W. O. FREET.

OZONE GENERATOR.

APPLICATION FILED MAY 20, 1912.

1,085,598.

Patented Feb. 3, 1914.

FIG. 1

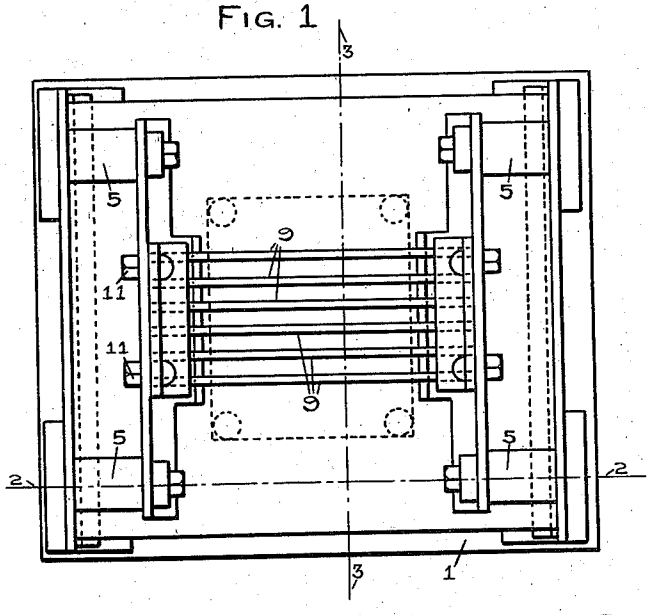


FIG. 4

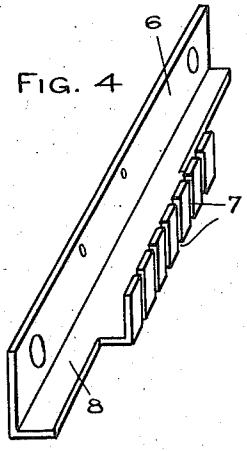


FIG. 2

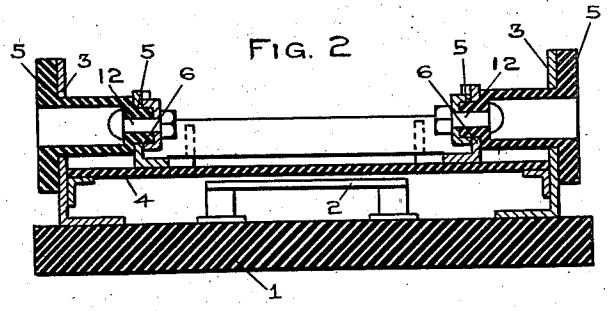
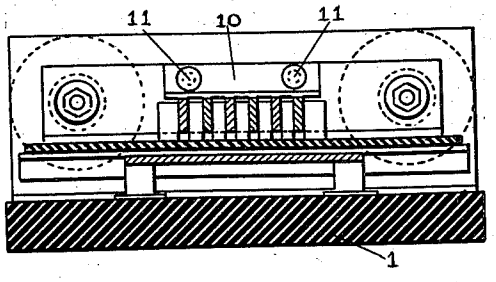


FIG. 3



WITNESSES:

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OZONE-GENERATOR.

1,085,598. Specification of Letters Patent. Patented Feb. 3, 1914.

Application filed May 20, 1912. Serial No. 698,486.

To all whom it may concern:

Be it known that I, WILLIAM O. FREET, a citizen of the United States, residing in Hackensack, county of Bergen, and State of New Jersey, have invented or discovered certain new or useful Improvements in Ozone-Generators, of which the following is a full, clear, and complete disclosure.

My invention relates to ozone generators of a kind suitable for use in producing ozone in small quantities and of relatively low concentration for purifying the air of apartments and for other uses where only low concentration and limited quantities are desired.

The objects of my invention are to provide a generator of this kind which will be strong and durable and which may be easily and cheaply constructed and which may easily be adjusted so as to regulate the quantity of the output.

A further object is to so arrange the parts of the generator that the dielectric plate forming an element thereof, may easily be removed for cleaning.

In the drawing accompanying and forming a part of this specification, I have illustrated one embodiment of my invention.

In this drawing, Figure 1 is a plan view. Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1. Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1. Fig. 4 is a detailed view.

Referring in detail to the features of the structure illustrated, the numeral 1 designates a base of the insulating material on which the parts of the generator are assembled and supported. A flat plate 2 is supported on the base 1 and constitutes one electrode of the device. Flanged supporting members 3 mounted near the opposite sides of the base, support a dielectric plate 4 and also the insulators 5. Two oppositely disposed racks 6 having a plurality of vertical slots 7 thereon, are supported at the inner ends of the insulators 5 by means of bolts 12. These racks, one of which is shown in perspective in Fig. 4, are formed by stamping out and bending up a thin plate of conducting material and they are so formed that the lower portion 8 of these racks rests on the dielectric plate.

A plurality of metallic strips or slats 9, are provided and their opposite ends are disposed in the slots 7 and rest on the lower portion 8 of the rack. This lower portion spaces them uniformly from the dielectric. These strips or slats constitute the other electrode and the number of these slats may readily be varied so as to regulate the quantity of the output. The slats are held in position in the slots by members 10, removably secured to the racks 6 by bolts 11. In case it is desired to vary the output, one of the members 10 is removed and the number of slats adjusted according to the quantity of the output desired.

In operation, one terminal connected with the source of current to be used is connected with one of the racks 6, and the other terminal to the electrode 2, so that the discharge takes place from the lower edges of the slats through the dielectric to the lower electrode 2. Should the dielectric 4 need cleaning or be broken, it can be slid out edgewise and be cleaned, or a new plate inserted without altering the arrangement of the other parts.

While I have described only one embodiment of my invention, I am aware that this may be modified by those skilled in the art without departing from the scope of my invention.

What I claim is:

1. In a device of the kind described, a base of insulating material, two electrodes mounted thereon and spaced from each other and a flat dielectric plate slidably mounted between said electrodes, substantially as described.

2. In a device of the kind described, a base of insulating material, a flat electrode supported thereby, a flat dielectric plate supported over said electrode, oppositely disposed racks having vertical slots therein located over said dielectric and a plurality

of electrodes disposed in said slots and supported by said racks, substantially as described.

3. In a device of the kind described, a base of insulating material, a flat electrode supported thereby, a flat dielectric plate slidably supported over said electrode, oppositely disposed racks having vertical slots therein located over said dielectric, and a plurality of flat strips constituting electrodes disposed in said slots and supported by said racks, substantially as described.

WILLIAM O. FREET.

Witnesses:
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