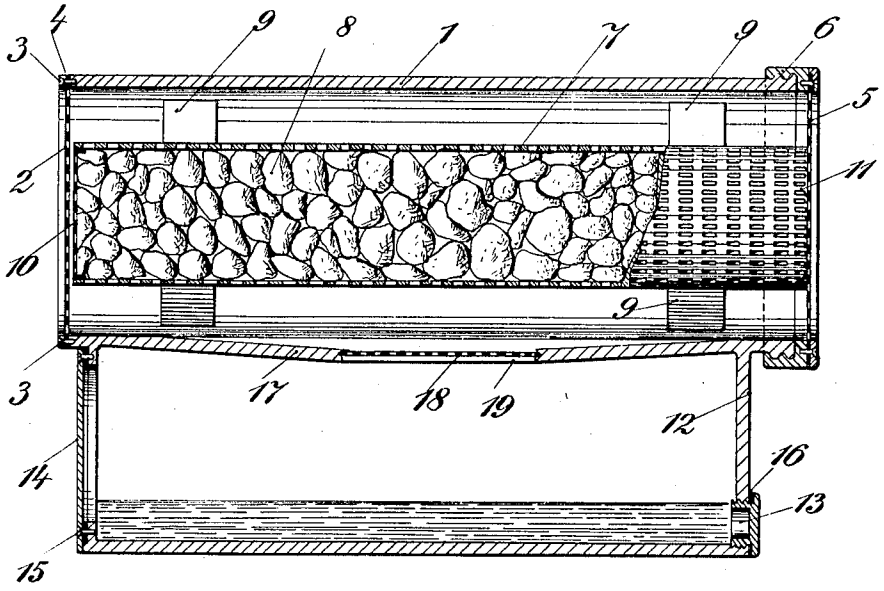
O. TOUZIMSKY.

DEVICE FOR DRYING AIR, GAS, &c.

APPLICATION FILED SEPT. 9, 1907.

913,325. Patented Feb. 23, 1909.



Witnesses:
Edward Miller
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OTTOMAR TOUZIMSKY, OF LOBOSITZ, AUSTRIA-HUNGARY.

DEVICE FOR DRYING AIR, GAS, &c.

No. 913,325. Specification of Letters Patent. Patented Feb. 23, 1909.

Application filed September 9, 1907. Serial No. 392,000.

To all whom it may concern:

Be it known that I, OTTOMAR TOUZIMSKY, a subject of the Austrian Emperor, and resident of Lobositz, Bohemia, Austria-Hungary, have invented certain new and useful Improvements in Devices for the Drying of Air, Gases, &c., of which the following is a specification.

My invention concerns a device for extracting moisture from air, gases etc., and should be especially serviceable wherever it is desired to protect anything whatsoever from the damaging influences of humidity. The invention is chiefly based on the well known fact that chlorid of calcium is capable of quickly extracting moisture to a very great extent.

The accompanying drawing shows in a vertical section one form of construction of the new device.

The outer cylinder 1 (made of metal, or some other suitable material) is open on two opposite sides, so that the moistened air or gas can pass through the cylinder. When necessary the two openings of the cylinder can be suitably closed by perforated covers. The cover 2 is made of perforated metal, and is held fast by the ring 4 which is tightened by the screws 3. The cover 5 is likewise of perforated metal, being similarly fastened to a ring 6 screwed on to the cylinder 1.

7 is a cylinder which is fitted into the cylinder 1, and which contains the chlorid of calcium. This cylinder 7 is perforated on all sides, so that the air or gas which is to be dried can have free access to the chlorid of calcium 8.

9 are pegs by means of which the cylinder 7 is held fast in cylinder 1.

On the one side the cylinder 7 could be closed by a perforated cover 10, whereas the other side 11, used for filling and emptying, can only be closed by the screwing-up of the ring 6 through the cover 5 of the outer cylinder.

Underneath the cylinder 1 there is the cylinder 12 for the reception of the extracted fluid. The same is provided with a screw cap 13, which is opened to let off the fluid.

14 is a cover which is screwed on to the cylinder 12, and 15 and 16 are rubber-packings.

The cylinder 1 has a sloping-bottom; on the lowest point of which the perforated-cover 18 is fixed over the outlet 19. The collected fluid in cylinder 12 could also be let off through this opening. To accomplish this one has only to turn the whole device upside down.

In the form shown on the drawing, the arrangement is such that the cylinders 1 and 12 are cast in one piece; the cylinder 7 is to be made of perforated-metal. This cylinder 7. and the covers 2, 5, 10 and 18 can also be made from wire-trellis. The outer cylinder 7 and the cylinder 12 can also be made of sheet-metal or similar material. The air or gas which is to be dried passes, on entering through one of the covers 2 or 5, along the surface of the inner cylinder 7 and partly enters same. In this manner the moisture is absorbed by the chlorid of calcium and the fluid hereby produced passes into the cylinder 12. Any larger pieces of the chlorid of calcium are retained by the cover 18. From the collected fluid in cylinder 12, the chlorid of calcium can, by means of the usual method of regeneration, to a great extent be recovered.

What I claim as my invention and desire to secure by Letters Patent, is:—

1. In a device for the drying of air, gases etc. in combination, a box open on two opposite sides, a perforated cover on each open side, one of which is removable, a perforated box arranged in the said outer box and open on one side, a perforated cover to close the open side of the inner box, means to hold the said inner-box in a suitable position in the said outer box, the latter having an inclined bottom, an opening at the lowest point of same and a water-tight receptacle below the said inclined bottom, substantially as set forth.

2. In a device for the drying of air, gases etc., in combination a box open on two opposite sides a perforated cover on each open side, one of which is removable, a perforated box arranged in the said outer box and open on one side, a perforated cover to close the open side of the inner box, and pegs to hold the latter in position in the said outer box, the latter having an inclined bottom, an opening in the lowest point of same, a per-

forated cover which closes the said opening, a water tight receptacle, fastened to the said outer box below the said inclined bottom, an outlet in the said receptacle and means to close the said outlet, substantially as set forth.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

OTTOMAR TOUZIMSKY.

Witnesses:
ARTHUR SCHWEZ,
WILHELM FLERSCHNER.