Dec. 30. 1924. 1,521,348

C. AMBRUSTER

MEANS FOR OPPOSING THE DISCHARGE OF ACID LADEN AIR

Filed Aug. 9, 1921

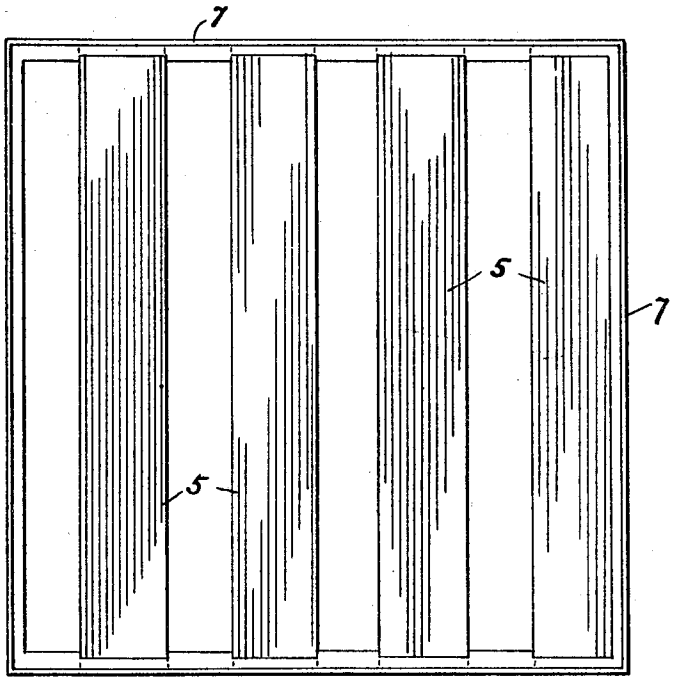



FIG. 1.

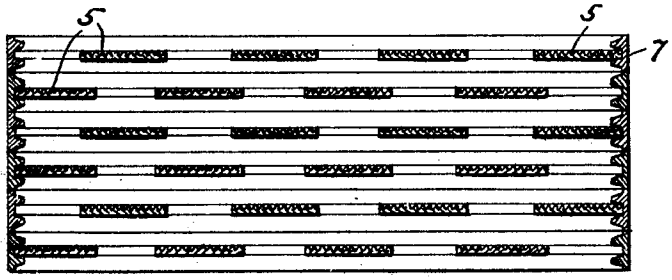



FIG. 2.

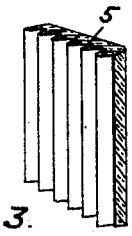



FIG. 3.

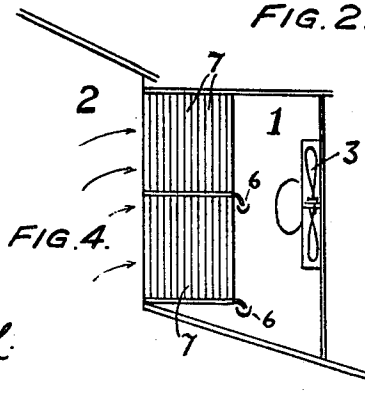



FIG. 4.

WITNESS:
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# UNITED STATES PATENT OFFICE.

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## MEANS FOR OPPOSING THE DISCHARGE OF ACID-LADEN AIR.

Application filed August 9, 1921. Serial No. 490,332.

*To all whom it may concern:*

Be it known that I, CORNELIUS AMBRUSTER, a citizen of the United States, residing at Roslyn, in the county of Montgomery and State of Pennsylvania, have invented a new and useful Means for Opposing the Discharge of Acid-Laden Air, of which the following is a specification.

In the manufacture of storage batteries, and more especially in the formation of plates, sulphuric acid is thrown into the air and the air thus charged or laden with sulphuric acid vapor, while not injurious to the health, is nevertheless unpleasant and objectionable when discharged into the atmosphere.

The principal object of the present invention is to prevent or substantially oppose the discharge of air laden or charged with sulphuric acid vapor from the interior of battery factories or forming rooms into the outside atmosphere. To this and other ends hereinafter set forth the invention, generally stated, comprises the improvements to be presently described and finally claimed.

In the following description reference will be made to the accompanying drawings forming part hereof and in which

Figure 1 is an elevational view of a glass baffle screen embodying features of the invention.

Fig. 2 is a sectional view of the same.

Fig. 3 is a perspective view drawn to an enlarged scale and diagrammatically illustrating a part of a grooved or prismatic strip of sheet glass, and

Fig. 4 is a diagrammatic view which may be considered to be a cross-section illustrative of one form of embodiment of the invention.

In the drawings 1, generally, is an air outlet ventilator from a storage battery forming room or the like indicated, generally, at 2, and the form of the air outlet ventilator is not important and is the subject of a variety of embodiments and of course there may be any number of such outlets and they may be variously located. 3 is a fan for the ventilator 2 and it serves when present to induce a flow of acid laden air, as indicated by the arrows in Fig. 4. There is a baffle screen interposed in the outlet ventilator 1, and it consists of spaced strips 5 of facially grooved or prism sheet glass arranged in rows, Fig. 2, with the strips of one row staggered in respect to the strips of adjacent rows and with the grooved faces confronting the ventilator outlet, that is, facing the arrows in Fig. 4. 6 are drainage trays or troughs. 7 are leaden frames shown as rectangular and in which the strips 5 are arranged in spaced relation and in use the frames are aligned as shown. Referring to the drawing it will be seen that the frames 7 are duplicates and that a strip 5 is at one edge (right in Fig. 1) and that a space is at the other edge so that by turning alternate frames upsidedown or in reversed position the described staggered construction is provided.

In use the acid laden air repeatedly impinges upon the grooved or prismatic faces of the various strips with the result that the acid vapor is caught in the grooves and in that way taken out of the air which escapes to the atmosphere substantially free from acidity. The acid deposited upon the glass strips is collected by the trays 6, and the glass and leaden frames resist the corrosive tendency of the acid.

It will be obvious that modifications may be made in details of construction and arrangement without departing from the spirit of the invention which is not limited as to those matters or otherwise than as the prior art and the appended claim may require.

I claim:

Means for opposing the discharge of acid laden air from storage battery forming rooms and the like which comprise individual duplicate marginal frames assembled alternately in reversed positions and each provided with spaced facially grooved strips of glass of which one is disposed at one edge of the frame and another is spaced from the other edge of the frame, substantially as described.

CORNELIUS AMBRUSTER.