

[54] **APPARATUS FOR ATTACHING STRIP LABELS TO TOP AND NECK OF A CONTAINER**

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[51] Int. Cl. **B65c 3/12, B65c 3/06**

[58] Field of Search **156/363, 358, 485, 486, 489, 156/490, 491, 566**

[56]

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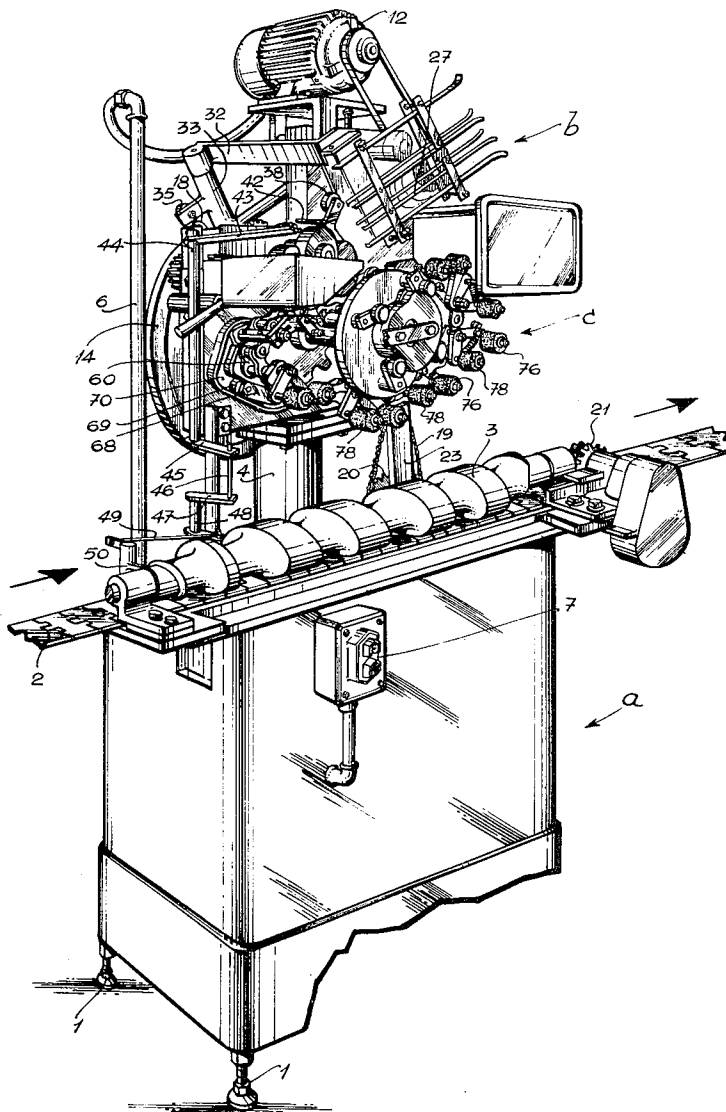
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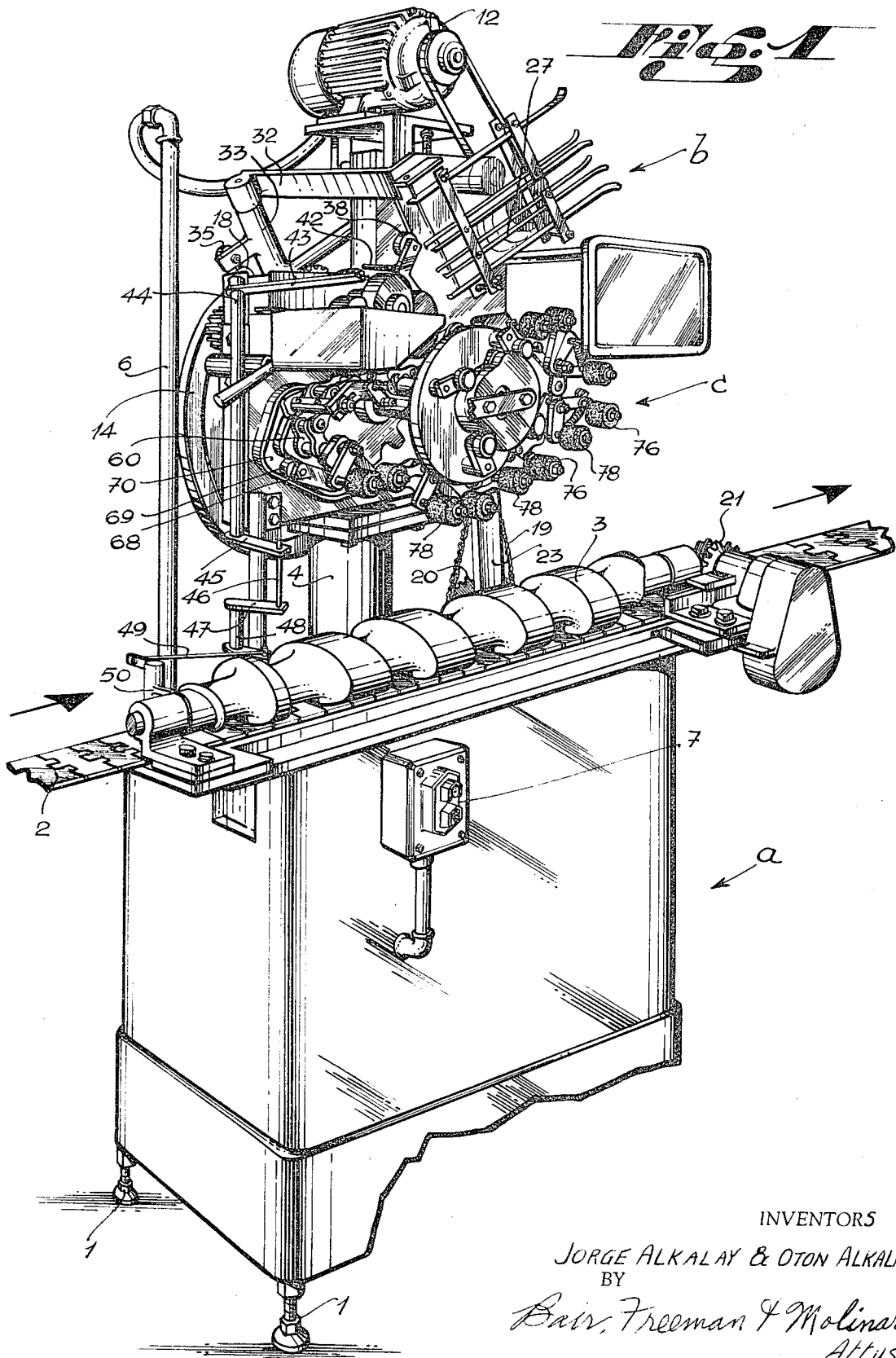
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ABSTRACT

A labeling machine for affixing revenue stamps across the top and down the sides of the neck of a bottle. As bottles continuously are moved along a conveyor, the revenue stamps are placed, adhesive side down, on the bottle top by a clamp. Two rollers simultaneously move down the neck of the bottle and press the stamp securely thereon. The rollers then separate and move off of the bottle neck. Multiple pairs of rollers are on a continuous chain which moves with the speed of the conveyor so that the stamps may be affixed on multiple bottles as the bottles move with the conveyor belt.

18 Claims, 10 Drawing Figures

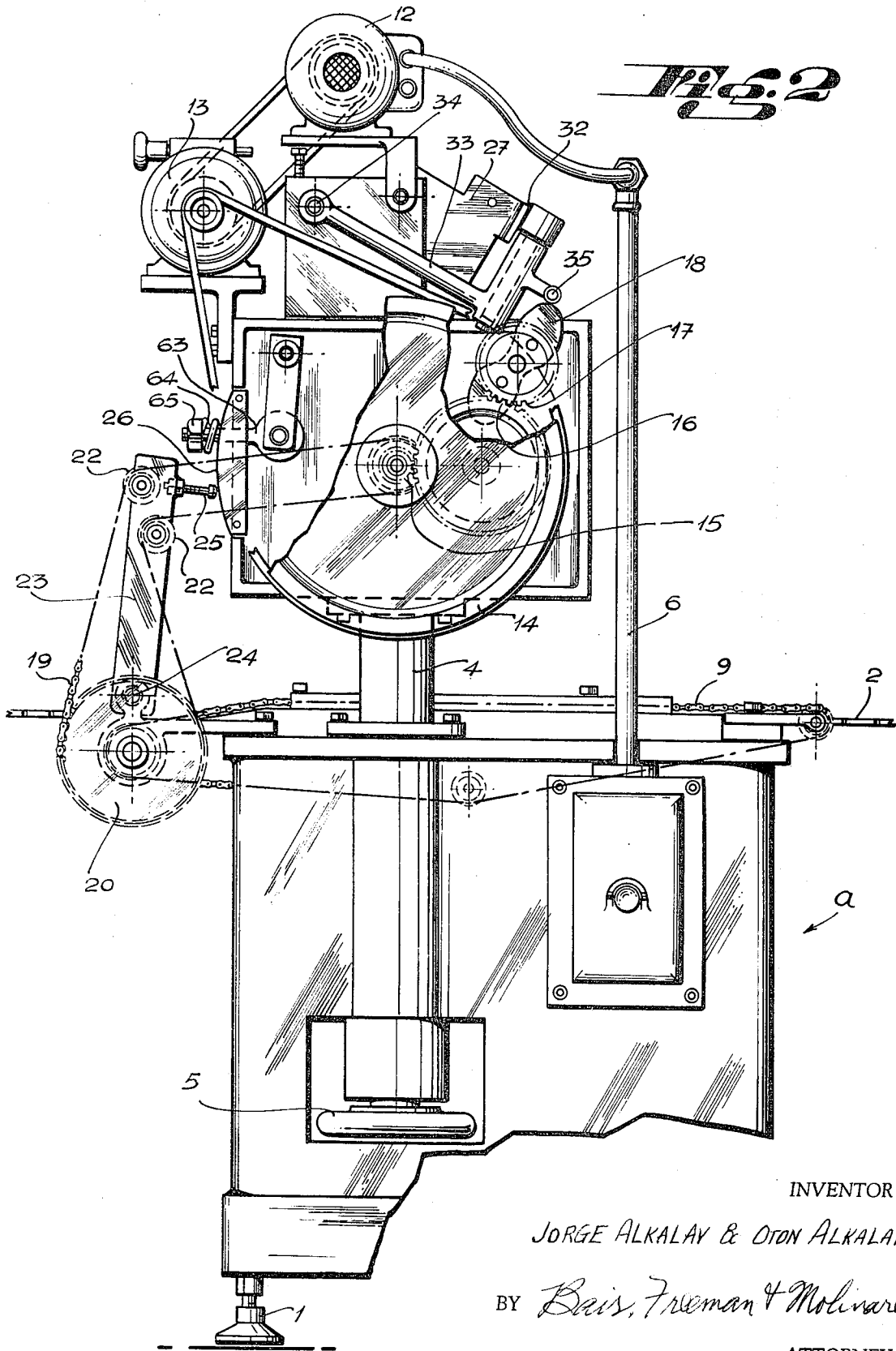




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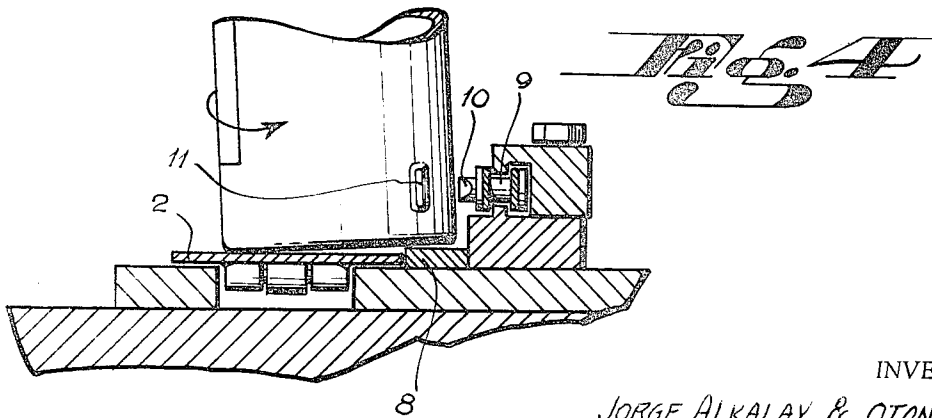
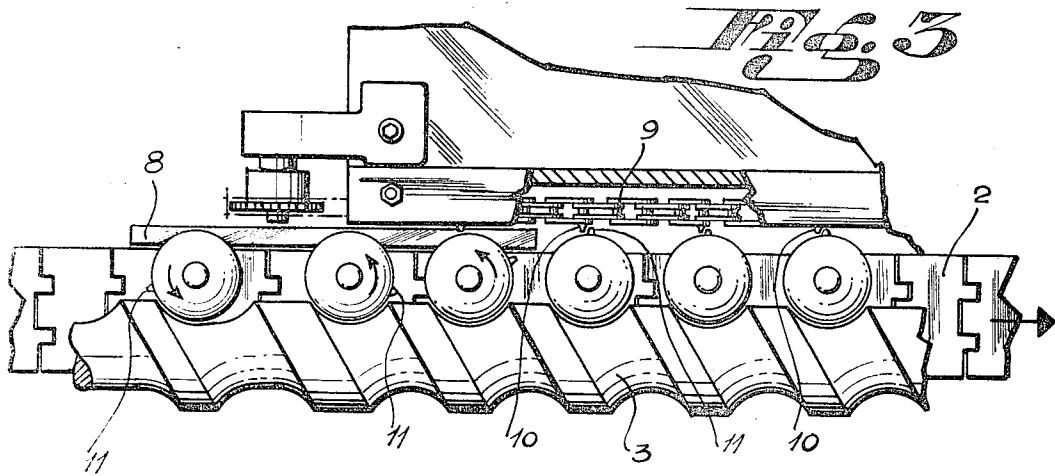
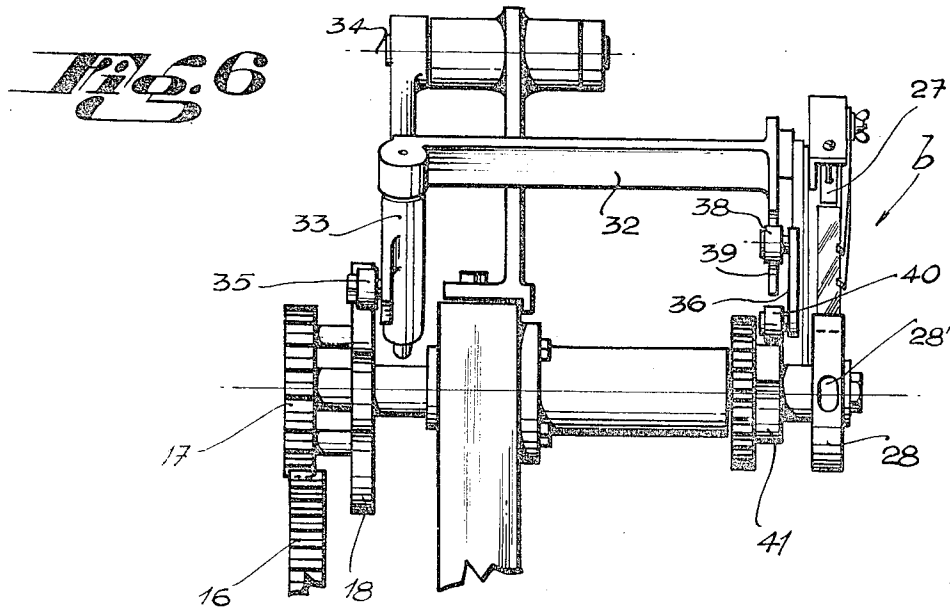


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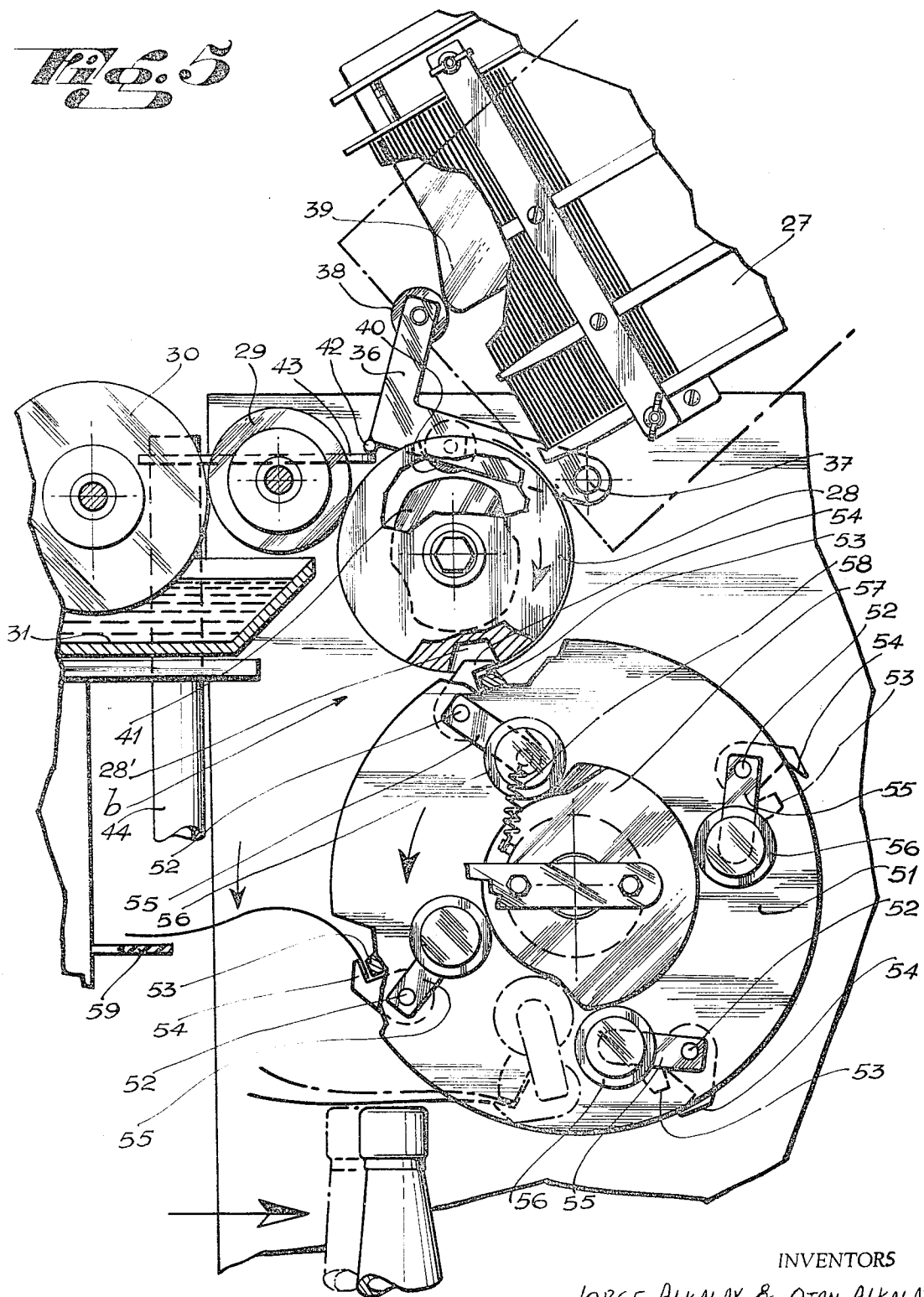
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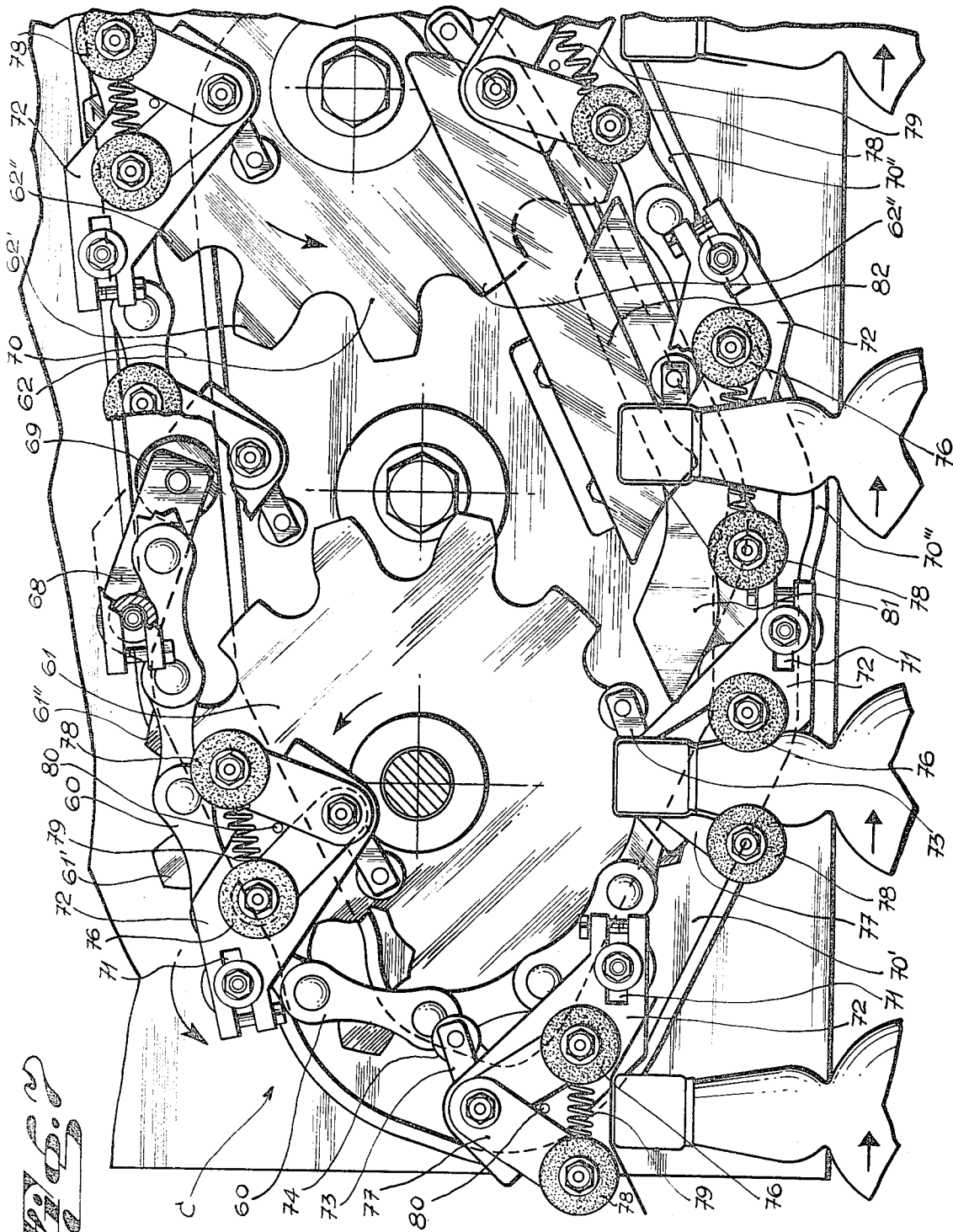


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Fig. 5



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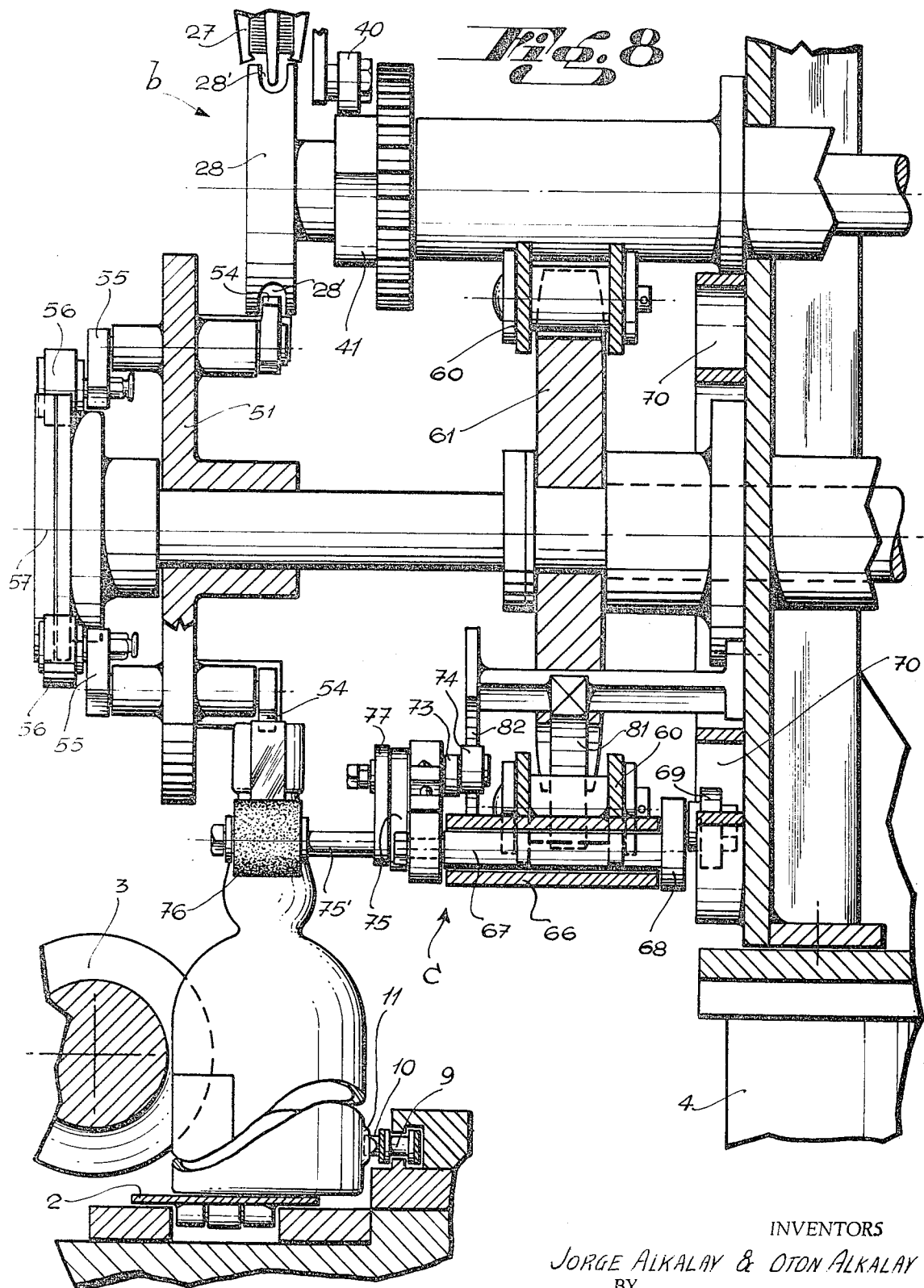
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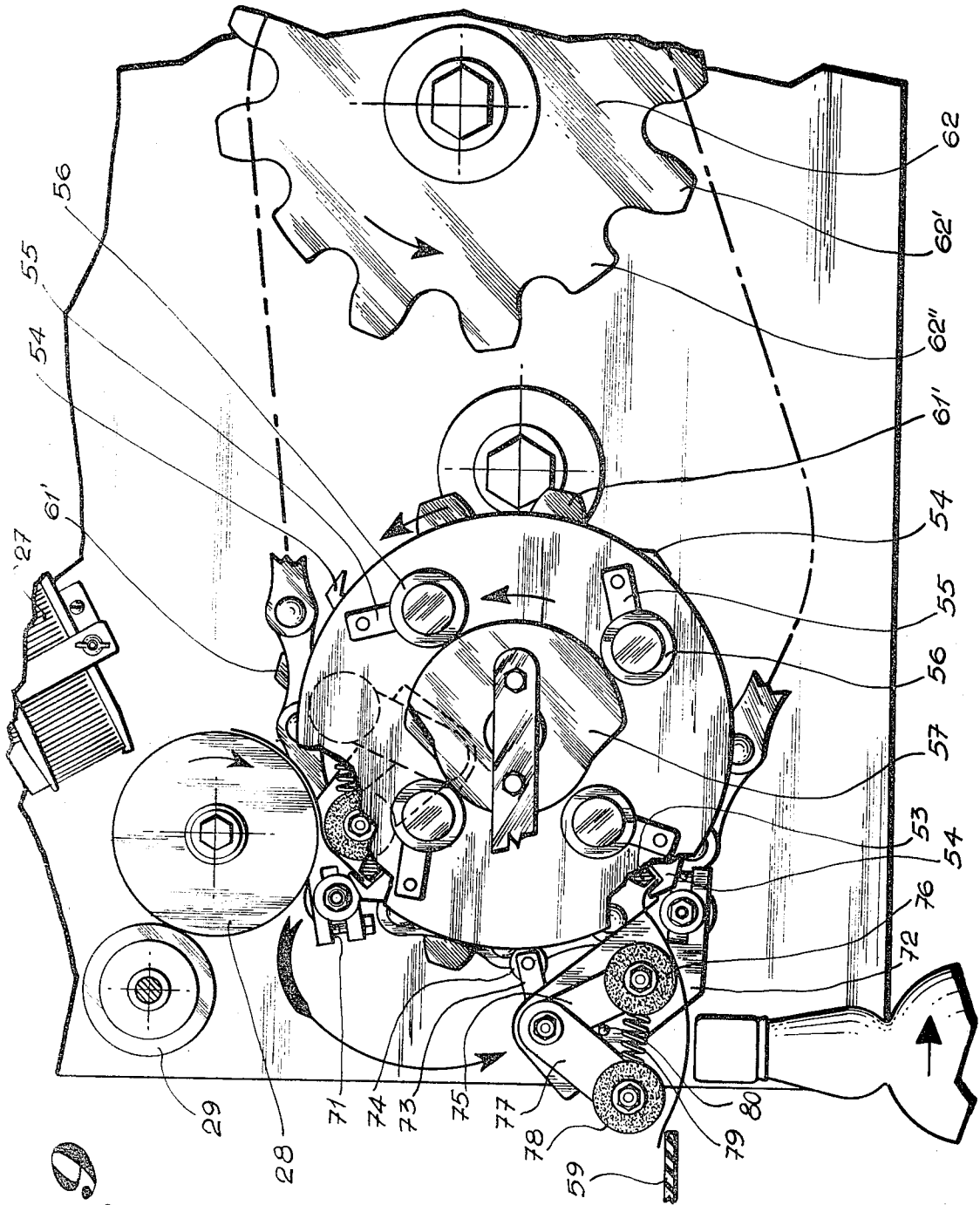
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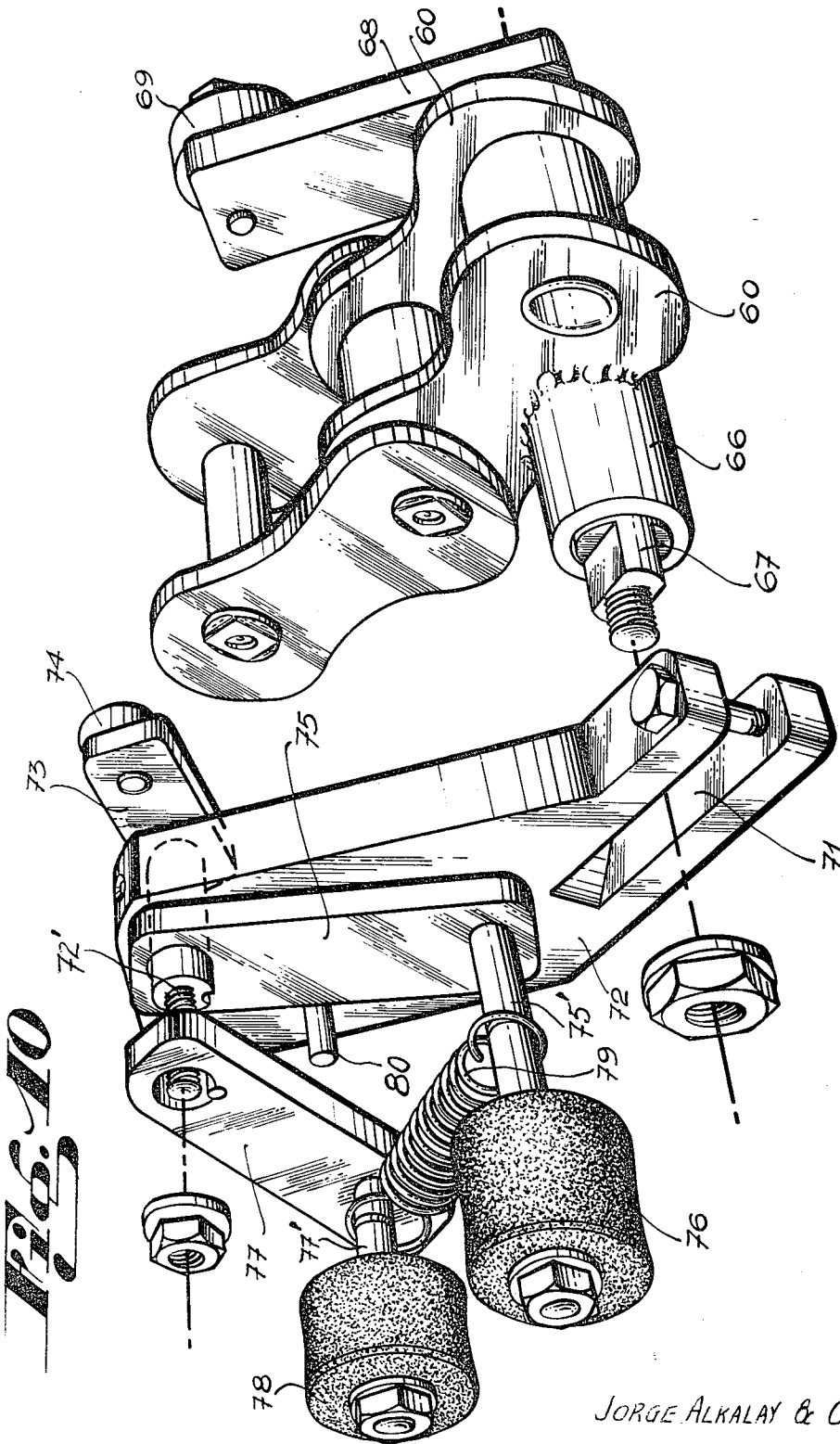
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APPARATUS FOR ATTACHING STRIP LABELS TO TOP AND NECK OF A CONTAINER

CROSS-REFERENCE TO RELATED APPLICATION

This application is a streamlined continuation of my co-pending application, Ser. No. 639,453 filed May 18, 1967 now abandoned.

BACKGROUND OF THE INVENTION

The present invention refers to a machine for applying and fixing tax bands or stamps on the upper mouth of bottles or containers and, more particularly, to an automatic device for fixing bands or stamps on the extreme end of the closed mouth of bottles.

Alcoholic liquors such as bourbon, scotch and the like are often taxed to produce governmental revenue. Generally the payment of the tax is denoted by attaching a strip of paper called a revenue stamp over the closed end of the bottle containing the liquor. Thus when the cap of the bottle is opened, the stamp is torn thereby cancelling the stamp.

Various methods have been devised to attach the revenue stamps to liquor bottles. The most elementary method is, of course, by hand. Mechanical devices for attaching stamps are usually positioned in the conveyor bottle filling and capping line just prior to the bottle packaging devices.

Stamp affixing devices normally operate by having the bottle stopped in its line of travel on the conveyor while the stamp is placed on the top of the bottle. Then mechanical flaps fold the ends of the stamp along the sides of the bottle neck.

Such devices have at least two disadvantages. First the smooth flow of the conveyor line is interrupted by stopping and stamping each bottle. Second, parts need to be substituted each time the stamp length or bottle configuration changes.

SUMMARY OF THE INVENTION

In a principal aspect the present invention comprises an apparatus for displacing bottles or the like on a conveyor at continuous speed while applying on the top of the bottle a tax stamp. Simultaneous with displacement of a bottle on the conveyor, a stamp is displaced downward normal to the advancing conveyor direction and over the bottle neck by fixing means which press the side bands of the tax stamp onto the bottle neck. After the stamp is affixed, the fixing means automatically open as the fixing means are displaced upward in the opposite normal direction to the bottles being carried forward by the conveyor. This eliminates loosening or rumpling of the newly affixed side bands of the tax stamp.

The elements or fixing means which affix the bands or stamps to the bottles are displaced or move in a fixed closed path or circuit along a closed circuit guiding element. The fixing elements are mounted on a chain guided by the guiding element. The chain is coordinated to advance with the speed of the bottle conveyor as the stamps are affixed to the bottle. A fixed cam is utilized to define the normal movement of the fixing elements during the stamp adhering operation.

It is thus an object of this invention to provide a strong and durable stamp fixing apparatus which can maintain a continuous speed of operation.

Another object of this invention is to provide a simplified construction in a stamp fixing apparatus which promotes operative efficiency and prevents apparatus deterioration and breakdown.

Still another object of the invention is to provide an apparatus having a minimum size and a minimum number of moving parts and an apparatus which may be incorporated on a level plane with existing container conveyor lines. In addition, the apparatus incorporates a counter device which prevents discharge of stamps from the machine when no bottles are passing on the moving conveyor.

As an additional feature, the apparatus may be adjusted to account for a change in container heights without replacing components in the apparatus.

One further object of the present invention is to provide an apparatus which affixes stamps at a precisely pre-determined position on the mouth of the bottle being carried on the conveyor.

Further objects, advantages and features of the present invention will be appreciated by referring to the following description in which reference is made to the several drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view illustrating the entire apparatus with the arrows pointing in the direction of advancement of the bottle conveyor;

FIG. 2 is an elevated view, of the opposite side of the apparatus of FIG. 1, partially sectioned to illustrate the transmission mechanism and the height regulator which adjusts to account to the variously sized containers;

FIG. 3 is a partial plan view of the worm bottle drive having its axis parallel to the conveyor belt and with the chain drive cover partially sectioned;

FIG. 4 is an elevated front view of a partial detail of a transverse section showing the means for positioning the containers on the conveyor belt;

FIG. 5 is an elevated partial view of the band or stamp positioning device, some of the elements being partially sectioned with the arrows showing the directions of rotation and displacement;

FIG. 6 is an elevated front view showing in detail a portion of the stamp positioning and transmission mechanism and the articulated arm connected to the stamp carrier;

FIG. 7 is a partial view illustrating the stamp fixing elements in which the fixing elements are seen to be displaceable along a closed circuit in the direction shown by the arrows;

FIG. 8 is an elevated view of a transverse cross section of the machine showing the container carrier with the container positioned to engage the stamp fixing device;

FIG. 9 is a side elevational view showing a detail of the stamp carrier; and

FIG. 10 is a partial view of the component elements of the stamp fixing device and its means for connection with the links of the drive chain.

DESCRIPTION OF THE PREFERRED EMBODIMENT

In the drawings the same reference numbers indicate corresponding parts. Combinations of various elements are indicated by letters.

Referring to FIG. 1 the machine for placing and fixing bands or stamps on bottles and other containers comprises a base *a* provided with adjustable supporting legs 1 to regulate the height of the machine. The machine is in register with the conveyor belt 2. The belt 2 is mounted with its direction of advance parallel to the rotational axis of the worm 3. The worm 3 provides a means for driving the bottles to a position in which the stamps may be affixed.

An adjustable height supporting column 4 projects upwards from the base *a*. The height of the column 4 may be adjusted by the hand rotatable wheel. Conduit arm 6 provides a passageway for the electric power conductor leading to the motor 12 from the switch panel 7. Push buttons on the panel 7 are manipulated to cause the power to turn on or off.

Column 4 is the support means for the stamp positioning part of the device *b*, the stamp affixing part of the device *c* and the transmission of the driving mechanism for the entire machine.

The worm 3 is partially positioned over one side of belt 2 (FIG. 3). On the opposite side of the belt 2 and parallel to the belt 2 is a fixed guide 8. The upper part or plane of the guide 8 extends to a height above the plane of the belt 2 (FIG. 4). A chain 9 is mounted parallel to the belt 2 and guide 8. The links have lateral projections 10 extending towards belt 2. The bottles have a lateral projection 11 which engages the projection 10 of the chain 9 to provide for proper positioning of the bottles.

That is, the mechanism provides for positioning the bottles so that the stamps may be uniformly affixed on the top part of the bottles. When the bottles carried by the belt 2 reach worm 3, part of the base of each bottle rests on the lateral guide 8 so that with the advance of belt 2 and the rotation of worm 3, the bottle is longitudinally displaced. At the same time the bottle is rotated due to the lateral braking action of the guide 8. When, during the advance and rotation of the bottle, the lateral projection 11 of a bottle encounters a projection 10 of the chain 9, the rotational movement is stopped. The chain 9 advances at the same speed as that of the worm 3 so that the bottle remains in a position to receive the band or stamp. After leaving the position on the guide 8, the bottle continues its longitudinal non-rotational displacement.

A motor 12 is mounted at the top part of the machine and is coupled with a speed adjusting means 13 (FIG. 2). The speed adjuster 13 is coupled by a belt to a large diameter pulley 14. The pulley 14 is axially connected with transmission gear 15 which, in turn, meshes with an intermediate gear 16. Intermediate gear 16 meshes with gear 17. The gear 17 is solidly and axially connected to girating cam 18. The axial gear 15 also meshes with chain 19 to drive the gear wheel 20 which, in turn, drives chain 9, and gears 21 (FIG. 1) which drives the worm 3.

In order to maintain adequate tension of the transmission chain 19 when the height of the adjustable support column 4 is altered, the guide gears 22 are mounted on an arm 23 which is rotatably coupled at its lower portion 24 to the base of the machine. On the higher portion of the arm 23 is a laterally projecting rod 25 resting against curvilinear runway 26. A vertical displacement of the devices mounted on the column 4 made in order to account for the different heights of bottles, will cause the rod 25 to angularly displace the arm 23 as well as the gears 22 and thereby maintain adequate tension on chain 19 (FIG. 2).

The placing and fixing devices for bands or stamps *b* and *c* are coordinated with each other and with the speed of the bottles on the conveyor belt 2 and worm 3.

As shown in FIG. 5, the positioning device for the stamps *b* comprises a carrier 27 with the housing being adjustable to accommodate different sizes of stamps or labels. The carrier 27 has a pendulum-like movement which is effected by the cam 18 (FIG. 2). The phantom lines in FIG. 5 indicate the alternative position of carrier 27 as effected by cam 18. Wheel 28 rotates to receive adhesive on its border from intermediate roller 29 which, in turn, is in contact with wheel 30 partially submerged in the bowl 31 containing the adhesive. The stamps from the housing 27 are then applied to the wheel 28 over the adhesive, thereby transferring adhesive to the stamps.

The carrier 27 is mounted on the end of the bar 32 (FIG. 1). The bar 32 is attached to the end of the arm 33. The arm 33 is pivotally attached at a fixed end 34. At its opposite end near the attachment of the bar 32, a roller 35 runs on the bearing surface of the cam 18 to provide for a pendulum-like movement of the carrier 27. The bar 32 is pivotally attached to the arm 33. Thus when the carrier 27 is locked in position when no bottles pass through the device (as described below), the bar 32 pivots on the arm 33 as the arm 33 is displaced by the action of the cam 18.

Referring again to FIG. 5, the movements of the carrier 27 are caused by elbowed arm 36 which is pivotally connected at one of its extremes 37. The opposite end of the arm 36 carries a roll 38 resting on projection 39 which projects from carrier supporting arm 32 (FIGS. 1, 5 and 6). A second roller 40 which runs on the surface defined by the girating cam 41 projects laterally from the elbowed arm 36. The cam 41 is mounted on the axis of wheel 28. The wheel 28 extracts the stamps from the carrier 27 whenever the cam 41 presents a surface which allows the elbowed arm 36 to lower the carrier into contact with the wheel 28.

A rod 42 (FIGS. 1 and 5) projects from the elbowed arm 36 and may rest on the interposed element 43. The element 43 is fixed to the end of a vertical bar 44 which is angularly displaceable about its longitudinal axis through a set of elements

45, 46, 47, 48. The set of elements 45 through 48 are actuated by a displaceable lever 50 which is activated by the bottles entering the machine. When the lever 50 is displaced, the element 43 (FIGS. 1 and 5) liberates rod 42 and allows the carrier 27 to move towards the stamp extracting position. When the machine is operating but no bottles are on the conveyor the element 43 holds rod 42 and prevents the carrier 27 from engaging in contact with the extracting wheel 28.

Because of the synchronization of movement between the component mechanisms of the machine, when carrier 27 nears and partially engages the rotating wheel 28 which has a surface with a film of adhesive, the stamp is carried by the wheel 28 with one end over one of the depressions 28' (FIG. 5).

Mounted and working in combination with the wheel 28 is rotating plate 51 carrying pivoting rods 52 mounted normal to the plate 51. The rods 52 are arranged in a circular configuration on the plate 51 with the ends of the rods 52 protruding from the plate 51 and lying in the vertical plane defined by the wheel 28. A fixed element 53 and one angularly displaceable element 54 comprise a clamp which, in closed position, carries the end of the stamp drawn by wheel 28 and extracts it from the wheel 28 to deposit it on the top of the bottle, as shown in FIG. 5.

The rods 52, which are normal to plate 51 and rotatably mounted in said plate 51 are solidly attached to their corresponding displaceable clamp elements 54. On the opposite side of the plate 51 the rods 52 are solidly attached to the arms 55. The ends of the arms 55 have rollers 56 which roll on the fixed cam 57. The rollers are held in tension against the cam 57 by springs 58. Roller 56 actuated by the cam 57 causes closing and opening of the clamp formed by the fixed element 53 and mobile element 54. Closing is synchronized to occur within the notches 28' of wheel 28 in order to extract from the notches 28' the adhesive covered stamp. Opening occurs when the stamp is set on the mouth of the bottle. In order that the stamp will not fall in an abnormal position on the mouth of the bottle, a fixed projection 59 as may be seen in FIG. 5, is positioned opposite the plate 51 to intersect the descending stamp and hold it in position over the bottle.

The bands or stamps are thus transversely set on the closed mouth of the bottles. The middle part of the band rests on the bottle cap with the ends of the band projecting over the cap. The face with its surface covered by the adhesive rests on the bottle cap surface. In order to complete the adhering of the ends onto the lateral walls of the bottle, the machine possesses the fixing device *c* which is the principal novelty of the invention.

The device *c* basically comprises a displaceable fixing mechanism operative on a closed circuit of a chain of links 60 (FIGS. 1, 7 and 8). The links 60 are mounted and driven by at least one geared wheel 61, the axis of the wheel 61 being transversally disposed to the advancing direction of the bottle and actuated by the gear 16 (FIG. 2).

In the illustrated example, the geared wheel 61 cooperates with a second geared wheel 62 having an axis parallel to the former and having mounted thereon the link chain 60. The tension of the chain 60 is maintained by element 63 (FIG. 2) which is kept in tension by biasing spring 64 fixed by bolt 65. A variation in the relative position of the geared wheel 62 with respect to that of 61 is compensated for by the spring biased element 63 which keeps tension on the chain 60.

At regular intervals the chain 60 carries cylindrical tubes 66 disposed transverse to the direction of travel of the chain 60. The tubes 66 are disposed on the outer periphery of the chain 60. Thus the speed of the tubes 66 is greater than that of the chain 60 even though their rotational speeds are identical. The superior speed of the tubes 66 in relation to the chain 60 is accounted for in the synchronization of the device. The superior speed of the tubes 66 advantageously makes it easier to produce a linear component of speed equal to the speed of the conveyor belt 2. Such speed makes it possible to achieve the maximum outputs for the machine which are superior to prior labeling devices.

Axial members 67 pass through and are mounted in the tubes 66 (FIGS. 8 and 10). The axial members 67 have, at the end opposite to the bottle passage zone, an arm 68 affixed thereto. Attached to the arm 68 is a roller 69 running in the lateral fixed channel 70.

Referring to FIG. 10, the opposite end of axial member 67 has a lateral ribbed portion which adapts to fit in the groove 71 on the end of member 72 so that the member 72 is solidly attached and angularly displaced with the axial member 67.

A second axial member 72' is attached normal to the member 72 with a fixed arm 73 having an attached roller 74 situated on the inside end of the member 72. The opposite end of the second axial member 72' is attached to an arm 75 which is rotatably free in respect to the displacement of the second axis 72'. A rod 75' for mounting the affixing roller 76 projects normally from the end of the arm 75.

Also at the other terminal end of the second axis 72' through member 72 there is attached a fixed arm 77 similar to the arm 75. Arm 77 also has a corresponding normal rod 77' attached thereto for the mounting of the roller 78. Both fixing rollers 76 and 78 are of an elastic material and act as the clamps for the lateral sides of the mouth of the bottle on which they are displaced vertically downwards to fix end portions of a stamp which set transversely on the end of the bottle mouth.

Between the mounting rods of the rollers 76 and 78 is a spring 79 attached to the rods 75' and 77' which draws the rolls 76 and 78 together. Between the arms 75 and 77 attached normal to member 72 is a rod 80 which acts as a limiting stop of the angular displacement of the arms 75 and 77.

The runway or channel 70 is followed by a roller 69 which is attached to an arm 68 from axial member 67 and thus to member 72. Member 72 is the displaceable base on which are mounted the fixing rollers 76 and 78. The channel 70 has near its base an inclined descending part 70' and a corresponding ascending part 70'' (FIG. 7). A fixed guide 81 guides the links in the chain 60. The central portions of the links of chain 60 are forced by the guide 81 to descend and follow the guide 81. The fixed guide 81 has a descending part and an ascending part which runs upwards in the direction of the bottle movement.

The roller 69 engages the runway or channel 70 around the closed path formed by the channel 70. The links of the chain 60 after being guided by the guide 81 are engaged by the teeth on the gear 62. The gear 62 also defines the route of the chain 60. The roller 74 which is connected to the stamp fixing roller 78 engages the camming guide surface 82 to force the roller 78 into an open position in respect to the other fixing roller 76 after the stamp is affixed to the bottle.

As seen in FIG. 7, the chain wheels or gears 61 and 62 have normal protruding teeth 61' and 62', and distributed between normal teeth 61' and 62' are shorter teeth 61'' and 62'' which engage the chain 60 at positions corresponding to the places where the pieces of tube 66 are set in the links 60. This permits the maintenance of engagement between the gears 61 and 62 and the chain 60.

As can be appreciated from the description and illustrations, the displacement of the chain of links 60 and the various components engaging the chain 60 is substantially in a single common plane parallel to the direction of the advance of the bottles with all displacements and advancements being coordinated and synchronized.

In the movement of the chain of links 60, the roller 69 passes through the channel 70. When the chain 60 is near the top part of the run of the channel 70 (inoperative position of the fixing means) the body of the member 72 is shown disposed downwards in respect to axial member 67 which is attached to arm 68 of the roller 69. The member 72 is also disposed downward with respect to the stamp fixing rollers 76 and 78 (FIGS. 7 and 9). When the chain 60 descends with the wheel 61, the rollers 69 remain in channel 70 while the member 72 commences to tumble or rotate forward, the tumbling being completed with the passage of roller 69 towards the lower interior part 70' of the runway 70.

At that moment the fixing rollers 76 and 78 are shown extending downward and tensioned by spring 79. The rollers 76 and 78 are now in the position of maximum nearness allowed by the intermediate rod 80. Each set of fixing devices 76 and 78 are displaced with a component of speed parallel to and equal to the speed of the bottles on the conveyor belt 2. FIG. 7 illustrates how the fixing rollers 76 and 78, when descending, meet the stamp, guide it, flip it over, fix against the sides of the bottle and press the side parts of the stamp onto the bottle. This pressure is due to the tension of spring 79.

When rollers 76 and 78 reach the lowest point of their vertical run just before roller 69 begins the upward run 70'' in the channel 70, the roller 74 attached to arm 77 of the fixing roller 78 intersects the guide 82 to open the clamp formed by the two fixing rollers 76 and 78.

As the member 72 is displaced in the channel 70 through the descending portion 70' thereof, the portion of the member 72 having the groove 71 which receives the terminal portion of the axial member 67 is maintained in a substantially horizontal position. Simultaneously, the fixing rollers 76 and 78 descend for approximately equal distances to affix the stamp to the sides of the mouth of the bottle.

At the end of the descending run 70' of channel 70, the affixing operation is ended. The bottle maintains its constant speed of advance and roller 69 enters the lower depression 70''' of channel 70. This causes the front part of member 72 to move forward and downward before the roller 69 begins the ascending run in space 70''.

The vertical change of direction of the fixing rollers 76 and 78 occurs between the descending portion 70' and the ascending portion 70'' of channel 70 as the chain of links 60 with its tubes 66 fixed at intervals is displaced along a large circular path. The stamp fixing roller 76 commences its ascent at a greater speed than the top part of the bottle due to the downward thrust of the member 72. Simultaneously roller 74 is downwardly displaced by guide 82 to move stamp fixing roller 78 toward the rear and upwards. Thus both rollers 76 and 78 are separated from the walls of the top part of the bottle. Thus during the ascending vertical movement of the stamp fixing rollers 76 and 78, unfastening or rumpling of the stamp affixed on the sides of the bottle as the bottle is conveyed along the belt 2 is avoided.

The depression 70''' which causes the inclination partially downwards of the front part of member 72 as previously described, causes the fixing rollers 76 and 78 to separate as they begin the ascending movement. The top part of the bottle is separated from the rollers 76 and 78 and positioned approximately midway between both rollers 76 and 78. At the same time the depression 70''' prevents producing a great variation of the relative height between the fixing rollers 76 and 78. Thus the rollers 76 and 78 are maintained in a substantially horizontal plane.

The operation is thus continuous and automatic without requiring variations of speed in the passage of bottles. In operation, stamps were affixed to bottles at the normal rate of 150 bottles per minute. All moving parts are synchronized. Although the machine has been described as affixing revenue stamps to liquor bottles, it may be used to attach almost any strip material to the top and sides of a container or bottle. In addition, the machine is adjustable and may be used to attach stamps or bands to various sized bottles having various neck lengths without replacing or adjusting parts.

We claim:

1. Apparatus for adhering a strip of material over the top end and opposite sides of a neck of each container in a series of containers moving continuously in a straight line, single file on a conveyor, said apparatus comprising, in combination: a single position above said conveyor having means for receiving and transferring said strip to the top of said continuously moving container, said means for receiving operable to receive said strip and transfer said strip vertically down onto said container top as said container moves continuously on a straight conveyor;

means for affixing said strip to said container as said strip is transferred to the top of said container, said means for affixing located at said same single position above said conveyor as said transferring means, said means for affixing operable to move vertically downward to engage the opposite ends of said strip and press said strip ends against the opposite sides of the neck of said container, said means for affixing subsequently disengaging said affixed strip ends and said continuously moving container; and means for driving both said means for receiving and transfer and said means for affixing said strip in synchronization with containers being driven through said apparatus and with each other so that said strip is sequentially positioned on said container and affixed to said container at said single position.

2. The apparatus of claim 1 including means for spacing said containers on said conveyor through said apparatus.

3. The apparatus of claim 1 including means for aligning said containers about their vertical axis upon their passage through said apparatus.

4. The apparatus of claim 1 wherein said means for affixing include a continuously driven closed loop member, said member being synchronously driven with respect to said continuous moving containers, at least one set of biased means pivotally mounted by attachment means on said loop member, said biased means engaging said strip and pressing said strip against opposite sides of said container neck as said loop member is driven in synchronization with said containers, and cam driving means to control engagement of said biased means with said container neck and to separate said biased means for engagement with said container neck following pressing of said strip against said container neck.

5. The apparatus of claim 1 wherein said means for receiving and transfer include at least one set of transfer fingers mounted for rotation about a horizontal axis in a vertical plane above said conveyor, said fingers adapted to receive a strip and deposit said strip on said container top, and said means for affixing include at least one means for engaging the ends of said strip, said means for engaging mounted for movement in a closed path in said vertical plane, said fingers holding said received strip until said affixing means engage said strip.

6. The apparatus of claim 5 wherein said transfer fingers are mounted on a rotating plate, said plate being mounted for rotation in a plane parallel to said vertical plane and adjacent one side of said conveyor, and wherein said means for engaging are mounted on a closed loop of connected driving links moving in a vertical plane on the opposite side of said conveyor.

7. The apparatus of claim 5 wherein said transfer fingers are mounted on a rotating plate having a cam wheel thereon, said fingers being mechanically linked to a follower, said follower cooperating with said cam wheel to thereby open and close said fingers for receiving and transfer of said strips onto said container top.

8. The apparatus of claim 2 wherein said means for spacing include worm drive means positioned above and parallel to said conveyor for engaging and driving said containers through said apparatus, said drive means synchronized with said means for transferring and affixing

9. The apparatus of claim 3 wherein said means for aligning include catch means for engaging said containers on said conveyor to prevent rotation of said bottles, during strip affixing, said catch means moving in synchronization with said conveyor.

10. The apparatus of claim 4 wherein said loop member in-

cludes a plurality of biased means attached at intervals to said loop member to engage and affix stamps to successive containers on said conveyor.

11. The apparatus of claim 1 including synchronized positioning means for said strips comprising strip magazine means for holding a plurality of strips, strip pickup means alternatively engaging and disengaging said magazine means to pick up a single strip in synchronization with the passage of containers on said conveyor, and adhesive application means mounted for application of adhesive to said strip prior to engagement and transfer of said strip by said means for receiving and transfer of said strip.

12. The apparatus of claim 4 wherein said biased means comprise first and a second pliable rollers, said rollers being biased toward one another for pressing said strip on opposite sides of said container neck.

13. The apparatus of claim 1 including lever actuating means positioned over said conveyor line in the path of said containers, said lever actuating means being connected to said means for driving said apparatus for activation thereof whenever a container passes into said device.

14. The apparatus of claim 1 including means for adjusting the position of said means for affixing and transfer in relation to said conveyor to accommodate variously sized containers.

15. The apparatus of claim 4 wherein said loop member comprises a series of interconnected chain links adapted to be engaged by and driven by gear wheel means, said gear wheel means being parallel to the direction of bottle conveyor movement; said attachment means comprise a body member with a first axial member affixed normal thereto, said first axial member being pivotally mounted on one of said links, said biased means being attached to a second normal axial member extending from said body member; and said cam driving means include a closed loop channel defining a path substantially coincident with said loop member, said first axial member having cam following means attached thereto, said cam following means engaging said channel and positioning said body member and biased means for attachment of said strip to said neck by coercion of said cam following means and said channel.

16. The apparatus of claim 15 including second cam following means affixed to said second axial member, said cam driving means also including a camming surface adapted to engage said second cam following means subsequent to pressing of said strip by said biased means on said neck and cause separation of said biased means from said neck.

17. The apparatus of claim 15 wherein said first axial member is attached on the outside of said closed loop of chain links to provide accelerated linear components of speed in relation to the linear components of speed of said chain link to which said axial member is attached.

18. The apparatus of claim 15 wherein said channel includes a first curved portion driving said biased means into engagement with said strip from said positioning means, said channel also including a second substantially straight line portion adjacent said first portion providing constant pressure from said biased means along the entire length of said neck, said channel also including a third curved portion adjacent said second portion, said third portion providing said biased means with a component of speed in the direction of movement of said bottles, said component being greater than the speed of said bottles, and said channel also including a fourth substantially linear portion disengaging said biased means from the path of said bottle necks conveyed along said conveyor.

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