**PROVISIONAL SPECIFICATION** left by the said Antoine Joseph Sax at the Office of the Commissioners of Patents, with his Petition, on the 13th January 1865.

I, ANTOINE JOSEPH SAX, trading under the Firm of Adolphe Sax, of Paris, France, Musical Instrument Maker, do hereby declare the nature of the said Invention for "IMPREGNATING AIR FOR HYGIENIC OR THERAPEUTIC PURPOSES WITH THE VAPOURS OR EMANATIONS ARISING FROM TAR, CREOSOTE, OR OTHER SUITABLE LIQUID, ANTISEPTIC OR ANTIPUTRID SUBSTANCES, OR DISSEMINATING IN THE AIR FOR THE SAID PURPOSES SUITABLE PULVERIZED SUBSTANCES," to be as follows:—

10 The object of the Invention is impregnating atmospheric air, for hygienic or therapeutic purposes, with the vapours or emanations arising from tar, creosote, or other suitable liquid, antiseptic or antiputrid substances, or disseminating in the air for the said purposes suitable finely pulverized substances, such as flowers of sulphur for instance.

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The antiseptic or antiputrid powers of tar, creosote, phenic acid, benzol, chloroform, or other analogous substances are long since known ; my Invention consists in disseminating the vapours or emanations arising from such substances, or finely pulverized substances, such as flowers of sulphur, for instance, in the air of rooms, hospitals, churches, theatres, or other places, with the 5 object of rendering the said air more salubrious, for curing diseases of the respiratory organs or other hygienic or therapeutic purposes. For the purpose of impregnating the air of the said places with the vapours or emanations arising from such antiseptic liquid substances I make use of suitable apparatus presenting a series of surfaces to be coated by immersion or other suitable 10 means with tar or other suitable antiseptic or antiputrid liquid substances or suitable mixtures of them, which substances may, if desired, be suitably heated.

The apparatus consists by preference of a sort of trough or vessel for containing the tar or other suitable liquid antiseptic substance with the vapours 15 or emanations of which the air is to be impregnated, and of an impregnating arrangement consisting of a series of partition plates, blades, or shelves, presenting a large surface, and which by immersion or other means may be coated with the tar or other suitable liquid antiseptic or antiputrid substance, and which impregnating arrangement is afterwards kept in such position as to 20 allow the air in passing between the said partition plates of becoming duly impregnated with the vapours or emanations arising from the antiseptic substance made use of. Or the impregnating arrangement of the apparatus may consist of a sort of small paddle wheel, caused to revolve in such manner that its paddles alternately become immersed in the tar or other liquid in the trough, 25 and thus duly stir this liquid, and at every revolution of the wheel present fresh parts of the liquid to the air ; by means of a pair of bellows, a fan blower, or other suitable arrangement, the air might be blown between the partition plates, or between the paddles of the wheel, or caused to impinge on the surface of the tar or other antiseptic liquid made use of. 30

For disseminating finely pulverized substances, such as flowers of sulphur for instance, in the air of rooms, hospitals, churches, theatres, or other suitable places, for hygienic or therapeutic purposes, the said substances reduced to an almost impalpable state are projected in the air by means of any suitable blowing apparatus, whilst the impregnating of the air with the above- 35 mentioned vapours or emanations may be combined with that of the disseminating therein of the said pulverized substances.

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**SPECIFICATION** in pursuance of the conditions of the Letters Patent, filed by the said Antoine Joseph Sax, in the Great Seal Patent Office on the 13th July 1865.

**TO ALL TO WHOM THESE PRESENTS SHALL COME, I, ANTOINE**  
5 **JOSEPH SAX**, trading under the Firm of Adolphe Sax, of Paris, France, Musical Instrument Maker, send greeting.

**WHEREAS** Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Thirteenth day of January, in the year of our Lord One thousand eight hundred and sixty-four, in the twenty-eighth year of  
10 Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Antoine Joseph Sax, Her special licence that I, the said Antoine Joseph Sax, my executors, administrators, and assigns, or such others as I, the said Antoine Joseph Sax, my executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times  
15 thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "**IMPREGNATING AIR FOR HYGIENIC OR THERAPEUTIC PURPOSES WITH THE VAPOURS OR EMANATIONS ARISING FROM TAR, CREOSOTE, OR OTHER SUITABLE LIQUID ANTISEPTIC**  
20 **OR ANTIPUTRID SUBSTANCES, OR DISSEMINATING IN THE AIR FOR THE SAID PURPOSES SUITABLE PULVERIZED SUBSTANCES,**" upon the condition (amongst others) that I, the said Antoine Joseph Sax, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascertain the nature of the said Invention, and in  
25 what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

**NOW KNOW YE**, that I, the said Antoine Joseph Sax, do hereby declare the nature of my said Invention, and in what manner the same is to be  
30 performed, to be particularly described and ascertained in and by the following statement:—

The object of the Invention is impregnating atmospheric air for hygienic or therapeutic purposes with the vapours or emanations arising from tar, creosote, or other suitable liquid antiseptic or antiputrid substances, or dis-  
35 seminating in the air for the said purposes suitable finely pulverized substances, such as flowers of sulphur, for instance.

The antiseptic or antiputrid qualities of tar, creosote, phenic acid, benzol, chloroform, or other analogous substances are long since known. My Invention

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consists in applying the vapours or emanations arising from the said liquid antiseptic or antiputrid substances to hygienic or therapeutic purposes, by disseminating in the air of rooms, hospitals, churches, theatres, or other confined places the said vapours or emanations arising from or evolved by the said antiseptic or antiputrid substances, whether in the cold or in a suitably-heated 5 state, or disseminating in the air of confined places suitable finely-pulverized substances, and with the object of rendering the said air more salubrious, or for the purpose of curing diseases of the respiratory organs, or for other hygienic or therapeutic purposes. For the purpose of impregnating the air of rooms or other confined places with the vapours or emanations arising from 10 tar or other similar liquid antiseptic or antiputrid substances, I make use of suitable apparatus presenting a series of surfaces to be coated by immersion or other suitable means with tar or other appropriate antiseptic or antiputrid liquid substances, or suitable mixtures of them, and either in the cold or in the heated state. 15

The apparatus consists by preference of a sort of trough or vessel, of tinplate or other suitable material, for containing the tar or other suitable liquid antiseptic or antiputrid substances to be made use of. In this trough or vessel is to be introduced the impregnating arrangement, consisting of a series of partition plates, blades, or leaves presenting a large surface, and which by im- 20 mersion or other means may be coated with the tar or other antiseptic liquid contained in the trough, and which arrangement after having thus received a coating of the said liquid is then lifted partly out of the trough and fixed at any required height, so as to allow of the air passing freely between the coated blades, and thus becoming impregnated with the vapours or 25 emanations arising from the antiseptic or antiputrid liquid made use of.

In order to make the Invention more easily understood, the annexed Drawings show an apparatus, which I make use of for the purpose of impregnating the air of rooms or other confined places with the vapours or emanations arising from tar or other suitable liquid antiseptic or antiputrid 30 substance. Fig. 1 shows a front, and Fig. 2 a side elevation view of the apparatus, when in working state, viz., with the impregnating arrangement lifted partly out of the trough, and fixed at the required height; Fig. 3 is a front elevation view of the apparatus, with the impregnating arrangement lowered in the trough. In the three Figures corresponding parts are indicated 35 by the same letters of reference.

The apparatus consists of a sort of trough A, or vessel of tinplate or other suitable metal or material, which trough serves for holding the tar, creosote, or other suitable antiseptic or antiputrid liquid, the emanations or vapours of

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which are to be disseminated in the air of the room or other place where the apparatus is put up. In the trough A may be introduced and kept at any required height a movable part B, which I call the impregnating arrangement or impregnator, also made of tin-plate or other suitable metal or material, and  
5 consisting of a series of blades, plates, or leaves C, connected together and kept parallel to each other at the required distances apart by means of the cross plate D, which latter at the same time serves as a lid for the trough, and is provided with a handle E for lifting the impregnator at any required height, for which purpose a tongue or blade F, fixed to the plate D glides in a slot G  
10 fixed to the longitudinal side of the trough. Against the outside of the blade or tongue F is soldered a rod or tube H, provided at suitable distances apart with notches or openings *h*, in which may be introduced a spring I, soldered in *i* to the side of the trough. The manner of making use of the apparatus is as follows:—The impregnator B having been lifted entirely out of the trough A  
15 this latter is partly filled, say for instance, for about  $\frac{3}{4}$  of its capacity, with tar, creosote, or other suitable antiseptic or antiputrid liquid or semi-liquid; the impregnator is then replaced in the trough and lowered as far as possible in the liquid in this latter, and is then again raised and set at the required height by causing the spring I to enter into one of the notches *h*; a  
20 spring I is provided at each of the two longitudinal sides of the trough, or one of these sides only may be provided with a spring, and the other side with a sliding bolt, to be entered in one of the notches *h*. The impregnator having thus been set at the required height, the air will in striking between the blades C become impregnated with the vapours or emanations arising from the  
25 tar or other antiseptic or antiputrid liquid made use of. Various other devices for setting the impregnator at will at any desired height might be resorted to. If required, also, the trough may be provided with any suitable arrangement for suitably heating the liquid or semi-liquid contained therein, and causing the vapors or emanations to be evolved more rapidly and more abundantly  
30 than in the cold state. I also intend to have apparatuses in which a series of blades or plates, hinged together endwise in the manner as the links of a chain or of a lazy-tongs might be allowed either to clap together, and thus apply themselves flat on each other in a shallow trough, containing the tar or other suitable antiseptic liquid, or allow the blades or plates to be lifted up and kept  
35 stretched by a standard or other suitable means, so as in that case offer a large surface covered or coated with tar or other antiseptic liquid for the air to come in contact with. Or a series of plates might be connected in the manner as the leaves of a book, so as to permit of either folding them together, so as to lay on the bottom of the trough, or have the leaves kept extended for



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allowing the air to pass freely betwixt them, and thus become impregnated with the liquid in which the plates have been dipped, whilst, if required, an artificial draught of air may be caused to circulate between the leaves or plates by means of a ventilator or fan blower. Or, a sort of paddle wheel might be made to turn with its paddles in the liquid in the trough, for the purpose of 5 continually stirring the said liquid and thus promote the evolution of the emanations or vapors arising therefrom. I also intend to make use of a similar apparatus, or of a fan blower, for disseminating in the air of rooms, hospitals, churches, theatres, or other confined places, flowers of sulphur or other suitable finely pulverized substances possessing antiputrid, antiseptic, or hygienic 10 properties; whilst motion may be transmitted to the paddle wheel or to the blowing apparatus by hand, by clockwork, or any other suitable prime mover. I also intend to have small apparatuses consisting of a series of finely perforated thin plates or pieces of wire cloth, provided with tar or other suitable antiseptic or antiputrid liquid, which apparatus may, by a string, tape, or other 15 means be kept, applied, or worn before the mouth, so as to cause the air before entering into the lungs to pass through the holes or meshes of the perforated plate or wire cloth, and thus become impregnated with the emanations or volatile parts evolved from the tar or other suitable antiseptic, antiputrid, or hygienic liquid or semi-liquid made use of. I further intend to provide the 20 bell of trumpets, horns, saxophones, or other similar musical instruments actuated by human insufflation with an inner double jacket or other analogous arrangement, containing tar or other suitable antiseptic liquid or semi-liquid, or having its sides coated therewith in such manner that the air inhaled through the bell of the instrument is forced to become impregnated with the emana- 25 tions evolved from the said antiseptic or antiputrid liquid or semi-liquid. I finally wish it to be observed that the antiseptic or antiputrid substance to be made use of may be employed either in the liquid or in a semi-liquid or clammy state, and if required be diluted with or dissolved in any suitable menstruum. 30

Having thus described and particularly ascertained the nature of my Invention, and the manner in which the same is or may be carried into effect, I would observe, in conclusion, that I do not confine or restrict myself to the precise details of the arrangements above described, as many variations may be made therefrom without deviating from the principles or main features of the 35 Invention; but what I consider to be novel and original, and therefor claim as the Invention secured to me by the herein-before in part recited Letters Patent is,—

1ly. Impregnating the air of rooms, hospitals, churches, theatres, or other

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confined places, for hygienic or therapeutic purposes, with the emanations or vapours arising from tar, creosote, or other suitable liquid or semi-liquid antiputrid, antiseptic, or hygienic substances.

2ly. Disseminating in the air of rooms, hospitals, churches, theatres, or other  
5 confined places, and for hygienic or therapeutic purposes, suitable finely pulverized substances, such, for instance, as flowers of sulphur.

3ly. The general arrangement and mode of working of the apparatuses above described or referred to for impregnating the air of confined places and for hygienic or therapeutic purpose with the vapours or emanations arising  
10 from tar, creosote, or other suitable liquid or semi-liquid antiputrid, antiseptic, or hygienic substances, or for disseminating in the said air and for the said purposes suitable finely pulverized substances.

In witness whereof, I, the said Antoine Joseph Sax, have hereunto set my  
hand and seal, this Seventh day of July, in the year of our Lord One  
15 thousand eight hundred and sixty-five.

A. J. SAX. (L.S.)

Witness,

A. G. BRADE.

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LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,  
Printers to the Queen's most Excellent Majesty. 1865.

Report of the Commission on the Hygienic Purposes of the

containing plans for hygienic or therapeutic purposes with the extension or various other means for the purpose of other suitable liquid or semi-liquid substances, antiseptic or hygienic substances.

27. Determining in the air of rooms, hospitals, churches, theatres, or other confined places, and for hygienic or therapeutic purposes, suitable liquid or vapour substances, such for instance, as flowers of sulphur.

28. The general arrangement and mode of working of the apparatus to be described or referred to for purifying the air of confined places and for hygienic or therapeutic purposes with the vapours or emanations arising from tar, creosote, or other suitable liquid or semi-liquid antiseptic or hygienic substances, or for determining in the said air and for the said purposes suitable liquid or vapour substances.

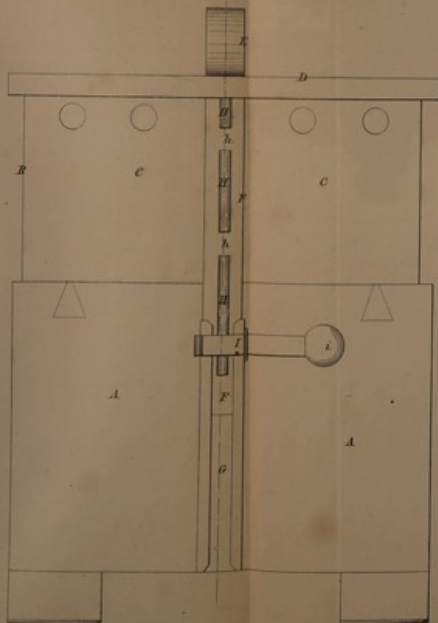
In witness whereof, the said Antonio Joseph Diaz, have hereunto set my hand and seal this seventh day of July, in the year of our Lord One thousand eight hundred and sixty-five.

A. J. SAK. (L.S.)

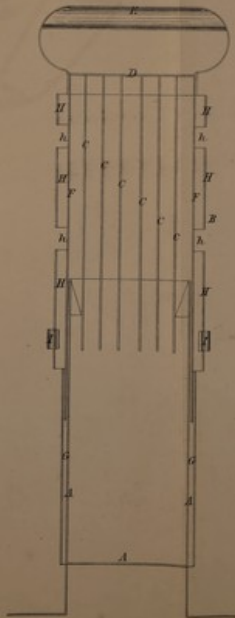
A. G. DEAR

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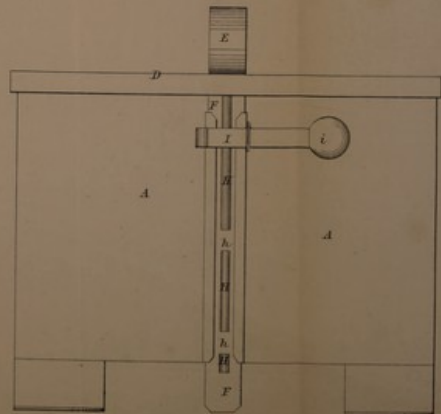
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F I G. 3.



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