

P. P. VON THEINBURG.
Apparatus for Cooling Air.

No. 218,145.

Patented Aug. 5, 1879.

Fig. 1.

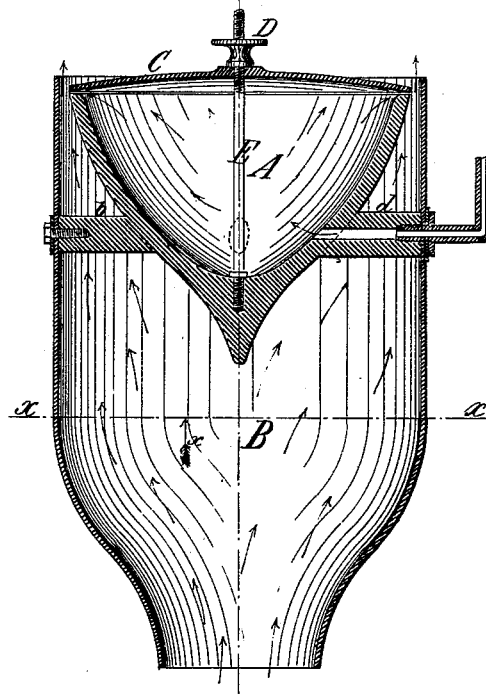
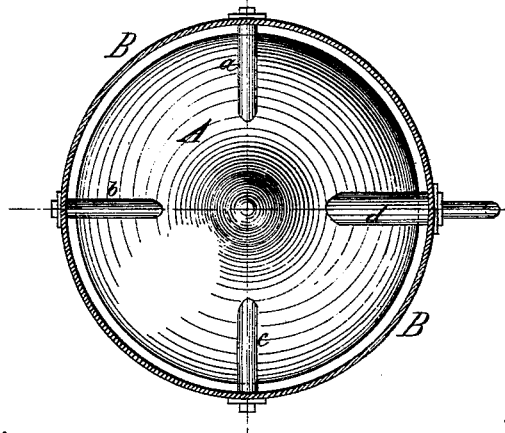


Fig. 2.



Witnesses:
Benjamin H. Galsted
Robert C. Grant

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by John J. Galsted,
Atty.

UNITED STATES PATENT OFFICE.

PAUL P. VON THEINBURG, OF VIENNA, AUSTRIA.

IMPROVEMENT IN APPARATUS FOR COOLING AIR.

Specification forming part of Letters Patent No. **218,145**, dated August 5, 1879; application filed November 12, 1878.

To all whom it may concern:

Be it known that I, PAUL PACHER VON THEINBURG, of Vienna, Empire of Austria, have invented a certain new and useful Apparatus for Moistening and Cooling Air, of which the following is a specification.

The object of this invention is to provide a means for moistening the air in spinning-mills or other establishments or rooms where humidity or coolness is desirable; and it consists in the combination of an internal vessel for discharging a thin sheet of liquid over its edge, with a surrounding air passage or conduit of greater diameter; and it further consists in the combination, with such outer conduit, of an internal vessel having an adjustable lid and a passage to admit liquid into such vessel, and an annular outlet for the liquid between the vessel and its lid, whereby an annular current of air may be driven through an annular film or sheet of liquid, whereby the latter may be finely comminuted and scattered.

I attain this purpose by leading a blast-current in a perpendicular direction, or nearly so, against a thin jet or jets of water or other liquid, whereby the liquid will be scattered away as dust, being dispersed in very minute particles, suspending in and moistening the air.

In carrying out this invention, a vessel, A, of suitable form, may be suspended by arms *a b c d* or otherwise within another vessel, B, in such a manner that an annular space is formed between both vessels, through which the blast-current is directed. The vessel A is

provided with an adjustable lid, C, which, by screw-nut D and screw E, may be pressed upon the rim of this vessel.

One of the said arms, *d* for instance, is hollow, and through this arm water or other liquid under pressure is continuously forced into the vessel A. As soon as the latter is filled the liquid will escape between the lid and the rim of the vessel in a flat thin circular jet, and this jet will be scattered away as dust by the blast-current passing through the annular space formed by the two vessels A and B.

This arrangement may of course be varied without departing from the substance of my invention; but

What I claim is—

1. In air cooling or moistening apparatus, the combination of an internal water-vessel for discharging a thin sheet of water over its edge with a surrounding air-conduit of greater diameter, substantially as shown and described.

2. In combination, the hollow vessel B, the vessel A, and its adjustable lid, and provided with a passage to admit liquid into the inner vessel, A, and with an annular outlet for such liquid between such vessel and lid, substantially as and for the purpose described.

In witness that I claim the foregoing I have hereunto set my hand this 12th day of October, 1878.

PAUL PACHER VON THEINBURG.

Witnesses:

HEINRICH ZWANZIGA,
HEINRICH PALM.