

107 Printing  
 Pumping.

# J. A. Lynch.

## Paper Dampener.

No. 70,479. Patented Apr. 7. 1868.

Fig. 1.

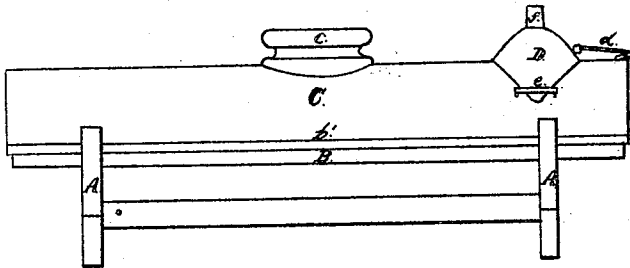


Fig. 2.

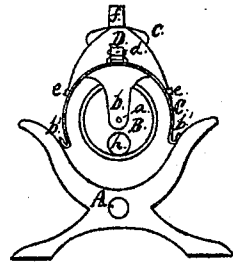


Fig. 3.

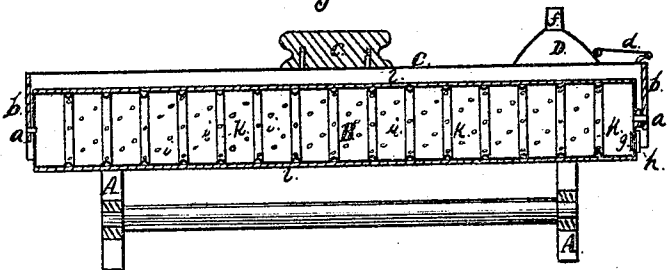


Fig. 4.

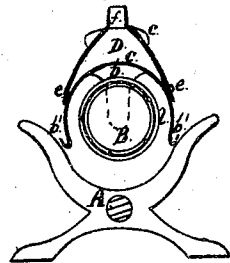
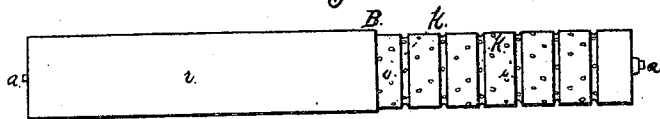


Fig. 5.



Witnesses.

J. N. Piper

Lairitz Mollen

Inventor.

J. A. Lynch.

by his attorney.

R. H. Eddy

# United States Patent Office.

J. AUGUSTUS LYNCH, OF BOSTON, MASSACHUSETTS.

*Letters Patent No. 76,479, dated April 7, 1868.*

## IMPROVEMENT IN PAPER-DAMPENERS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, J. AUGUSTUS LYNCH, of Boston, in the county of Suffolk, and State of Massachusetts, have invented an Improved Paper-Dampener; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a side elevation,

Figure 2 an end view,

Figure 3 a longitudinal section, and

Figure 4 a transverse section of it.

Figure 5 is a view of its roller, representing the cloth covering thereof as partially removed.

These figures also represent the dampener as supported in the crotches of a stand, marked A.

The dampener is to moisten a sheet of paper, or the leaf of a copy-book, preparatory to an impression of a written page being taken thereon by means of a press.

In the drawings, B denotes a hollow metallic cylinder, provided with journals, *a a*, at its two ends, to enter corresponding holes in two arms, *b b*, which project down from the extremes of an arched cover, C. The said cover extends about the cylinder, in manner as represented; and at or near its two ends the cover is bent or curved outward, as shown at *b' b'*. A knob or handle, *c*, extends up from the middle of the top of the cover. Furthermore, there is connected with the cover, at one end of it, and by means of a link or arm, *d*, hinged to the cover, a small tunnel, D, the link also being hinged to the tunnel. This tunnel is constructed so as to straddle and rest on the top surface of the cover, and enter two long staples or clasps, *e e*, projecting therefrom, as represented in the drawings, the whole being so as not only to support the tunnel on the cover, but enable the tunnel to be turned over away from its seat, and moved so as to carry its nose or tube, *f*, into a filling-hole, *g*, in the next adjacent head of the cylinder. A screw-cap, *h*, screws into the said hole, and stops it when the cylinder is supplied with water. The said cylinder is formed with numerous fine holes, *i*, leading through its sides, and also with a series of grooves, *k*, extending transversely about its curved surface, and at or about at equal distances asunder, there being one or more of the discharging-holes leading into each of such grooves. Around the cylinder so made is a covering, *l*, of cloth, or some other proper absorbent material.

The cover, on each side of the cylinder, extends nearly down to a level with the lower part of the cylinder. This cover answers to protect the cylinder from dust, and to support it within the stand, and out of contact therewith.

The grooves around the surface of the cylinder are channels to hold air, and enable it to pass into the cylinder, in order to facilitate the escape of water therefrom. With these grooves, and their passages leading from them into the cylinder, it has been found that the absorbent covering of the cylinder will be kept evenly saturated, but without them, or with the holes alone, it will not be so, as, by pressure of it on the holes, it becomes so jammed into them, in time as to effectually stop more or less of them, or materially impede the escape of water from them.

The stand A is formed with two crotches, to receive the edges of the cover, which rest in the crotches, and support the roller out of contact with them, or with anything below them.

To use the dampener, the roller, after having been supplied with water, is to be borne down upon and rolled upon the paper to be wet.

The dampener hereinbefore described differs from that which was patented by me, April 27, 1858, and is described in the United States Patent, No. 20,077, as it has no roller for removing the surplus moisture, nor any connection of such roller with the wetting-cylinder by means of a handle or frame. Besides, my patented dampener had no cover, nor any transverse grooves in its cylinder. Neither did it have any means of so supporting the cylinder; when not in use, that the outer periphery of its absorbent covering should be out of contact with anything.

I claim, in the above-described new or improved dampener, as my invention, the following; that is to say

I claim the combination of the filling-tunnel with the cylinder and its cover by means of the link or arm hinged to them, and so as to operate therewith, substantially as described.

I also claim the arrangement of the stand with the cover and the cylinder, in manner as described and represented.

I also claim the combination of the filling-tunnel with the cylinder and its cover.

J. AUGUSTUS LYNCH.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.