

(No Model.)

E. RYDER.
ENVELOPE MOISTENER AND SEALER.

No. 465,498.

Patented Dec. 22, 1891.

Fig. 1

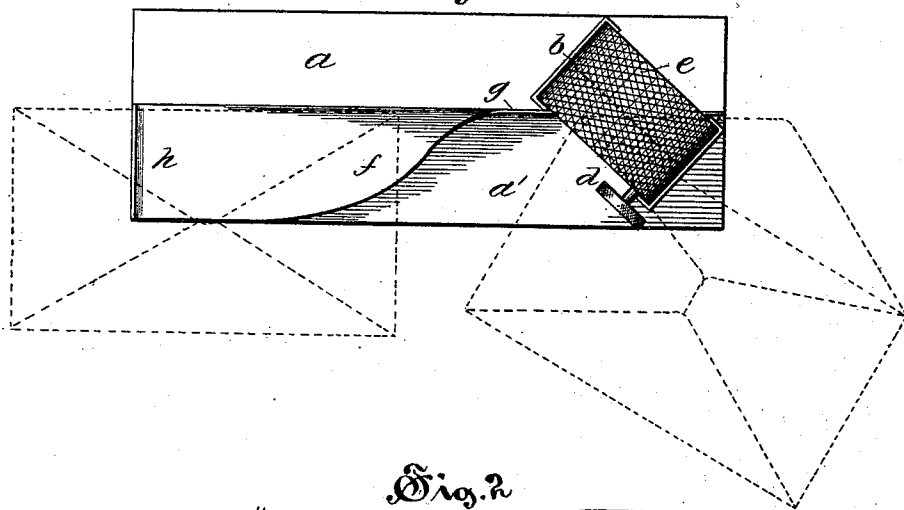


Fig. 2

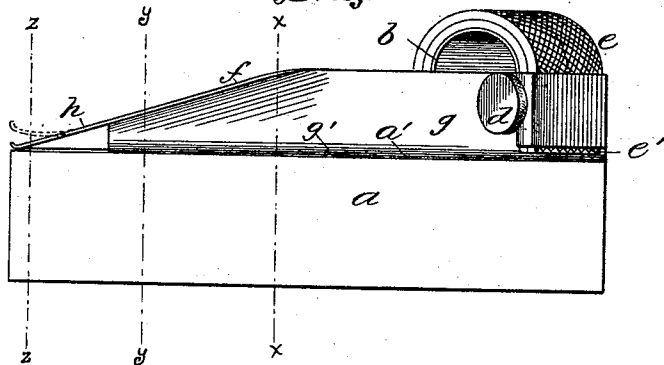


Fig. 3

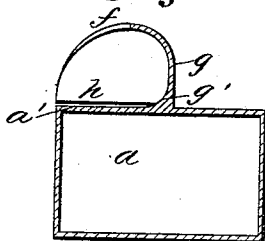


Fig. 4

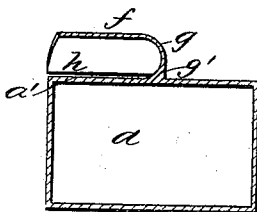
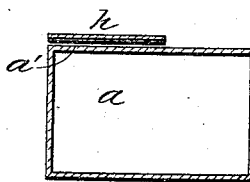


Fig. 5



Witnesses:

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ELISHA RYDER, OF HARTFORD, CONNECTICUT.

ENVELOPE MOISTENER AND SEALER.

SPECIFICATION forming part of Letters Patent No. 465,498, dated December 22, 1891.

Application filed March 25, 1890. Serial No. 345,201. (No model.)

To all whom it may concern:

Be it known that I, ELISHA RYDER, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Envelope Moisteners and Sealers, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

The object of my invention is to provide a device by means of which an envelope may be moistened for the purpose of affixing a stamp, and may also have its flap not only moistened, but sealed by the same device.

To this end my invention consists in the details of the moistening and folding device and in their combination, as more particularly hereinafter described, and pointed out in the claims.

Referring to the drawings, Figure 1 is a top or plan view of one form of the moistener and sealing device. Fig. 2 is a view in front elevation of the same. Fig. 3 is a detail view, in cross-section, of the folder on plane denoted by line *x x* of Fig. 1. Fig. 4 is a detail view, in cross-section, of the folder on line *y y* of Fig. 2. Fig. 5 is a detail view, in cross-section, of the sealer on line *z z* of Fig. 1.

In the accompanying drawings, the letter *a* denotes the reservoir or tank adapted to hold water, and this vessel may be of any convenient material, as of iron, copper, glass, or porcelain ware. At one end of the vessel there is arranged an outlet *b*, leading from the top of the vessel and curving downward, so that the outer end of the tube (the outlet is tubular both where it passes through the top of the reservoir and at the outer end) is arranged at the proper distance above the table *a'*, formed on the top of the reservoir, to enable the end of the wick or other like moistening device to be set a proper distance from the table to moisten anything that is inserted below the end of the tube. The moistening device is preferably made of a flat wick, such as is used in an ordinary lamp, and I have found the best results to follow from the use of two wicks that are stitched together along the center, making what may be called a "compound feed device." One end of the feed device is located within the water in the reservoir, while the other end is turned downward and looks toward the top

of the table, preferably near the right-hand end; but this end *e'* of the wick or other feeder is preferably located above the level of the surface of the water in the reservoir, in order that it may not serve as a siphon and carry so much water as to cause it to drop from the end of the feeder. Located as described the feeder absorbs and conveys just enough water to keep the working end of the feeder in a moist condition, the tube being preferably covered in from end to end to prevent evaporation, and being also provided near the working end with a feed-screw *d*. An envelope or other paper is moistened by introducing it edgewise underneath the feeder, from which a certain amount of moisture is wiped upon the paper, and an envelope may be thus moistened for the purpose of affixing the stamp.

In order to use the device for moistening and sealing an envelope, the envelope is introduced below the feeder from the right with the flap bent, as illustrated in dotted outline in Fig. 1, and then is slid toward the left until it encounters the wall of the folder *f*, that is an extension of the guide *g*—that is, a vertical wall arranged along the top of the reservoir to serve as a guide as well as support for the folder. The folder is wide and curved transversely toward its mouth, but narrows rapidly toward the farther end, so that the flap of the envelope is gradually turned down, as illustrated in Figs. 3, 4, and 5. The folder terminates in a flat spring-arm forming the sealer *h*, the outer end of the arm resting with a yielding pressure upon the end of the table *a'*, so that the sealer is adapted for use on envelopes of varying thicknesses. As the envelope is slid progressively from the right-hand end to the left-hand end of the device in the manner above described, an opened envelope is first moistened, then folded over, and finally thoroughly sealed by a single movement of the envelope across the table of the device. The lower corner of the guide is preferably rounded, as at *g'*, in order to properly start the folding process.

In many forms of feed devices that have been tested the compound feeder, consisting of the two wicks laid flatwise upon one another and fastened together by stitching, (usually along the center,) has given the best

results; but I do not limit myself to this specific form of feed device for conveying the water by capillary attraction from the reservoir to the working end of the feeder, as other
 5 absorbent fibrous fabrics may be used without departing from my invention.

To aid in the sealing of a long envelope the front edge of the sealer may be turned up, as shown in dotted lines in Fig. 2.

10 I claim as my invention—

1. In combination with a reservoir *a*, an outlet through the top thereof, a curved support for a fibrous moistener secured adjacent to the opening and provided with a feed device, the moistener feed device, and the fibrous
 15 moistener extending from within the reservoir and with its delivery end located above the possible level of the water in the reservoir, terminating near the surface of the top
 20 of the reservoir in a position accessible for the specific use described.

2. In combination with a reservoir *a*, an outlet through the top thereof, a curved support *b* for a fibrous moistener *c* adjacent to the
 25 opening and provided with a feed device *d*, the moistener consisting of two or more wicks superimposed and fastened together with one end within the reservoir and the other—the delivery end—located above the possible level
 30 of the water in the reservoir and near and overlying the surface of the top of the reservoir in a position accessible for the specific use, all substantially as described.

3. In combination with a reservoir for water
 35 or like fluid, the moistener consisting of a bent tube leading from the top of the reservoir and with the other end terminating near the top of the reservoir, the fibrous feeder lo-

cated within the tube and forming a moistener device, and the folder located on the top
 40 of the reservoir and terminating in a spring sealing device, all substantially as described.

4. In a device for moistening and sealing letters, the fibrous moistener located at one end of the reservoir with the delivery end of
 45 the moistener overlying the table formed by the top of the reservoir, the folder located adjacent to the moistener and terminating in a sealer, consisting of a flat spring-arm, overlying the top of the reservoir and having an
 50 opening between it and the surface less than the thickness of the object intended to be slid beneath it, all substantially as described.

5. In a device for moistening and sealing letters, the combination of the reservoir, the
 55 tubular outlet with a delivery end terminating near the surface of the reservoir, the fibrous feeder located within the tube, the guard located on the top of the reservoir, the folder forming a continuation of the guard,
 60 and the spring sealing device located beyond the folder, all substantially as described.

6. In a device for moistening and sealing letters, a table, a porous and absorbent water-retaining element located at one end of the
 65 table and closely overlying it, whereby a narrow passage is left between it and the table, the guard located beyond the moistener and leading into a folder that terminates in a sealing-arm that is adapted to hold with a yield-
 70 ing pressure an object slid beneath it, all substantially as described.

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Witnesses:

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