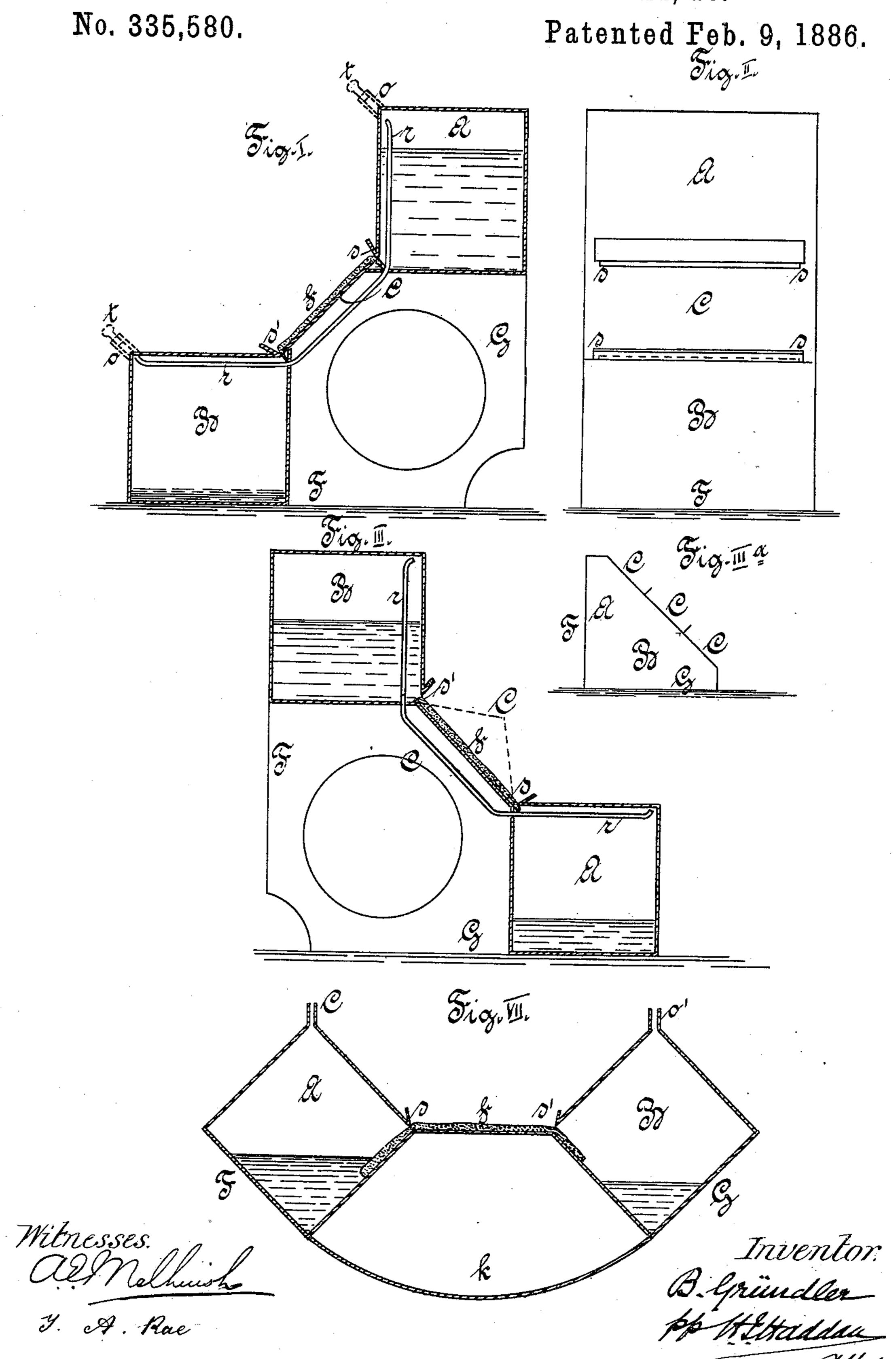
## B. GRÜNDLER.

APPARATUS FOR MOISTENING STAMPS, &c.

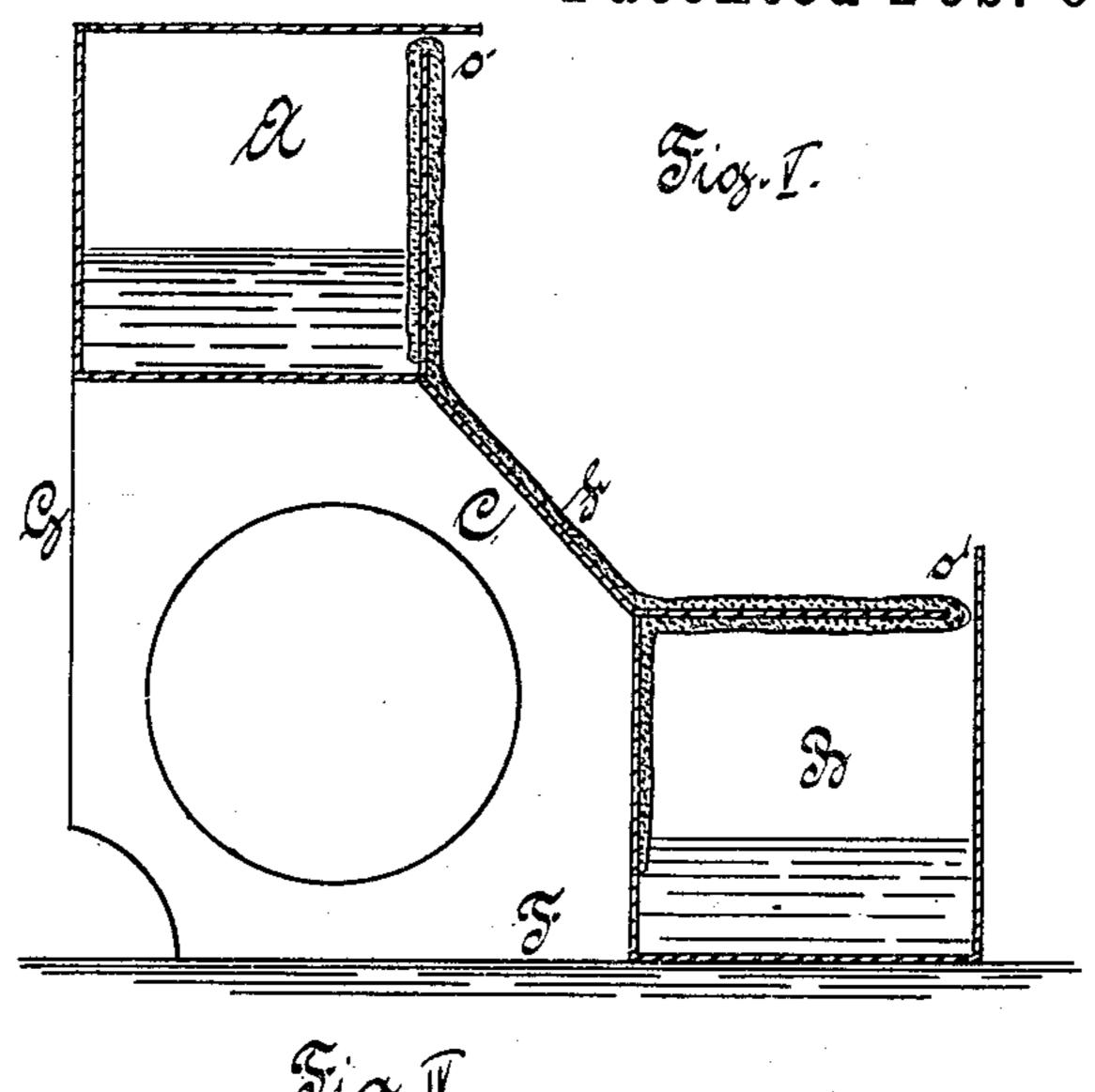


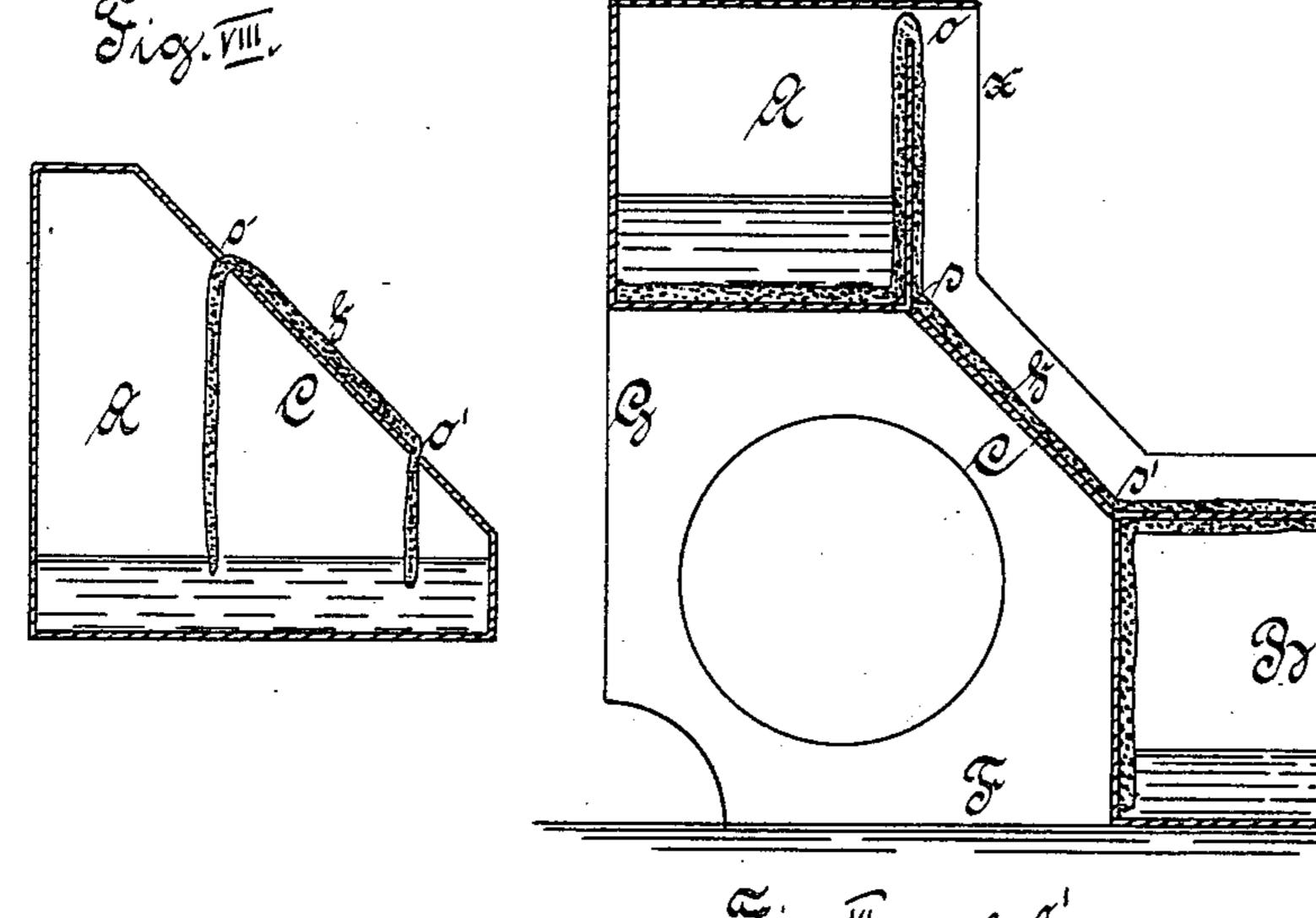
## B. GRÜNDLER.

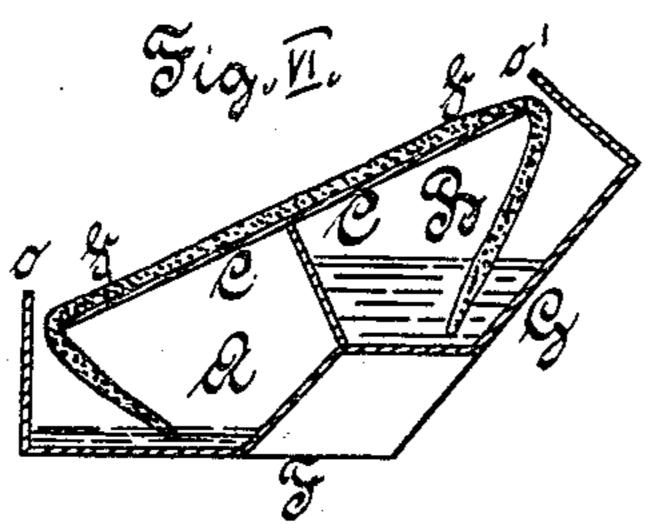
APPARATUS FOR MOISTENING STAMPS, &c.

No. 335,580.

Patented Feb. 9, 1886.







# United States Patent Office.

BERNHARD GRÜNDLER, OF PETERSDORF, PRUSSIA, GERMANY.

### APPARATUS FOR MOISTENING STAMPS, &c.

SPECIFICATION forming part of Letters Patent No. 335,580, dated February 9, 1886.

Application filed September 23, 1884. Serial No. 143,783. (No model.) Patented in Germany May 3, 1884, No. 28,467, and in England, May 30, 1884, No. 8,452.

To all whom it may concern:

Beit known that I, BERNHARD GRÜNDLER, a subject of the King of Prussia, Germany, residing at the village of Petersdorf, near Zielenzig, in the Kingdom of Prussia, have invented new and useful Improvements in Apparatus for Moistening Stamps, Labels, and Similar Articles, of which the following is a specification.

This invention relates to a moistening ap-10 paratus for stamps, labels, and similar arti-

cles.

In describing the invention reference is made to the accompanying drawings, Figures I to VIII, which represent various modifica-15 tions and details of apparatus embodying this invention. Two liquid-receptacles, A and B, are placed side by side at different levels and provided with base-plates F and G, forming an angle which is less than one hundred and 20 eighty degrees. Between the two receptacles is situated the moistening-surface C, and each receptacle has a slit, s, for the discharge of the water. The upper receptacle, A, is filled with water, which is slowly discharged through the 25 slit s, passes over the surface between the two slits, and enters through the lower slit into the receptacle B. After the receptacle A has been gradually emptied, whereby the receptacle B has been filled, the apparatus is reversed, so 30 that B is placed above and A below, whereupon the action of the apparatus is renewed. For the purpose of obtaining the required effect, the air spaces of the receptacles A and B are either connected with each other by a 35 connecting-pipe, r r, or the receptacles are provided with apertures o o, through which the air passes in and out. The moistening of the moistening-surface C is caused by the law

Figs. I and II represent a vertical section and front view of such an apparatus. A and B are the two receptacles; F and G, the base-plates; C, the moistening-surface; f, the moistening-strip, made of felt, cloth, or blotting-paper, or any other suitable material. r r show the connecting-pipe of the two air-spaces,

of gravitation of the liquid, assisted by the

which is immersed in the liquid of one or both

40 capillary attraction of the moistening cloth f,

which may be replaced by apertures o o with 50 stoppers t t. (Represented in dotted lines.)

Fig. III represents the above-described apparatus in the reversed position, and shows in dotted lines that the moistening-surface may also be angular.

Fig. III<sup>a</sup> represents the moistening surface arranged at a level with the side walls of the

receptacles A and B.

Fig. IV represents a modified arrangement of the felt strip f, owing to which the walls of 60 the receptacles A and B themselves serve as a moistening-surface, so that the central moistening-surface, C, may eventually be entirely omitted. x is a flange of the apparatus, protruding sidewise. o o' and s s' are apertures 65in the receptacles, the apertures ss' being preferably small holes, while the apertures o o' are broad slits, so that the water discharged under pressure at s, which does not enter at s', passes through the broad slit o' into the receptacle B. 70 In some cases it is sufficient if the effect of the capillary attraction of the moistening cloth fonly is used for moistening the same. (See Figs. V and VI.) If, in the apparatus represented in Fig. IV, the small apertures s and 75 s' are omitted, the removal of the water from the receptacle A to the receptacle B is effected only by the capillary attraction of the moistening-cloth f, which is sufficient for all such cases in which an uninterrupted use of the 8c apparatus is not required.

Fig. VII represents another modification, in which the two base-plates F and G form a

cradle by means of the bend k.

Fig. VIII represents a modification in which 85 capillary attraction only is used for moisten-

ing the surface f.

If, in the construction represented by Figs. V and VII, the walls separating the receptacles A and B are omitted, the apparatus is 90 converted into one receptacle, A, Fig. VIII, provided with two slits, o and o', in which arrangement the moistening-cloth f, which passes through these slits and is immersed in the liquid, causes the same effect as the apparatus 95 represented above, only somewhat weaker.

What I claim is, in moistening apparatus consisting chiefly of two receptacles acting al-

ternately as feed vessels or receptacles for the discharged or used liquid—

1. In moistening apparatus, the combination of a frame or stand having two alternative bases, F and G, placed at an angle to each other, with a pair of liquid-receptacles, A and B, placed at a distance apart and provided with openings s, and a sheet of porous material, f, between the openings and connecting to the receptacles, substantially as described.

2. In moistening apparatus, the combination of a stand or frame having two alternative bases, F and G, with a pair of liquid-re-

ceptacles, A and B, a sheet, f, and a pipe, o, open at both ends and connecting the top of 15 the air-space of one receptacle with the top of the air-space of the other, substantially as described.

Intestimony whereof I have signed my name to this specification in the presence of two 20 subscribing witnesses.

#### BERNHARD GRÜNDLER.

Witnesses:

B. Roi,

E. GEDALIUS.