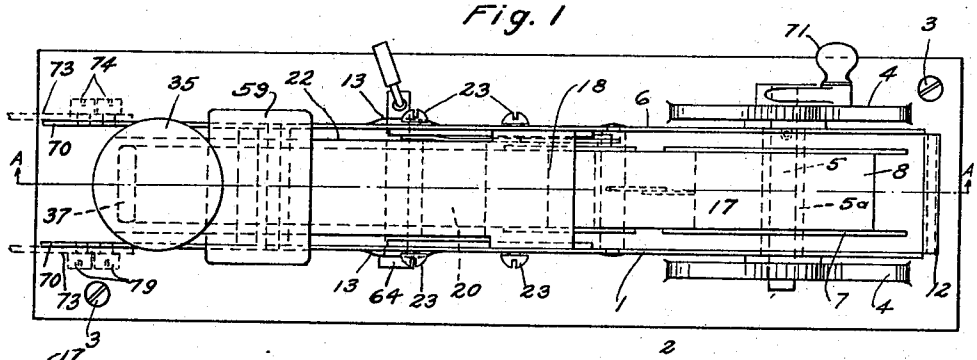
J. H. BARROW.

STAMP AFFIXER.

APPLICATION FILED JAN. 19, 1914.

1,217,387. **Patented Feb. 27, 1917.**

Fig. 1



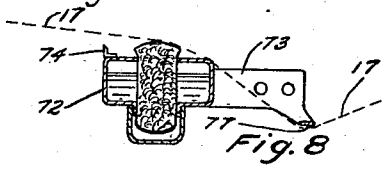


Fig. 8

Fig. 2

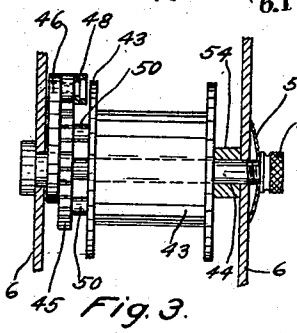


Fig. 3.

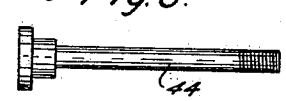


Fig. 9

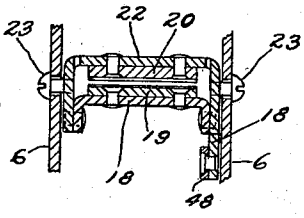


Fig. 4

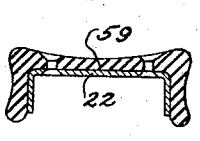


Fig. 5

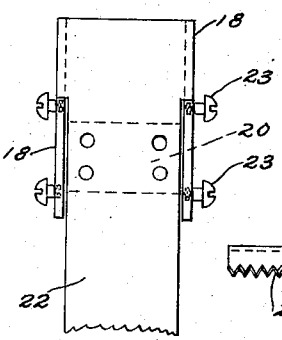


Fig. 6

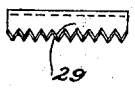


Fig. 10

Witnesses:

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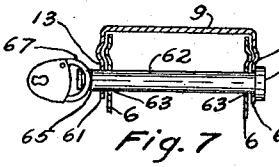


Fig. 7

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STAMP-AFFIXER.

1,217,387. Specification of Letters Patent. Patented Feb. 27, 1917.

Application filed January 19, 1914. Serial No. 813,043.

To all whom it may concern:

Be it known that I, JOHN HERBERT BARROW, a citizen of the United States of America, and a resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Stamp-Affixers, of which the following is a specification.

This invention relates to mechanical means for affixing stamps, labels and the like, and more particularly to hand operated devices adapted for feeding stamps from a spool or roll carried thereby and affixing them to mail matter.

The main objects of this invention are to provide an improved form of stamp affixer of the above character adapted either to be carried in the hand, or to be mounted operatively upon a suitable support, preferably of a rigid nature and adapted to remain stationary in use; to provide reciprocatory clamping means adapted for manual operation for feeding the stamp strip forward the length of one stamp at a time; to provide means operatively connected with the feed means for detaching the stamps successively from the strip; to provide means also operatively connected with the feed means for moistening the receiving surface immediately in advance of attaching the stamp; to provide for removing and moistening a series of stamps at one time when desired; to provide means for preventing accidental breaking of the stamp strip or detachment of stamps otherwise than by the means above indicated; to provide automatic controlling means for restoring the feed clamp, cutter and moistener after each operation; to provide automatic means for collecting the used portion of a ribbon separated from the stamp strip as the stamps are fed forward; to provide for the prevention of pilfering; and to provide a mounting adapted to pivotally support the stamp affixer whenever desired, in a manner adapted for attaching stamps successively to envelops or the like arranged in suitable stacks of variable height.

An illustrative embodiment of this invention is shown in the accompanying drawings, in which—

Figure 1 is a top plan view of the affixer and pivotal support with the affixer cover removed.

Fig. 2 is a central longitudinal vertical section taken substantially on the line A—A of Fig. 1.

Fig. 3 is a fragmentary cross-section taken on the line B—B of Fig. 2, and shows the mechanism of the ribbon collecting spool.

Fig. 4 is a fragmentary cross-section taken on the line C—C of Fig. 2, and shows the feed clamp and supporting means therefor.

Fig. 5 is a cross-section of the thumb rest.

Fig. 6 is a fragmentary top plan view of the reciprocatory feed clamp member.

Fig. 7 is a fragmentary cross-section showing the locking means.

Fig. 8 is a longitudinal vertical section of a removable moistener attachment.

Fig. 9 is a side elevation of the pivot bolt for the collecting spool.

Fig. 10 is a front elevation of the blade.

In the construction shown, the hand stamp affixer 1 is shown mounted pivotally on a frame 2, adapted to rest upon a table or bench (not shown) to which it may be secured if desired by any suitable means as screws 3, for the purpose of supporting the large roll-housing end of the affixer. The mounting frame 2 is provided with a pair of upright arms or supports 4 adapted to pivotally receive the affixer 1, as by means of an axial shaft 5 by which the affixer is oscillatively supported.

The stamp affixer proper comprises a housing or frame 6 preferably formed somewhat pointed at the forward end and having an enlarged rear portion adapted to receive a stamp reel 7 or roll 8 of stamps, labels, or the like to be affixed. The said frame is provided with a cover member 9 preferably adapted to be hinged as at the point 12 so as to give access to the interior of the device. Locking means for the cover are provided as illustrated at 13.

The supporting axis 5^a for the stamp spool or roll is hollow to receive the crank shaft 5, and is removable from the frame 6, so as to facilitate interchangeability of spools or rolls.

The stamps 17 are fed from the roll by means of a stepping device consisting of a reciprocatory clamp frame 18 having a pair of normally open jaws 19 and 20 between which the strip 17 is fed. One of the jaws, as for instance the lower one 19, is fixed rigidly to the feed frame 18, the other of

which is carried movably by a forwardly projecting spring member 22, which may be integral with and may constitute the top of the feed frame. Said frame 18 is guided by coacting means as pins or screws 23 on the clamp frame and longitudinal guide slots 24 in the sides of the affixer frame. The frame 18 is held normally in its rearward position, as shown, by any suitable yielding means as a restoring spring 25. The cushion 25ª on the under side of spring 22 assists in feeding the stamps. The range of movement of the feed frame 18 may be adjusted to correspond with the length of a stamp whereby the stamp strip is advanced the exact length of a stamp by each forward movement of the feed frame 18. For this purpose a thumb screw 26 is adjustably mounted to variably limit the forward stroke of the frame 18, said screw being accessible for adjustment with the thumb and finger through the opening 27 in the under side of the frame 6.

Severing means for detaching the foremost stamp are provided comprising a stationary shear member 28 and a movable blade member 29 of suitable form attached to the forward portion of the clamp spring 22. The edge of said blade is preferably serrated to correspond with the perforations between adjacent stamps.

For the purpose of shifting the forward stamp 17ª when detached ahead and sliding it onto the envelop or other body (not shown) to be stamped, a resilient cushion member 31 is provided on the under side of the forward portion of the clamp spring 22 in advance of said blade.

The housing 6 is provided with a forwardly projecting part 6.1 which serves as a bearing plate for the cushion 31 and which is adapted to receive the stamps as they are severed from the strip.

Improved non-gumming means are provided for moistening the receiving surface, comprising a reservoir 35 carried on the forward extremity of the feed spring 22, and provided with a downward outlet preferably equipped with a wick 37 adapted to provide a suitable amount of moisture to accomplish the purpose desired, the moisture being applied directly in front of the stamp attaching cushion 31 as the feed mechanism is depressed and advanced.

In order to assist the feeding of the stamp strip from the spool or roll to the cutter 28, and more especially to prevent tearing or breaking of the strip especially when stamps are used having the usual series of close-set perforations, a ribbon 40 is provided, said ribbon being wound upon the spool with the stamps and passing through the feed clamp with the stamps. Normally the ribbon passes with the stamps to a point adjacent to the cutter where it is arranged for the ribbon to turn downward over a roller 42 and thence backward to a receiving spool 43 mounted on a pivot axis 44 where the used ribbon is collected and saved for subsequent use.

The said collecting spool is operated by any suitable means adapted to promptly take up the ribbon as fast as it is fed through the said clamp. To this end the collecting spool is associated preferably with a ratchet wheel 45 and an oscillatory arm 46 carrying a ratchet 47 adapted to engage the teeth on said ratchet wheel. The said arm is operated by means of a link 48 connected to the oscillatory feed frame 18 whereby the said ratchet wheel is given a definite positive turn for each forward movement of the feed clamp. With this construction the diameter of the core of the collecting spool 43 is such that the rotary movement imparted thereto by said ratchet will be sufficient at all times to take up the ribbon as fast as it passes through the feed mechanism, and moreover will impart a substantial tension thereto.

In order to compensate for the gradual increase in the diameter of the roll of ribbon as it winds upon the collecting spool, connecting means of a yielding nature are provided adapted to permit the rotation of the spool to lag sufficiently behind that of the ratchet wheel to avoid too much tension on the ribbon, said equalizing means preferably operating by friction, and may comprise a friction member 50 disposed between the ratchet wheel 45 and one flange or head of the spool 43. The friction member is preferably carried by the ratchet wheel and may comprise a plurality of distributed parts as shown. Means are provided for adjusting the tension on said friction means, as by means of a thumb screw 52 and a spring washer 53 coaxial with the spool 43. A spacing bushing 54 holds the spool away from the wall 6. In case it is desired not to collect the ribbon, the same may be torn off from time to time as it emerges from the feed clamp, in which case it will not pass around the roller 42 but will depend directly from the forward edge of the lower jaw 19 which may be provided with a sharp edge or corner adapted to facilitate tearing away the free end of the ribbon. When thus used the waste ribbon may escape through the opening 27 in the bottom of the housing 6.

Means are provided to prevent the stamps from moving backward through the feed clamp when the latter is released, a spring 57 preferably being provided therefor. Braking means, as a spring 58, is also arranged to bear upon the spool or roll 8, preferably transaxially, to retard and steady the unwinding thereof, said means serving for various sizes and shapes of rolls.

The cover 9 extends forward to a point adjacent to the thumb rest 59, and is preferably formed with downwardly turned flanges 61 to overlap the sides of the housing 6, and adjacent to the point 13 are embossed slightly to register with corresponding portions of the frame 6, so that normally the cover will be held closed yieldably, the frame and cover being somewhat resilient, so as to spring or snap together.

Locking means adapted to secure the cover closed and also prevent feeding of stamps may comprise a bolt 62 adapted for inserting through perforations 63 in the walls of frame 6 near the point 13, and in the path of the feed fraime, said cover having in its flanges perforations arranged in registry with the perforations in the housing walls, and said bolt passing through said registering perforations. The bolt 62 is headed on one end 64 and the opposite end 65 is perforated to receive the bar 67 of a padlock. By cutting off the projecting stamp 17^a when through using, and locking the feed member, pilfering of stamps may be prevented.

A slot or opening 66 is provided in the cover adapted to permit feeding a strip of stamps 17^b through the feed clamp independently of the supply spool or roll 8 when desired, instead of from the roll.

The forward end of the frame 6 terminates in a pair of lateral members 70 adapted to guide the forward end of the feed spring and moistener. These arms 70 are preferably pointed in order to facilitate manipulating the envelops, etc., when desired.

The operation of the device is as follows: To insert a spool or roll, the cover member is swung back on its hinge thus enabling the operator to insert the spool or roll into the large end of the frame where it will be rotatively supported. The end of the stamp strip together with the ribbon associated therewith, in case a ribbon is used, is threaded diagonally forward and downward through the feed clamp to the forward end of the frame, the forward stamp being fed out beneath the cutter and the ribbon downward around the roller 42 and back to the collecting spool to which it is secured ready for winding up the ribbon as it is fed forward. The position of the stamp strip is adjusted so that the perforations register with the position of the blade.

When the device is to be carried in the hand, the reciprocating member comprising the clamp cutter, etc., is operated by the thumb and when ready for use the forward end of the affixer is placed on the surface to receive the stamp. The thumb is pressed down causing the cutter to sever the forward stamp and at the same time close the feed clamp upon the stamp strip and also bring the forward cushion down upon the severed stamp. The wick of the moistener is thereby brought into contact with the receiving surface. The thumb is then moved forward whereby the wick passes over the receiving surface, and the stamp 17^a is slid forward thereon where it is securely affixed by the downward pressure of the front cushion 31. The feed clamp also advances the stamp strip sufficiently to bring the next stamp into position ready for cutting off by the next downward movement. The forward movement of the stamps is also assisted by the cushion disposed over the forward roller. The ribbon is taken up by the collecting spool and any slackness thereof is prevented. The thumb is then raised, thereby releasing the cutter supporting spring, which immediately rises and the reciprocatory member as a whole is restored diagonally upward and backward by means of the spring 25 ready for a repetition of the operation.

When the stamps are all removed a fresh supply may be provided as follows: The empty spool may be taken out and a loaded spool inserted or the empty spool may be recharged. In either case the cover 9 is opened and one end of a strip of stamps is inserted under the ribbon whereupon by turning the crank 71 the ribbon may be wound back from the collecting spool onto the supply spool, together with the new strip of stamps, said strip being formed if desired by tearing ordinary commercial blocks of stamps into strips and sticking them together at the ends. During this charging operation the tension on the friction means associated with the collecting spool may be released sufficiently to permit the ribbon to unwind freely therefrom. If commercial stamp rolls are used the ribbon may be omitted if desired and the rolls or spools freely interchanged.

There are circumstances under which it is preferable to mount the stamp affixer on the supporting frame 2 during the stamping operation. It may then be operated as follows: The front portion of the device is gripped with one hand as by means of the upwardly projecting moistener 35, and the forward end of the affixer raised successively to permit moving the envelops or the like into position successively, one upon another, under the forward end, the stamp feed mechanism being operated by one hand while the envelops or other objects to be stamped are manipulated with the other hand.

There are times when it is desirable to attach a series of stamps on the same receiving surface, as upon an object to be sent by parcel-post. In order to facilitate attaching such a strip or series of stamps most conveniently and expeditiously, a separate

supplementary moistener 72 carried on arms 73 may be attached at the forward end of the guide arms 70 of the affixer frame, adapted for moistening the under side of the strip of stamps, which strip may be drawn forward through the open feed clamp jaws and over the moistening attachment 72 independently of the feed mechanism, by gripping the forward stamp with one hand while the affixer frame may be held by the other hand. During this operation the thumb-piece 59 is not depressed and a passage for the stamp strip is thereby left between the severing members 28 and 29. At the forward edge of the supplementary moistener a cutting blade 74 is provided by means of which the strip of stamps or labels may be readily severed by pulling down on the strip over the cutting edge. The strip of stamps thus removed is attached to the parcel or other object by hand. A cross bar 77 extends between the arms 73 so as to guide the stamp strip down away from the moistener wick 37. When the affixer is to be used in the usual way for attaching individual stamps, the supplementary moistener attachment 72 may be removed. This attachment may be secured by any convenient means, thumb screws 79, one pair on each side, being shown in the present embodiment.

Although but one specific embodiment of this invention is herein shown, it will be understood that numerous details of the construction shown may be altered or omitted without departing from the spirit of this invention, as defined by the following claims.

I claim:

1. A stamp affixer comprising a housing frame, means carried by said frame for supplying a continuous strip of stamps, a step feed member adapted to advance the strip a definite amount for each operation thereof, means for severing the stamps successively after the strip is advanced, means for sliding the severed stamp forward onto a receiving surface, and moistener means carried by the said feed mechanism for moistening the receiving surface in advance of the stamp.

2. A stamp affixer comprising a housing frame, means therein adapted for mounting a strip of stamps arranged in a roll together with a backing ribbon, step-by-step feed mechanism adapted for operation by the thumb for advancing the stamp strip and ribbon the exact length of a stamp for each operative movement of the thumb, severing means adapted to remove the foremost stamp from the strip at the beginning of and by each operative movement of the thumb, means actuated by each operative movement of the thumb for moistening a receiving surface, means also actuated by each operative movement of the thumb for sliding the detached stamp into place upon the moistened surface, and automatic means for collective winding of the used portion of the ribbon.

3. A stamp affixer comprising a stationary supporting frame in combination with a housing frame oscillatively supported thereon, said housing frame being formed and adapted to receive a strip of stamps in the form of a roll and having feed mechanism adapted to advance the strip successively the exact length of a stamp, means operatively connected to the feed mechanism for severing the stamps, for moistening a receiving surface and for advancing the severed stamps thereupon, the forward end of the stamp affixer being vertically movable with respect to the frame to receive objects of variable height upon which the stamps are to be affixed.

4. A stamp affixer comprising a frame, means carried by said frame for supporting a strip of stamps, a reciprocating carriage for advancing the strip at each operation thereof, a moistening device carried by said carriage and traveling in advance of said strip of stamps, and means for affixing the stamps.

5. A stamp affixer comprising a housing frame, means for supplying a strip of stamps, feed mechanism carried by said frame for advancing the strip, means carried by said feed mechanism for moistening a receiving surface, means for severing the stamps successively as the strip is advanced, and means for affixing the severed stamps to the moistened receiving surface.

6. A stamp affixer comprising a housing frame, means for supplying a strip of stamps, feed mechanism carried by said frame for advancing the strip at each operation thereof, means carried by said feed mechanism for moistening a receiving surface, means for severing the stamps successively as the strip is advanced and comprising a pair of coacting members, one of which is rigidly disposed on one side of the path for the strip, and the other of which is operatively supported on the opposite side of the path for the strip by said feed mechanism, and means for applying the severed stamp to the moistened receiving surface.

7. A stamp affixer comprising a housing frame, means for supplying a strip of stamps, feed mechanism carried by said frame for advancing the strip at each operation thereof, means carried by said feed mechanism for moistening a receiving surface, means for severing the stamps successively as the strip is advanced and comprising a pair of coacting members, one of which is rigidly disposed on one side of the path for

the strip, and the other of which is operatively supported on the opposite side of the path for the strip by said feed mechanism, one of said severing members having a serrated cutting edge corresponding substantially with the perforations between the stamps, and means for applying the severed stamp to the moistened receiving surface.

8. A stamp affixer comprising a housing frame, means for supplying a strip of stamps, feed mechanism for said stamps comprising a reciprocatory clamp frame, a spring member carried by said feed mechanism, said spring member being arranged for manual operation for closing the clamp and for moving the clamp frame forward to advance the stamps, means for severing the stamps from the strip and applying them to a receiving surface, and means for automatically restoring the feed mechanism.

9. A stamp affixer comprising a housing frame, means for supplying a strip of stamps, feed mechanism for said stamps comprising a reciprocatory clamp frame formed to close for forward movement and to open for rearward movement, a spring member carried by said feed mechanism, said spring member being arranged for manual operation for closing the clamp and for moving the clamp frame forward to advance the stamps, means for severing the stamps from the strip and applying them to a receiving surface, and means for automatically restoring the feed mechanism.

10. In a stamp affixer, feed mechanism comprising a reciprocatory clamp frame movable longitudinally of the housing, one of the clamp jaws being movable, a spring member carried by said feed mechanism and supporting the movable jaw, said spring member being adapted for manual operation for closing the clamp and for moving the clamp frame forward to advance the stamps, means for automatically restoring the feed mechanism, said housing and clamp frame being mutually formed and adapted to guide said feed mechanism in its forward and backward movement, means for severing the stamps from the strip, and means for affixing the severed stamps to a receiving surface.

11. In a stamp affixer adapted for using stamps wound upon a roll with a ribbon and comprising a housing frame, a feed mechanism adapted for manual operation, said feed mechanism comprising a reciprocatory clamp adapted to close for forward movement and to open for rearward movement, and a collecting spool adapted to receive the used portion of the ribbon as the stamps are used and separated therefrom, said collecting spool being actuated automatically by connection with the feed mechanism, said collecting spool and actuating means therefor being adapted to provide a suitable degree of tension upon the ribbon as it is wound thereupon, means for severing the stamps from the strip, and means for affixing the severed stamps to a receiving surface.

12. In a stamp affixer adapted for using stamps wound in a roll together with a ribbon, a ribbon collecting spool arranged to receive the ribbon as the stamps are fed forward, a ratchet wheel operated by the feed means, said ratchet wheel being connected to the collecting spool by yielding friction means, said collecting spool and ratchet wheel being adapted to insure a suitable degree of tension on the ribbon and said friction means being adapted to prevent excessive tension on the ribbon, means for severing the stamps from the strip, and means for affixing the severed stamps to a receiving surface.

13. In a stamp affixer having a severing member carried on a reciprocating feed arm, an affixing pad disposed on said arm in advance of the severing member and projecting downward below the same, the affixer housing having a forwardly projecting bearing plate beneath said pad for receiving the stamp when severed, said pad being adapted to slide the stamp forward from said bearing plate onto a receiving surface when the said arm is moved forward.

14. In a stamp affixer having a reciprocatory stamp feed member, a forwardly projecting arm carried by said feed member, and a moistener attachment carried by and at the forward end of said arm, said moistener being adapted and arranged to contact with the receiving surface for moistening the same when the feed member is moved forward to deliver a stamp.

15. A stamp affixer comprising a housing frame adapted to carry a strip of stamps, in combination with longitudinally reciprocatory feed means, said means comprising a resilient arm the forward end of which is adapted and arranged to oscillate vertically, said arm being provided with means for severing the stamps successively and for sliding the severed stamps forward onto the receiving surface and a downwardly facing moistener carried on the forward end of said arm in advance of the severing and sliding means adapted to moisten the receiving surface immediately in advance of the stamp as the latter is slid forward into place.

16. A stamp affixing device adapted for feeding stamps forward and affixing same successively, and also having a forwardly disposed upwardly facing removable attachment adapted for moistening a series of stamps as they are drawn from the affixer for manually attaching a plurality of stamps in one group.

17. A stamp affixing device having means for attaching stamps automatically in succession and also having a removable attachment comprising a moistener having a wick on the under side adapted to moisten the receiving surface and also a wick on the upper side adapted to moisten the under side of the stamp strip as it is drawn forward thereover for manually attaching a plurality of stamps in one group.

Signed at Chicago this 15th day of January, 1914.

JOHN HERBERT BARROW.

Witnesses:

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WILLIAM E. HANN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."