(No Model.)

J. M. DEMPSEY.

ENVELOPE MOISTENER AND SEALER.

No. 533,948. Patented Feb. 12, 1895.

Fig. 1.

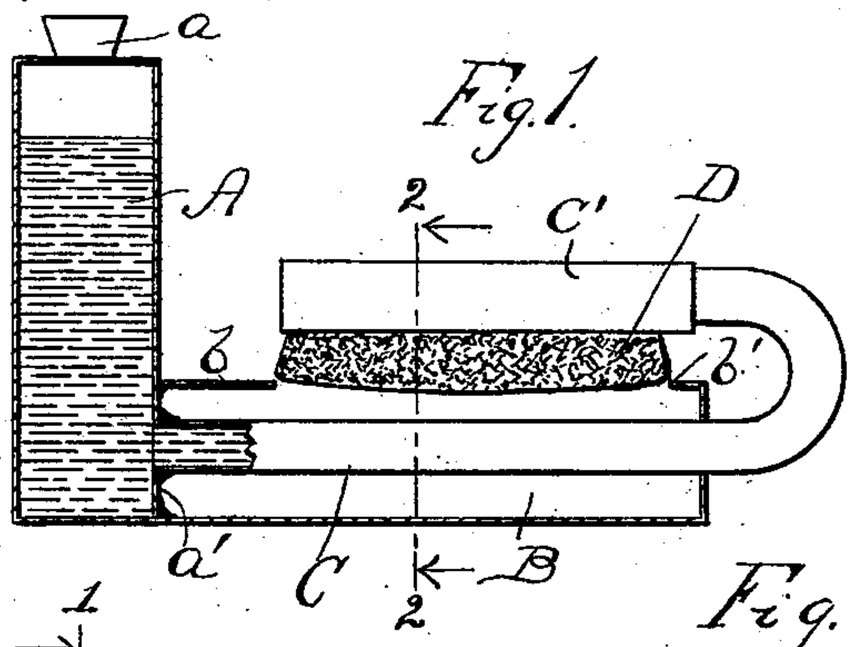


Fig. 5.

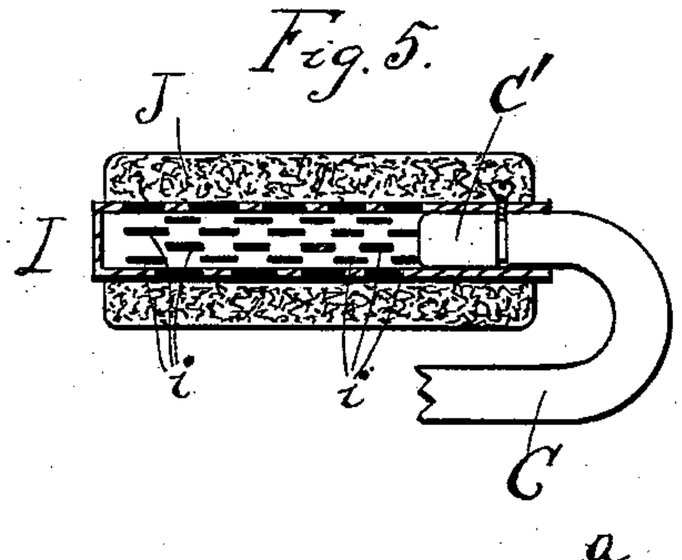


Fig. 2.

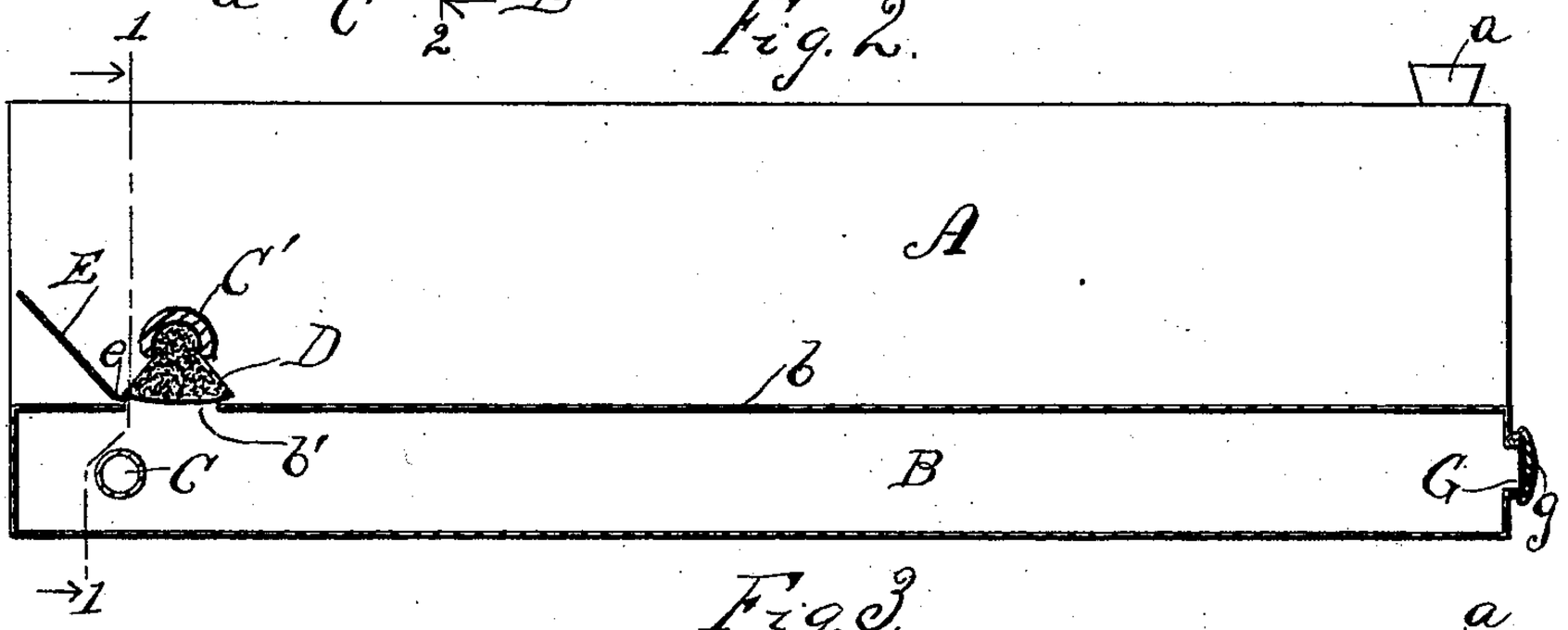


Fig. 3.

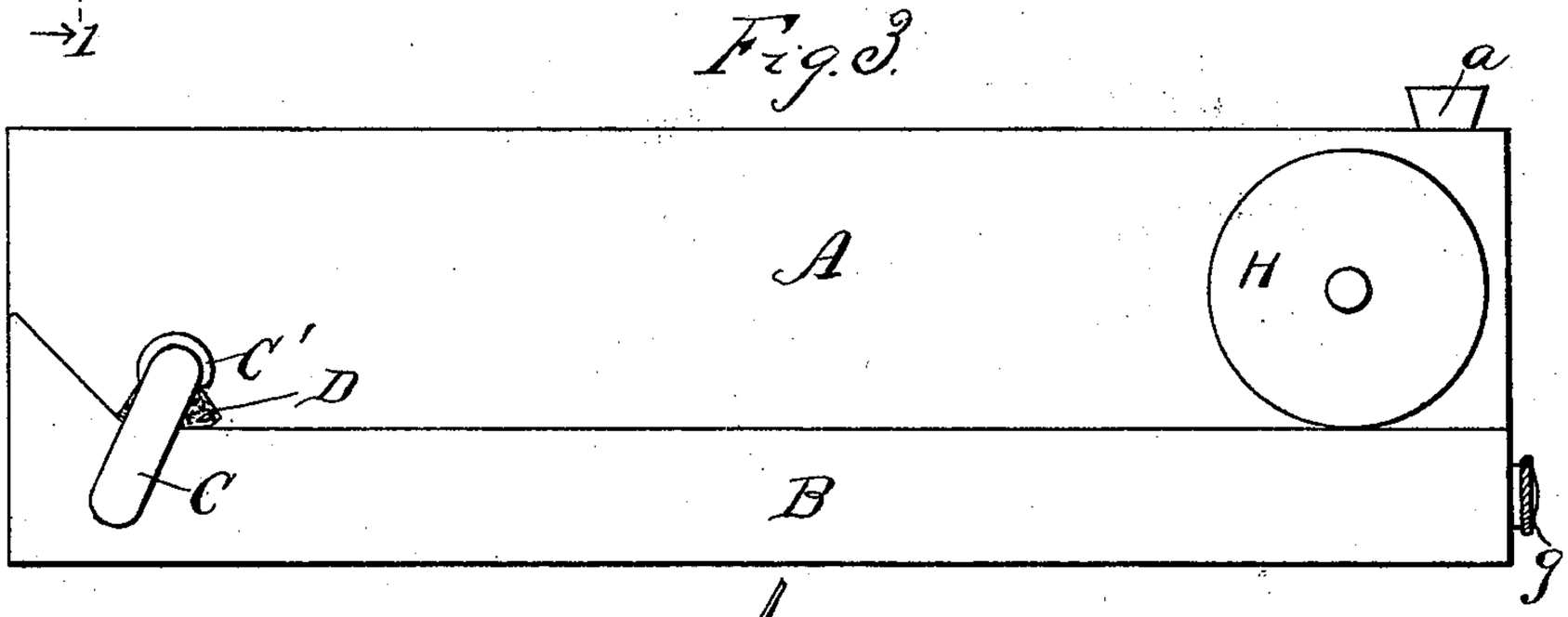
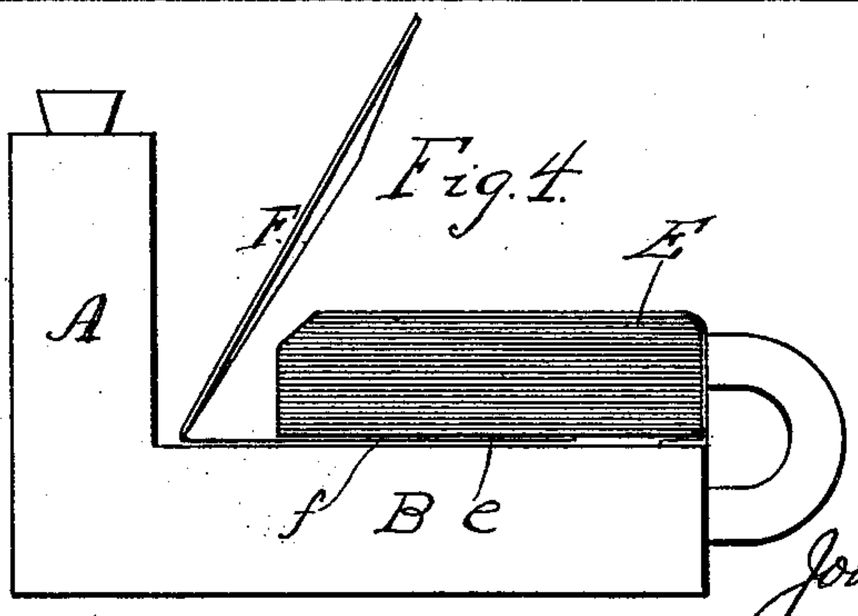


Fig. 4.



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ENVELOPE MOISTENER AND SEALER.

SPECIFICATION forming part of Letters Patent No. 533,948, dated February 12, 1895.

Application filed June 28, 1894. Serial No. 515,942. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. DEMPSEY, a citizen of the United States, residing at Milwaukee, county of Milwaukee, State of Wisconsin, have invented a certain new and useful Improvement in Envelope Moisteners and Sealers; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to new and useful improvements in devices for moistening and sealing the flaps of envelopes, and consists in the matters hereinafter described and pointed out in the appended claims.

In the accompanying drawings illustrating my invention, Figure 1 is a vertical transverse sectional view of a device constructed in accordance with my invention, said section being taken on line 1—1 of Fig. 2. Fig. 2 is a longitudinal vertical sectional view of the same. Fig. 3. is a front elevation of the same. Fig. 4. is an end elevation of the same. Fig. 5. is a detail sectional view illustrating a somewhat different form of moistener.

Referring by letter to said drawings, A designates a suitable reservoir or tank for water, provided in its upper side with a filling aperture conveniently fitted with a funnel *a*.

B designates a horizontally extending table or base, which is conveniently made hollow, in the manner shown.

As shown more particularly in Fig. 1 of the drawings, the tank or reservoir A does not communicate with the hollow base portion B, but is separated therefrom by a partition *a'*, so that water from the reservoir A cannot find its way into the hollow base.

A pipe C communicates at one end with the lower part of the reservoir A, and is conveniently carried out transversely through the hollow base B, and thence upwardly to a point above the level of the upper wall *b*, of the base, and the free end C' of said pipe is arranged to extend horizontally above said upper wall *b*, of the base B.

In the particular construction shown in Figs. 1 to 4 inclusive, of the drawings, a pad D of absorbent material is inserted in an opening or slot in the under side of the horizontal part C' of the bent tube, and this pad is arranged to extend somewhat below the lower side of said tube, with its lower surface in substantially the same horizontal plane as the top wall *b* of the base B.

As shown in the drawings, the reservoir A is made of such height as to extend considerably above the level of the horizontal pipe C' which supports the pad D of absorbent material so that water will readily find its way from the reservoir through the bent tube C, into the horizontal part C' of said tube and into contact with the pad D, so as to saturate said pad, and enable moisture to be applied thereby to the flaps of envelopes, which may be passed under said pad, in an obvious manner.

As shown more particularly in Figs. 1 and 2, I prefer to provide, immediately beneath the pad D, an opening or slot *b'* in the upper wall *b* of the base B, so that any excess of moisture will be permitted to drip from the lower side of said pad into the hollow base B, in an obvious manner.

In order to facilitate the passage of the envelope flaps beneath the pad D, I provide an oblique guide-plate E, shown more particularly in Figs. 2 and 4, the lower edge *e* of which is arranged to come close to the upper surface of the wall *b*, of the base B, a space being left between the end of the oblique plate E and the face of the reservoir A. By this construction the edges of the envelope flaps are guided beneath the pad D, and their gummed surfaces brought into contact with the moist pad, in an obvious manner, so as to moisten the gum and render the same adhesive. After the flap has been passed beneath the moistening pad, the envelope may be sealed in the ordinary way, if desired, but in order to facilitate the sealing as well as the moistening of the envelope flaps, I prefer to construct the base B in substantially the manner shown in the drawings, the upper wall *b* thereof affording a broad, flat surface upon which the envelopes may be folded down onto the flaps, in the operation of sealing.

In passing the envelopes through the device, the flaps *f*, of the envelopes, are opened up, as shown more particularly in Fig. 4, so as to pass horizontally beneath the pad, and

the main parts F of the envelopes held in an oblique or vertical position, as shown. In this position, the envelopes may be readily grasped and drawn lengthwise through the device, so as to pass the gummed flaps longitudinally beneath the pad, when the envelopes may be folded down, in the manner described, in sealing.

At one end of the hollow base B, I prefer to provide a discharge aperture, by means of which any accumulation of water in the hollow base may be poured out. For this purpose, I find it convenient to provide a nipple G, provided with a screw-threaded cap or plug *g*, by which it may be closed at will.

As a separate and further improvement, I may employ one or more pressure rollers H, revolubly mounted upon the device, in any convenient manner, so as to press the envelopes and the moistened flaps together in the operation of sealing.

Instead of the particular form of moistening pad shown in Figs. 1, 2 and 3 of the drawings, I may, of course, employ any other desired form of moistening device, such for instance, as that shown in Fig. 5, this latter device consisting of a sleeve I, revolubly mounted upon the horizontal part C′ of the bent tube C, and provided with perforations or apertures *i i* for the escape of water, and having an exterior covering or coating J, of absorbent material, adapted to take up the water and distribute the same over the surfaces of articles passed beneath it. In this particular form of construction, when the flaps of the envelopes are passed beneath the moistener, the latter will rotate in an obvious manner, and distribute moisture over the entire surface of the gummed flaps.

With my improved device, the flaps of envelopes may be very rapidly moistened and sealed, and the reservoir is capable of holding a supply of water sufficient for moistening the flaps of a large number of envelopes without the necessity of refilling the reservoir.

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

1. A device for moistening and sealing the flaps of envelopes comprising a reservoir, an elongated horizontal base, a pipe leading from the lower part of the reservoir and extending over said horizontal face, and provided with apertures for the escape of water, and a moistening pad of absorbent material secured to said pipe, and arranged to receive moisture from said apertures, substantially as described.

2. A device for moistening and sealing the flaps of envelopes comprising a reservoir for water, a horizontal base, a pipe leading from the lower part of said reservoir through said horizontal base, and bent upwardly and arranged at its free end to extend horizontally above said base, and provided with apertures for the escape of water, and a moistening pad secured to the horizontal part of said pipe, and arranged to receive moisture from said apertures, substantially as described.

3. A device for moistening and sealing the flaps of envelopes comprising a reservoir, an elongated horizontal base, a pipe leading from the lower part of the reservoir and extending over said horizontal base, and provided with apertures for the escape of water, a moistening pad of absorbent material secured to said pipe, and arranged to receive moisture from said apertures, and an oblique guide-plate arranged to direct the flaps to be moistened beneath said pad, substantially as described.

4. A device for moistening and sealing the flaps of envelopes comprising a reservoir, an elongated, hollow, horizontal base, a pipe leading from the lower part of the reservoir, and extending over said hollow horizontal base, and provided with apertures for the escape of water, a moistening pad of absorbent material secured to said pipe, and arranged to receive moisture from said apertures, a slot or aperture in the upper wall of the hollow base beneath said pad, and a discharge spout for water, provided with a cap or plug, substantially as described.

5. A device for moistening and sealing the flaps of envelopes comprising a reservoir A, for water, horizontal base B pipe C, a moistening pad secured to said pipe, and one or more pressure rollers H for compressing the envelopes upon the moistened flaps, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

JOHN M. DEMPSEY.

Witnesses:
JOHN E. WILES,
E. W. STRUT.