June 29, 1943. C. E. BAYLOR 2,323,004

ENVELOPE AND STAMP MOISTENER

Filed Oct. 1, 1941

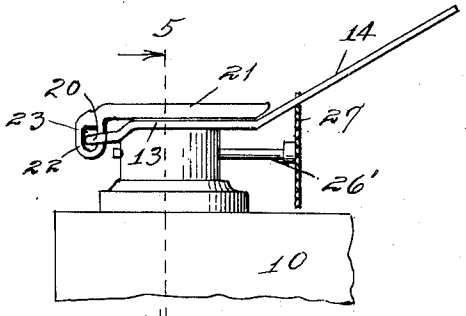


Fig. 4.

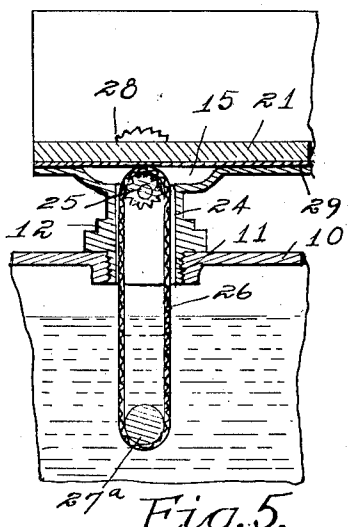


Fig. 5.

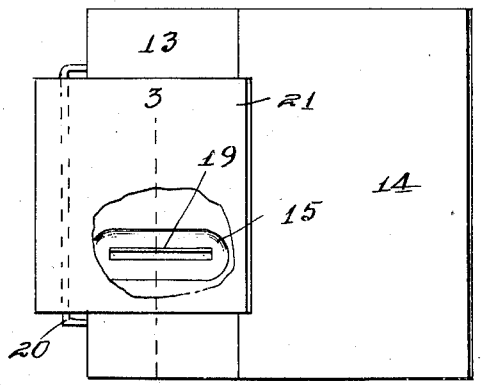


Fig. 1.

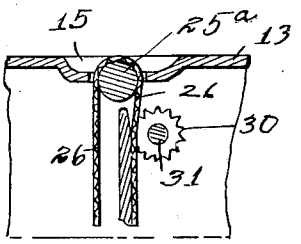


Fig. 6.

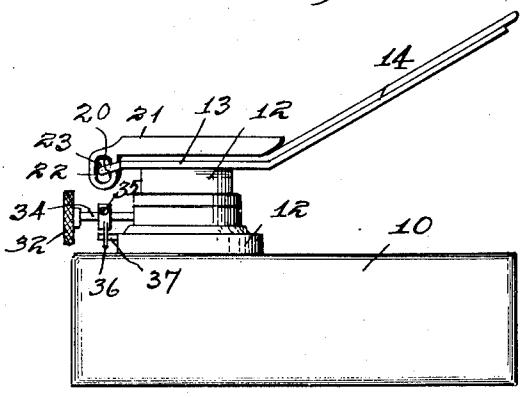


Fig. 2.

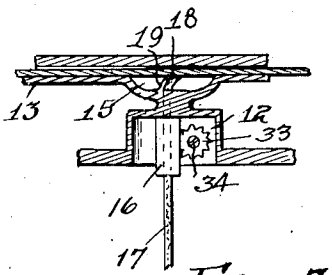


Fig. 3.

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UNITED STATES PATENT OFFICE

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ENVELOPE AND STAMP MOISTENER

Charles E. Baylor, Sigourney, Iowa

Application October 1, 1941, Serial No. 413,171

5 Claims. (Cl. 91—54.4)

The object of my invention is to provide an improved envelope moistener of simple, durable and inexpensive construction which is of comparatively small construction and particularly adapted to be placed on a desk.

A further object of my invention is to provide an envelope moistener with improved means for moistening the gummed surface of the envelope flap, wherein the gummed surface is always sufficiently moistened even when the flap is moved rapidly over the moistening device, and at the same time so arranged that any excess moisture or water will be removed from the envelope and permitted to drain into the water container.

A further object of my invention is to provide an improved means for applying the moisture to the gummed surface, consisting of a wick having one end supported in a container containing water and the other end supported in an upwardly and forwardly inclined position in relation to the line of movement of the envelope as it is passed over the wick, wherein a greater amount of surface of the wick may be applied to the envelope to more evenly distribute the moisture thereto.

A further object of my invention is to provide in a moistener employing an endless wick, improved means for changing the active position of the wick successively as the envelopes are passed thereover, said improved means being automatically operated by the movement of the envelope over the wick.

A further object of my invention is to provide an improved means for applying pressure to the envelope immediately over the wick, said pressure applying means being arranged wherein it may be easily adjusted when in inoperative position, to permit the moistening of postage stamps or the like.

My invention consists in the construction, arrangement and combination of the various parts of the device whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawing, in which:

Figure 1 is a plan view of one form of my improved moistener;

Figure 2 is an end view of the same;

Figure 3 is a detail sectional view taken on the line 3—3 of Figure 1;

Figure 4 is an end elevation of a slightly modified form of my device;

Figure 5 is a detail sectional view taken on the line 5—5 of Figure 4; and

Figure 6 is a detail sectional view of a slightly modified form of the construction illustrated in Figure 4.

My improved device comprises a water container 10, which may be of any suitable formation, having an opening 11 in its upper surface, preferably screw threaded, to receive a support or pedestal 12, the upper end of which is provided with a table 13 having one of its edges preferably provided with an upwardly and outwardly inclined portion 14, that portion of the table 13 immediately above the pedestal 12 being provided with an oblong and transversely arranged depression 15, the member 12 having a vertical and tubular member 16, which I shall term the wick casing, the upper end of the casing 16 terminating in the bottom of the depression 15 and provided with a wick 17, the upper end 18 of the wick being deflected upwardly and forwardly by means of a flange 19 supported transversely of the depression 15 and terminating in a plane substantially level with the top of the table 13.

Fixed to one edge of the member 13 is a loop-shaped rod 20 on which is pivotally mounted what I shall term a float 21, the said float 21 having a downwardly projecting portion 22 provided with a slot 23 for receiving the rod 20, thus providing a pivot for the float wherein the said float may be swung from a horizontal position, as illustrated in Figs. 1, 2 and 4, to an upwardly and outwardly inclined position, as illustrated in dotted lines in Figure 2. The float is designed to ride on top of the envelope flap as it is passed there-beneath, to cause the flap to engage the upper end of the wick with the wick under slight pressure, the slot 23 permitting the float to move upwardly and downwardly to accommodate flaps of various thicknesses, the float being adapted to be swung to its upwardly and outwardly inclined position to permit the user to utilize the wick for moistening stamps or other articles if so desired. In operation the body of the envelope is placed on the inclined portion 14 with the flap on top of the table 13 and beneath the float, and moved longitudinally beneath the float so that the entire gummed surface of the flap may be moistened, any excess moisture being deflected in the depression 15 and returned to the container 10 through the wick casing. The wick 17 is adjusted vertically the desired amount by means of a toothed wheel 33, a shaft 34 and the hand wheel 32, the shaft 34 being provided with a collar 35 having a lug 36 for engaging a pin 37 providing means for limiting the movement of the toothed wheel 33 so as to prevent the operator from accidentally feeding the wick downwardly to

a position where it will disengage the said toothed wheel.

In Figures 4 and 5 I have illustrated a slightly modified form of my device in which the pedestal 12 is provided with a vertical slot 24 wherein the said pedestal forms a wick casing, the upper end of the slot 24 being provided with a toothed wheel 25 for receiving an endless wick 26, the lower end of the wick being adapted to pass around a roller 27a, if so desired, to cause the wick to frictionally engage the wheel 25. The wheel 25 is provided with a shaft 26' having at its outer end a toothed wheel 27 of larger diameter than the wheel 25, and having its upper edge passing through a slot 28 in the member 14 a slight distance in such a manner that as an envelope is passed over the member 14, it will engage the upper edge of the wheel 27 and cause it to be rotated, and in turn the wheel 25, causing the wick 26 to also be rotated. The height of the wheel 25 is such as to cause the wick to engage the under and gummed surface of the envelope flap 29. Inasmuch as the wheel 25 is smaller in diameter than the wheel 27, it will be seen that the circumferential travel of the outer edge of the wheel 27, which is at the same speed as that of the envelope as it is passed thereover, is such that there is a dragging or rubbing effect between the wick and the gummed surface which produces substantially the same effect as moving the envelope over the wick, as illustrated in Figure 3. At the same time this provides means for changing the contact or active surface of the wick, so that a sufficient amount of moisture is always applied to moisten the gum, even when the envelope is rapidly moved over the wick.

In Figure 6 the wick 26 is driven by a toothed wheel 30 mounted on a shaft 31, instead of being driven by the wheel 25a directly. In the latter arrangement the roller 27a may be omitted, the shaft 31 being driven either by a hand reel 32, such as illustrated in Figure 2, or by an arrangement such as illustrated in Figure 4.

Thus it will be seen I have provided an envelope moistener of simple, durable and inexpensive construction in which the gummed surface of the envelope flap, may be sufficiently moistened to adhere to the envelope when folded and at the same time excess moisture is returned to the container, and wherein the active surface of the wick may be constantly changed as the device is operated.

I claim as my invention:

1. An envelope moistener, comprising a water container, a table with a depression in its upper surface, a wick casing having its upper end terminating in the bottom of said depression and its lower end terminating in said container, an upright wick for said casing, means for curving the upper portion of said wick to bend upwardly and forwardly wherein the gummed portion of an envelope flap supported on said table and moved over said wick will engage said curved portion and moisten the same, and wherein any excess moisture will be contained in said depression and returned to said container.

2. An envelope moistener, comprising a water container, a supporting table having a depression, a wick casing in said container having its upper end terminating in said depression, a continuous wick within said casing, a toothed wheel on the upper end of said casing for supporting said wick, said wheel having an outwardly extending shaft, a second toothed wheel on the outer end of said shaft for rotating said roller and having its upper edge extending upwardly through said table to engage an envelope passed over said table and engaging said wick, whereby the first toothed wheel will be rotated each time an envelope is passed over said table and a new portion of said wick caused to engage said envelope.

3. An envelope moistener, comprising a water container, a table with a depression in its upper surface, a wick casing having its upper end terminating in the bottom of said depression and its lower end terminating in said container, an upright wick within said casing, means for curving an upper portion of said wick upwardly and forwardly wherein the gummed portion of an envelope flap supported on said table and moved over said wick will engage said curved portion and be moistened by the same, and wherein any excess moisture will be contained in said depression and returned to said container, and means for adjusting said wick.

4. An envelope moistener, comprising a water container, a table with a depression in its upper surface adapted to have the gummed surface of an envelope passed thereover, a wick casing having its upper end terminating in the bottom of said depression and its lower end terminating in said container, an upright wick for said casing, means for curving an upper portion of said wick to bend upwardly and forwardly wherein the gummed portion of an envelope flap supported on said table and moved over said wick will engage said curved portion and be moistened by the same, and wherein any excess moisture will be contained in said depression and returned to said container, and means for automatically adjusting said wick to cause a newly moistened portion of said wick to engage the envelope each time it is passed over said wick.

5. An envelope moistener, comprising a water container, a table with a depression in its upper surface and a wick-receiving opening in the bottom of said depression, an upright wick supported within said opening and depression, means for curving an upper portion of said wick upwardly and forwardly wherein the gummed portion of an envelope flap supported on said table and moved therethrough will engage the curved portion of said wick and moisten the gummed surface of said envelope.

CHARLES E. BAYLOR.