

Sept. 14, 1965

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3,206,348

STRIP STAMP APPLYING MECHANISM

Filed Jan. 21, 1963

3 Sheets-Sheet 1

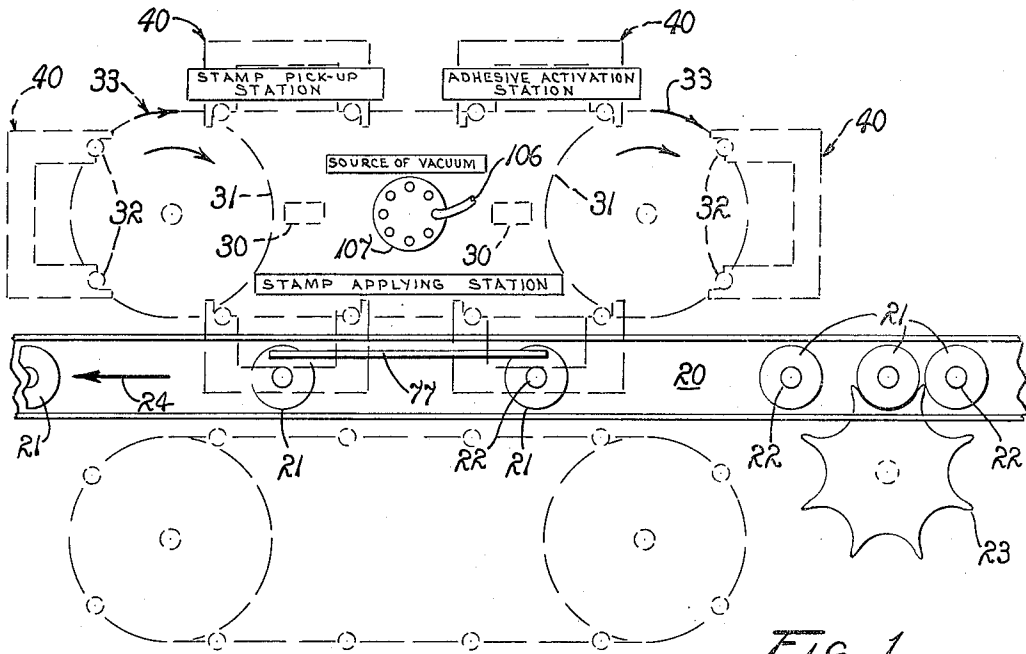


FIG. 1.

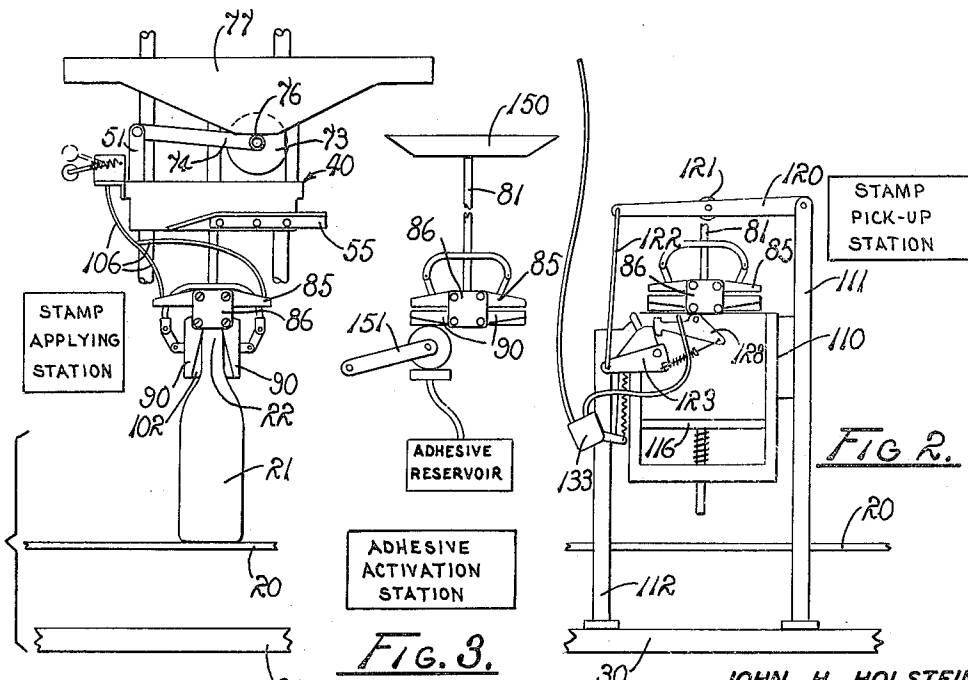


FIG. 2.



FIG. 3.



FIG. 4.

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3 Sheets-Sheet 2

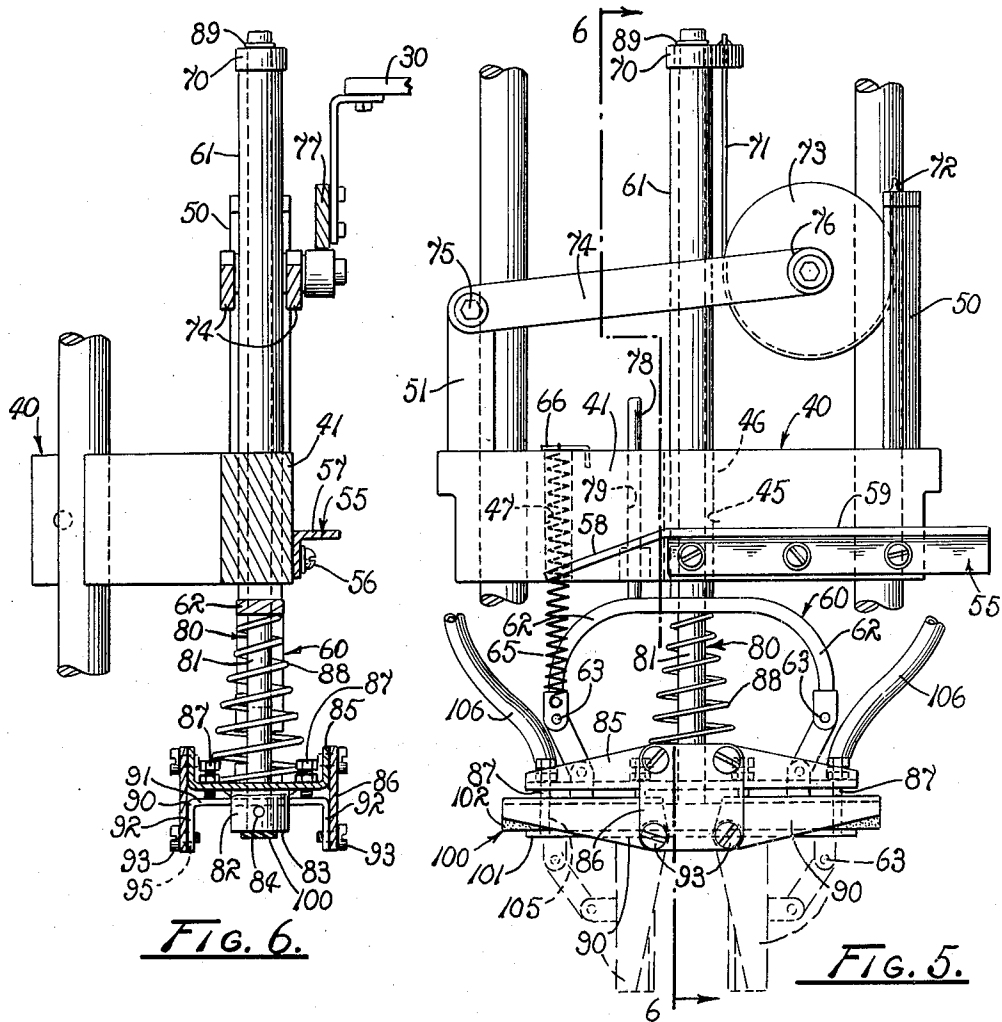


FIG. 6.

FIG. 5.

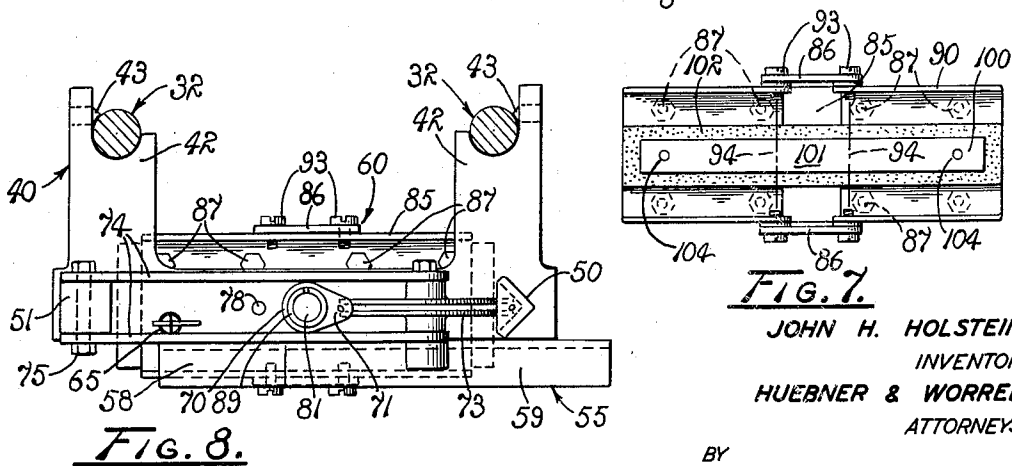


FIG. 8.

FIG. 7.

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STRIP STAMP APPLYING MECHANISM

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3 Sheets-Sheet 3

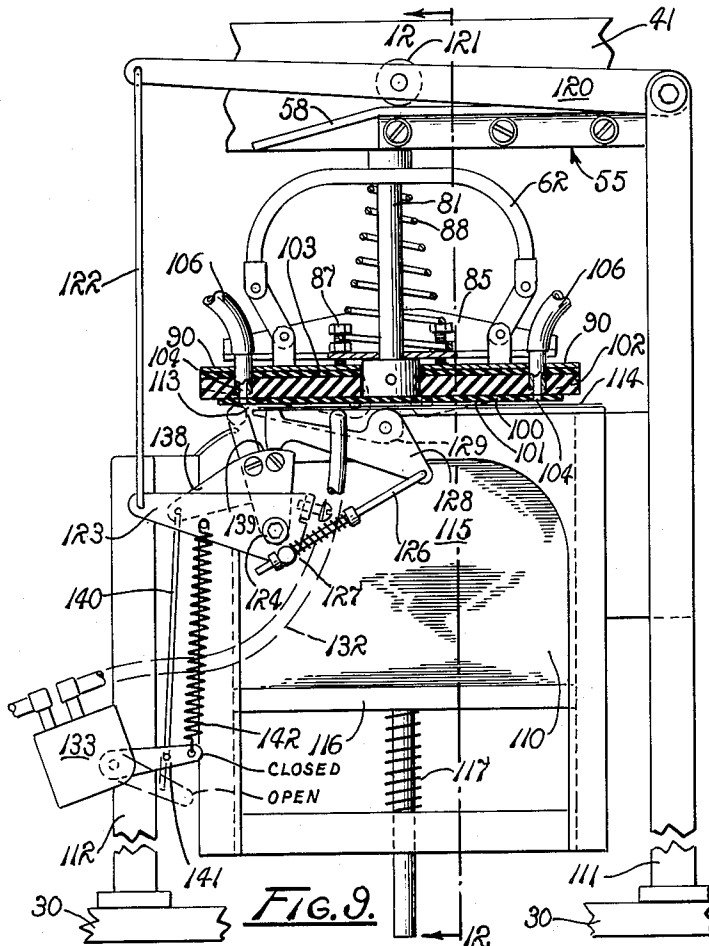


FIG. 9.

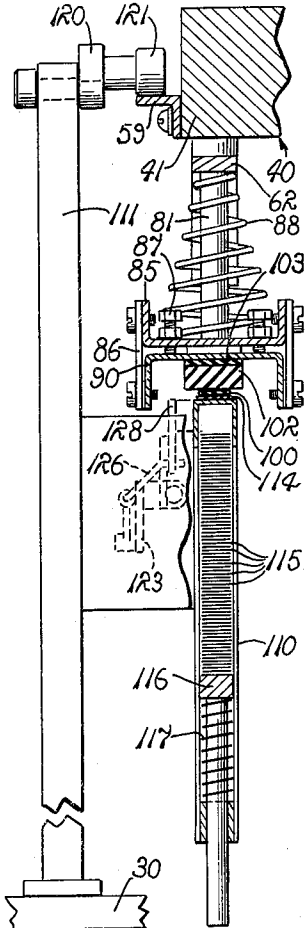


FIG. 12.

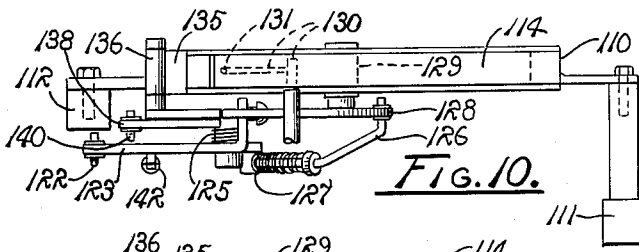


FIG. 10.

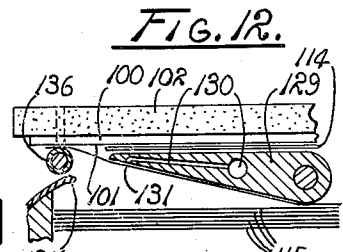


FIG. 13.

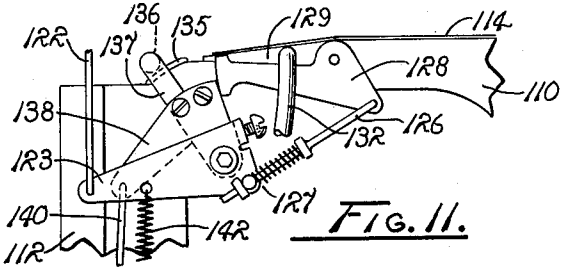


FIG. 11.

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STRIP STAMP APPLYING MECHANISM
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Filed Jan. 21, 1963, Ser. No. 252,994
8 Claims. (Cl. 156-488)

This invention relates to apparatus for applying narrow elongated labels to the closed ends of containers such as bottles and the like. The invention particularly relates to an applying mechanism adapted for use in attaching elongated narrow labels and stamps, such as revenue stamps, to the closed upper ends of the containers, such as bottles filled with taxable alcoholic beverages, and other similarly packaged articles to which a revenue stamp must be affixed or a narrow label is to be applied.

The present invention is well suited for use in connection with automated packaging machinery and permits the application of labels and stamps to the closed ends of containers while maintaining such containers in continuous movement along a path through an assembly line arranged for packing, labeling and shipping of containers. Throughout the description of the present invention, the mechanism is described in connection with the application of revenue stamps to the closed necks of bottles employed in the packaging of taxable alcoholic beverages for illustrative convenience while obviously being suited to other label or stamp application.

The strip stamp applying mechanism is particularly adapted for use in connection with the labeling apparatus described in my patent application entitled Label Applying Machine which is being filed concurrently herewith. Such Label Applying Machine provides apparatus to support a label applying mechanism for movement throughout a circuitous path of travel so as to position the mechanism with respect to bottles moving along a rectilinear path through the machine to permit affixing of labels to such bottles without interrupting their continuous movement through the machine. The strip stamp applying mechanism of the present invention has utility with other types of labeling machines, but is described in connection with a continuous-motion labeling machine disclosed in the aforesaid patent application.

Such neck labels and revenue stamps have previously been applied manually or by mechanisms which required the bottle to be held in a stationary position during affixing of the label or stamp. Such label and stamp applying methods do not lend themselves for use in current automated types of processing machinery and materially reduce the efficiency of such machinery.

Accordingly, it is an object of the present invention to provide a mechanism to apply to the closed ends of containers, a narrow elongated label or stamp, the mechanism being particularly adapted for use in automated, continuous-motion processing machinery.

Another object is to provide a strip stamp applying mechanism adapted for use in affixing narrow revenue stamps to the closed ends of bottles.

Another object of the invention is to provide a mechanism capable of affixing narrow labels and stamps to the closed necks of bottles, and is adapted to conform to usual dimensional variations occurring in such bottles within the expected range of manufacturing tolerances.

Another object of the present invention is to provide mechanism individually to select narrow stamps from a single source of supply, render the underside of such stamps adherent and apply the stamps to a container by pressing the adherent underside into contact with the container.

A further object of the invention is to provide a completely automatic stamp applying mechanism which

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eliminates the need for tedious manual affixing of stamps to bottles, and the like.

A still further object is to provide a strip stamp applying mechanism adaptable for use in applying narrow elongated labels to the closed ends of a variety of containers.

These, together with other objects, will become more fully apparent upon reference to the following description and accompanying drawings.

In the drawings:

FIG. 1 is a schematic illustration of a suitable conveyor used in automated packaging and labeling shown in conjunction with a supporting and motivating mechanism adapted for use with a strip stamp applying apparatus embodying the principles of the present invention.

FIG. 2 is a view in front elevation showing the strip stamp applying mechanism in a position to pick up a narrow elongated stamp from a magazine holding a supply of such stamps.

FIG. 3 is a somewhat schematic illustration showing one type of suitable mechanism to render the stamp adherent as by applying adhesive thereto.

FIG. 4 is a view in front elevation showing the mechanism in a stamp applying position to affix the stamp to the closed neck of a bottle.

FIG. 5 is an enlarged view in front elevation of a stamp applying mechanism shown in FIGS. 2 and 3.

FIG. 6 is a view in vertical, transverse section taken on line 6-6 of FIG. 5.

FIG. 7 is a bottom plan view of the mechanism shown in FIG. 5.

FIG. 8 is a top plan view of the mechanism shown in FIG. 5.

FIG. 9 is an enlarged view of the mechanism shown in FIG. 2, showing the details of the stamp magazine.

FIG. 10 is a top plan view of the mechanism shown in FIG. 9.

FIG. 11 is a fragmentary, enlarged view of the stamp issuing linkage associated with the magazine shown in FIG. 9.

FIG. 12 is a view in vertical, transverse section taken on line 12-12 of FIG. 9.

FIG. 13 is a fragmentary, enlarged view of a portion of the stamp issuing apparatus shown in FIG. 9.

Referring to FIG. 1 of the drawings, an upper run of a conventional conveyor is indicated at 20 and is powered for movement by suitable means, not shown, in a direction moving from right to left, as viewed. Supported on the conveyor is a plurality of bottles 21 each having a closed end or neck 22. The containers can be in other forms, however, since bottles are usually used as containers for taxable alcoholic beverages, they have been chosen as a convenient form of container in describing the strip stamp applying mechanism of the present invention. The bottles are spaced at uniform intervals along the conveyor at a bottle admission station by means of a star wheel 23, and then proceed along a rectilinear path of travel, indicated at 24.

Brief mention will be made of the supporting apparatus associated with the conveyor and disclosed in detail in my copending application entitled Label Applying Machine. Such apparatus includes a main frame, a portion of which is indicated at 30, and suitable transport mechanism, such as a closed circuit power mechanism or conveyor, generally indicated at 31 which motivates a plurality of support structures in the form of carrier masts indicated at 32. It should be noted that each of the carrier masts is thus propelled about a circuitous path of travel, indicated at 33, a portion of which is parallel to and closely adjacent to the path of travel 24 of the bottles 21. If desired, transport mechanism identical to that illustrated at 31 may also be provided on the opposite side of the conveyor, cor-

responding to the lower half of FIG. 1. The mechanism described above is only illustrative of a suitable form of conveying and transporting mechanism to serve as a support structure for the strip stamp applying mechanism to be described below.

Referring to FIGS. 5-8, the stamp applying mechanism includes a U-shaped frame 40 when viewed in plan. The frame comprises an intermediate body portion 41 and a pair of opposed angulated arms 42 integral therewith. The arms are secured to the carrier masts 32 by means of setscrews 43. The intermediate portion 41 is provided with a cylindrical bore 45 generated along a substantially vertical axis when installed in the transport mechanism described above. A bushing 46 is press-fitted into the bore to provide a bearing surface concentric with and extended along the vertical axis. A second bore 47 is also provided in the frame laterally spaced from the bore 45 for a reason subsequently to be explained. The frame includes a vertically extended transversely angulated post 50 and a laterally opposed upstanding lug 51. A cam rail 55 is also joined to the frame by means of capscrews 56. As can be seen in FIG. 6, the cam rail provides a profile surface 57 and referring to FIG. 5, this surface includes a riser portion 58 and a plateau portion 59. The plateau portion is linearly extended a predetermined range and employed in connection with the mechanism for issuing and picking up individual stamps.

A carriage 60 is mounted for movement relative to the frame along the aforementioned vertical axis by means of a tubular sleeve 61 received in the bushing 46. The carriage includes a pair of laterally opposed arms 62, each of which respectively carries at its terminal end individual pivot pins 63. The pins provide respective individual axes at opposite sides of the path of movement parallel to each other and normal to said path. A spring 65 is connected between one of the pins 63 and an anchorage 66. It extends through the bore 47 and serves to bias the carriage toward the frame.

A collar 70 is fixed to the upper end of the sleeve 61. One end of a cable 71 is fixed to the collar 70 and extended to an anchorage 72 on the post 50. The intermediate portion of the cable is trained about a sheave 73 rotatably received in the bifurcated end of a beam 74. The opposite end of the beam is mounted for pivotal movement by means of a pin 75 carried on the upstanding lug 51. A cam follower 76 is rotatably mounted on the beam and adapted to contact a cam, indicated at 77, which is secured in an appropriate position on the main machine frame 30. It is to be understood that the cam 77 is provided with a profile to be engaged by the follower 76 to effect downward movement of the carriage 60, as viewed in FIGS. 5 and 6. The downward movement is of a magnitude determined by the profile of the cam and sufficient to effect proper operation of the stamp applying mechanism. To insure that the carriage is maintained in a proper plane of operation, a guide pin 78 is rigidly secured thereto and extended through a guide bore 79 in the frame 40.

A central support member, generally indicated at 80, includes an elongated rod 81 longitudinally slidably received in the sleeve 61 to permit relative movement between the central support member and the carriage 60 as well as the frame 40. The rod 81 terminates at its lower end, as viewed in FIGS. 5 and 6, in a backing member or reaction plate 82, which is circular in plan form for use in affixing stamps to the necks 22 of bottles 21. Obviously, the plan form of the backing member 82 is selected to conform to the profile of the end of a particular container to which a stamp is to be affixed. The backing member 82 provides a plane surface of support, indicated at 83, of a linear dimension corresponding to the closed end of the bottle. A pin 84 interconnects the rod and backing member, and other suitable means can be employed for this purpose. Integral with the backing member is a transversely extended adjustment plate 85 to which is secured opposed depending lugs 86. Carried in

the adjustment plate is a plurality of adjustment screws 87 used in aligning articulated members to be described below. A spring 88 is interposed between the carriage 60 and the adjustment plate 85 to bias the backing member away from the carriage. To limit the range of movement of the backing member away from the carriage, a stop 89 is received in an annular groove at the upper end of the rod 81 and abuts the collar 70.

The articulated portion of the applying mechanism includes a pair of laterally opposed swing arms 90. Each of these arms is provided with a flattened central portion 91 and opposed depending flanges 92. Each of the flanges is pivotally connected to one of the depending lugs 86 by means of pins 93. It should be noted that each swing arm is mounted for pivotal movement about a respective axis, indicated at 94. To permit conformance of the mechanism to minor manufacturing variances encountered with bottles, the swing arms may be pivotally mounted by means of slightly elongated, rather than circular, apertures 95 to receive the pins 93.

Extended transversely in a stamp receiving position, as shown in full lines in FIG. 5, is a flexible pad 100. The pad provides a stamp contacting face 101, and is preferably formed of an impervious elastomer sheet material. The pad is cemented to the plane surface 83 of the backing member 82 and the opposite end of the pad is secured to the respective one on the swing arm 90. To provide the desired conformance to bottles of slight dimensional variances, elastic, resilient cushions 102 are preferably disposed between the stamp pad 100 and the arms. Since it is desirable to use a closed-cell elastomer cushion, it is preferred to employ an impervious bonding pad 103 heat bonded to the swing arm 90 and thereby to serve as a mounting base to which is cemented the resilient cushion 102. The pad 100 is provided with a pair of laterally opposed pneumatic ports 104 adjacent to each of the ends of the pad and respective passagesways 105 are provided in communication with the ports and connected to conduits 106. The conduits 106 are connected to a distributor manifold 107 which constitutes a source of vacuum. The manifold is connected by means, not shown, to any suitable vacuum pump, also not shown.

Referring to FIG. 9, the details of a stamp magazine 110 are illustrated. The magazine is mounted between a pair of opposed upright posts 111 and 112 to provide a stamp issuing point, indicated at 113, at an elevation compatible with that of the stamp contacting face 101 of the stamp pad 100 when in a retracted position shown in full lines in FIG. 5. During movement about the path of travel 33, the stamp contacting face slidably engages an elongated flat reed 114, which preferably is in the form of a thin brass strip. The function of this reed is to seal the port 104 in the trailing end of the stamp pad 100. The magazine 110 is adapted to hold a supply of individual narrow elongated stamps 115. The stamps are supported on a platen 116 which is biased upwardly, as viewed in FIGS. 9 and 12, by a spring 117.

A beam 120 is pivotally connected to the post 111 and carries a cam roller 121 adapted to engage the cam rail 55 mounted on the frame 40 of the stamp applying mechanism. The free end of the beam carries an operating link 122 pivotally connected to an operating arm 123. The arm is mounted on the magazine for rocking movement about a pivot shaft 124 on which is concentrically mounted a torsion spring 125, one end of which engages the arm 123 so that counterclockwise movement thereof torsionally energizes the spring. A laterally projecting portion of the operating arm 123 is connected to a link rod 126 by means of a lost-motion connection 127 to control the rocking movement of an issuing arm 128. The arm 128 is provided with a stamp issuing finger 129 secured to the arm. A pneumatic passageway 130 extends from a stamp pick-up port 131 to a flexible conduit 132 leading to a control valve 133. The control valve is

connected to any suitable source of vacuum, not shown, such as the vacuum pump previously mentioned.

A stamp retaining finger 135 secured to the magazine normally maintains the uppermost stamp 115 adjacent to the issuing point 113 within the magazine until said stamp is lifted by the issuing finger 129 by means of the port 131. A holding roller 136 is carried on the free end of a holding arm 137 which is normally biased in a counterclockwise direction when the torsion spring 125 is energized. The holding arm 137 is connected to a valve control arm 138 provided with a timing profile, indicated at 139, which abuts the free end of the issuing arm 128, as shown in FIG. 11. This condition exists except when the cam follower 121 is raised to provide the sequence of events necessary to present an individual stamp at the stamp issuing point 113. A valve control rod 140 interconnects the arm 138 and a control handle 141 operatively associated with the valve 133. The details of valve 133 are not shown in that it is a conventional valve adapted to open upon clockwise rocking of the control handle 141 to the position shown in dashed lines in FIG. 9, and to block flow through conduit 132 when the handle is moved to the position shown in full lines. A tension spring 142 is interconnected between the valve control handle 141 and operating arm 123 to urge the handle toward a closed position upon raising of the arm 123 to the position shown in full lines in FIG. 9.

Operation

The operation of the described embodiment of the subject invention is believed to be readily apparent and is briefly summarized at this point. A supply of bottles 21 is provided at the bottle admission station. The conveyor 20, the transport mechanism 31 and the star wheel 23 are driven through a common power train to provide synchronized movement between the bottles spaced along the conveyor and the carrier masts 32. Each of the masts includes structure for the stamp applying mechanism. The stamp magazine 110 is fixed at a selected location, such as indicated by the legend "Stamp Pick-up Station," in relation to the path of travel 33 of the stamp applying mechanism. At a subsequent point in that path of travel, an "Adhesive Activation Station" is provided, which may be in the form of an adhesive roller to which is supplied a proper adhesive from a reservoir. A schematic illustration of satisfactory mechanism is shown in FIG. 3, and a means to engage the stamp retained on the applicator mechanism with the adhesive roller is shown in the form of a cam 150 fixed to the main frame 30. The cam is adapted to engage the upper end of the rod 81 to urge the backing member 82 and adjustment plate 85 toward the adhesive roller. By means of the adjusting screws 87, the stamp contacting face 101 of the pad 100 is maintained substantially in the same plane to provide uniform contact with the adhesive roller. A drive train for the adhesive roller is schematically illustrated at 151 to provide a peripheral speed equal to that of the pad 100 as it progresses along the path of travel 33. As an alternative method of rendering the underside of the stamps adherent, pregummed stamps can be employed, and the adhesive roller merely utilized to supply an activating liquid, such as water.

Also diagrammatically illustrated in FIG. 1 is a portion of the path of travel 33 parallel to the path 24 traveled by the bottles 21 and entitled "Stamp Applying Station." During this portion of the respective paths, the stamp applying mechanism is motivated by the cam means 77 fixed to the frame and extended a predetermined distance with a profile to provide the desired rate of relative movement between the frame mechanism and the bottle. The sequence of events in operating the above described mechanism is as follows:

Assuming that the mechanism is in motion and that a plurality of bottles are uniformly spaced on the conveyor, a given stamp applying mechanism is progressively moved

through the Stamp Pick-up Station, the Adhesive Activation Station, and finally the Stamp Applying Station.

During progress through the Stamp Pick-up Station, the contacting face 101 of the pad 100 slidably engages the reed 114 in sealing relationship; suitable timing mechanism, not shown, provides communication between the source of vacuum such as the manifold 107 and thereby provides a suction at the ports 104 in the face of the stamp pad. Prior to the cam follower being engaged by the cam rail 55, the pneumatic control valve 133 has established communication between the port 131 in the stamp issuing finger 129 and a suitable source of vacuum, not shown. Inasmuch as the port 131 is in contact with the uppermost stamp 115 in the magazine 110, subsequent movement of the stamp issuing linkage incident to elevation of the free end of the beam 120 raises the left-hand end of the stamp, as shown in FIG. 9. As the cam follower 121 is elevated by the riser portion 58 of the cam rail 55, the operating lever 122 rocks the operating arm 123 in a clockwise direction, as viewed in FIG. 9, and tensions the spring 142 extended between the control arm and the valve control handle 141. Since the torsion spring 125 is pre-loaded to a sufficient value normally to urge the holding arm 137 and consequently the valve control arm 138 in a counterclockwise direction, as viewed in FIG. 9, the control valve 133 remains in an open position to continue to provide suction to port 131. It will be observed that simultaneously, the link 126 rocks the issuing arm 128 in a clockwise direction to raise the issuing finger 129 and the free end of a stamp 115 past the retainer 135 to be presented at the stamp issuing point 113. During this time, the movement of the applicator mechanism about the path of travel 33 progresses to position the pad 100 as shown in FIG. 9. Also, the timing mechanism has provided communication between the port 104 and the source of vacuum so that the pad is able to pick up the free end of the stamp. Just prior to contact of the port 104 with the stamp, the suction to port 131 is blocked by movement of the valve control handle 141 to an upper or closed position, as shown in full lines in FIG. 9. The timing profile 139 of the valve control arm 138 is freed from abutting the end of the issuing arm 128, since the issuing arm has been rocked in a clockwise direction. Accordingly, the valve control arm is now free to be rocked in a clockwise direction incident to the force exerted by the tension spring 142. Simultaneously, the holding arm 137 has been rocked in a clockwise direction to position the holding roller below the free end of the stamp to hold it at the stamp issuing point 113.

Further progressive movement of the pad 100 along the path of travel 33 results in the stamp being drawn transversely from the magazine beneath the reed 114. Since the port 104 in the trailing end of the pad is sealed by the reed, the suction is not lost in the front port 104. As soon as further progressive movement permits the trailing port 104 to clear the reed 114, it picks up the trailing end of the stamp being supported by the roller 136.

The stamp is then held on the face 101 of the pad 100 and carried to the Adhesive Activation Station shown in FIG. 3 and described above. Assuming that adhesive is to be applied to the underside of the stamp, the adhesive roller effects a uniform distribution of adhesive to the stamp.

Further progressive movement of the stamp applying mechanism about the path of travel 33, carries it to the Stamp Applying Station. The stamp applying cam 77, shown in FIG. 4, is fixed to the main frame 30 and provided with a profile to effect relative movement of the stamp applying mechanism toward the bottle at a proper portion of the path 24 traveled by the bottles. Downward movement of the beam 74, as the cam follower 76 engages the cam, effects movement of the carriage relative to the frame 40 along the vertical path of travel de-

fined by the tubular sleeve 61. Since the central support member which includes the backing member 82 and adjustment plate 85 is biased by the spring 88, this member initially moves downwardly with the carriage. When that portion of the pad 100 secured to the surface 83 contacts the upper end of the bottle, further movement of the central support member is prevented. The profile of cam 77 provides a greater range of movement for the carriage 60 so that the carriage arm 62 moves downwardly to carry the pins 63 to the position shown in dashed lines in FIG. 5. During this movement, the swing arms 90 pivot about their respective axes 94 until reaching the position shown in dashed lines in FIG. 5 whereupon the terminal ends of the pad 100 urge the stamp 115 into intimate contact with the peripheral surface provided by the closed end and adjacent sides of the neck 22 of the bottle 21. It will be observed that the pivotal axes 94 are parallel to each other and parallel to the plane surface of support 83 provided by the backing member 82. The pivotal axes 94 are so located also to be parallel with the stamp contacting face 101 of the pad 100 and approximately to lie in the plane of the pad when in a stamp receiving position, as shown in full lines in FIG. 5.

Accordingly, it will be appreciated that a stamp applying mechanism has been provided which is well suited for use in automated machines now employed in the processing, shipping, and labeling of containers. The applying mechanism of the present invention is particularly well suited for use in connection with continuous-motion conveying machinery and can be driven at a rate compatible with other components in the processing machinery.

Although the invention has been herein shown and described in what is conceived to be the most practical and preferred embodiment, it is recognized that departures may be made therefrom within the scope of the invention, which is not to be limited to the details disclosed herein but is to be accorded the full scope of the claims so as to embrace any and all equivalent devices and apparatus.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a machine for applying narrow elongated stamps to the peripheral surface of a container presented by a closed tubular end thereof and a portion of the sides contiguous thereto, a stamp applicator mechanism including a flexible pad providing a stamp contacting face; pneumatic means to retain a stamp on said face in a predetermined position and with one side thereof exposed; means to render said exposed side of the stamp adherent while the stamp is retained on said face; power means to effect relative movement between the pad and said closed end to cause intimate contact between the exposed side and said peripheral surface and to conform the pad to the configuration of said surface; and means to disable said pneumatic means to release the stamp from said face.

2. In a machine for applying narrow elongated stamps to the peripheral surface of a container presented by a closed tubular end thereof and a portion of the sides adjacent thereto, means to advance said container to a predetermined position; a stamp applicator mechanism including a flexible pad providing a stamp contacting face; a stamp magazine; means to issue the stamps individually from the magazine; means to transport the stamp applicator mechanism to position the stamp contacting face adjacent to the stamp magazine and to effect contact between the face and the issued stamp; pneumatic means to retain the issued stamp on said face in a predetermined position and with one side exposed; means to render said exposed side of the stamp adherent while the stamp is retained on said face; means to transport the stamp applicator mechanism to a position overlying the container; power means to effect relative movement between the pad and said closed tubular end to cause intimate contact between the exposed side of the stamp and said peripheral surface and to conform the pad to the con-

figuration of said surface; and means to disable said pneumatic means to release the stamp from said face.

3. In a machine for applying a narrow elongated stamp to the closed neck of a bottle, a stamp applicator mechanism including a flexible pad providing a stamp contacting face; pneumatic means connected to the pad and communicating therethrough with the face to retain a stamp on said face in a predetermined position and with one side of the stamp exposed; means engageable with the face of the pad to deposit a film of adhesive on the exposed side; power means operatively associated with one of the pad and the bottle to effect relative movement between the pad and said closed neck of the bottle to cause intimate contact between the exposed side of the stamp and the peripheral surface of the neck and to conform the pad to the configuration of said surface; and means connected to the pneumatic means to disable said pneumatic means to release the stamp from said face.

4. In a machine for applying a narrow elongated stamp to the closed neck of a bottle presenting a peripheral surface of attachment, means to advance a bottle along a predetermined path; a stamp applicator mechanism including a flexible pad providing a stamp compacting face mounted adjacent to said path; a stamp magazine including a supply of stamps therein; means associated with the magazine adapted to issue the stamps individually from the magazine; power means connected to the applicator mechanism adapted to transport the applicator mechanism to position the pad adjacent to said magazine and to move said face into contact with an issued stamp; pneumatic means connected to the applicator mechanism and communicating with said face through the pad adapted to retain a stamp on said face in a predetermined position and with one side of the stamp exposed; means engageable with said stamp to apply an adhesive to said exposed side while the stamp is retained on said face; power means connected to the applicator mechanism for transporting said mechanism carrying said stamp in a path a portion of which is superposed and coincident with a portion of said bottle path; means connected to the bottle advancing means and to the power means of the applicator mechanism to synchronize the movements of the bottle and applicator mechanism to position the latter above the former during said coincident portions; means operatively associated with the applicator mechanism to effect relative movement between the pad and said closed neck to cause intimate contact between the exposed side of the stamp and said peripheral surface of attachment to conform the pad to the configuration of said surface; and means connected to the pneumatic means adapted to disable said means to release the stamp from said face upon intimate contact between the stamp and said peripheral surface.

5. In a machine adapted for applying elongated strip stamps to the closed necks of bottles, means to advance a bottle to a predetermined position; a stamp applicator comprising a frame, a carriage mounted for movement in the frame along a substantially vertical path, a flexible pad providing a label contacting face of plane dimensions slightly less than those of said strip stamps, a rigid backing member secured to the central portion of the pad, support means mounting said member in the frame for movement relative to the frame and to the carriage along said vertical path, a pair of opposed rigid support arms pivotally carried by the backing member support means and secured respectively to opposite end portions of the pad, and articulating links pivotally interconnecting the carriage and said arms respectively at points intermediate their ends; a supply of stamps; means to issue an individual stamp to a position in contact with said face; pneumatic means to retain an issued stamp on said face; means to apply an adhesive to a stamp while retained on said face; means to position the applicator over said bottle; means to effect movement of the applicator carriage toward the bottle to cause a stamp intimately to

contact the closed neck and to conform the pad to the configuration of the neck; and means to disable said pneumatic means to release the stamp from said face upon intimate contact of the stamp with said closed neck.

6. In combination with a machine having a conveyor adapted to transport a plurality of bottles along a predetermined path at intervals of spacing and to apply elongated substantially rectangular stamps to the closed neck ends of said bottles and a mobile supporting structure provided for movement about a circuitous path of travel, a portion of same being adjacent to said predetermined path; a strip stamp applicator adapted to be carried by said mobile supporting structure and comprising: a frame; a carriage; means on the carriage providing spaced parallel pivotal axes; a flexible pad providing a stamp contacting face less than the plane dimensions of said stamps, the pad having a pneumatic passageway adjacent to each end and each passageway terminating in respective pneumatic admission ports at said face; a central support including a backing member disposed intermediate said axes and affording a plane surface parallel to and spaced from said axes and secured to the intermediate portion of said pad; a pair of rigid swing arms; means pivotally connecting said arms to said central support for movement about respective pivotal axes, said axes being parallel to each other and to said plane surface and adjacent to said surface; a pair of opposed articulating links respectively interconnecting each of said arms with the carriage at said parallel pivotal axes, each of the links being connected to its respective arm intermediate the ends thereof; means securing the opposite ends of the pad respectively to said arms; a source of vacuum; and conduit means connecting said source with the passageways in the pad to effect retention of a stamp urged into contact with the face of the pad.

7. In combination with a machine having a conveyor adapted to transport a plurality of bottles along a predetermined path at intervals of spacing and to apply elongated substantially rectangular stamps to the closed neck ends of said bottles and a mobile supporting structure powered for movement about a circuitous path of travel, a portion of same being adjacent to said predetermined path, a strip stamp applicator carried by said mobile supporting structure and comprising: a frame; means mounting the frame on said mobile supporting structure; a carriage, including a pair of opposed arms rigidly secured to an elongated tubular sleeve, the sleeve defining a longitudinal axis; means mounting the sleeve in the frame for movement relative thereto along a rectilinear path parallel to said axis; a pair of pivot pins carried in said arms and providing respective pivotal axes parallel to each other, spaced equidistantly from said sleeve axis, and lying in a plane normal to said axis; a flexible pad providing a stamp contacting face as a plane surface having dimensions less than the plane dimensions of said stamps, the pad having a pair of pneumatic passageways therein each terminating in respective pneumatic admission ports in the face of the pad adjacent to each end thereof; a central support including a backing member disposed intermediate said pair of pivot pins and affording a plane surface parallel to and spaced from said pivotal axes and secured to the intermediate portion of the pad; a pair of rigid swing arms; a pair of pivot pins respectively interconnecting each of said swing arms with the central support at opposite sides of the backing member for rocking movement about respective pivotal axes, said axes being parallel to each other and to said plane surface and lying substantially in the plane of the stamp contacting face of said intermediate portion of the pad, the arms thereby being pivoted to and from an aligned substantially coplanar position and an angulated position of stamp application; a pair of opposed articulating links respectively interconnecting each of said arms with the pivot pins of the carriage, the links being connected to

their respective arms by a pivot pin disposed parallel to the carriage pivot pins and at a location intermediate the ends of each arm; means securing the opposite end portions of the pad respectively to said arms, including a resilient elastic cushion disposed between each arm and respective end portion of the pad; a source of vacuum; and conduit means connecting said source with the passageways in the pad to retain a stamp on said face.

8. An apparatus for applying elongated stamps to the closed neck ends of bottles comprising a conveyor adapted to transport a plurality of said bottles successively along a predetermined path at predetermined intervals of spacing; a mobile supporting structure powered for movement about a circuitous path of travel, said paths having adjacent portions of substantially continuously uniform spaced relation; and a strip stamp applicator carried by said mobile supporting structure having a frame providing a bore extended through a portion thereof, means mounting the frame on said mobile supporting structure, a carriage including a pair of opposed arms rigidly secured to an elongated tubular sleeve, the sleeve defining a longitudinal axis, means slidably mounting the sleeve in the bore of the frame for movement relative thereto along a rectilinear path parallel to said axis, a pair of pivot pins carried in said arms and providing respective pivotal axes parallel to each other, spaced equidistantly from said sleeve axis, and lying in a plane normal to said axis, a flexible pad providing a stamp contacting face as a plane surface having dimensions less than the plane dimensions of said stamps, the pad having a pair of pneumatic passageways therein each terminating in respective pneumatic admission ports in the face of the pad adjacent to each end thereof, a central support including a backing member disposed intermediate said pair of pivot pins and affording a plane surface parallel to and spaced from said pivotal axis and secured to the intermediate portion of the pad, a pair of rigid swing arms, a pair of pivot pins respectively interconnecting each of said swing arms with the central support at opposite sides of the backing member for rocking movement about respective pivotal axes, said axes being parallel to each other and to said plane surface and lying substantially in the plane of the stamp contacting face of said intermediate portion of the pad, the arms thereby being pivoted to and from an aligned substantially coplanar position and an angulated position of stamp application, a pair of opposed articulating links respectively interconnecting each of said arms with the pivot pins of the carriage, the links being connected to their respective arm by a pivot pin disposed parallel to the carriage pivot pins and at a location intermediate the ends of each arm, adjustment means carried on said central support to prevent pivotal movement of said arms away from said angulated position beyond said coplanar position, means securing the opposite end portions of the pad respectively to said arms, including a resilient elastic cushion disposed between each arm and respective end portion of the pad, a source of vacuum, conduit means connecting said source with the passageways in the pad to retain a stamp on said face, valve means disposed in said conduit and being shiftable alternatively to block and to open same, means to effect relative movement between a bottle and the pad, and means to effect synchronized opening and closing of said valve means to release the stamp from the pad upon application to a bottle.

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