H. ALLARD.

ARRANGEMENT FOR REMOVING THE MOIST AIR FROM DRYING CHAMBERS.

APPLICATION FILED JUNE 22, 1911.

1,025,603.

Patented May 7, 1912.

FIG. 1.

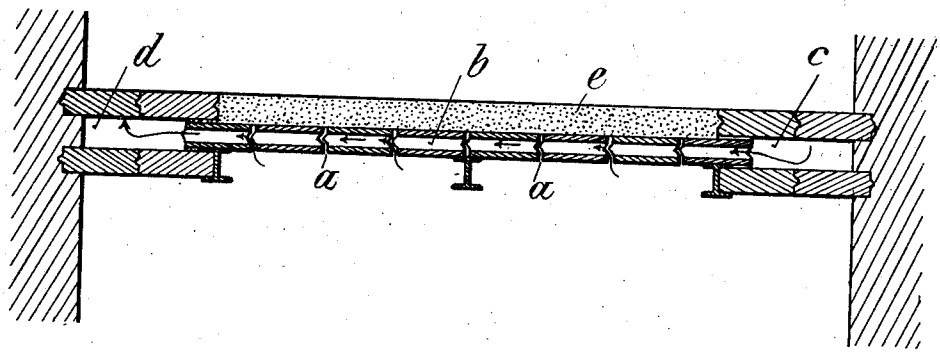
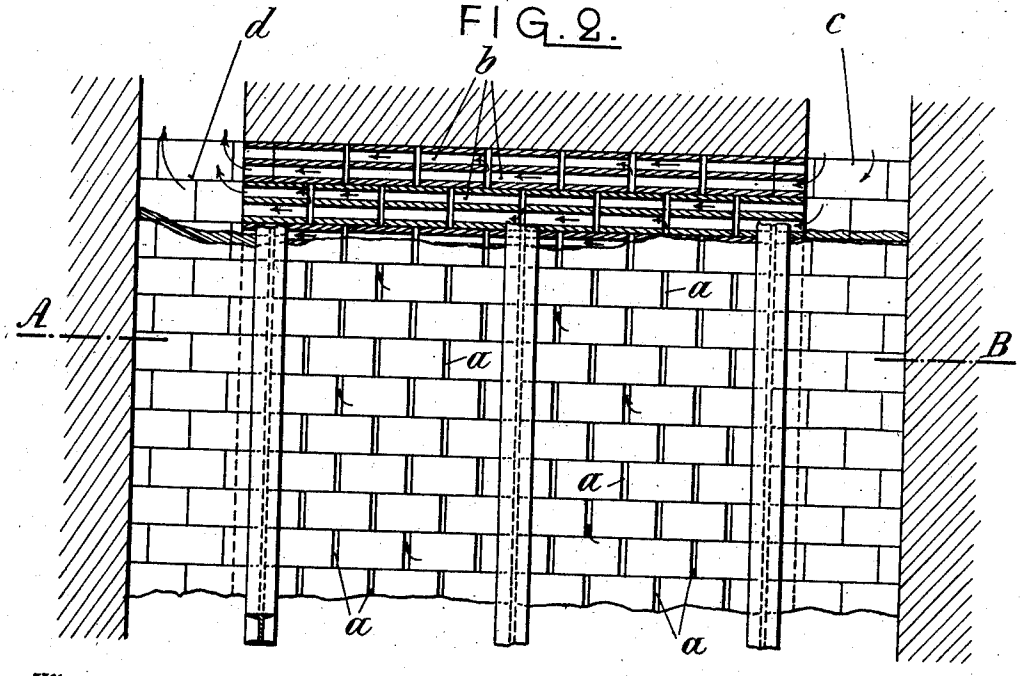


FIG. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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ARRANGEMENT FOR REMOVING THE MOIST AIR FROM DRYING-CHAMBERS.

1,025,603. Specification of Letters Patent. Patented May 7, 1912.

Application filed June 22, 1911. Serial No. 634,708.

To all whom it may concern:

Be it known that I, HERMAN ALLARD, manufacturer, a subject of the Queen of the Netherlands, and residing at Geertruidenberg, Netherlands, have invented certain new and useful Improvements in the Arrangement for Removing the Moist Air from Drying-Chambers, of which the following is a specification.

This invention relates to means for eliminating moist air from drying rooms and the like.

It has already been proposed to remove moist air from drying rooms or the like by means of passages formed in hollow bricks constituting the ceilings or roofs of the chambers, and which passages are provided with openings for the inlet of the moist air.

The present invention relates to improvements in this method of discharging moist air from drying rooms, and it consists essentially in the arrangement wherein the joints of the bricks are left open at the underside of the ceiling in order to permit of the passage of the moist air from the chamber into the ceiling passages, and wherein external air, slightly warmed air, warmed gases, or flue gases are conveyed to the moist air contained in the ceiling passages. This air or the gases mixes or mix with the air from the drying passages and prevent the deposition of water. The moist air which collects in the ceiling passages passes into a common outlet passage from which it is sucked or drawn through shafts or ventilators into the atmosphere.

To enable the invention to be fully understood, I will describe it by reference to the accompanying drawing, in which:

Figure 1 is a cross section of the ceiling or roof of a drying room or chamber embodying my improvements, the section being taken along the line A, B Fig. 2. Fig. 2 is an underside view of the ceiling or roof the lower surface of the hollow bricks and the bottoms of the inlet and outlet passages for the warmed air or the like, being partially broken away to show the interior of the said bricks and passages.

a, *a* are the joints in the hollow bricks, *b*, which joints are open at the underside of the ceiling but closed at the top by concrete or the like *e* Fig. 1, forming the top of the hollow ceiling or roof.

c is the passage for the admission of the warm air or the like and *d* is the passage for the discharge of the air from the hollow bricks *a* into shafts or ventilators and so into the atmosphere.

The moist air in the room or chamber passes up through the open joints *a* into the hollow bricks *b*, while the external or warmed air or the like enters the passage *c* and mixes with the air in the passages *b* formed by the hollow bricks, thus preventing the deposition of water. The air then enters the passage *d* and is discharged into the atmosphere.

The direction of the air currents is indicated by arrows in the drawing.

What I claim and desire to secure by Letters Patent is:—

1. A drying chamber, the ceiling of which is provided with a plurality of horizontal passages, a common exhaust passage communicating with said horizontal passages, and with a plurality of vertically disposed passages opening into the horizontal passages, whereby the moist air is carried off from said chamber and condensation is avoided.

2. A drying chamber, the ceiling of which is provided with a plurality of horizontal passages, a common exhaust passage communicating with said horizontal passages at one side of the chamber, means for supplying warm air to said horizontal passage at the opposite side of said chamber, and having a plurality of vertically disposed passages opening into the horizontal passages whereby the moist air is carried off from said chamber and condensation avoided.

3. A drying chamber, the ceiling of which is constructed of hollow bricks laid a distance apart, the hollow portions forming continuous horizontal passages, and the spaces between said bricks forming vertically disposed passages which lead into the said horizontal passages, and a common exhaust passage communicating with said horizontal passages, whereby moist air is carried off from said chamber and condensation is avoided.

In testimony whereof I hereto affix my signature in presence of two witnesses.

H. ALLARD.

Witnesses:
N. V. HERP,
N. G. E. MEUERS.