

Aug. 4, 1942.

H. A. E. SJOBERG ET AL

2,292,093

LABELING MACHINE

Filed Nov. 19, 1941

4 Sheets-Sheet 1

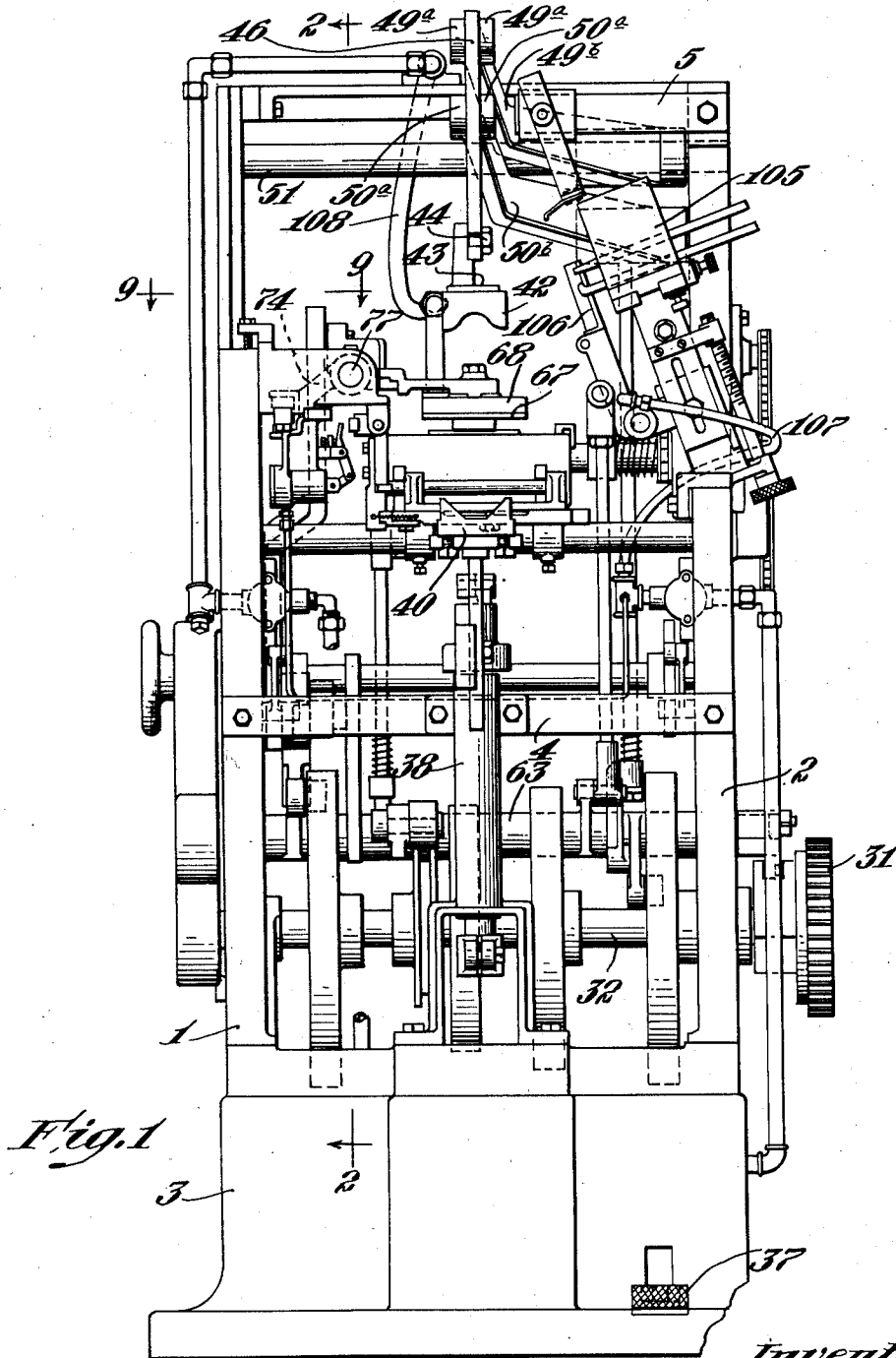


Fig. 1

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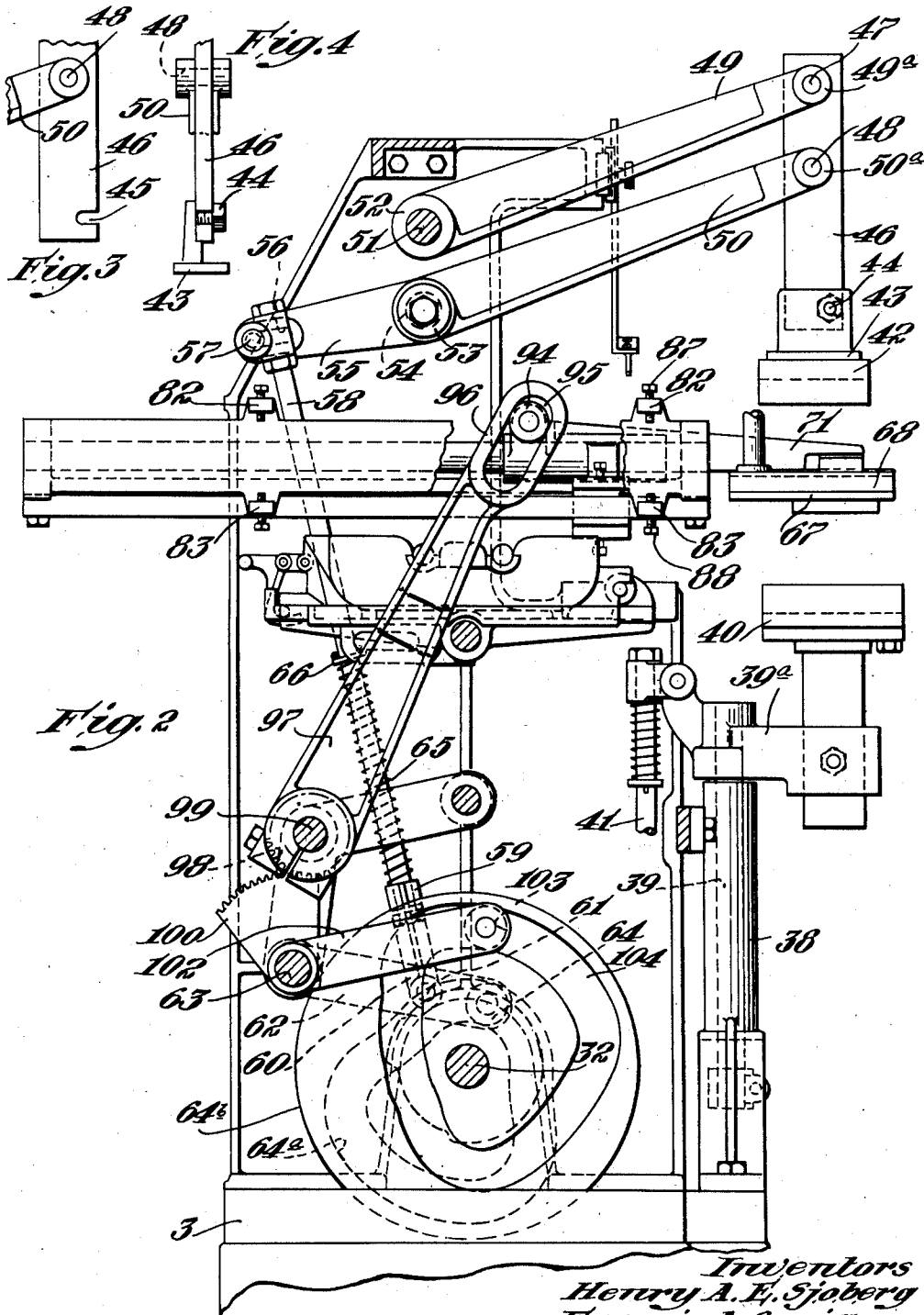
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4 Sheets-Sheet 2



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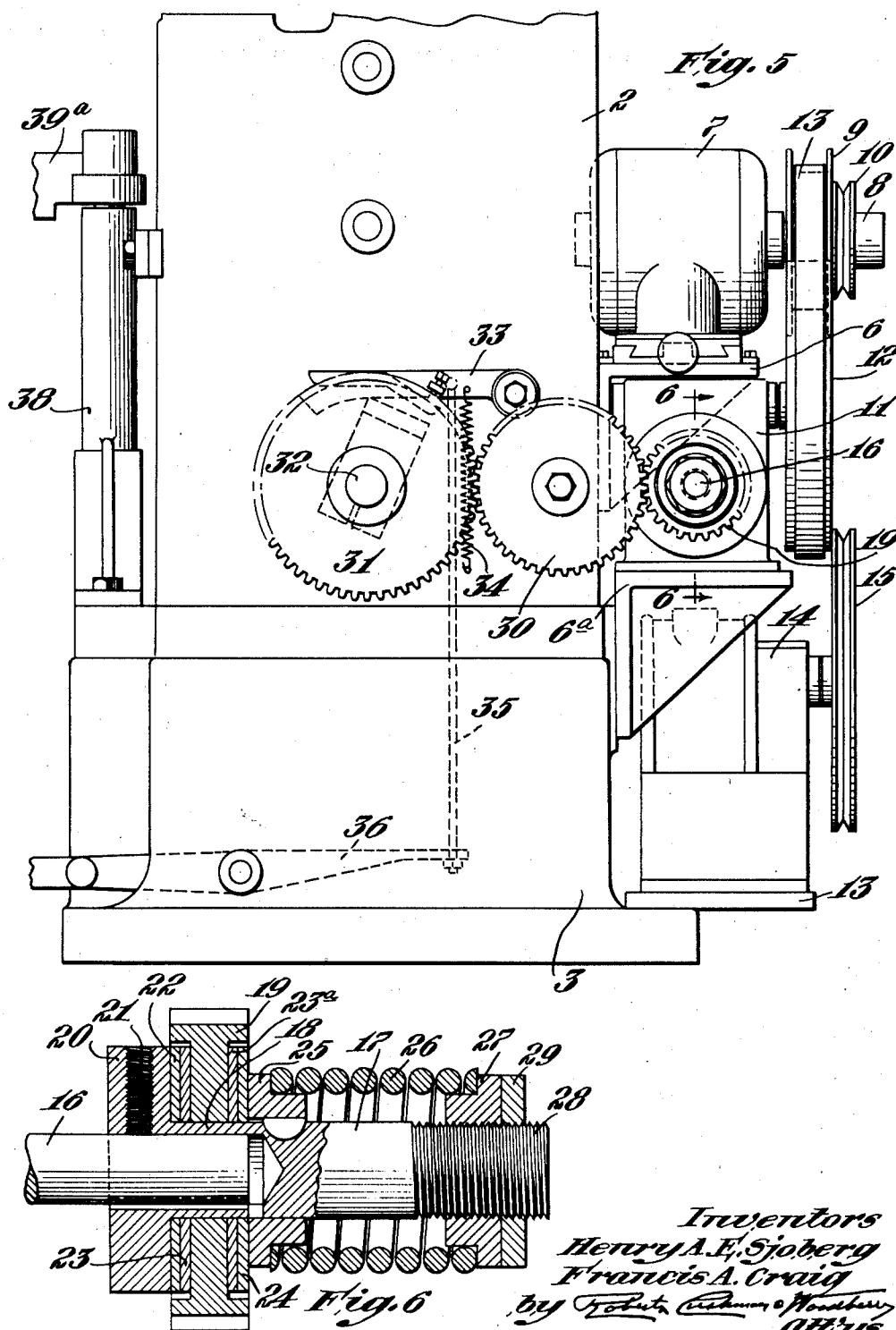
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LABELING MACHINE

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4 Sheets-Sheet 3



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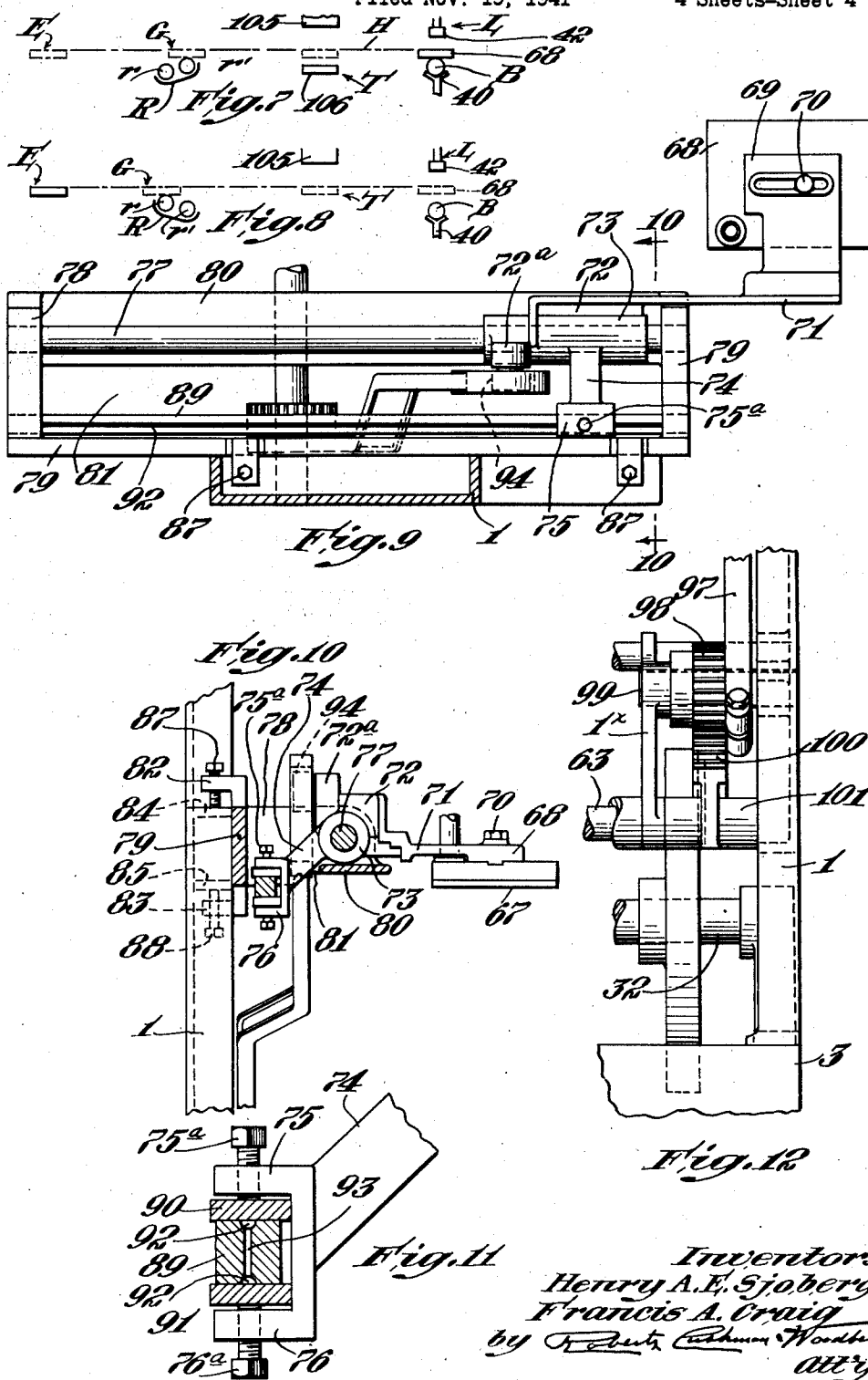
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4 Sheets-Sheet 4



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UNITED STATES PATENT OFFICE

2,292,093

LABELING MACHINE

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14 Claims. (Cl. 216—55)

This invention pertains to labeling machines and relates more particularly to improvements in semi-automatic machines of the general type illustrated in the patent to Holm, No. 2,242,974. In machines of this type, the labels are removed automatically one by one from a magazine by a picker device (usually a suction picker) and carried by the picker to a transfer station. A label transfer carrier, moving back and forth in a definite, usually rectilinear path, receives the label from the picker at the transfer station and carries it rearwardly past a gumming station where a part only of the label is gummed during the rearward movement of the carrier, and where, during the ensuing forward movement of the carrier, the remainder of the exposed surface of the label is gummed. The carrier, with the gummed label, then moves forwardly past the transfer station to the labeling station where the label is deposited upon the article which is to receive it, and, after the carrier has commenced its return journey toward the transfer station, a presser device presses the label firmly against the article.

In prior machines of this type the presser device has commonly been directed in its vertical movement by rigid, vertical guides extending up a very substantial distance above the path of the transfer carrier, and the carrier has been moved by link-and-lever mechanism arranged in the upper part of the machine, above the carrier path. This arrangement makes the machine unduly tall so that it requires substantial head room for its installation and tends to make the machine top heavy and subject to vibration.

In machines of this type it is necessary to change the presser at frequent intervals in order that it may conform to labels or articles of different contours. Furthermore, it is desirable to be able to vary the limits within which the presser moves vertically and to provide some degree of yieldability between the presser and its actuating means in order to avoid any danger of crushing the article. It is also desirable to be able to adjust the level of the path of movement of the transfer carrier; to adjust the plane of the suction pad of the carrier in order that the pad may conform properly to the surface of the article; to vary the limits of movement of the label carrier pad; and also to vary the position of the label carrier relatively to its carriage. Since the label transfer carriage is of considerable weight and moves a substantial distance backwardly and forwardly, its sudden reversals tend to impose excessive stresses and

shocks upon the actuating mechanism or to cause the motor to stall when the driving clutch is first engaged.

Objects of the present invention are in general to improve machines of the above type and in particular to provide adequate means for adjusting the limits of movement of the presser device as it moves toward and from the article support; to provide ready means whereby the presser device may be removed and replaced with reference to its supporting means; to provide for a certain degree of yield between the presser device and its actuating means; to provide for adjustment of the level of the transfer carrier path; to provide for adjustment of the plane of the suction pad of the carrier; to provide for adjustment of the carrier with respect to its carriage; to provide for variation of the limits of movement of the carrier; to provide improved means for supporting and guiding the presser and for actuating the carriage whereby the height of the machine may be reduced as compared with previous machines of this type, thereby making the machine more compact and less subject to vibration; to provide power transmitting connections such as to lessen the shock as the transfer carriage reverses or when the drive clutch is engaged; and to provide simple, readily accessible and easily manufactured mechanism for imparting the desired coordinated movements to the presser device and carriage.

Other and further objects and advantages of the invention will be pointed out in the following more detailed description and by reference to the accompanying drawings in which:

Fig. 1 is a front elevation (with certain parts broken away and omitting certain parts) illustrating a labeling machine embodying the present invention;

Fig. 2 is a fragmentary vertical section substantially on the line 2—2 of Fig. 1, but to larger scale and omitting certain of the parts shown in Fig. 1;

Fig. 3 is a fragmentary elevation illustrating the support for the label presser;

Fig. 4 is a fragmentary front elevation of the parts shown in Fig. 3;

Fig. 5 is a fragmentary elevation of the lower portion of the right-hand side of the machine illustrating the drive mechanism;

Fig. 6 is a fragmentary section to larger scale on the line 6—6 of Fig. 5;

Figs. 7 and 8 are diagrams illustrating the movement of the label carrier and the gum-applying means;

Fig. 9 is a section to larger scale, substantially on the line 9—9 of Fig. 1, omitting many of the parts and illustrating the label carriage and its guiding means;

Fig. 10 is a fragmentary vertical section substantially on the line 10—10 of Fig. 9;

Fig. 11 is a fragmentary section on the same plane as Fig. 10 but to larger scale illustrating certain details of the carriage guiding means; and

Fig. 12 is a fragmentary rear elevation of the right-hand lower part of the machine illustrating certain details of the label carriage driving mechanism.

Referring to the drawings (Fig. 1) the numerals 1 and 2 designate left- and right-hand rigid, vertical frame members, such frame members being securely bolted or otherwise attached to the base casting 3. The vertical frame members 1 and 2 are held in properly spaced and rigid relation by means of traverse bars 4, 5, etc., thereby to provide a rigid main frame structure for supporting the various operative elements of the mechanism.

Referring to Figs. 5 and 6, the numeral 6 designates a bracket fixed to the main frame of the machine and projecting from the rear side thereof, such bracket constituting a support for the electric motor 7 by means of which the machine is driven. The motor shaft 8 is provided with pulleys 9 and 10. A second bracket 6^a, below the bracket 6, supports a speed reduction gearing mechanism indicated generally at 11, such reduction mechanism being of any suitable type and comprising a pulley 12 which receives a belt 13 passing about the pulley 9 on the motor shaft. Below the bracket 6^a is another bracket 13 which may be secured to the base casting 3 and which supports an air pump 14 having a drive shaft provided with a grooved pulley 15 which receives a belt (not shown) passing about the grooved pulley 10 on the motor shaft thereby to drive the air pump.

The reduction gear mechanism 11 also comprises the power delivery shaft 16 (Fig. 6) which projects to the outside of the right-hand side of the casing of the reduction mechanism 11. On the outer end of the shaft 16 is mounted the hub member 17 of a friction or slip clutch or coupling. As illustrated in Fig. 6, the left-hand end portion of this hub 17 is hollow, providing the sleeve member 18 which receives the end of the shaft 16, —the hub 17 being coaxial with the shaft 16. A gear 19 is mounted to turn freely on the tubular portion 18 of the hub 17, the latter being provided with a radial flange 20 having a screw threaded radial bore for the reception of the set screw 21 by means of which the hub is fixedly secured to a shaft 16. The flange 20 is provided with a radial right-hand face which contacts a rigid washer 22 which bears against a friction washer 23 which engages the left-hand radial face of the gear 19. A second friction washer 23^a bears against the right-hand radial face of the gear 19 and in turn is engaged by a rigid washer 24. A collar 25 is splined to the hub 17 and its left-hand surface bears against the washer 24. A coil compression spring 26 bears at one end against the collar 25 and at its other end against a nut 27 having screw threaded engagement with the threaded right-hand end portion 28 of the hub 17. Preferably a lock nut 29 is provided for holding the nut 27 in adjusted position, with the spring 26 held under the desired degree of com-

pression. The pressure of the spring 26 against the collar 25 reacts against the washer 24 and thus causes the friction disks 23 and 23^a to bear with desired pressure against the opposite radial faces of the gear 19. When the shaft 16 is turned, the motion of the shaft is normally transmitted to the gear 19 through these friction disks, but if the rotation of the gear 19 is opposed by the application of sufficient force the gear 19 will slip with reference to the shaft 16 so that although the shaft 16 may continue to rotate the gear 19 may remain stationary. The degree of force necessary to prevent rotation of the gear 19 may be varied by adjusting the nut 27 along the hub 17.

The gear 19 meshes with an idler gear 30 mounted on a stub shaft fixed to the frame member 2 and this gear meshes with a gear 31 mounted on the main cam shaft 32 of the machine. The gear 31 is normally free to turn relatively to the shaft 32 but may be connected to the shaft by clutch mechanism of any appropriate type. The details of this clutch mechanism are not herewith specifically shown but the clutch mechanism comprises a pivoted dog 33 which, when in depressed position, engages a complementary element of the clutch mechanism thereby disengaging the gear 31 from the shaft 32. When it is desired to start the main cam shaft the dog 33 is lifted (in opposition to the force exerted by a spring 34) by means of a lifter rod 35 connected at its lower end to a treadle lever 36 having a foot treadle 37 at its forward end by means of which the lever may be rocked.

At the front of the machine there is arranged a tubular post or column 38 (Figs. 1, 2 and 5) here shown as bolted to the upper surface of the base 3. This post or column constitutes a guide for a vertically movable rod 39 to the upper end of which is secured a bracket 39^a which carries the support 40 upon which is placed the article to which the label is to be applied. The post 39 is vertically movable by means of a rod 41 which is actuated by an appropriate cam on the main cam shaft 32. Since the means for moving the article support 40 may be substantially like that disclosed in the patent to Holm No. 2,242,974 dated May 20, 1941, it is unnecessary to describe this part of the machine in further detail herein, it being sufficient to note that, as illustrated in Fig. 2, the article support is in its lowermost article-receiving position and that the support is raised to a suitable distance during the automatic operation of the machine to bring the article into proper position to receive a label from the label carrier at the label-applying station.

In addition to the article support at the label-applying station there also is provided a label presser 42 (Figs. 1 and 2). This presser may be of appropriate size and shape for use with the particular label to be applied and usually is of a material of a somewhat yielding character, for example soft rubber or the like. This presser is provided with a rigid supporting member 43 having an upwardly directed lug which is provided with a laterally extending bolt 44. This bolt is designed to be slipped into a horizontal slot 45 (Fig. 3) in the lower end of the elongate presser supporting bar 46. After the bolt 44 has been slipped laterally into the slot 45, the bolt is tightened thus firmly attaching the presser to the bar 46. However by loosening the bar 44 the presser is very easily removed from the bar so as to permit the substitution of another

presser of a different size or shape, for example for use with a label of a different kind. The arrangement thus provided permits the operator of the machine to remove the label presser and replace it by the manipulation of the single bolt 44, thus making this change of parts much easier than has been possible in machines of this general type as previously constructed.

At its upper part the presser supporting bar 46 is provided with vertically spaced pivot pins 47 and 48 which receive the forked forward ends 49^a and 50^a of a pair of levers 49 and 50 respectively.

The lever 49 is provided at its rear end with an elongate hub portion 52 which turns freely on a shaft 51 which extends across the machine and which preferably has its opposite ends fixed in the frame members 1 and 2 respectively. Preferably the hub portion 52 of the lever 49 is disposed closely adjacent to the inner surface of the frame member 2 and the lever 49 is bent at a point between its ends, as shown at 49^b (Fig. 1) so as to bring its forward end substantially in the mid-plane of the machine. The lever 50 is also provided with an elongate hub portion 53, but this hub portion is mounted to turn freely on a stub shaft 54 secured to the frame member 2. The lever 50 is also bent at the point 50^b between its ends (Fig. 1) so that its forward end lies in the same vertical plane as the forward end of the lever 49, the forward ends of the levers 49 and 50 being substantially above the article support 40. The axes about which the levers 49 and 50 turn are spaced apart vertically substantially the same distance as the axes of the pivot pins 47 and 48 so that the two levers constitute a parallel linkage for supporting and guiding the presser supporting bar 46. While the levers 49 and 50 constitute the sole means for supporting and guiding the presser supporting bar 46, the arrangement disclosed is such that the bar 46 always remains vertical, and although the presser 42 moves in an arcuate path the arrangement is such that as the presser 43 approaches the surface of an article resting on the support 40, the tangent to the arc of movement is so nearly vertical that there is no danger of causing undesirable slippage of the label horizontally along the article during the application of pressure.

The lever 50 is provided with a rearwardly extending arm 55 provided at its rear end with an elongated slot 56 which receives a bolt 57 adjustable along the slot and which carries a head supporting a pivot pin by means of which the upper end of an actuating rod 58 is secured to said adjustable head. The lower end of the rod 58 is arranged for free sliding movement in a hub 59 which forms part of a fork having spaced arms 60 which straddle a lever 62 and which are provided at their lower ends with openings for the reception of a pivot pin 61 by means of which the fork arms are secured to the lever. This lever 62 is arranged to turn freely at its rear end upon a shaft 63 which extends transversely across the machine 1. At its forward end the lever 62 is provided with a cam follower roll 64 which engages a cam groove 64^a in a cam disk 64^b fixed to the main cam shaft 32. A coiled compression spring 65 encircles the actuating rod 58, having its lower end bearing against the member 59 and having its upper end engaging a collar 66 fixed to the rod 58. As the cam 64^b rotates the lever 62 is rocked, thereby moving the actuating rod 58 up and down and thus swinging the levers 49 and 50 and causing the presser 42

to move up and down relatively to the article support 40. Adjustment of the bolt 57 in the slot 56 permits of variation of the stroke of the presser 42, for example to accommodate articles of different sizes, while the spring 65 and the slip connection between the rod 58 and the part 59 provides for the yielding application of force by the presser against the label so that all danger of breaking or crushing the article to be labeled is avoided.

Referring particularly to Figs. 9, 10 and 11, the label transfer carrier comprises a suction pad 67 mounted upon a rigid carrier member 68 which, as here illustrated (Fig. 9) is arranged for adjustment from the front to rear with reference to a supporting bracket 69, the latter having an elongate slot which receives a bolt 70 having screw threaded engagement with the part 68. By the provision of this elongate slot and bolt, it is possible to adjust the position of the suction pad of the carrier forwardly or rearwardly with respect to its carriage (about to be described) thereby to accommodate the suction pad to labels of different size and location relative to the article to be labeled.

The bracket 69 is fixed to or integrally joined to an arm 71 forming a part of the label transfer carriage 72 (Fig. 9). This carriage is designed to move back and forth, as will hereinafter be more fully described, and in the present embodiment is arranged to reciprocate in a substantially rectilinear path. However, it is to be understood that in its broader aspects the invention is not necessarily limited to an arrangement in which the path of the carrier is straight, since the path might, for example, be arcuate or of other shape if desired.

As here illustrated the label transfer carriage comprises the elongate sleeve portion 73 from which projects the rigid arm 74, the latter extending downwardly and to the left as viewed in Figs. 1, 10 and 11. At its lower end the arm 74 is forked to provide the upper and lower vertically spaced substantially horizontal members 75 and 76 (Fig. 11) respectively, said horizontal members having screw threaded bores for the reception of the bolts 75^a and 76^a respectively.

The sleeve 73 of the carriage is arranged to slide on a cylindrical guide rod 77, the opposite ends of which are fixed in the end members 78 and 79 respectively of a carriage-supporting frame which also comprises the left-hand, substantially vertical side wall 79 (Fig. 10) and the floor 80. This frame may be an integral casting if desired or made in any other suitable way. The floor 80 is provided with an elongate slot 81 whose purpose will hereinafter be described and the side wall 79 is provided with an upper pair of brackets 82 and a lower pair of brackets 83. These brackets are designed to overlap horizontal web members 84 and 85 (Fig. 10) of the frame member 1 and are provided with screw threaded bores for the adjusting bolts 87 and 88 respectively. By means of these bolts the carriage supporting frame may be vertically adjusted, thereby to vary the horizontal plane of the suction pad 67 of the transfer carrier.

As illustrated in Fig. 11, a substantially square rod 89 lies between the fork members 75 and 76 of the arm 74, said rod 89 having its opposite ends fixed in the members 78 and 79 of the carriage supporting frame. Gib members 90 and 91 are interposed between the fork arms 75 and 76 and the upper and lower surfaces of the square bar 89 respectively. By relative adjustment of the bolts

75^a and 76^a the transfer carriage may be rocked about the shaft 77 thereby to adjust the inclination of the plane of the label transfer carrier 68 relatively to the horizontal. The upper and lower surfaces of the square guide bar 89 are preferably provided with elongate oil-receiving grooves 92 and preferably these grooves are connected at intervals by small vertical bores 93. Thus by dropping oil into the upper groove 92, adequate lubrication of the engaging surfaces of the gibs 90 and 91 with the fixed guide bar 89 is assured.

The transfer carriage 72 is provided with a boss 72^a (Fig. 9) which carries a stub shaft on which turns a roller 94. This roller is received in an elongate slot 95 (Fig. 2) in the upper end 96 of a carriage actuating lever 97 whose upper part oscillates within the slot 91 in the floor 80 of the carriage-supporting frame. The lower end of this lever 97 is clamped to a short shaft 99 journaled at one end in the frame member 1 and at its other end in a fixed bracket 1^x (Fig. 12). A pinion 98 is keyed to this shaft 99 and meshes with a gear segment 100 having a hub portion 101 which turns freely on the shaft 63 above referred to. A lever arm 102 (Fig. 2) is fixed to the hub 101 and projects forwardly and is provided at its forward end with a cam follower roll 103 which engages a cam groove 104 in the cam 64^b above referred to.

Referring to Fig. 1, the numeral 105 designates generally a suitable magazine for labels, the labels being removed one by one from the magazine by a suction picker device 106 which is arranged to swing from a label-receiving position, adjacent to the magazine, to a label-delivering position at the label-transfer station, at which point the picker is disposed immediately beneath the suction pad 67 of the transfer carriage. The suction pad of the picker and the suction pad of the transfer carrier are connected by flexible tubes 107 and 108 respectively to conduits which lead, by way of automatic valves, to the air pump 14, said valves being of any suitable type and being actuated in proper time with the other elements of the mechanism by means which it is not necessary here to describe since such means, in general, is described in the patent to Holm above referred to.

In the operation of the machine, the cam shaft 32 is turned in the proper direction and at the proper speed. The cam disk 64^b, having the cam grooves 64^a and 104, rocks the levers 62 and 102 respectively and thus in properly timed relation moves the label pressers 42 up and down and moves the transfer carriage 72 backwardly and forwardly.

Referring first to Figs. 7 and 8 of the drawings, the letter H designates the path along which the label carrier 68 moves back and forth from the labeling station L past a transfer station T and a gumming station G to a point of reversal E and then forwardly again past the gumming station and the transfer station to the labeling station. At the labeling station there is the support 40 for the article B to which the label is to be applied and the vertically movable presser 42 which presses the gummed label against the surface of the article B after the carrier 68 has deposited the label on the article and has started rearwardly along the path H. At the transfer station T the picker 105 functions to present a label to the under surface of the carrier 68 as the latter moves rearwardly through the transfer station,—the carriage actuating cam groove 104 having a

dwell so designed that the carriage hesitates momentarily at the transfer station to permit transfer of the label to take place. The picker moves back and forth from the label magazine 105 from which it picks up a label and moves it down to the transfer station in readiness to be picked up by the carrier, as just described.

The gum-applying means at the gumming station G may be substantially like that more freely disclosed in the Holm patent above referred to, including a rocker R arranged to rock about a substantially horizontal axis transverse to the path H of the carrier, and this rocker is provided with a reservoir for adhesive and with a pair of applicators, for example rolls *r*, *r'*, which, by the rocking movement of the rocker, are caused alternately to be advanced upwardly toward the carrier path so as to apply gum or other adhesive means to the under surface of the label which is supported by the carrier. As the carrier moves rearwardly, as shown in Fig. 7, the applicator roll *r'* is moved upwardly while the carrier is passing so that the applicator roll first contacts the surface of the label substantially midway the length of the label and remains in contact until the right-hand edge of the label reaches the roll. On the return stroke of the carrier, as illustrated in Fig. 8, the rocker is so tipped as to raise the applicator roll *r* to contact with the surface of the label at about the mid-portion of the length of the latter and to remain in contact with the label until the left-hand end of the label reaches the roll.

The operation of the machine in general, irrespective of the particular mechanical means employed for the purpose, may be understood from consideration of the diagrammatic Figures 7 and 8. Thus referring to these figures the mechanism herein illustrated provides for the actuation of the presser and transfer carriage in a very simple and reliable way, while at the same time reducing the height of the machine as compared with prior machines of similar type, and the machine is less expensive and more rigid than when the picker and carriage are actuated by means such as has previously been employed. Furthermore, adequate means is herein provided for adjusting the movements of the carriage, and in particular for adjusting the plane of operation of the suction pad of the transfer carrier as well as for the ready removal and replacement of the label presser.

While one desirable embodiment of the invention has herein been disclosed by way of illustration, it is to be understood that the invention is inclusive of any and all equivalents which fall within the terms of the appended claims.

We claim:

1. A labeling machine of the kind having an article support, a movable label carrier and means operative to move the carrier back and forth from label-gumming position to label-applying position, and a label presser for pressing a label against an article mounted on the support, characterized in having a pair of arms pivoted to rock about vertically spaced axes and having their free ends spaced apart and pivotally connected to the presser, and means operative to swing said arms simultaneously thereby to move the presser toward and from label-pressing position.

2. A labeling machine of the kind having an article support, a label carrier having back-and-forth movement from label-gumming position to label-applying position and a label presser for

pressing a label against an article mounted on the support, characterized in having a pair of levers arranged to rock about vertically spaced axes, the free ends of the levers being pivotally secured to the presser at points spaced vertically apart a distance which substantially equals the distance between the axes of the levers, an actuating rod pivotally connected to one of said levers, and means for moving the rod thereby to swing the lever and thus move the presser in an arcuate path.

3. In a labeling machine having an article support, a label carrier having reciprocating movement in a substantially horizontal path from label-gumming position to label-applying position, and a label presser for pressing a label against an article mounted on the support, a plurality of levers constituting the sole supporting and directing means for the presser, and means for swinging said levers, the levers being so constructed and arranged that when the presser nears the surface of the article to be labeled it moves in a path substantially perpendicular to said surface.

4. In a labeling machine having an article support, a label carrier movable back and forth from label-gumming position to label-applying position, a presser device for pressing a label against an article mounted on the support, a pair of arms pivoted to rock about vertically spaced axes and having their free ends spaced apart and pivotally connected to the presser device, a rotary cam, and connections for transmitting motion from the cam to one of said arms, said connections including a resiliently yielding element.

5. In a labeling machine having an article support, a label carrier movable back and forth from label-gumming position to label-applying position, a presser device for pressing a label against an article mounted on the support, a pair of arms pivoted to rock about vertically spaced axes and having their free ends spaced apart and pivotally connected to the presser device, a rotary cam, and connecting means for transmitting motion from the cam to one of said arms, said connecting means including a pair of relatively slidable parts and spring means urging said parts in opposite directions.

6. In a labeling machine having an article support, a label carrier movable back and forth from label-gumming position to label applying position, a presser device for pressing a label against an article mounted on a support, a pair of levers arranged to rock about vertically spaced axes, the free ends of the levers being pivotally secured to the presser device at points spaced vertically apart a distance which substantially equals the distance between the axes of the levers, an actuating rod pivotally connected to one of said levers, a rotary cam, a rocker arm actuated by the cam and a support interposed between said rocker arm and the rod, the spring being operative yieldably to transmit motion from the rocker arm to the rod.

7. A labeling machine of the kind having an article support, a label carrier having back-and-forth movement along a substantially horizontal path from label-gumming position to label-applying position, and a label presser for pressing a label against an article mounted on the support, a substantially horizontal cam shaft located within the lower part of the machine below the path of the carrier, means including a cam on said shaft for moving the presser downwardly and upwardly toward and from operative posi-

tion, and means for moving the label carrier along its path, characterized in that said latter means comprises a lever pivoted to swing about an axis located below the level of the carrier, a pinion coaxial with the lever and fixed relatively to the latter, means connecting the free upper end of the lever to the carrier, a rockable gear segment meshing with the pinion, and means including a cam on said cam shaft for rocking the gear segment.

8. In combination in a labeling machine having an article support, a label carriage having back-and-forth movement in a predetermined substantially horizontal path from label-gumming position to label-applying position, and a label presser for pressing a label against an article mounted on the support, a substantially horizontal cam shaft located within the lower part of the machine below the path of the carriage, means including a cam on said shaft for moving the presser, and means for moving the carriage along its path, said latter means including a lever having an elongate slot near its upper end, a pin projecting from the carriage into said slot, a rock shaft to which the lower end of the lever is secured, a pinion fixed to said rock shaft, a rockable gear segment meshing with the pinion, an arm fixed to the segment and a rotating cam on said cam shaft operative to rock said arm.

9. In a labeling machine having a main frame, an article support carried by the main frame, a label carrier having reciprocating movement in a substantially rectilinear path from label-gumming position to label-applying position and a label presser for pressing a label against an article mounted on the support, means for moving the presser, and a carriage for the label carrier, said carriage having a sleeve portion and a forked portion laterally offset from the sleeve portion, a supporting frame for the carriage comprising spaced end members, a cylindrical guide rod having its opposite ends fixed in the end members of the frame and having its intermediate portions passing through said sleeve, a polygonal rod spaced laterally from the cylindrical rod and having its opposite ends fixed in the end members of the frame and its intermediate portion disposed between the arms of the forked portions of the carriage, the supporting frame having an elongate slot, and an actuating lever passing through said slot in the frame and having its free end operatively connected to the carriage, means for securing the supporting frame to the main frame of the lever, and means for rocking the lever.

10. In a labeling machine having a main frame, an article support carried by the main frame, a label carrier reciprocable in a substantially rectilinear path from label-gumming position to label-applying position, and a presser device for pressing a label against an article mounted on the support, means for moving the presser device, and a carriage for the label carrier, said carriage having a sleeve portion and a laterally offset forked arm, a supporting frame for the carriage, and means connecting the carriage-supporting frame to the main frame, said connecting means being constructed and arranged to provide for vertical adjustment of the carriage-supporting frame.

11. In a labeling machine having a main frame, gum-applying means, an article support carried by the main frame, a label carrier movable from label-gumming position to label-applying posi-

tion, and a presser device for pressing a label against an article mounted on the support, means for moving the presser device, and a carriage for the label carrier, said carriage having a sleeve portion and a laterally offset forked arm, a supporting frame for the carriage, and means so connecting the carriage-supporting frame to the main frame as to provide for variation of the plane of the label carrier relative to the gum-applying means.

12. In a labeling machine having a main frame, an article support carried by the main frame, gum-applying rolls, a label carrier movable back and forth from label-gumming position to label-applying position, and a presser device for pressing a label against an article mounted on the support, means for moving the presser device, and a carriage for the label carrier, said carriage having a sleeve portion and a laterally offset forked arm, a supporting frame for the carriage, a pair of spaced parallel guide rods mounted in the supporting frame, one of said rods being cylindrical, the carriage having a sleeve portion which receives said cylindrical guide rod, a rigid arm projecting laterally from the carriage, and adjustable means interposed between said arm and the second guide rod whereby the carriage may be tilted about the axis of the cylindrical guide rod for adjusting the plane of the label carrier.

13. In a labeling machine having a main frame, an article support carried by the main frame, gum-applying rolls, a label carrier movable back and forth from label-gumming position to label-applying position and a presser device for pressing a label against an article mounted on the support, means for moving the presser device, and a carriage for the label carrier, said carriage

having a sleeve portion and a laterally offset forked arm, a supporting frame for the carriage, a pair of laterally spaced parallel guide rods mounted in the supporting frame, one of said rods being cylindrical and the other being polygonal, the carriage having a sleeve portion which receives the cylindrical guide rod, a rigid arm projecting laterally from the carriage, said arm having an element which overlies the polygonal guide rod, and an adjustable gib interposed between said polygonal rod and the overhanging portion of the carriage arm thereby to permit angular adjustment of the carriage about the axis of the cylindrical rod.

14. In a labeling machine having a main frame, an article support carried by the main frame, gum-applying rolls, a label carrier reciprocable in a substantially rectilinear path from label-gumming position to label-applying position and a presser device for pressing a label against an article mounted on the support, means for moving the presser device, and a carriage for the label carrier, said carriage having a sleeve portion and a laterally offset forked arm, and a supporting frame for the carriage, a pair of spaced parallel guide rods mounted in said supporting frame, one of said rods being cylindrical, and having a sliding fit within said sleeve portion of the carriage, a rigid arm projecting laterally from the carriage, said arm having a forked end which straddles the second guide rod, and adjustable gibs interposed between the upper and lower surfaces of said second guide rod and the upper and lower fork members of the arm respectively, thereby providing for angular adjustment of the carriage about the axis of the cylindrical rod.

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