

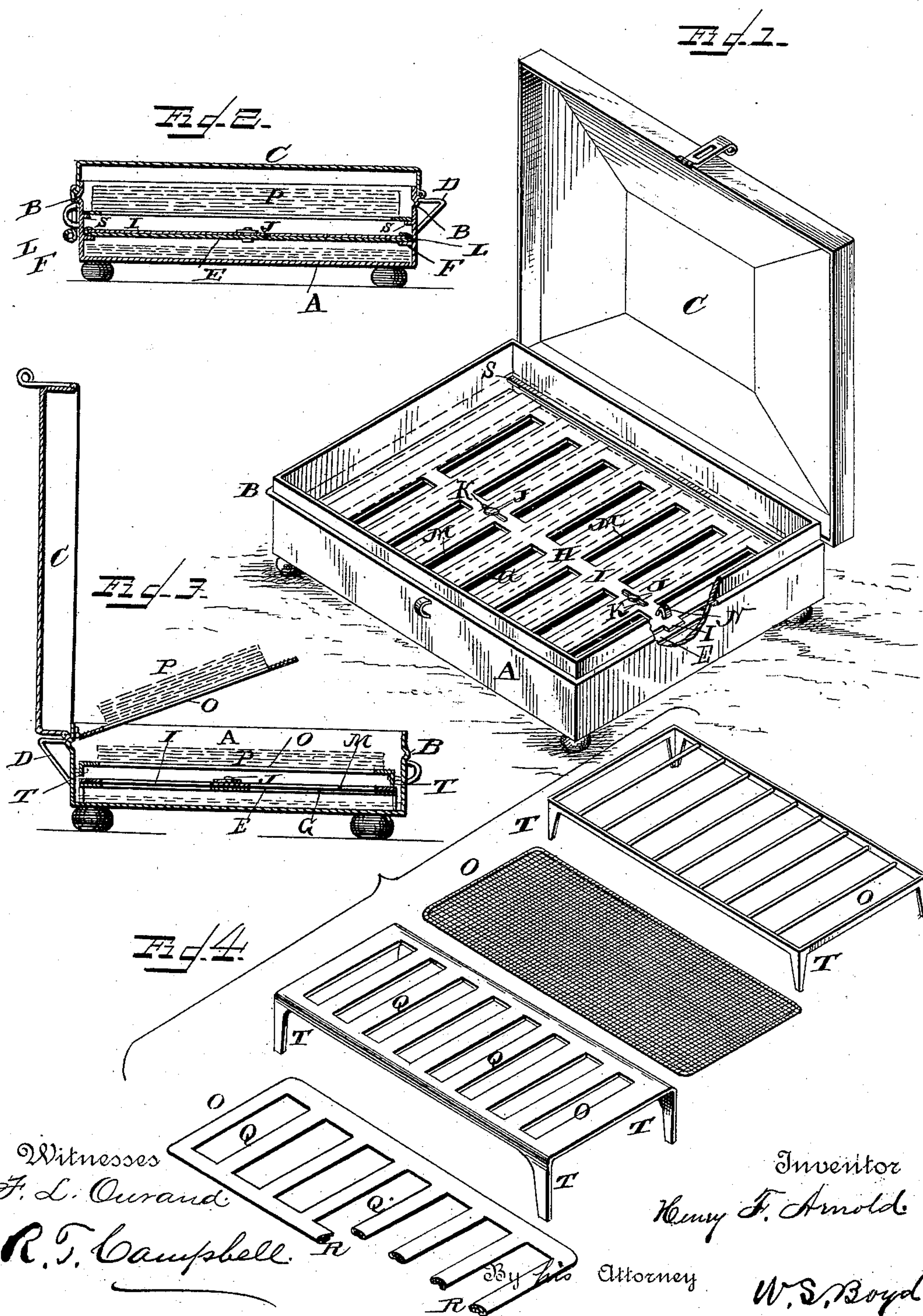
(No Model.)

H. F. ARNOLD.

BLOTTER BATH.

No. 378,641.

Patented Feb. 28, 1888.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY F. ARNOLD, OF MANCHESTER, IOWA.

BLOTTER-BATH.

SPECIFICATION forming part of Letters Patent No. 378,641, dated February 28, 1888.

Application filed June 4, 1887. Serial No. 240,302. (No model.)

To all whom it may concern:

Be it known that I, HENRY F. ARNOLD, a citizen of the United States, residing at Manchester, in the county of Delaware and State of Iowa, have invented certain new and useful Improvements in Blotter-Baths; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved blotter-bath, showing the rack in dotted lines. Fig. 2 is a transverse vertical sectional view of the same, showing the blotter-pads in position in dotted lines. Fig. 3 shows a modification, and Fig. 4 is a detail view of different forms of the rack or grate.

In all important correspondence it is often desirable, if not absolutely necessary, to keep a copy of papers and letters sent, which is most easily and quickly done by means of what is known as "letter-press copy." To make good copies by this process requires that the pads of blotting-paper or other absorbent material should be of an even moisture throughout, which is an impossibility where the water is applied by the ordinary means of a brush or sponge. To immerse them in water makes them too wet, and after they have been placed between dry pads until the whole pile are of the right moisture an exposure to the the atmosphere for a short time will make them too dry. If they are placed in a closed vessel, the evaporation from them will be prevented, and if the vessel also contains water the evaporation from it will supply the amount of moisture which has been taken from the pads in using them; but such vessel must have means whereby the amount of evaporation from the water can be controlled, or the pads will be apt to become too moist or perhaps too dry.

My invention consists in the improved construction of a vessel of this class and of providing it with means for controlling the amount of evaporation and of so placing the pads as to be accessible to the moisture at all points,

as will be hereinafter more particularly described, and pointed out in the claims.

Referring to the accompanying drawings, in which the same letters of reference indicate corresponding parts in all the figures, A represents the pan or bath, near the top of which is a bead or projection, B, against which the cover C fits when it is closed, thus making as close a joint as possible to prevent the escape of the moisture. The side of the pan to which the cover is hinged is provided, if desired, with two brackets, D, against which the cover rests when opened. A false bottom, E, is secured in the pan by means of ribs or projections F upon its sides at a little distance from the bottom of the pan; or short legs or supports can be used instead, or the sides of the bottom may be turned down to form supports. This false bottom is provided with slots or apertures G, preferably arranged transversely of the bottom and at its sides, either with or without leaving a solid portion, H, through its middle. Upon this false bottom a slide, I, is secured by means of rivets J, which project through slots K, and also by having its edges passed under the flanges L at the sides of the bottom, which are turned up for that purpose; or the rivets may be omitted. This slide is provided with holes or apertures M, which are of the same size and register with the apertures G in the false bottom, so that by moving the slide back or forth, which can be done by means of the stud or button N at one end, the holes in the false bottom can be opened or closed, as is necessary, to regulate the amount of evaporation.

A rack or grate, O, for supporting the pads P, which are only shown in dotted lines, is supported at a short distance above this false bottom by means of supports T, which rest upon the false bottom. This rack is preferably made or cast of some cheap non-corrosive material or of malleable iron and then galvanized as light as possible to support the pads and provided with cross-bars Q, or it can be made of a single sheet of metal and the cross-bars be formed by stamping out the material between them, or it can be cut and folded back under the bars, as shown at R, thus making a stronger rack or grate; or, if preferred, the grate can be made of a small sheet of wire

screen having a piece of heavier wire around its edge to give it the requisite strength.

In some offices it is necessary to have two sizes of pads to accommodate different sizes of paper, in which case the bath can be provided with two grates, one of them secured as above and the other hinged at one edge to the side of the pan high enough above the other one to permit of having a pile of pads between the two grates of one size and another pile upon the top grate of another size. Instead of having the supports secured to or a part of the grates, they can be formed by securing ribs along the sides of the pan at the required distance above the projections F. By the use of the grate above the false bottom a better result is obtained as the evaporation from the water passes up through the apertures in the false bottom, and it permits of a free circulation of the moisture underneath the pads, which passes up through them as well as on all sides and above them.

In using the bath a sufficient quantity of water or other suitable liquid, usually about half or three-quarters of an inch deep, is placed in the bottom of the pan, and the pads after being properly moistened or after having been used are placed upon the grate and the lid closed down, it and the pan being provided with a suitable fastening device to keep them securely closed. In this condition, where they are exposed to the moisture from all points, they remain until wanted for use again, the pile being turned upside down occasionally as the lower pads become wetter than the top one, as they are directly over the water.

By the use of my bath (which may be made out of galvanized iron or other non-corrosive material and of different sizes to accommodate different-sized blotters) all the bother and loss of time necessary with the old style of wetting the pads separately with a brush or sponge is avoided and better results are obtained, as the pads are of such a uniform moisture that the copy is neither too pale nor too much blurred to be easily read.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a blotter-bath, the combination of a pan, a closely-fitting lid or cover hinged thereto, a false bottom within said pan, provided with apertures, means, substantially as described, for regulating the size of said apertures, and a grate above said false bottom.

2. In a blotter-bath, the combination of a pan, a closely-fitting lid hinged thereto, a false bottom within said pan, provided with apertures, a slide upon said false bottom, provided with apertures registering with the apertures in said false bottom, and a grate above said false bottom.

3. In a blotter-bath, the combination of a pan, a closely-fitting lid hinged thereto, a false bottom within said pan, having a series of apertures at each side transversely to the bottom, leaving a solid portion through its middle and having its edges flanged, a slide upon said bottom, having apertures, and a solid portion registering with the false bottom and having two slots in its solid portion, rivets projecting through said slots, a knob or button, and a grate above said false bottom.

4. In a blotter-bath, the combination of a pan, a closely-fitting cover hinged thereto, ribs or projections upon the interior of said pan, a false bottom upon said ribs, and a grate above said false bottom.

5. In a blotter-bath, the combination of a pan, a closely-fitting cover hinged thereto, a false bottom within the pan, and a grate above the false bottom, said grate consisting of a single piece of metal the edges of which are bent down to form supports and having cross-bars formed across its body portion by cutting away the material between them.

6. In a blotter-bath, the combination of a pan, a closely-fitting cover hinged thereto, a false bottom within said pan, a grate supported above said false bottom, and a second grate hinged at one of its edges to the side of the pan above said first-mentioned grate.

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

HENRY F. ARNOLD.

Witnesses:

GEO. W. DUNHAM,
CALVIN YORAN.