

Nov. 7, 1944.

G. W. VON HOFE

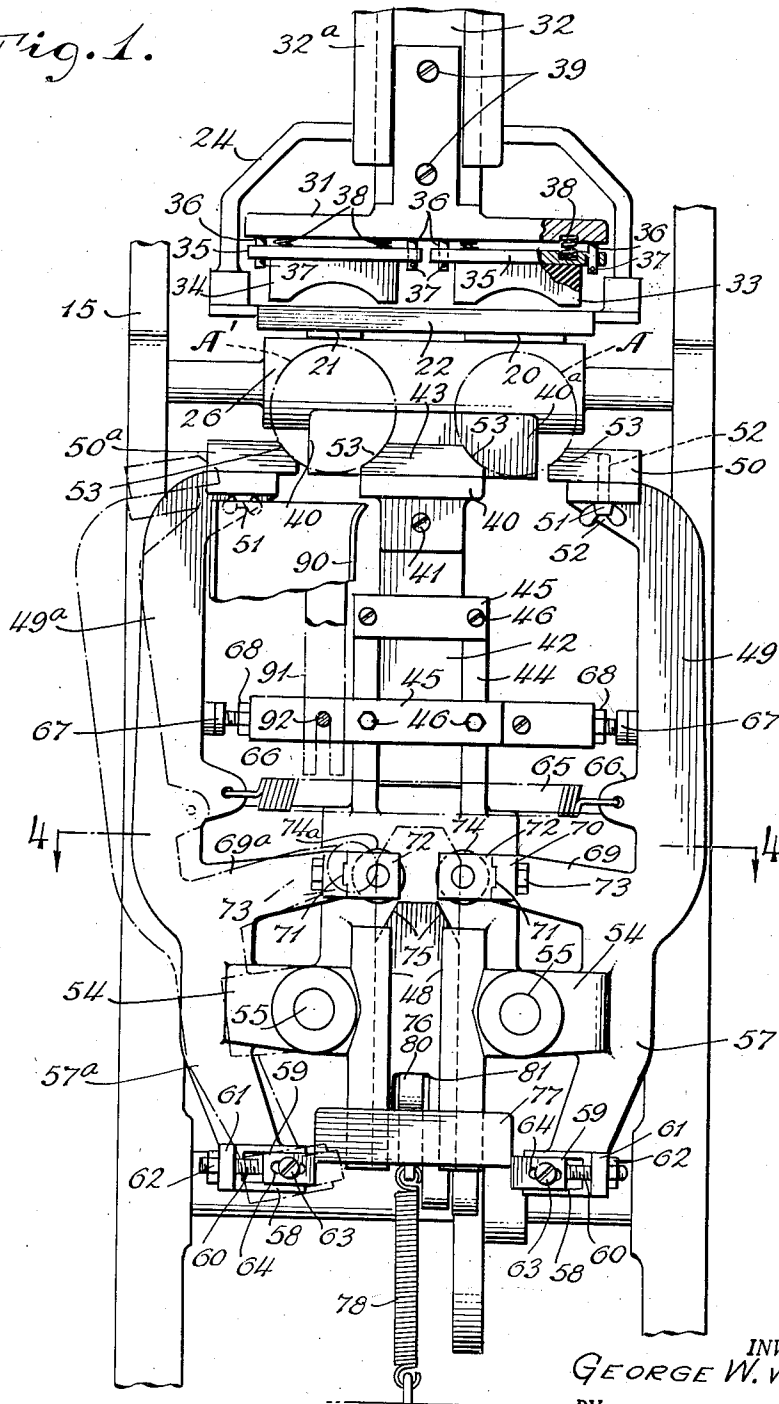
2,362,328

LABELING MACHINE

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7 Sheets-Sheet 1

Fig. 1.



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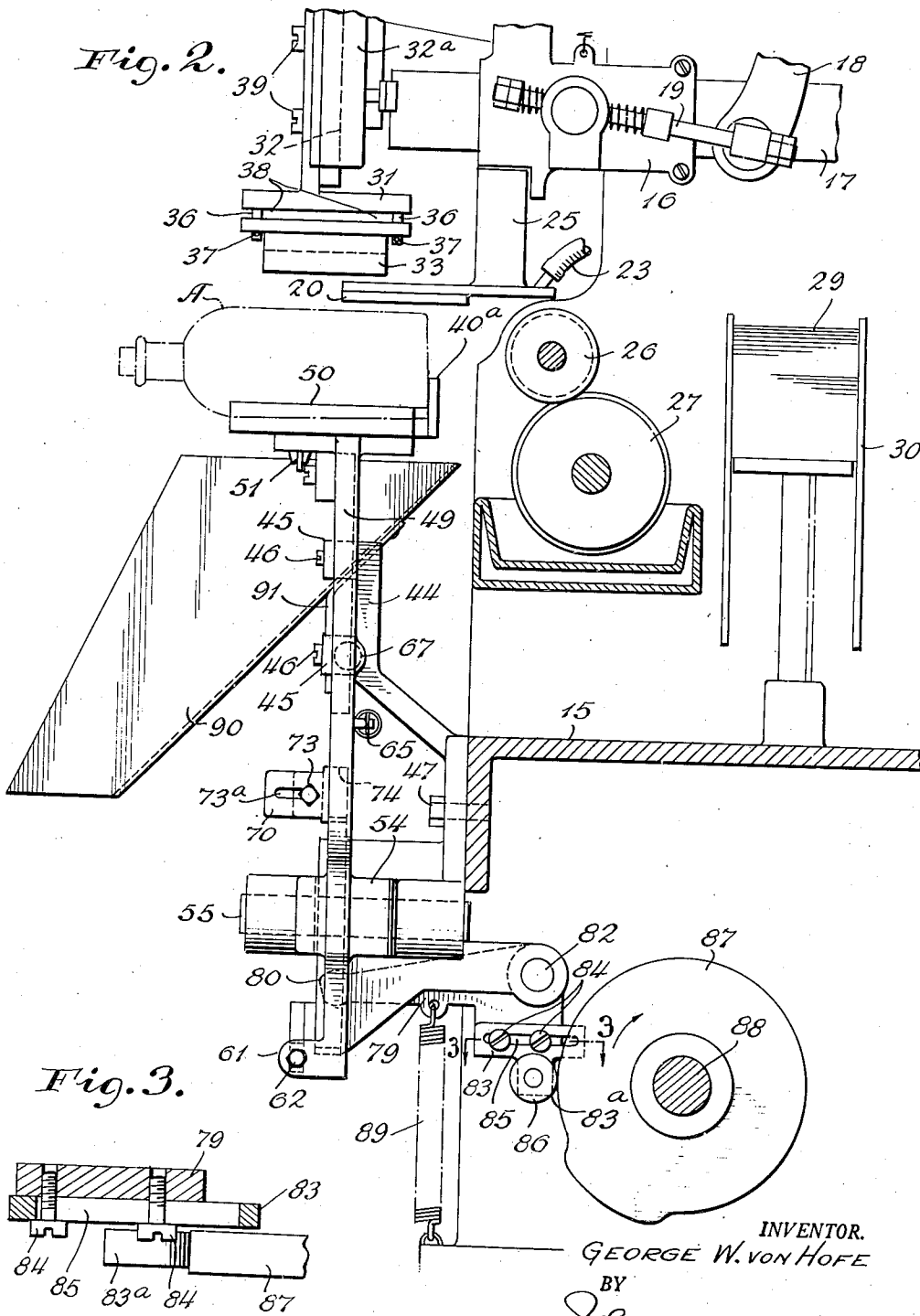
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LABELING MACHINE

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7 Sheets-Sheet 2



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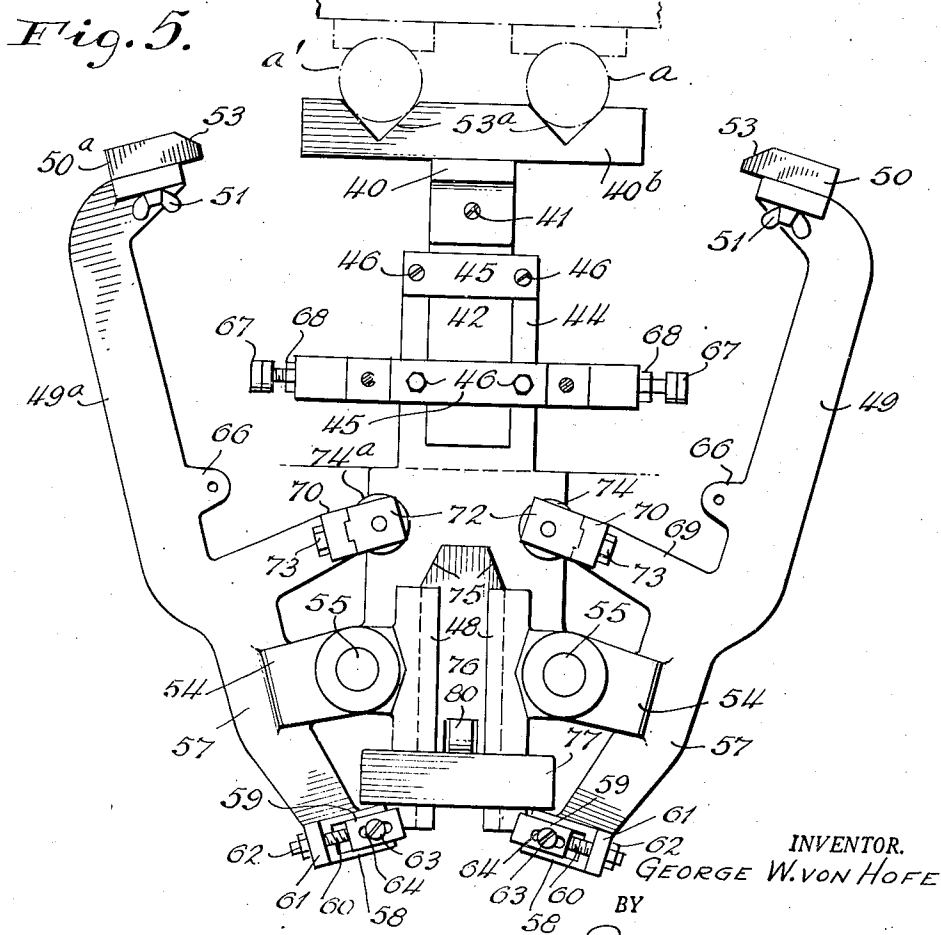
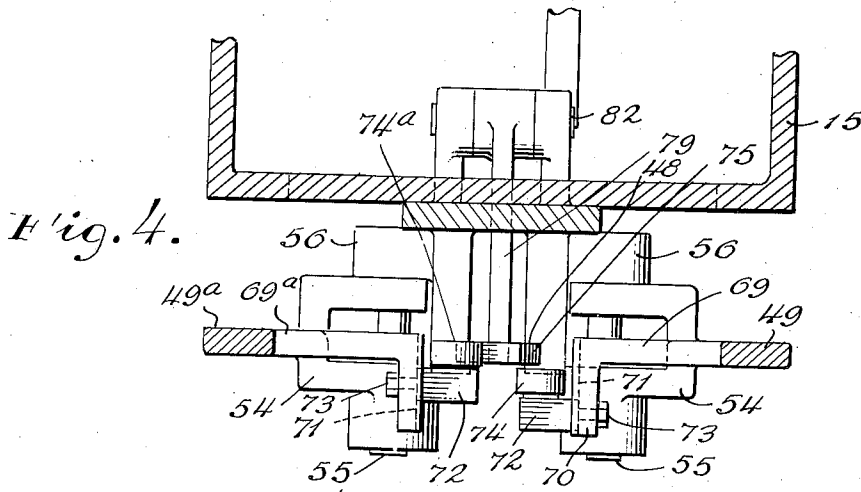
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LABELING MACHINE

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LABELING MACHINE

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Fig. 7.

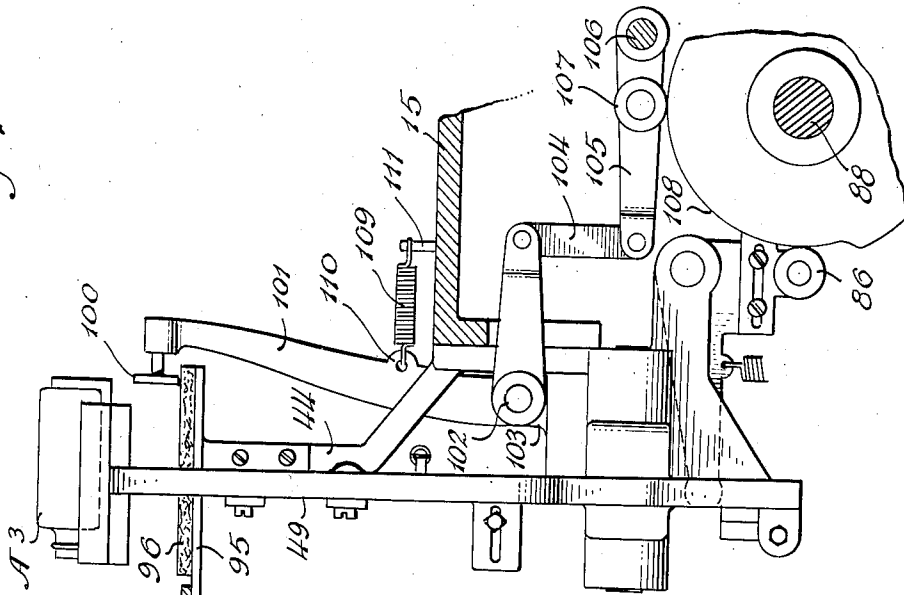
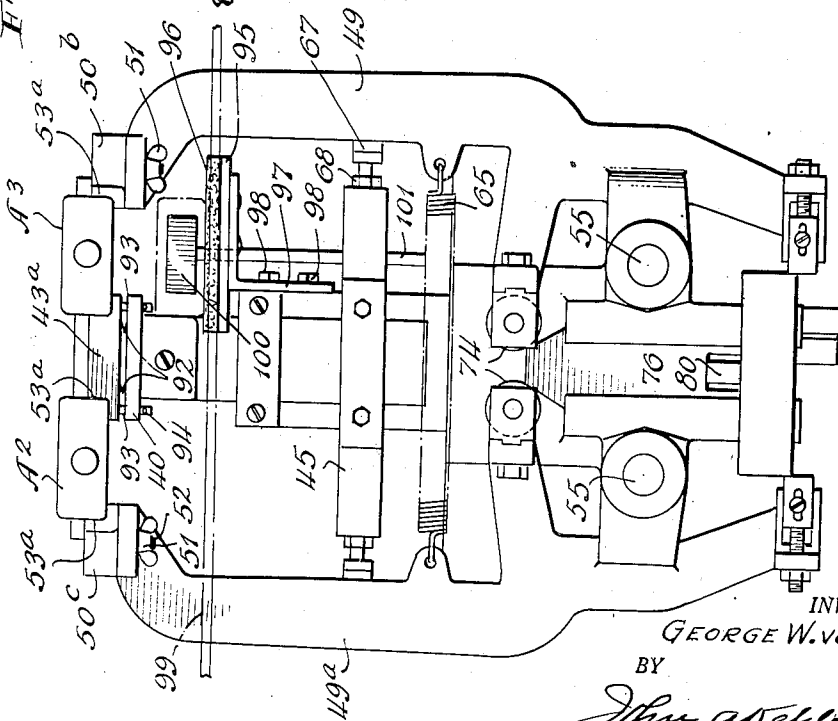


Fig. 6.



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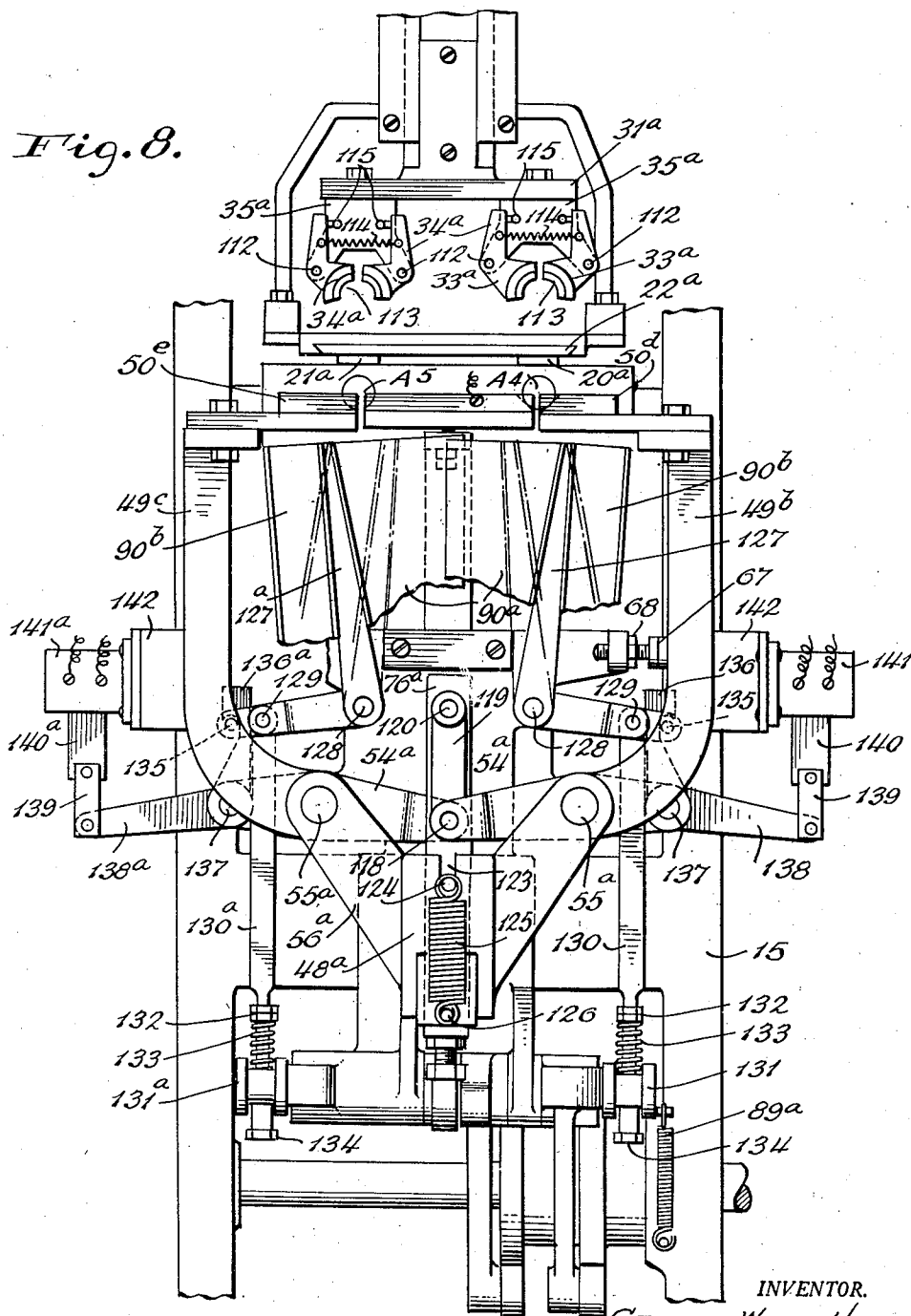
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LABELING MACHINE

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7 Sheets-Sheet 5

*Fig. 8.*



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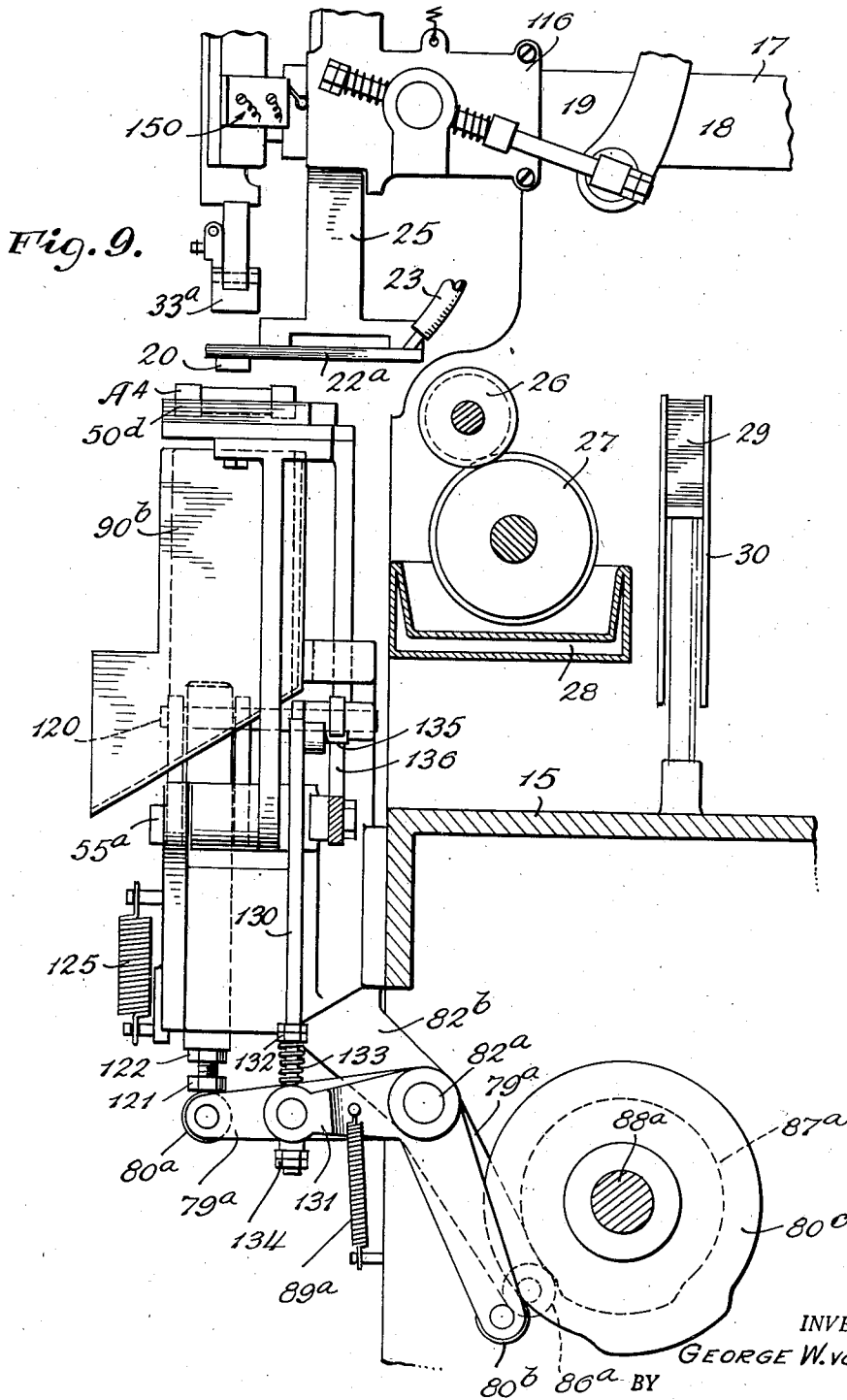
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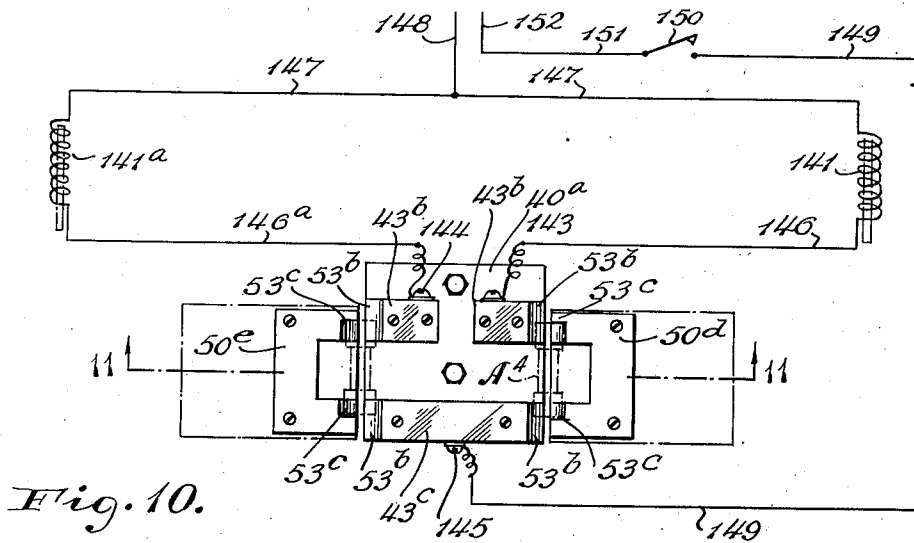


Fig. 10.

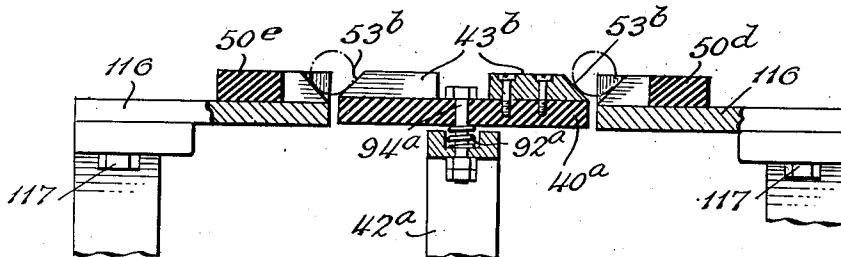


Fig. 11.

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## UNITED STATES PATENT OFFICE

2,362,328

## LABELING MACHINE

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Application January 9, 1942, Serial No. 426,107

15 Claims. (Cl. 216—55)

The invention relates to labeling machines and has for its object to provide a novel machine of the indicated class which is designed for multiple labeling or in other words, which operates in a simple and efficient manner to coincidentally apply labels to a plurality of articles, or to apply a plurality of labels successively to given articles.

The invention contemplates further the provision of a novel means whereby the labeled articles are automatically ejected from the machine in a simple manner and with a maximum degree of safety against breakage or other injury.

In addition the invention proposes to provide labeling means for applying labels to articles and for separating defective articles from those which are not defective.

A further object of the invention is to provide labeling means designed specially for applying labels to articles in the electrical art as exemplified by conventional fuses and arranged automatically to dispose of electrically defective articles independently of electrically perfect articles.

Other objects will appear from the description hereinafter and the features of novelty will be pointed out in the claims.

In the accompanying drawings, which illustrate examples of the invention without defining its limits,

Fig. 1 is a fragmentary front elevation of a labeling machine embodying the novel features;

Fig. 2 is a fragmentary sectional elevation thereof;

Fig. 3 is an enlarged detail section on the line 3—3 of Fig. 2;

Fig. 4 is a horizontal section on the line 4—4 of Fig. 1;

Fig. 5 is a fragmentary front elevation illustrating another arrangement of the invention;

Fig. 6 is a front elevation of another form of the novel mechanism;

Fig. 7 is a side elevation thereof;

Fig. 8 is a view similar to Fig. 1 showing still another form of the invention;

Fig. 9 is a sectional elevation thereof;

Fig. 10 is a diagrammatic view illustrating an electric circuit included in the form of the invention shown in Fig. 8, and

Fig. 11 is an enlarged detail section on the line 11—11 of Fig. 10.

As shown in Figs. 1 to 4 inclusive, the labeling machine comprises a suitable frame 15 on which the operating instrumentalities are conveniently mounted. The latter include means whereby the

labels are transferred from a suitable source of supply at the label pick-up station of the machine to the label applying station thereof for application to the articles supported in label receiving positions at the latter station. For purposes of disclosure and description the illustrated mechanism is shown in a form arranged to transfer and apply two labels to the articles, it being understood that this is not intended to define the limits of the invention.

In its illustrated form the label transfer and applying means consists of a carriage 16 slidably mounted on a horizontal guide rail 17 suitably fixed in place on the frame 15. The carriage 16 is reciprocated on said rail 17 between the pick-up and label applying stations of the machine by suitable mechanism exemplified by the arm 18 which is pivotally mounted on the frame 15 in any conventional manner. The arm 18 is connected with the carriage 16, for instance, by means of a yieldingly mounted rod 19, and is rocked on its pivot in proper timing by conventional means such as shown for instance, in my Patent No. 2,227,816 of January 7, 1941. The transfer and applying means in the illustrated machine further comprises suction controlled means including a plurality of suction heads corresponding in number to the number of labels which are to be applied to the articles for which said labels are intended. The selected example of the novel machine shows two suction heads 20 and 21 carried in suitably spaced relation by and depending from a suction plate 22 connected with a source of suction in any convenient manner as by means of a flexible tube 23. Provision is made in any well-known way for controlling the suction in the heads 20 and 21 and plate 22 in proper timing in an operative cycle of the machine.

The suction plate 22 as shown in Fig. 1 is mounted on a yoke or the like 24, preferably so as to be readily removable therefrom to permit replacement and substitution of plates 22 with varying arrangements of suction heads. The yoke or the like 24 forms part of or is carried by a member 25 slidably mounted on the carriage 16 for vertical reciprocation thereon and is arranged to move downwardly relatively to the carriage 16 at the pick-up station and at the label applying station in respective label pick-up and label applying steps in the well-known way.

In the travel of the carriage 16 from the pick-up station to the label applying station, that is from right to left in Fig. 2, the member 25 is suitably maintained at an elevation on the car-

riage 16 in which the labels held by suction on the suction heads 20 and 21 pass in adhesive receiving relation to an adhesive applying means and each receive a surface coating of adhesive therefrom. In its illustrated form the adhesive applying means consists of an adhesive applying roller 26 in rolling engagement with an adhesive transferring roller 27, said rollers 26 and 27 being rotatably supported in the machine and operated in any convenient manner. The roller 27 dips into a supply of adhesive in a container 28 suitably supported on the frame 15, as shown in Fig. 2, and transfers adhesive therefrom to the applying roller 26 in the well-known way. Provision may be made in any conventional manner to prevent the labels from being carried around the circumferential surface of the applying roller 26 as the coating with adhesive proceeds. During the return movement of the carriage 16 and its associated elements from left to right in Fig. 2 or, in other words, back to the pick-up station, the member 25 occupies an elevated position on said carriage 16 in which the suction heads 20 and 21 pass above the adhesive applying roller 26 without engaging the same, so as to prevent said suction heads 20 and 21 from becoming coated and soiled with adhesive during such return movement. Any well-known means may be incorporated in the machine for effecting these results, and any conventional mechanism may be utilized for vertically reciprocating the member 25 with the suction heads 20 and 21 at the pick-up and label applying stations.

At the label pick-up station the machine is provided with supplies of labels 29 preferably arranged in the form of stacks in upright containers 30 mounted on the frame 15 in any well-known way. Suitable provision is made, for instance, as illustrated in my previously mentioned Patent No. 2,227,816, for periodically elevating the stacks of labels 29 to restore the terminal labels at the upper ends thereof to a predetermined level. The stacks of labels 29 are located, at the pick-up station, in registry with the reciprocative paths of the respective suction heads 20 and 21, so as to enable said suction heads 20 and 21 to pick-up successive terminal labels 29 therefrom in the well-known way.

To complete the application of the labels to the articles, the machine is provided with pressing means which serves to press the labels into final adhesive contact with said articles subsequent to the initial application by the suction heads 20 and 21. As shown in Fig. 1, the pressing means includes a pressure member 31 carried by a plunger 32 vertically reciprocable in any convenient manner in a guideway 32<sup>a</sup> located on the frame 15, in properly timed operative sequence with its associated elements. In the specific form shown in Fig. 1, two pressure devices 33 and 34 preferably shaped to conform to the shape of the articles for which they are designed and preferably made of yielding material such as rubber or the like, are illustrated. The devices 33 and 34 each depend from a carrier 35 slidably mounted on guide pins 36 which project downwardly from the member 31 and are provided with cross-pins 37 to maintain the carriers 35 thereon. Springs 38 are located between the carriers 35 and the member 31 and serve to yieldingly resist the pressure developing operations of said devices 33 and 34 when the pressure member 31 is actuated. In the preferred arrangement, the pressure member 31 is removably mounted on the plunger 32, for instance, by means of screws 39 to enable various

types of pressure devices 33 and 34 to be utilized at will.

In addition to the parts so far described, the machine includes supporting means for supporting the articles in label receiving position at the label applying station, said supporting means being constructed in a novel manner to co-operate respectively with the suction heads 20 and 21 or their equivalents, and the pressure devices 33 and 34 in automatically setting said articles in the most efficient label receiving and pressure receiving position, and to efficiently and safely eject the labeled articles from the machine.

The aforesaid supporting means in the form shown in Figs. 1 to 4 inclusive, includes an intermediate supporting member 40 detachably mounted in any convenient manner as by means of a screw 41, upon a carrying member 42, said intermediate supporting member 40 preferably being provided on its upper face with a seat defining head 43 made of suitable material. The carrying member 42 in the illustrated example is clamped upon a bracket 44, for instance by means of clamping plates 45 removably secured in place in any convenient manner as by means of screws 46. The bracket 44 is fixed upon a suitable portion of the frame 15 by one or more bolts 47, or in any other suitable manner, and is further provided with spaced parallel guideways 48 extending in vertical directions as shown in Figs. 1 and 2. The article supporting means under discussion further includes arms 49 and 49<sup>a</sup> provided at their upper ends with seat defining heads 50 and 50<sup>a</sup>, the latter being mounted on the arms 49 and 49<sup>a</sup> preferably so as to be adjustable relatively thereto and removable therefrom as, for instance, by wing nuts 51 and co-operating bolts 52. The seat defining heads 50 and 50<sup>a</sup> co-operate respectively with the intermediate head 43 to provide seats which may be referred to as divided seats, in which the articles A and A' are supported in label and pressure receiving position; in the illustrated example the respective heads 43, 50 and 50<sup>a</sup> are bevelled as indicated at 53 to provide inwardly converging seats for the accommodation of circular or round articles A and A', such as bottles, cans, and the like. It will of course be understood that the heads 43, 50 and 50<sup>a</sup> may be shaped to provide other types of seats depending upon the nature and form of the articles A and A' to be accommodated or supported therein. Preferably suitable means is provided to properly and accurately position the articles to be labeled in a recurrent, corresponding label receiving position. For this purpose the intermediate member 40 may include an upright stop 40<sup>a</sup> with which the bottom of the article A or A' may be engaged when positioned in the respective seats, as illustrated for instance in Figs. 1 and 2.

The arms 49 and 49<sup>a</sup> include preferably integral yokes 54 whereby said arms 49 and 49<sup>a</sup> are pivotally mounted on pivot studs 55 carried by bearing members 56 which form preferably integral parts of and project from the previously mentioned guide members 48, as shown in Fig. 1. In the preferred arrangement the yokes 54 constitute parts of levers 57 and 57<sup>a</sup> which depend from the arms 49 and 49<sup>a</sup> respectively, as integral parts thereof and at their lower ends terminate in guideways 58 in which plates 59 are slidably mounted. The plates 59 include screwthreaded studs 60 which project through lugs 61 of the levers 57 and 57<sup>a</sup> for the accommodation of nuts 62. With this arrangement the plates 59 may

be slidably adjusted in the guideways 58 by screwing the nuts 62 relatively to the studs 60 in one direction or the other, as will be apparent. The plates 59 may be fixed in an adjusted position on the levers 57 and 57<sup>a</sup> in any convenient manner as by means of screws 63 extending through slots 64 into threaded engagement with the levers 57 and 57<sup>a</sup> respectively. The arms 49 and 49<sup>a</sup> are yieldingly connected with each other by means of a spring 65 having its opposite ends connected with apertured ears 66 formed on said arms as shown in Fig. 1 and exerting a tension tending to pivotally swing said arms 49 and 49<sup>a</sup> in directions to shift the seat defining heads 50 or 50<sup>a</sup> inwardly toward the seat defining intermediate head 43. In order to restrict such inward pivotal movement of the arms 49 and 49<sup>a</sup>, stops 67 are provided and preferably are adjustably mounted upon integral outward extensions of the lower clamping plate 45 and secured in adjusted positions thereon by means of lock nuts 68, as illustrated in Fig. 1. The arms 49 and 49<sup>a</sup> further include preferably integral members 69 and 69<sup>a</sup> which extend inwardly toward each other and at their opposed inner end are provided with transverse sections 70 formed with lengthwise extending guide grooves 71 in which bearing boxes 72 are slidably mounted and fixed in adjusted positions by means of screws 73 which are movable in slots 73<sup>a</sup> provided in the transverse sections 70 for this purpose as shown in Fig. 2. Rollers 74 and 74<sup>a</sup> are rotatably mounted on the bearing boxes 72 and are normally arranged to co-operate with the upper wedging or camming end 75 of a controlling member 76 slidably mounted in the guide members 48 for vertical reciprocation therein, said controlling member 76 carrying a locking member 77 movable therewith in external sliding engagement with the guideways 48 in registry with the previously mentioned plates 59 of the levers 57 and 57<sup>a</sup> respectively, for the purpose to be more fully set forth hereinafter. A coil spring 78 is connected with the slide 76 or the locking member 77 in a manner to develop a tension tending to move said slide 76 and locking member 77 downwardly relatively to the guide members 48. Any suitable means may be provided for vertically reciprocating the control member 76 and the locking member 77 to effect the desired results to be more fully described further on in the specification. For instance, as shown in Figs. 1 and 2, a bell-crank lever 79 may have the free end of its one member rounded as illustrated at 80 and located in a slot 81 with which the control member 76 is provided, as shown in Fig. 1. The bell-crank lever 79 is pivoted at 82 for instance upon a portion of the bracket 44 and has its other arm, which is of considerable width, provided with a slide 83 adjustably mounted on said member of the bell-crank lever 79 by means of screws 84 and a slot 85. A roller 86 is rotatably mounted upon a downwardly projecting lug 83<sup>a</sup> of the slide 83 so that said roller 86 partakes of the movements of adjustment of said slide. The roller 86 is in rolling engagement with a cam 87 carried by a shaft 88 suitably mounted in the machine and rotatively operated in any convenient manner, a spring 89 effective on the first-mentioned arm or member of the bell-crank lever 79 developing a tension thereon whereby the roller 86 is maintained in operative contact with said cam 87.

The novel arrangement further includes one or more chutes 90 into which the labeled articles A and A' are ejected subsequently to the completion

of the labeling operations. In the illustrated example, one chute 90 is provided in receiving relation to the seat forming head 50<sup>a</sup> of the arm 49<sup>a</sup> and the seat forming head 43 of the intermediate member 40. This chute 90 may be supported in any convenient manner and as shown is provided with a supporting bracket 91 which is adjustably clamped in place by means of a screw 92 on the extension of the lower clamping plate 45, as illustrated in Figs. 1 and 2.

In the operation of the machine the carriage 16 is reciprocated on the horizontal guide rail 17 by means of the arm 18 and the connecting rod 19 and the associated mechanism between the label pick-up station and the label-applying station of the machine. At the label pick-up station, the member 25 is moved downwardly on the carriage 16 in the conventional manner to bring the suction heads 20 and 21 into engagement with the terminal labels 29 at the upper ends of the supply stacks in the respective containers 30. At the proper moment, suction is developed in the suction heads 20 and 21 and the latter are lifted upwardly by raising the member 25 on the carriage 16 to carry said terminal labels 29 upwardly away from the respective supply stacks. The carriage 16 is then shifted to the left in Fig. 2 along the guide rail to cause the labels 29 carried by the suction heads 20 and 21 to pass in tangential adhesive receiving relation to the adhesive applying roll 26 to receive coatings of adhesive therefrom in the well-known way. The movement of the carriage 16 to the left is continued until the applying station of the machine is reached at which time the member 25 is again moved downwardly on the carriage 16 to correspondingly move the suction heads 20 and 21 downwardly and to thereby bring the labels 29 carried by said suction heads into label applying relation to the articles mounted on the previously described supporting means.

In the illustrated example shown in Fig. 1, separate labels may be applied successively to the articles, for instance, in diametrically opposed positions thereon. In such case, at the beginning of the labeling operation a single article A may be located in the seat provided by the intermediate head 43 and the head 50 of Fig. 1 with the opposed seat between the intermediate head 43 and the head 50<sup>a</sup> empty. In this event the previously described downward operation of the suction heads 20 and 21 will initially apply a label 29 to the article A with the label carried by the suction head 21 being wasted and discarded. Alternatively, articles A and A' may be coincidentally positioned in both seats, or in other words, supported upon both arms 49 and 49<sup>a</sup> and the intermediate member 40 as shown in Fig. 1. Under such conditions, the downward movement of the suction heads 20 and 21 will coincidentally initially apply different labels to both articles A and A'. In either case, after the initial application of the label or labels has taken place, the slide 25 will be moved upwardly on the carriage 16 to raise the suction heads 20 and 21 away from the articles A and A' respectively, to a level above that of the adhesive applying roller 26. The carriage 16 will then again be moved to the right on the guiderail 17 to bring the suction heads 20 and 21 above and in registry with the respective supply stacks of labels ready for a repetition of the pick-up operations whereby the next successive terminal labels 29 are picked up from said supply stacks. In the meantime, in proper operative synchronism with these opera-

tions the plunger 32 is moved downwardly in the guideway 32<sup>a</sup> in any conventional manner to correspondingly move the pressure member 31 downwardly to thereby bring the pressure devices 33 and 34 into yielding contact with the initially applied labels on the articles A and A' to develop a pressure thereon whereby the application of the labels to said articles is completed. If as previously mentioned, only the article A is in label receiving position, at the beginning of an operative period, the pressure device 34 in such case will develop no operative effect. With only the article A initially in position for labeling, this article A subsequent to the application of a label thereto, is transferred in a reverse position to the seat between the heads 43 and 50<sup>a</sup> and becomes the article A'. If, on the other hand, articles A and A' are coincidentally in place in the respective seats, the article A' is transferred in a reverse position to the seat previously occupied by the article A and the article A is transferred in a correspondingly reverse position to the seat previously occupied by the article A', whereupon the previously described initial application of labels and subsequent pressure thereof on said articles is repeated. These operative steps may be continued in repeated sequence throughout a given operative period of the machine. In the preferred operation the seat between the heads 43 and 50<sup>a</sup> is without an article at the beginning of the operative cycle and the article A after the first label has been applied thereto as described, is transferred in a reverse position in which the article A' is illustrated in Fig. 1, and a successive article A is placed in the seat between the heads 43 and 50. In such case when the next successive label applying steps have been completed to provide the article A' with its second label, the completely labeled article A' is ejected into the chute 90 and removed from the machine.

In this connection it is to be noted, with the machine set up for use as illustrated in Fig. 1, that the one roller 74 is adjusted to an inoperative position on the transverse section 70 of the member 69 of the arm 49 so as to lie outside of the path of the vertically moving control member 76. Under such conditions as the cam 87 is rotated during an operative period of the machine, it will act on the roller 86 to thereby swing the bell-crank lever 79 in a direction to raise the controlling member 76 in the guides 48. The wedging or camming end 75 of said member 76 will thus act on the roller 74<sup>a</sup> and by exerting a camming action to the left thereon will pivotally swing the arm 49<sup>a</sup> correspondingly to the left to move the head 50<sup>a</sup> away from the head 43 a distance sufficient to permit the fully labeled article A' to drop downwardly into the chute 90; in other words, the completely labeled article A' is dislodged from its supporting seat. As the controlling member 76 is thus raised, the locking plate 77 will be correspondingly lifted out of registry with the plates 59 so as not to interfere with the above described pivotal movement of the arm 49<sup>a</sup>. Because of the inoperative position of the roller 74 out of the path of the controlling member 76, the upward actuation of the latter will have no effect on the arm 49 so that the article A will remain in position in the seat between the heads 50 and 43. As the cam 87 continues its rotation, the spring 89 will cause the bell-crank lever 79 to be pivotally moved in a reverse direction whereby the control member 76 is moved downwardly in the guides 48 to there-

by restore the wedging or camming end 75 of the member 76 to its normal inoperative position and to permit the spring 85 to swing the arm 49<sup>a</sup> inwardly and to return the head 50<sup>a</sup> into operative supporting relation to the head 43. At the same time the locking plate 77 is moved downwardly with the member 76 into registry with the plates 59 to thereby lock the arms 49 and 49<sup>a</sup> against pivotal movement in a direction to cause unintentional movement of the heads 50 and 50<sup>a</sup> away from the head 43. In other words, the heads 50 and 50<sup>a</sup> are firmly fixed against any movement away from the head 43 under the camming forces developed by the articles A and A' on the respective seats during the labeling operations.

As previously stated, it is preferred to apply a label to the article A and to then transfer said article A in reverse position to the seat previously occupied by the article A', for receiving a second label so that the labels are successively applied to a given article in diametric opposite positions or other relation thereon. If labels are applied coincidentally to articles A and A' first in one position and then in a reverse position in the respective seats, it may be desirable to eject the two completely labeled articles A and A' from the machine simultaneously. In such case, the roller 74 is adjusted to an operative position on the section 70 of the extension 69 of the arm 49 into the path of the wedging or camming end 75 of the controlling member 76. Under such conditions, when the latter is vertically moved as previously described, both arms 49 and 49<sup>a</sup> will be pivotally actuated to coincidentally shift the heads 50 and 50<sup>a</sup> away from the head 43 to thereby permit both completely labeled articles A and A' to be ejected from the machine. It will of course be understood that in such case a duplicate chute 90 will be located in receiving relation to the heads 50 and 43. As the controlling member 76 moves downwardly in the manner previously set forth, both arms 49 and 49<sup>a</sup> will be pivotally actuated to restore both heads 50 and 50<sup>a</sup> into proper operative relation to the head 43 to provide the respective seats for successive articles A and A'. The inward pivotal movements of the arms 49 and 49<sup>a</sup> either individually or simultaneously will be arrested by the stops 67 so that the heads 50 and 50<sup>a</sup> will be properly positioned relatively to the head 43 to properly support the articles to be labeled in a most efficient manner. The degree of reciprocation of the controlling member 76 and its associated parts may be varied by adjusting the slide 83 and roller 86 on the depending arm of the bell-crank lever 79 as will be apparent.

In some instances, it may be desirable to render the arms 49 and 49<sup>a</sup> with their associated parts and associated mechanism temporarily inactive or inoperative for the purpose, for instance, of substituting a central supporting member of different type for the supporting member 40. Such an arrangement is illustrated in Fig. 5 in which the supporting member 40<sup>b</sup> is provided with seats 53<sup>a</sup> for the accommodation of articles a and a' arranged to be coincidentally labeled by means of suitable mechanism as illustrated in Fig. 5.

To effect the inoperative setting of the arms 49 and 49<sup>a</sup> and the associated mechanisms the plate 83 is adjusted to a position on the depending lug 83<sup>a</sup> of the bell-crank lever 79 in which the roller 86 is located outside of the operative range of the cam 87. In addition the spring 85

is disconnected from the arms 49 and 49<sup>a</sup> and the latter are swung to the inactive and inoperative positions illustrated in Fig. 5, it being understood that the controlling member 76 and locking plate 77 are raised in the guideways 48 to enable this to be done. The support 40<sup>b</sup> may be replaced by the support 40 at will and the other parts of the mechanisms restored to operative condition at any time desired by again connecting the spring 65 with the arms 49, 49<sup>a</sup> and by adjusting the roller 86 into proper operative relation to the cam 87.

In the form shown in Figs. 6 and 7, the mechanism generally corresponds to that of the form shown in Figs. 1 to 5 inclusive. It will be noted however as illustrated in Fig. 6 that the arrangement under discussion is designed for applying labels to articles of substantially rectangular form. It is to be understood however that this is in no sense to be construed as a limitation as the mechanism of Figs. 6 and 7 may be used with equal efficiency for supporting articles of circular and other configuration, in label receiving positions. In the illustrated specific construction, the seat forming heads 43, 50 and 50<sup>a</sup> are replaced by an intermediate seat forming head 43<sup>a</sup> located upon the intermediate supporting member 40 and by the seat forming heads 50<sup>b</sup> and 50<sup>c</sup> removably secured by means of the wing-nuts 51 and co-operating bolts 52 upon the upper ends of the respective arms 49 and 49<sup>a</sup>. The heads 43<sup>a</sup>, 50<sup>b</sup> and 50<sup>c</sup> include angular recesses 53<sup>a</sup> normally located in associated relation to provide angular seats for the accommodation of the approximately rectangular articles A<sup>2</sup> and A<sup>3</sup>; this relative positioning of the parts is effected by the stops 67 in co-operation with the arms 49 and 49<sup>a</sup>. In the illustrated preferred arrangement the intermediate head 43<sup>a</sup> is yieldingly mounted on the intermediate supporting member 40 by means of springs 92 and guide pins 93 which project downwardly from the head 43<sup>a</sup> through apertures provided for this purpose in the intermediate supporting member 40 as shown in Fig. 6. The guide pins 93 are provided with stop pins 94 which by engagement with the supporting member 40 maintain the head 43<sup>a</sup> in operative connection with the supporting member 40.

In the form now being described the articles A<sup>2</sup> and A<sup>3</sup>, after the application of the labels has been completed, are dislodged from the supporting seat or seats and dropped upon a table 95, the upper face of which preferably carries a pad 96 of cushioning material, such as rubber, or the like, to neutralize the impact of the dislodged articles A<sup>2</sup> and A<sup>3</sup> and prevent breakage thereof or other injury thereto. In the illustrated example the table 95 and its cushion 96 are located beneath and in receiving relation to the seat formed by the head 50<sup>b</sup> of the arm 49 and the seat forming head 43<sup>a</sup> of the intermediate member 40 as illustrated in Fig. 6. Obviously the table 95 and its cushion 96 may be correspondingly located in receiving relation to the seat forming head 50<sup>c</sup> of the arm 49<sup>a</sup> and the intermediate seat forming head 43<sup>a</sup>. In any case, the table 95 and its cushion 96 are supported in the machine in any convenient manner as by means of a bracket 97 secured upon the bracket 44 for instance by means of screws 98. The arrangement being described further includes a travelling conveyer 99 operated in any suitable manner and having its upper run suitably supported against sagging and travelling in adja-

cent receiving relation to the cushion 96 of the table 95, as shown in Fig. 7. The aforesaid conveyer 99 serves to transfer the labeled articles from the labeling station subsequent to the application of the labels to a convenient point outside of the machine for suitable disposition as may be desired. For the purpose of transferring the labeled articles from the cushion 96 of the table 95 to the conveyer 99 the machine may be provided with a suitable means whereby this is accomplished. As shown in Fig. 7, this means comprises an impelling member 100 movable transversely of the cushion 96 in operative relation thereto and located at the upper end of one arm of a bell-crank lever 101. The latter is pivotally mounted at 102 upon a lug or lugs 103 which may be secured to or form part of the bracket 44. The arm 101 in the operation of the mechanism is rocked upon its pivot 102 in a manner to cause the impelling member 100 to shift the labeled articles transversely of the cushion 96 of the table 95 and to transfer said articles to the conveyer 99. Any suitable mechanism may be provided for this purpose. For instance, as shown in Fig. 7, the other arm of the bell-crank lever 101 may be pivotally connected with a link 104 which in turn is pivotally connected with an operating lever 105 pivoted at 106 in any conventional manner upon the frame 15 of the machine and carrying a roller 107 arranged in rolling engagement with a cam 108 fixed upon the previously mentioned shaft 88. A spring 109 has its one end connected with a lug 110 of the first mentioned arm of the bell-crank lever 101 and its other end secured to a pin suitably located on the frame 15. This spring 109 serves to return the bell-crank lever 101 to the normal position illustrated in Fig. 7 and at the same time to maintain the roller 107 in rolling engagement with the cam 108.

With the arrangement shown in Fig. 6 it may be assumed that the roller 74 of the arm 49<sup>a</sup> occupies an inoperative position out of the path of reciprocation of the controlling member 76. Under such conditions when the labels have been applied to the article A<sup>3</sup> the arm 49 will be pivotally actuated to shift the seat forming head 50<sup>b</sup> away from the seat forming head 43<sup>a</sup> to thereby dislodge the labeled article A<sup>3</sup> from said supporting seat and permit said labeled article A<sup>3</sup> to drop to and upon the cushion 96 of the table 95. Because of the relatively short distance between the seat in which the article A<sup>3</sup> is supported during the application of the labels, and the cushion 96, the completely labeled articles A<sup>3</sup> will drop to the cushion 96 without material change in position and with the bottoms of said articles A<sup>3</sup> substantially in registry with and proximity to the impelling member 100.

As the operation of the machine continues, the cam 108 in proper operative synchronism with the other operative steps will act on the roller 107 to pivotally raise the lever 105 and thereby develop an upward pushing force on the link 104 which causes the bell-crank lever 101 to be pivotally actuated in a direction to shift the impelling member transversely across the cushion 96 toward the left in Fig. 7. It will be understood that the table 95 and cushion 96 are both slotted in registry with each other and with the bell-crank lever 101 to permit this transverse movement of the impelling member 100. As the latter is thus actuated it will develop an impelling force on the completely labeled article A<sup>3</sup> which is in position on the cushion 96 and thereby will

force said article A<sup>3</sup> from said cushion 98 and transfer said labeled article A<sup>3</sup> to the conveyer 99. The labeled article A<sup>3</sup> thus transferred is carried from the machine to a suitable point of disposal. When this transfer of the completely labeled article A<sup>3</sup> to the conveyer 99 has been completed, the continued operation of the cam 108 will permit the spring 109 to restore the bell-crank lever 101 with the impelling member 100 to the initial normal position illustrated in Fig. 7 whereupon the described cycle of operations is repeated.

In Figs. 8 to 11 inclusive, the novel features are located in the machine and constructed in a manner designed especially for applying labels to articles of an electrical nature, as exemplified for instance by conventional electric fuses.

The labeling machine as shown in Fig. 9 includes supplies of labels 29 preferably arranged in the form of stacks in upright containers 30 in the same way as shown and described with respect to the form of the invention first referred to herein. The machine under discussion also includes adhesive applying means which may be of the same type and located in the same way as shown in Fig. 2. The mechanism whereby successive labels are removed from the supply stacks at the pick-up station and transferred to the label applying station may also be of the same general construction as that shown in Figs. 1 and 2, and previously described herein with respect thereto. During the transmission of the successive labels from the pick-up station to the label applying station, said labels receive a coating of adhesive in the same manner as previously mentioned herein.

The label transfer and applying means in the form of the machine now being described also includes a suction plate 22<sup>a</sup> provided with two suction heads 20<sup>a</sup> and 21<sup>a</sup> depending from the suction plate 22<sup>a</sup> which, as in the form first described, is mounted on the yoke or the like 24, preferably so as to be readily removable therefrom to permit replacement and substitution of plates 22<sup>a</sup> with varying arrangements of suction heads.

As in the form first described, the instant form of the machine includes pressing means which serves to press the labels into final adhesive contact with the articles subsequent to the initial application of said labels thereto by the suction heads 20<sup>a</sup> and 21<sup>a</sup>. As shown in Fig. 8, this pressing means includes supporting brackets 35<sup>a</sup> which depend from and are carried by a pressure member 31<sup>a</sup> corresponding to the pressure member 31 of Fig. 1 and correspondingly mounted and operated. Two pressure devices each consisting of co-operating pressure levers 33<sup>a</sup> and 34<sup>a</sup> are pivotally mounted at 112 upon the respective supporting brackets 35<sup>a</sup> as shown in Fig. 8. The pressure levers 33<sup>a</sup> and 34<sup>a</sup> in the illustrated example are curved to fit the articles being labeled and preferably are provided with correspondingly curved pads 113 of resilient material. The levers 33<sup>a</sup> and 34<sup>a</sup> of each pair are resiliently controlled by means of springs 114 and are maintained in their normal position by said springs in co-operation with stops 115 located on the brackets 35<sup>a</sup> as shown in Fig. 8.

The means whereby the articles A<sup>4</sup> and A<sup>5</sup> which as previously stated herein may be exemplified by the conventional electric fuses, are supported in label receiving positions at the label applying station in proper operative relation to the respective suction heads 20<sup>a</sup> and 21<sup>a</sup> and the

respective pressure devices 33<sup>a</sup> and 34<sup>a</sup> includes an intermediate supporting member 40<sup>a</sup> which is provided at its upper surface with heads 43<sup>b</sup> and 43<sup>c</sup> for defining seats conforming to the articles being labeled. As shown in Fig. 10 the heads 43<sup>b</sup> are located in opposed spaced relation to each other on the supporting member 40<sup>a</sup> while the head 43<sup>c</sup> comprises a continuous unit located in spaced parallel relation to the heads 43<sup>b</sup> as illustrated in Fig. 10. The supporting member 40<sup>a</sup> is preferably yieldingly supported upon a carrying member 42<sup>a</sup> by means of a bolt 94<sup>a</sup> and a spring 92<sup>a</sup> as shown in Fig. 11. The carrying member 42<sup>a</sup> may otherwise correspond to the carrying member 42 of the form first described and be correspondingly supported in the machine. The seat defining heads 43<sup>b</sup> and 43<sup>c</sup> in the illustrated example are beveled as indicated at 53<sup>b</sup> for the purpose of defining the aforesaid seats as will appear more fully hereinafter. Co-operating seat defining heads 50<sup>d</sup> and 50<sup>e</sup> are preferably U-shaped as shown in Fig. 10 with the parallel legs of said heads 50<sup>d</sup> provided with bevels 53<sup>c</sup> normally located in co-operative relation to the bevels 53<sup>b</sup> and co-operating therewith to provide seats in which the articles A<sup>4</sup> and A<sup>5</sup> are supported. The heads 50<sup>d</sup> and 50<sup>e</sup> are carried by members or plates 116 removably secured in place by means of screws 117 upon the upper ends of arms 49<sup>b</sup> and 49<sup>c</sup> which correspond to the arms 40 and 40<sup>a</sup> of the forms previously described and are similarly arrested in their normal positions by adjustable stops 67. The arms 49<sup>b</sup> and 49<sup>c</sup> are pivotally mounted at 55<sup>a</sup> upon lugs 56<sup>a</sup> secured to or forming part of a guide bearing 48<sup>a</sup> suitably supported on the frame 15 of the machine in any convenient manner, for instance, in the same way as the guideways 48 are mounted in the forms of the machine previously described herein. The arms 49<sup>b</sup> and 49<sup>c</sup> include extensions 54<sup>a</sup> which project toward each other and are pivotally connected at 118 with links 119 which in turn are pivotally connected at 120 with a controlling member 76<sup>a</sup> upon opposite sides thereof as illustrated in Fig. 8. The controlling member 76<sup>a</sup> is slidably mounted for vertical reciprocation in the guide bearing 48<sup>a</sup> and at its lower end is provided with a preferably adjustable projection shown in the form of headed screw 121 fixed in an adjusted position by a lock nut 122. The guide bearing 48<sup>a</sup> is provided with a slot 123 for the slidable accommodation of a pin 124 projecting from the controlling member 76<sup>a</sup> and serving to receive one end of a spring 125 the other end of which is attached to a pin 126 projecting from the guide bearing 48<sup>a</sup> as illustrated in Fig. 8.

Any suitable means may be provided for vertically reciprocating the controlling member 76<sup>a</sup> in the guide bearing 48<sup>a</sup> in proper synchronism with the associated elements of the machine. For instance, as shown in Fig. 9, the headed screw 121 may rest in engagement with a roller 80<sup>a</sup> carried by one member of a bell-crank lever 79<sup>a</sup> which is pivoted at 82<sup>a</sup> upon a bracket 82<sup>b</sup> suitably mounted in the machine, as illustrated in Fig. 9. The other arm of the bell-crank lever 79<sup>a</sup> is provided with a roller 86<sup>a</sup> located and maintained in rolling engagement with a cam 87<sup>a</sup> fixed upon a shaft 88<sup>a</sup> conveniently mounted in the machine and operated in any suitable manner.

In addition to the parts so far described, the machine under discussion includes deflecting means whereby articles of different type as ex-

emplified by electrically perfect and electrically imperfect articles are separately ejected from the machine. In the illustrated example electrically defective fuses A<sup>4</sup> and A<sup>5</sup> are ejected from the machine and discarded, while the electrically perfect fuses A<sup>4</sup> or A<sup>5</sup> are separately ejected from the machine in a manner to enable the latter articles to be easily gathered up subsequently to the completion of the application of the labels thereto.

In its illustrated form, the aforesaid deflecting means comprises bell-crank levers 127 and 127<sup>a</sup> suitably pivoted at 128 in the machine and having their upright arms provided with deflecting chutes 90<sup>a</sup> and 90<sup>b</sup> fixed upon said levers 127 and 127<sup>a</sup> in any convenient manner for instance upon opposite sides thereof as shown in Fig. 8. The other arms of the bell-crank levers 127 and 127<sup>a</sup> are pivotally connected at 129 with members 130 and 130<sup>a</sup> respectively, said members 130 and 130<sup>a</sup> being slidably connected at their lower ends with bell-crank levers 131 and 131<sup>a</sup>. The members 130 and 130<sup>a</sup> are each provided with abutments preferably in the form of adjustable nuts 132 against which springs 133 abut with their one end, the other ends of said springs being in engagement with the levers 131 and 131<sup>a</sup> respectively. The bell-crank levers 131 and 131<sup>a</sup> are mounted for rocking movements on the pivots 82<sup>a</sup> and are provided with rollers 80<sup>b</sup> in rolling engagement with the cam 80<sup>c</sup> suitably mounted on the shaft 88<sup>a</sup>. Springs 89<sup>a</sup> are provided for maintaining the rollers 80<sup>b</sup> in contact with the cam 80<sup>c</sup> as shown in Fig. 9. The members 130 and 130<sup>a</sup> are further provided with nuts 134 which by engagement with the bell-crank levers 131 and 131<sup>a</sup> arrest the movements of the members 130 and 130<sup>a</sup> relatively to said bell-crank levers 131 and 131<sup>a</sup> under the influence of the springs 133. The deflecting bell-crank levers 127 and 127<sup>a</sup> are further provided with pins 135 arranged to be engaged by latch members 136 and 136<sup>a</sup> respectively, to thereby lock said levers 127 and 127<sup>a</sup> against operation as will be more fully set forth hereinafter. The latch members 136 and 136<sup>a</sup> are fixed upon stub shafts 137 suitably mounted in the machine and carrying arms 138 and 138<sup>a</sup> which may be fixed upon said shafts 137 in any convenient manner. The arms 138 are connected by means of links 139 with the armatures 140 and 140<sup>a</sup> of electro-magnetic coils 141 and 141<sup>a</sup> located respectively upon opposite sides of the frame 15 and suitably mounted in place as by means of supporting brackets 142, as shown in Fig. 8.

The deflecting means now being described includes electric circuits whereby the electro-magnetic coils 141 and 141<sup>a</sup> are automatically controlled in a manner to bring about the automatic discarding of defective articles A<sup>4</sup> and A<sup>5</sup> in the intended manner. For this purpose the seat defining heads 43<sup>b</sup> and 43<sup>c</sup> are made of metal or any other suitable electrically conductive material and are provided with binding screws 143, 144 and 145 as illustrated in Fig. 10. A wire 146 leads from the binding screw 143 to one side of the electro-magnetic coil 141 while a corresponding wire 146<sup>a</sup> leads from the binding screw 144 to one side of the electro-magnetic coil 141<sup>a</sup>. The opposite sides of the coils 141 and 141<sup>a</sup> are connected by means of a wire 147 with a wire 148 which leads to a source of electric power. The binding post 145 is connected by means of a wire 149 with one side of a switch 150, the other side of which is connected by means of a wire 151

with a wire 152 leading to said source of electricity to complete the circuit. The switch 150 is of a type which is normally open to break the aforesaid electric circuit and is located and supported in the machine in any suitable manner in the path of the carriage 16 and so as to be adjusted to its closed position to close the aforesaid electric circuit when it is engaged by said carriage 16 as the latter reaches its terminal position at the left hand end of the guide rails 17, as shown in Fig. 9. It will be understood that the intermediate supporting member 140<sup>a</sup> on which the heads 43<sup>b</sup> and 43<sup>c</sup> are located is preferably made of insulation or other suitable electrically non-conductive material. Similarly the heads 50<sup>d</sup> and 50<sup>e</sup> may also be made of electrically non-conductive material such as a suitable insulation substance.

In the normal condition of the machine at the beginning of an operative cycle the parts may occupy the positions illustrated in Fig. 8 in which the articles A<sup>4</sup> and A<sup>5</sup>, hereinafter referred to as fuses, are located in label receiving position and in operative relation to the suction heads 20<sup>a</sup> and 21<sup>a</sup> and the pressing devices 33<sup>a</sup> and 34<sup>a</sup>. The labels are initially applied to the fuses A<sup>4</sup> and A<sup>5</sup> by the suction heads 20 and 21<sup>a</sup> respectively, and pressed into final adhesive connection with said fuses A<sup>4</sup> and A<sup>5</sup> by the pressure devices 33<sup>a</sup> and 34<sup>a</sup> in the same manner as previously described with respect to the other forms of the machine disclosed herein.

As the carriage 16 reaches its left hand terminus in Fig. 9 of the drawings, it will adjust the switch 150 to its closed position to thereby connect the wires 149 and 151 with each other and with the wire 152 which leads to a source of electric power. When the fuses A<sup>4</sup> and A<sup>5</sup> are in position in the respective seats formed by the bevels 53<sup>b</sup> and 53<sup>c</sup>, the metallic ends of said fuses will connect the heads 43<sup>b</sup> with the head 43<sup>c</sup> so that the electric circuits which includes the electro-magnetic coils 141 and 141<sup>a</sup> will be completed through the fusable wires or their equivalent which constitute parts of said fuses A<sup>4</sup> and A<sup>5</sup> in the conventional manner. If the fuses are electrically perfect, the electric current will pass therethrough and will energize the electro-magnetic coils 141 and 142 to thereby elevate the respective armatures 140 and 140<sup>a</sup> and swing the arms 138 and 138<sup>a</sup> in a direction to shift the latch members 136 and 136<sup>a</sup> out of engagement with the co-operating pins 135 to thereby release the bell-crank levers 127 and 127<sup>a</sup> for pivotal operation as will appear more fully hereinafter. In this position of the parts as the bell-crank lever 79<sup>a</sup> is actuated by the cam 87<sup>a</sup> to operate the controlling member 76<sup>a</sup> in a manner to swing the arms 49<sup>b</sup> and 49<sup>c</sup> in directions away from each other, the heads 50<sup>d</sup> and 50<sup>e</sup> will be moved away from the heads 43<sup>b</sup>, 43<sup>c</sup> to thereby dislodge the fuses A<sup>4</sup> and A<sup>5</sup> from the respective supporting seats. If said fuses A<sup>4</sup> and A<sup>5</sup> are electrically perfect, the electrical current will pass therethrough to the electro-magnetic coils 141 and 141<sup>a</sup> and will electrically energize the same. As a result the armatures 140 and 140<sup>a</sup> will be operated to shift the latch members 136 and 136<sup>a</sup> to inoperative positions and thereby release the bell-crank levers 127 and 127<sup>a</sup>. The latter accordingly will be pivotally operated to reverse the position of the chutes 90<sup>a</sup> and 90<sup>b</sup> relatively to the respective fuse supporting seats; in other words, the chutes 90<sup>b</sup> will thereby be moved into registry with the respective seats in which fuses A<sup>4</sup> and A<sup>5</sup> are supported during the labeling

operations. The labeled fuses A<sup>4</sup> and A<sup>5</sup> which are electrically perfect will thus drop into the chutes 90<sup>b</sup> and will be ejected from the machine for such disposition as may be desired.

On the other hand, if for instance one of the fuses, say the fuse A<sup>4</sup> is electrically defective, the electrical current will not pass through this defective fuse when the switch 150 is closed and the electro-magnetic coil 141 consequently will not be electrically energized. As a result the armature 140 will not be elevated and the latch member 136 will remain in engagement with the pin 135 to thereby retain the chute 90<sup>a</sup> of the bell-crank lever 127 in position in registry with the seat in which the defective fuse A<sup>4</sup> is supported. As the arms 49<sup>b</sup> and 49<sup>c</sup> are operated in the manner previously described to dislodge the fuses A<sup>4</sup> and A<sup>5</sup> from their seats subsequent to the completion of the labeling operation, the defective fuse A<sup>4</sup> will be discarded into the chute 90<sup>a</sup> and will be deflected thereby out of the machine for suitable disposition. When the latch member 136 thus remains in engagement with the pin 135, to lock the bell-crank lever 127 against operation, the member 130 will be correspondingly locked. At the same time the bell-crank lever 131 will be operated by its cam 80<sup>c</sup> which operation will be neutralized by the spring 133 and because of the slidable yielding connection of said member 130 with said bell-crank lever 131. If both fuses A<sup>4</sup> and A<sup>5</sup> are electrically defective, both chutes 90<sup>a</sup> will remain in place for the reception of said defective fuses A<sup>4</sup> and A<sup>5</sup>.

From the above it will be apparent that in addition to providing for the efficient application of labels to electrical articles such as electrical fuses, this form of the mechanism in addition automatically separates imperfect electrical articles from the perfect ones.

The electrical arrangement described in connection with the form of the mechanism shown in Figs. 8 to 11 inclusive, may if desired be combined with the other forms of said mechanism herein illustrated and described.

The novel mechanism in all of its forms provides for the efficient application of labels to the articles in the manner set forth and may be incorporated without difficulty in existing labeling machines.

Various changes in the specific forms shown and described may be made within the scope of the claims without departing from the spirit of the invention.

I claim:

1. In a labeling machine, a pair of members co-operating with each other to provide a divided supporting seat for an article to be labeled, means for applying a label to said article, and means for operating at least one of said members relatively to the other to disrupt said supporting seat and thereby dislodge the article from said supporting seat subsequently to the application of said label thereto.

2. In a labeling machine, a relatively stationary member, a movable member, said members co-operating with each other to provide a divided supporting seat for an article to be labeled, means for applying a label to said article, and means operating in operative timing with said label applying means for operating said movable member relatively to said stationary member to disrupt said supporting seat and thereby dislodge said article from said seat subsequently to the application of said label thereto.

3. In a labeling machine, an upright relatively

stationary member, a movable member located in associated relation therewith, seat forming heads on said members co-operating to provide a supporting seat for an article to be labeled, and means for operating said movable member relatively to said stationary member to dislodge the article from said seat subsequently to the application of a label thereto.

4. In a machine, the combination of means for providing a divided supporting seat for an article to be subjected to an operative step in said machine, means for disrupting said seat subsequently to the completion of said operative step, to dislodge said article from said seat, and means for receiving the dislodged article and removing the same from said machine.

5. In a machine, the combination of means for providing a divided supporting seat for an article to be subjected to an operative step in said machine, means for disrupting said seat subsequently to the completion of said operative step, to dislodge said article from said seat, and a plurality of means for selectively receiving dislodged articles of different type to separately remove the same from the machine.

6. In a machine, the combination of means for providing a divided supporting seat for an article to be subjected to an operative step in said machine, means for disrupting said seat subsequently to the completion of said operative step, to dislodge said article from said seat, and a chute in receiving relation to said supporting seat for receiving the dislodged article and removing the same from the machine.

7. In a machine, the combination of means for providing a divided supporting seat for an article to be subjected to an operative step in said machine, means for disrupting said seat subsequently to the completion of said operative step, to dislodge said article from said seat, a first article receiving chute, a second article receiving chute, and means for selectively shifting said chutes individually into receiving relation to said supporting seat whereby dislodged articles of different types are separately removed from the machine.

8. In a machine, the combination of means for providing a divided supporting seat for an article to be subjected to an operative step in said machine, means for disrupting said seat subsequently to the completion of said operative step, to dislodge said article from said seat, a movable support, a first chute carried by said support and normally located in receiving relation to said seat, a second chute carried by said support and normally located out of receiving relation to said seat, and means for operating said support to reverse the positions of said chutes relatively to said seat whereby dislodged articles of different type are separately removed from the machine.

9. In a labeling machine, supporting means including a stationary and a movable arm for supporting an article in label receiving position, means for applying a label to said article, operating means, and a roller adjustably mounted on said arm and co-operating with said operating means to operate said movable arm in a manner to dislodge the supported article subsequently to the application of a label thereto, said roller being selectively adjustable on said arm to an inoperative position relatively to said operating means whereby the operative action of the latter will be ineffective on said movable arm to dislodge said article.

10. In a labeling machine, a relatively stationary supporting member, a seat defining head

yieldingly mounted on said supporting member, a movable member, a seat defining head carried by said movable member, said seat defining heads co-operating to provide a supporting seat for an article to be labeled, means for applying a label to said article, and means for operating said movable member relatively to said stationary member to dislodge said article from said seat subsequently to the application of said label thereto.

11. In a machine including means providing a supporting seat for an article to be subjected to an operative step in said machine, that improvement which comprises means for dislodging said article from said seat subsequently to the completion of said operative step, a table in receiving relation to said seat for receiving the dislodged article, a resilient pad constituting the top of said table for neutralizing the impact of the dislodged article, a traveling conveyor in receiving relation to said table, an impeller, and means including a bell-crank lever for actuating said impeller to transfer the dislodged article from said table to said conveyor for removal from said machine.

12. In a labeling machine including means providing an electrically-conductive supporting seat for an electrical article, and means for applying a label to said electrical article, that improvement which comprises means for dislodging the labeled article from said seat, a pivoted lever, a pair of chutes carried by said lever, one of said chutes normally being located in receiving relation to said seat, locking means for locking said lever against operation, electrically-operated means controlling said locking means, an electric circuit including said electrically-operated means and an article on said seat, a normally open switch in said circuit controlled by said label-applying means whereby said electrically-operated means is actuated to release said locking means when the article being labeled is electrically perfect, and means for operating said lever in the released position of said locking means to reverse the position of said chutes relatively to said seat whereby the dislodged labeled articles are separately removed from said machine in dependence upon their electrically perfect or imperfect condition.

13. In a labeling machine for labeling electrical fuses including an electrically-conductive supporting seat for a fuse to be labeled, and means

for applying a label thereto, that improvement which comprises a bell-crank lever, a pair of independent chutes carried by said lever with one of said chutes normally in receiving relation to said seat, operating means for said bell-crank lever, a latch member for locking said bell-crank lever against operation with said one of said chutes in its normal position, an electric circuit including said supporting seat, electrically-operated means in said circuit controlling said latch member, a normally open switch in said circuit operated by said label-applying means to close said circuit and electrically energize said electrically-operated means and thereby operate said latch member whereby said latch member is actuated to release said bell-crank lever when the fuse being labeled is electrically perfect and to have no effect on said electrically-operated means when said fuse is electrically defective, means for dislodging the labeled fuse from said seat, and means for operating the released bell-crank lever to reverse the positions of said chutes relatively to said seat whereby electrically perfect and electrically defective fuses are separately discharged from said machine.

14. In a labeling machine, a plurality of members co-operating with each other to provide a divided supporting seat for an article to be labeled, means for applying a label to said article, means for relatively operating at least one of said members to disrupt said supporting seat and dislodge the article from said supporting seat subsequently to the application of said label thereto, and means for preventing said relative operation of said one of said members during said application of said label to said article.

15. In a labeling machine, a plurality of members co-operating to provide a divided supporting seat for an article to be labeled, means for applying a label to said article, means for operating at least one of said members relatively to a co-operating member to disrupt said seat and thereby dislodge the article from said supporting seat subsequently to the application of said label thereto, said means for predetermining the co-operating positions of said members relatively to each other.

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