

(No Model.)

W. H. RUSSELL & H. C. EARL.
INHALER.

No. 516,448.

Patented Mar. 13, 1894.

Fig. 1.

Fig. 2.

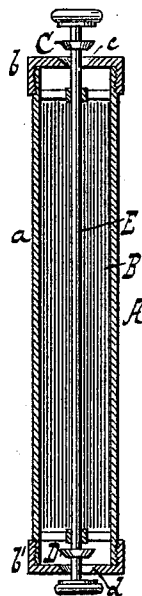
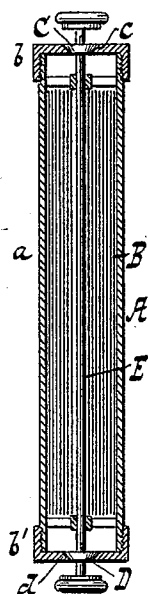
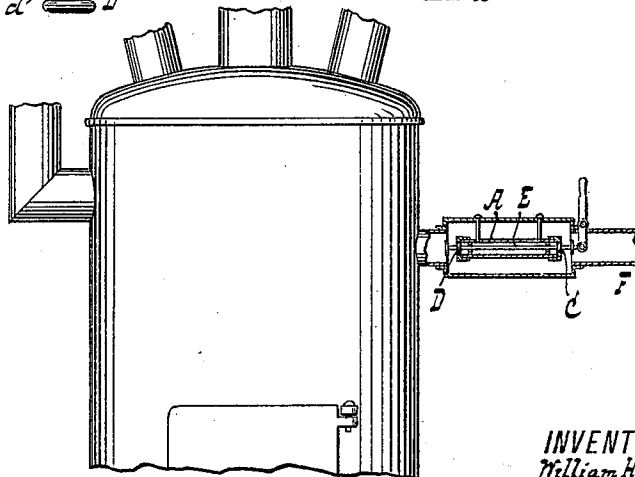


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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INHALER.

SPECIFICATION forming part of Letters Patent No. 516,448, dated March 13, 1894.

Application filed April 27, 1893. Serial No. 472,099. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. RUSSELL, residing at New City, in the county of Rockland, and HARVEY C. EARL, residing at New York, in the county of New York, State of New York, citizens of the United States, have invented new and useful Improvements in Demephitizing Devices, of which the following is a specification.

The object of this invention is a demephitizing device which can be readily used for charging the air which a person inhales with a suitable demephitizing substance or for charging the air in a railroad car or in a room or house with such demephitizing substance, the peculiar and novel construction of said device being pointed out in the following specification and claim and illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal section when the valves are closed. Fig. 2 is a similar view when the valves are open. Fig. 3 is a front elevation of a hot air furnace partly in section illustrating the application of the demephitizing device for charging the air passing into a house with a demephitizing substance.

In the drawings the letter A designates a receptacle which may be made of glass or any other suitable material and the size and shape of which must be changed according to the place where or the purpose for which it is to be used. If it is to be used for the purpose of charging the air which a person inhales, with a suitable demephitizing substance, the receptacle may be made cylindrical and small enough to be carried in the pocket and a number of such cylindrical receptacles can be used for charging the air in a railroad car or in a room with the demephitizing substance, but if the object is to charge the air in a house with the demephitizing substance, the receptacle must be made sufficiently large for this purpose. Said receptacle is charged with an absorbent material B which is saturated with the demephitizing substance and the ends of the receptacle are provided with valves C D respectively so that when these valves are closed, no air can

pass through the receptacle but when the valves are open and one end of the receptacle is applied to the nostrils, the air inhaled has to pass through the absorbent material B so that it becomes charged with the demephitizing substance before it reaches the nostrils.

The receptacle A is composed of a tube *a* open at both ends and provided with caps *b b'* which are provided with seats *c, d*, respectively for the valves C D. These valves are mounted on a common rod E, and the valve C opens outward while the valve D opens inward, so that when the rod E is moved to the position shown in Fig. 1, both valves are closed, and when the rod E is moved to the position shown in Fig. 2 both valves are open. The caps *b b'* are secured to the ends of the tube *a* in such a manner that they are retained in position either by friction or otherwise, but they can be adjusted in order to bring the seats *c, d*, in the proper relation toward the valves C D. If desired, however, the valves C D may be adjustably secured on the rod E. The tube *a* is provided with cross-bars *e* which form guides for the rod E, and which also serve to retain the absorbent material B in position.

In order to apply the demephitizing device to a hot air furnace the pipe F (Fig. 3) through which the cold air enters, is provided with an enlarged chamber G into which the receptacle A is placed, and this receptacle is provided at its ends with valves C D mounted on the rod E to which the required motion can be imparted by a lever or any other means so as to open or close the valves C D. If the valves are opened, the cold air which enters through the pipe F is charged with the demephitizing substance and the air so charged passes up into the house and through the registers into the various apartments.

What we claim as new, and desire to secure by Letters Patent, is—

A demephitizing device, consisting of a tube *a* charged with a demephitizing substance and having end caps *b* and *b'* provided respectively with the valve seats *c* and *d*, a rod E extending continuously through

the tube and through the valve seats in the
said caps, and valves C and D secured to the
rod in juxtaposition to the ends thereof so
that both valves open or close simultane-
ously by moving the rod lengthwise, substan-
tially as described.

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In testimony whereof we have hereunto set

our hands in the presence of two subscribing
witnesses.

WILLIAM H. RUSSELL.
HARVEY C. EARL.

Witnesses:

WM. C. HAUFF,
E. F. KASTENHUBER.