

No. 794,166.

PATENTED JULY 11, 1905.

C. A. ERBSLÖH.
AIR MOISTENING.
APPLICATION FILED MAR. 3, 1904.

Fig. 1

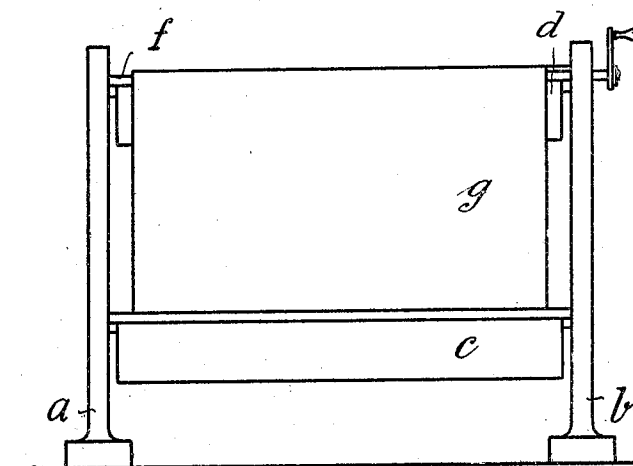


Fig. 2

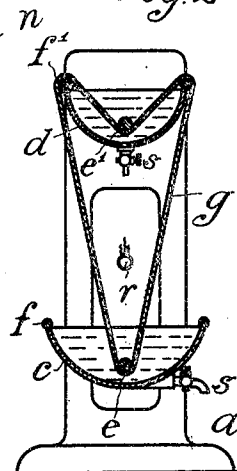


Fig. 3

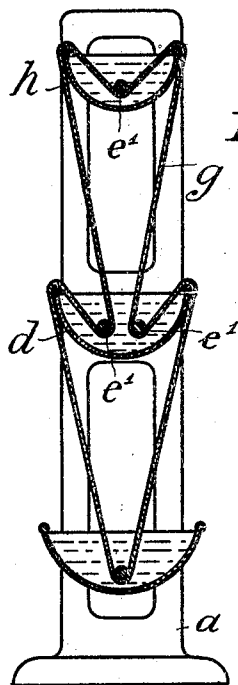
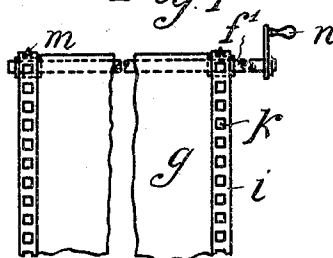


Fig. 4



Witnesses
Alfred Dicks.
Otto Kinner.

Inventor
Carl Alexander Erbslöh
by Adammas
Atty

UNITED STATES PATENT OFFICE.

CARL ALEXANDER ERBSLÖH, OF BARMEN, GERMANY.

AIR-MOISTENING.

SPECIFICATION forming part of Letters Patent No. 794,166, dated July 11, 1905.

Application filed March 3, 1904. Serial No. 196,454.

To all whom it may concern:

Be it known that I, CARL ALEXANDER ERBSLÖH, a subject of the German Emperor, residing in the city of Barmen, Rhenish Prussia, Empire of Germany, have invented a new and useful Improvement in Air-Moistening, of which the following is a specification.

My invention relates to a new and improved air-moistening apparatus which is simple in construction and yet effective, and which consists, essentially, of a cloth forming an endless belt and arranged to dip into vessels of liquid, said cloth being capable of traveling more or less, so that it may serve as a screen for an oven.

My invention is more fully described in the following specification and pointed out in the claims at the end of the same, and it is also illustrated on the accompanying drawings, of which—

Figure 1 is a front view of the apparatus. Fig. 2 is a vertical transverse section of Fig. 1. Fig. 3 is a vertical transverse section showing a modification, Fig. 4 showing in detail the moistening-cloth.

Like letters of reference indicate like parts in the drawings.

The apparatus consists of two vertical standards *a b*, which may be of any convenient form and material. Between said standards are fixed in any known manner two casings or troughs *c d*, which may be easily removed from the standards and which are filled with a liquid—as, for instance, water. In the said casings are removably fixed bars *ee'*, that may be turned in their sockets and, like bars *ff'*, are, if desired, fitted on the edges of the casings *c d* in a fixed or rotatable position, as shown. Round the bars *ee' ff'* is placed an endless cloth *g* in such a manner that a proportionately large portion of the same dips into or is touched by the liquid, and as the cloth is made of a hygroscopic material it will of course absorb the liquid and become perfectly and wholly moistened.

My apparatus contains, according to its construction, two inner and two outer air-moistening surfaces, and I therefore can build it in small proportions without diminishing its effect. If the same should be enlarged, I con-

struct my apparatus as shown in Fig. 3, in which I have fixed a third casing *h* to the standard, which is provided with a guiding-bar *e'*, while the casing *d* contains two guiding-bars *e'*, in order to turn the cloth into a second run, arranged above the first run, and to double the surfaces for moistening the air.

Now my apparatus may be used with advantage as a screen for ovens in order to advance the evaporation of the liquid contained in the cloth. For this purpose I arrange the cloth in such a manner that the same may travel more or less quickly, passing thus constantly through the liquid and being strongly moistened. The motion of the cloth may be obtained by simply drawing it by hand on its turnable guide-bars. A more convenient and effective construction may, however, be preferred. I provide the sides of the cloth, as shown in Fig. 4, with elastic and durable strips *i*, in which are cut holes or openings *k*. On one of the bars *ff'* are fixed prongs or teeth *m*, which fit into the holes *k*, and I further provide the bar *ff'* with a crank *n*. By turning this crank the cloth will be set in motion and passed through the liquid, as described before. Instead of by hand I can revolve the bar mechanically by means of an electric or other motor, watch, or clock. I further can arrange in the space inclosed by the cloth belt a heating contrivance *r* in order to augment the evaporation.

The casings may be fitted with faucets *s* for the purpose of conveniently emptying said troughs or casings. To the water I can add perfumes or other sweet-scenting materials.

I am aware that air-moistening apparatuses have been constructed before my invention, and I do not, therefore, claim such an apparatus broadly; but

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

1. The combination of two standards, a number of superposed liquid-troughs fixed between said standards, guide-bars located in said troughs and an endless cloth adapted to be carried round the bars to form moistening-surfaces as described and for the purpose set forth.

2. The combination of two standards, a number of superposed liquid-troughs fixed between

said standards, guide-bars located in said
troughs and an endless cloth adapted to be car-
ried round the bars said cloth having pierced
edges, one of the bars being provided with
5 prongs in order to engage the cloth edge and
having a crank for rotating the bars as de-
scribed and for the purpose set forth.

3. The combination of two standards, a num-
ber of superposed liquid-troughs fixed between

said standards, guide-bars located in said 10
troughs, an endless cloth adapted to be carried
round the bars and a heating contrivance ar-
ranged between the runs of the cloth as de-
scribed and for the purpose set forth.

CARL ALEXANDER ERBSLÖH.

Witnesses:

OTTO KÖNIG,

J. A. RITTERSHAUS.