Aug. 28, 1928. 1,681,984

H. F. LESSMANN

STAMP AFFIXING MACHINE

Filed Sept. 19, 1927 2 Sheets-Sheet 1

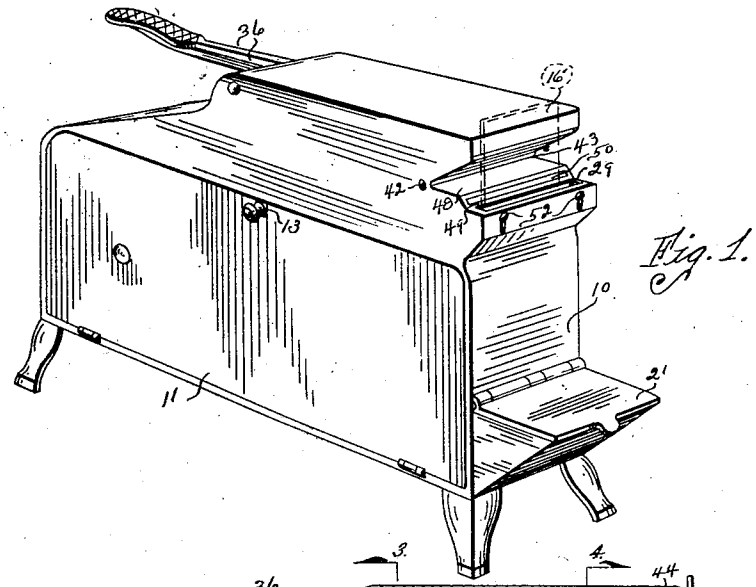


Fig. 1.

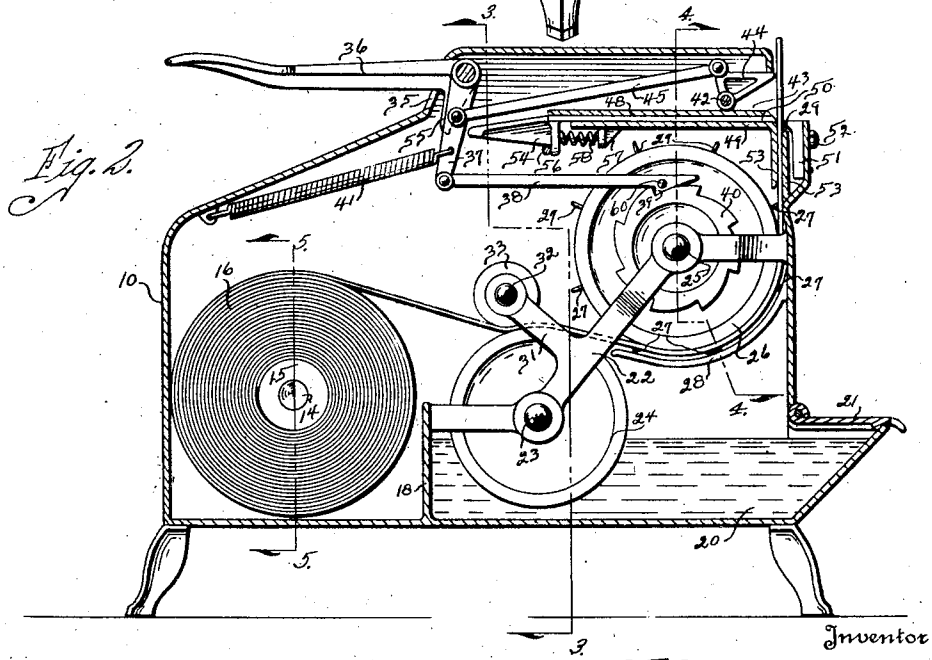


Fig. 2.

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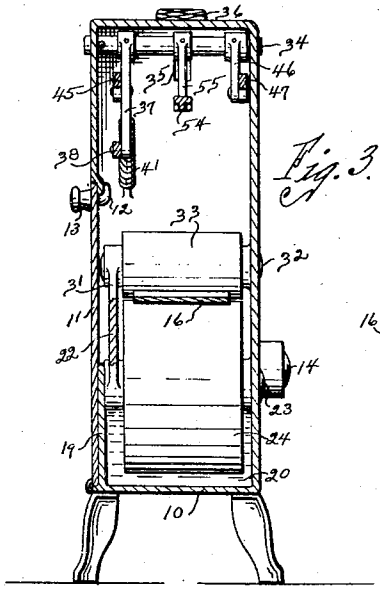


Fig. 3.

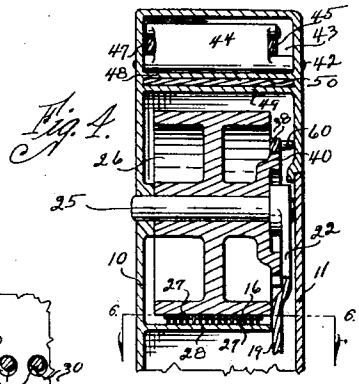


Fig. 4.

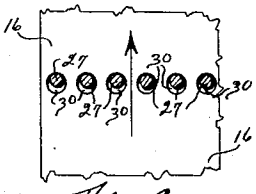


Fig. 6.

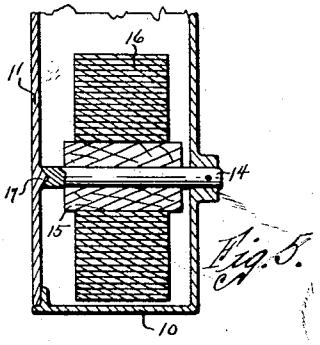


Fig. 5.

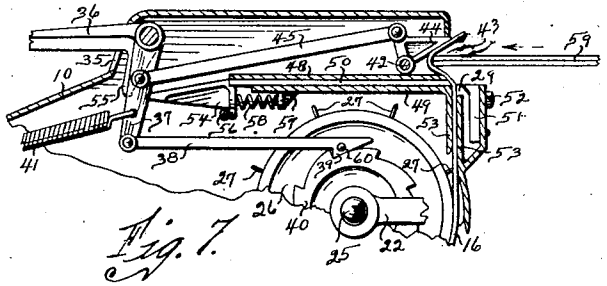


Fig. 7.

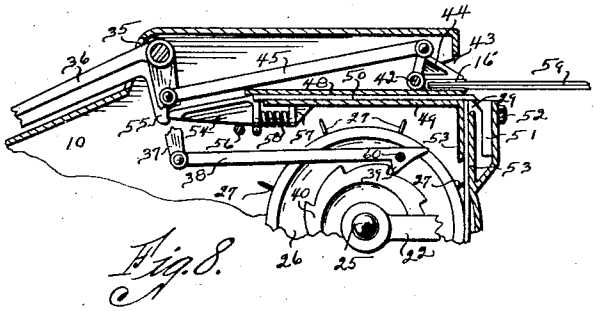


Fig. 8.

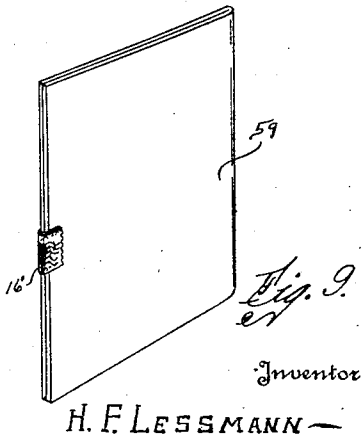


Fig. 9.

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Patented Aug. 28, 1928. 1,681,984

UNITED STATES PATENT OFFICE.

HERBERT F. LESSMANN, OF DES MOINES, IOWA.

STAMP-AFFIXING MACHINE.

Application filed September 19, 1927. Serial No. 220,370.

The principal object of this invention is to provide a device for stamping and sealing folders for mailing.

More specifically, the object of this invention is to provide a machine for stamping and sealing folders, comprising a stamp advancing mechanism, a roller for moistening the stamps, mechanism for folding and sealing the stamp around the open ends of a folder, all of which are actuated by a single manually operated lever.

A further object is to provide a stamp affixing machine that will stamp and seal folders for mailing without the touching of the stamps with the fingers.

A still further object is to provide a machine that will seal and stamp folders for mailing, much quicker than could be done by hand.

A still further object is to provide a stamp affixing machine that is economical in manufacture and durable in use.

These and other objects will be apparent to those skilled in the art.

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 drawings, in which:

Fig. 1 is a perspective view of my complete device ready for use, with dotted lines showing the position of the stamp ready to be affixed to a folder.

Fig. 2 is a side sectional view of my stamp affixing machine and more fully illustrates its interior mechanism.

Fig. 3 is a cross sectional view of my device taken on line 3—3 of Fig. 2 and more fully illustrates its mechanism for moistening the stamps.

Fig. 4 is a cross sectional view of the upper portion of my device taken on line 4—4 of Fig. 2 and more fully illustrates the stamp advancing mechanism.

Fig. 5 is a cross sectional view of the lower rear end portion of the stamp affixing machine taken on line 5—5 of Fig. 2 and illustrates the method of mounting a roll of stamps in the machine.

Fig. 6 is a plan sectional view taken on line 6—6 of Fig. 4 and illustrates the teeth of the stamp advancing mechanism engaging a row of holes in the roll of stamps.

Fig. 7 is a side sectional view of the upper portion of my device and shows the placing of a folder in the device for the sealing and affixing of a stamp.

Fig. 8 is a side sectional view of the upper portion of my device and shows a stamp being affixed to the free ends of the folder.

Fig. 9 is a perspective view of a folder sealed by having a stamp affixed around its free ends.

One of the easiest and most popular ways of sending folders through the mail is to affix the postage stamp around the free ends of the folder as shown in Fig. 9. This method holds the folder securely in a closed condition until it is torn open by the receiver. However, the affixing of postage stamps in this manner is a very tedious and untidy task. I have overcome these disadvantages as will be appreciated by those familiar with the art.

I have designated the housing of my device by the numeral 10, said housing having the hinged side 11. This hinged side is kept in closed position by the catch member 12 which is capable of engaging the inner side of the housing as shown in Fig. 3 when the external knob 13, to which it is secured, is rotated. Permanently secured in the lower rear portion of the housing 10 is the axle 14, designed to have rotatably mounted thereon, the wooden hub 15 carrying an ordinary roll of stamps 16. I have designated the single stamps that make up this roll by the numeral 16′. In order to afford a support for the free end of the axle 14, a lug 17 is integrally formed on the hinged side 11 adapted, when the side is in a closed position, to engage the depression in the end of the axle, as shown in Fig. 5. It should be noted that this projection is pointed in order that it will center itself in the end of the axle. In the forward lower portion of the housing are the vertical walls 18 and 19 to form a reservoir for holding the water 20. This water may be easily placed in the reservoir by lifting the hinged lid 21 on the forward end of the device. Integrally formed on the vertical wall 18 and the forward end of the housing 10 and extending in an irregular course therebetween, is the bracket 22, as shown in Fig. 2. Having one end mounted in this bracket and its other end mounted in the housing 10 is the shaft 23 on which is rotatably mounted the roller 24 having its lower portion extending into the reservoir and engaging the water 20. Hav-

ing one end secured in the upper portion of the bracket 22 and its other end mounted in the side of the housing 10 is the shaft 25. Loosely mounted on this shaft is the wheel 26 having a plurality of rows of teeth 27 on its periphery. The numeral 28 designates the curved stamp guide adjacent the lower portion of the wheel 26. The free end of the cartridge of stamps is designed to extend over the roller 24, around the bottom portion of the wheel 26 and out of the opening 29 in the upper forward portion of the housing, as shown in Fig. 2. If the stamps are properly loaded in the machine, each row of teeth 27 will engage a row of holes 30 in the ribbon of stamps, as shown in Fig. 6. These holes or perforations are provided in all rolls of stamps to facilitate the tearing off of single stamps when desired. By this construction it will readily be seen that if the wheel 26 is rotated to the left the ribbon of stamps will be unwound from the roll of stamps on the hub 15, will pass over the roller 24 and through the opening 29. The numeral 31 designates an arm extending from the bracket 22. Having one end mounted in the free end of this arm and its other end mounted in the side of the housing 10, is the shaft 32 having loosely mounted thereon the roller 33 designed to engage the top of the ribbon of stamps and force the same downwardly on the roller 24. This assures the gummed sides of the stamps to engage the wet roller 24, thereby moistening the stamps for affixing purposes. Rotatably mounted in the rear upper portion of the housing 10 is the shaft 34. Extending through a slot 35 in the housing and having one end permanently secured to the shaft 34 is the hand lever 36. The numeral 37 designates a link having one end permanently secured to the shaft 34 and its other end pivotally secured to one end of the arm 38. Formed on the free end of this arm is a hook portion 39 in operative engagement with the ratchet wheel 40 which is integrally formed on the wheel 26. The numeral 41 designates a coil spring having one end secured to the rear end of the housing 10 and its other end secured to the lower portion of the link 37, thereby yieldingly holding the link 37 in a rearward position. The numeral 42 designates a shaft in the forward end of the housing 10. Pivotally mounted on this shaft 42 and adjacent the opening 43 in the forward end of the housing 10 is the stamp affixing member 44 of triangular form in cross section, as shown in Figs. 2, 7, and 8. The numeral 45 designates a link having one end pivoted to the link 37 and its other end pivotally secured to the upper portion and at one end of the member 44. The numeral 46 designates an arm permanently secured to the shaft 34. The numeral 47 designates a link having one end pivoted to the arm 46 and its other end pivoted to the upper portion and at the other end of the member 44. Extending laterally from the opening 29 are the two blade guides 48 and 49. Slidably mounted between these guides is the blade 50. The numeral 51 designates the fixed blade adjustably secured to the housing 10 by the set screws 52, as shown in Fig. 2. The numeral 53 designates vertical stamp guides for more accurately forwarding the stamps through the opening 20 and between the cutting blades 50 and 51. Integrally formed on the rear end of the blade 50 is the projection 54 capable of engaging the downwardly extending projection 55 integrally formed on the handle 36. The numeral 56 designates a stop for limiting the rearward movement of the projection 54. Integrally formed on the guide 49 is a lug 57. Between the projection 54 and the lug 57 is the coil spring 58 for yieldingly holding the blade 50 in a rearward position.

By the above described parts, it will readily be seen that if the open ends of the folder to be mailed, which I have designated by the numeral 59, are placed in the opening 43, the stamp will be slightly bent around the same, as shown in Fig. 7 and if the hand lever 36 is pushed downwardly the link 37 and arm 46 will be forced forwardly, thereby depressing the stamp affixing member 44 onto the stamp and folder, as shown in Fig. 8, and applying a pressure for permanently affixing the stamp around the free ends of the folder and sealing the same. After the stamp affixing member 44 starts its closing movement, the projection 55 will engage the projection 54, thereby pushing the blade 50 outwardly and over the fixed blade 51, cutting the stamp from its roll. While the link 37 is in a forward position, the hook 39 on the free end of the arm 38 will engage another notch on the ratchet wheel 40 and when pressure is released from the hand lever 36, the spring 41 will bring the link 37 to a rearward position, thereby rotating the wheel 26 the fraction of a revolution, which will force another stamp through the opening 29. The numeral 60 designates a guide finger engaging the side of the housing 10 for keeping the arm 38 in the proper position on the ratchet wheel 40. As the hand lever 36 returns to its normal position and slightly before the wheel 26 starts to rotate, the spring 58 will return the cutting blade 50 to its normal position in the guides.

When all of the stamps in the device are used up, it is merely a matter of a few moments to open the hinged side 11 and place a new roll on the axle 14.

If it is desired to merely seal the folders and not use stamps, the roll of stamps 16 may be substituted with an ordinary roll of gummed paper. Ungummed paper may be used if glue is used in place of the water 20.

It will readily be understood by those

skilled in the art, that I have provided a simple and durable stamp affixing and sealing device.

Some changes may be made in the construction and arrangement of my improved stamp-affixing machine without departing from the real spirit and purpose of my invention and it is my intention to cover by my claims any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim—

1. In a device of the class described, a housing having a slot opening, a laterally extending platform adjacent said slot opening, a shaft in said housing designed to support a roll of postage stamps, a means for advancing the said roll of postage stamps through said slot opening, one stamp at a time, a blade slidably mounted in said housing capable of cutting off single stamps as they pass through said slot opening, a stamp affixing member above said platform, a means for moistening said stamps, and a lever for actuating said stamp advancing mechanism, said blade and stamp affixing member.

2. In a device of the class described, a housing having a slot opening, a shaft in said housing designed to support a roll of postage stamps, a laterally extending platform adjacent said slot opening, a cutting blade slidably mounted in said housing and adjacent one side of said slot opening, a fixed cutting blade adjustably mounted and adjacent the other side of said slot opening, a means for advancing said roll of stamps through said slot opening, one stamp at a time, a means for moistening said stamps, a second shaft secured to said housing and above said platform, a jaw member rotatably mounted on said last mentioned shaft and extending toward the vertical plane of said slot opening, and a hand lever in operative connection with said jaw, said first mentioned cutting blade and said stamp advancing mechanism.

3. In a device of the class described, a housing having a hinged side, a means for rotatably supporting a roll of postage stamps, a reservoir in said housing designed to hold water, a roller rotatably mounted in said housing and having its lower portion extending into said reservoir, a wheel rotatably mounted in said housing, teeth formed on said wheel designed to engage perforations in the roll of stamps capable of pulling the free end of the roll of stamps over said roller when said wheel is rotated, a slot opening in said housing through which the free end of the roll of stamps is designed to pass after passing over said roller, guides in said housing for guiding said roll of stamps through said slot opening, a platform adjacent said slot opening, a blade slidably mounted in said housing capable of cutting off single stamps after they have passed through said slot opening, a stamp affixing member rotatably mounted above said platform, a manually operated hand lever extending into said housing, a spring for holding said lever in normal position, a link in operative engagement with said lever and said stamp affixing member, a lug on said cutting blade designed to be engaged by said lever when the same is moved out of normal position, a ratchet integrally formed on said wheel, an arm in operative engagement with said lever and said ratchet, and a spring for holding said cutting blade in normal position.

4. A device of the class described, comprising a frame, a fixed knife carried by said frame, a slidable knife adapted to cooperate with said fixed knife, a shaft journaled in said frame and adapted to carry a rolled strip, a means for advancing said strip step by step between the edges of said knives, an oscillating pressure member carried by said frame, a means for applying liquid to said strip, and a lever for actuating said strip advancing means, said slidable knife and said pressure member.

5. A device of the class described, comprising a frame, a fixed knife carried by said frame, a slidable knife adapted to cooperate with said fixed knife, a shaft journaled in said frame and adapted to carry a rolled strip, a means for advancing said strip step by step between the edges of said knives, an oscillating pressure member carried by said frame, a means for applying liquid to said strip, and a lever for actuating said strip advancing means, said slidable knife and said pressure member, the movement of said knife being delayed relative to the movement of said pressure member and the movement of said strip advancing means being still further delayed.

6. A device of the class described, comprising a frame, a fixed knife carried by said frame, a slidable knife adapted to cooperate with said fixed knife, a shaft journaled in said frame and adapted to carry a rolled strip, a means for advancing said strip step by step between the edges of said knives, an oscillating pressure member carried by said frame, a means for applying liquid to said strip, a lever pivotally mounted, a pivotal connection between said lever and the pressure member for actuating the latter, a contact member connected with said lever for actuating said slidable knife, and a ratchet device connected with said lever for actuating said strip advancing means.

7. A device of the class described, comprising a frame, a fixed knife carried by said frame, a slidable knife adapted to cooperate with said fixed knife, a shaft journaled in said frame and adapted to carry a rolled strip, a means for advancing said strip step by step between the edges of said knives, an oscillat-

ing pressure member carried by said frame, a means for applying liquid to said strip, a lever pivotally mounted, a pivotal connection between said lever and the pressure member for actuating the latter, a contact member connected with said lever for actuating said slidable knife, a spring for retracting said knife, and a ratchet device connected with said lever for actuating said strip advancing means.

8. A device of the class described, comprising a frame, a fixed knife carried by said frame, a slidable knife adapted to cooperate with said fixed knife, a shaft journaled in said frame and adapted to carry a rolled strip, a means for advancing said strip step by step between the edges of said knives, an oscillating pressure member carried by said frame, a means for applying liquid to said strip, a lever pivotally mounted, a pivotal connection between said lever and the pressure member for actuating the latter, a contact member connected with said lever for actuating said slidable knife, a ratchet wheel on said strip advancing means, a pawl pivotally connected with said lever and engaging said ratchet wheel, and a spring acting on said pawl to turn said ratchet wheel when pressure on said lever is released.

HERBERT F. LESSMANN.