(No Model.)

N. C. STILES.

DAMPENING BATH FOR PRESS COPYING.

No. 260,251. Patented June 27, 1882.

fig 1

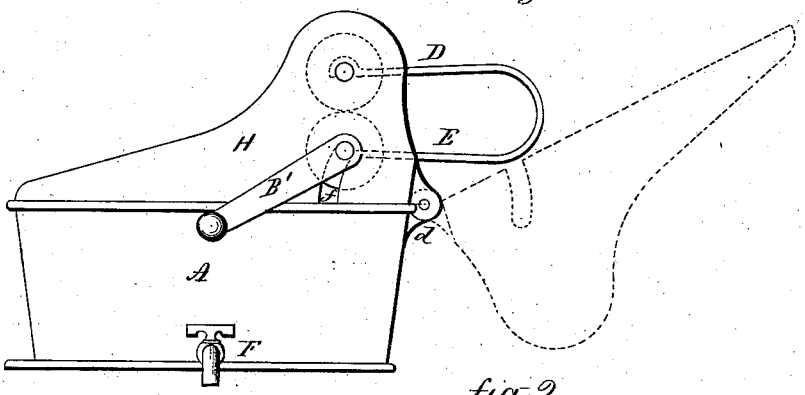


fig 2

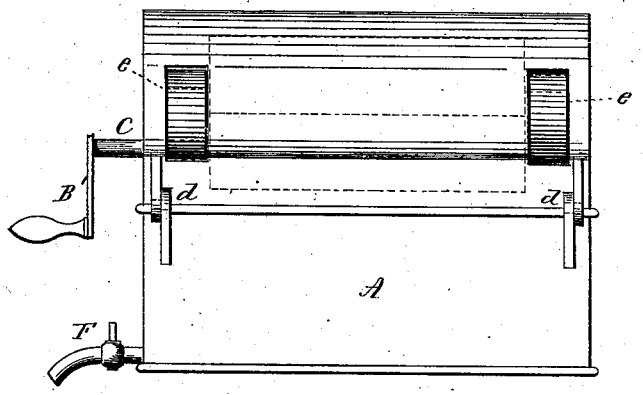
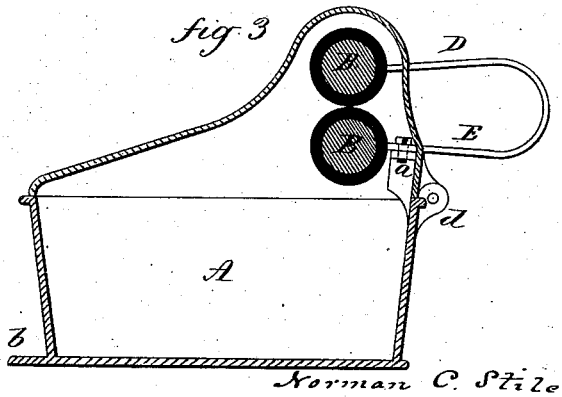


fig 3



Witnesses.
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UNITED STATES PATENT OFFICE.

NORMAN C. STILES, OF MIDDLETOWN, CONNECTICUT.

DAMPENING-BATH FOR PRESS-COPYING.

SPECIFICATION forming part of Letters Patent No. 260,251, dated June 27, 1882.

Application filed November 9, 1881. (No model.)

To all whom it may concern:

Be it known that I, NORMAN C. STILES, of Middletown, in the county of Middlesex and State of Connecticut, have invented a new Improvement in Dampening-Baths for Press-Copying; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, an end view; Fig. 2, a rear view; Fig. 3, a transverse section.

This invention relates to a device to facilitate the dampening of paper for copying written documents. Various devices are resorted to for this purpose, the one most generally used being to wet the paper directly, either with a brush or sponge, and then absorb the surplus water before copying. Other devices, however, have been used for this purpose—as, for instance, wetting a cloth, and then laying that cloth on one side of the copying-paper, while the document to be copied is upon the opposite side. Then pressure is applied. The dampness from the cloth penetrates the paper and produces the copy; but in this latter method a serious difficulty is experienced, owing to the impossibility of an even wetting of the cloth, except it be passed through a wringer. In some cases a common wringer has been used for this purpose, but it is inconvenient and cumbersome.

The object of this invention is the construction of a wetting-bath with a wringer combined therewith, so that the cloths to be used for copying may be conveniently wet, then squeezed or wrung; and the invention consists essentially in a tank to contain the water in which the cloths are to be wet, with a wringer attached thereto and made a part thereof, as more fully hereinafter described.

A represents the tank, which is made of cast metal, and preferably square or box-shaped, of a size to contain sufficient water and the cloths which are to be wet.

B B are two common india-rubber wringer-rolls each arranged in suitable bearings, the shaft C of the lower roll extending outward, and provided with a crank, B′, by which the rolls may be turned. The upper roll is hung at each end in an arm, D, of a spring, which gives the requisite pressure to the roll. The rolls are best attached by making the bearings for the rolls, one in the end of one arm, D, and the other in the end of the arm E of a U-shaped spring, the lower arm, E, being secured to a lug on the side of the tank, as at Fig. 3. The tank is fitted with projecting ears *b* at the bottom, by which it may be secured in position, and is fitted with a cock, F, by which the water may be drawn off when occasion requires.

H is a cover in size corresponding to the top of the tank, and hinged in rear of the rolls, as at *d*, and constructed to extend up over the rolls, so as to not only cover the rolls but cover the tank entire when closed, as seen in Figs. 1 and 3. This cover swings backward from the rolls and forms in the rear a receiver for the cloths which run through between the rolls—a great convenience, not to say necessity.

In case of the construction of the spring as shown, it will be necessary to make openings *e* through the rear of the cover, as seen in Fig. 2, and also to provide the end of the cover with a slot, *f*, to pass down over the crank-shaft, as seen in Fig. 1. In this device I make an article completely ready for use in which cloths may be wet, squeezed, and delivered into a receiver, from which they may be taken moistened in the most perfect manner and ready for use.

Other arrangement of the rolls may be made—that is, so far as the method of applying pressure thereto is concerned—it only being essential to this invention that there shall be a pair of rolls arranged in connection with or as a part of the tank, whereby the cloths may be readily taken from the tank, delivered to the rolls, the surplus water falling back into the tank and the cloths passing from the rolls outside the tank.

From the foregoing it will be understood that I do not broadly claim the employment of the pressure-rolls as a means for squeezing or wringing cloths for copying purposes; but

What I do claim is—

The tank A, combined with the rolls B B, arranged upon one edge of the tank, and the crank B′ for imparting rotary movement thereto, with the cover H, arranged in rear of the rolls, and so as to serve both as a cover to the box and receiver for the cloths, substantially as described.

Witnesses: NORMAN C. STILES.
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