

means, and means for bringing a succession of labels into a predetermined position, whereby said labels will be applied to said boxes on movement of the latter, substantially as described.

19. In a labeling machine, the combination of a receiving chute, guiding means leading from the bottom of said chute, means for successively carrying boxes from said receiving chute through said guiding means, means for moving said boxes in a horizontal plane after they have been delivered from said guiding means, means for bringing the labels successively into the path of said boxes, and means associated with said box-moving means for adjusting said labels in their proper positions, substantially as described.

20. In a machine of the character described, the combination of means to apply a label to one side of a box and to leave an end of a label projecting beyond the edge of the box, and means to impart to the said partially labeled box and to another box relative movement, whereby to wipe the projecting end of the label over into contact with another face of the first named box, substantially as described.

21. In a machine of the character described, the combination of means to apply a label to one side of a box and to leave an end of the label projecting beyond the edge of the box, and means to effect relative sliding movement of the said box with reference to another box whereby to wipe the projecting end of the label over upon another side of the first named box, substantially as described.

22. In a machine of the character described, the combination of means to apply a label to one side of a box and to leave an end of the label projecting beyond the edge of the box, and means to move a second box against the projecting end of the label whereby to wipe the end of the label over upon another face of the first named box, substantially as described.

23. In a machine of the character described, the combination of means to move a box with one side against one end of an adhesive label, and means to move a second box against the other end of the label to press the label over upon another side of the first box, substantially as described.

24. In a machine of the character described, the combination of means to move a box with one side in contact with one

end of an adhesive label to secure its adherence thereto, means to move the box and partially attached label laterally to make way for a second box, and means to move the second box in parallelism to the unlabeled face of the first box and against the unattached label portion to wipe the latter over upon the unlabeled face of the first box, substantially as described.

25. In a machine of the character described, the combination of means to move a box with one side in contact with one end of an adhesive label to secure its adherence thereto, means to move the box and partially attached label laterally to make way for a second box, means to move the second box in parallelism to the unlabeled face of the first box and against the unattached label portion to wipe the latter over upon the unlabeled face of the first box, said means cooperating to press the boxes together to secure intimate adhering contact of label and box, substantially as described.

26. In a machine of the character described, the combination of means to apply one end of a label to a box, a chute, means to move the box to a position across the open end of the chute, means to force the box into the chute whereby to wipe the free portion of the label into contact with another face of the box leaving the end of the label extending beyond said other face into the path of the next box, whereby it is wiped by such succeeding box into contact with yet another face of the first box, substantially as described.

27. In a machine of the character described, the combination of means to apply one end of a label to a box, a chute, means to move the box to a position across the open end of the chute, means to force the box into the chute whereby to wipe the free portion of the label into contact with another face of the box leaving the end of the label extending beyond said other face into the path of the next box, whereby it is wiped by such succeeding box into contact with yet another face of the first box, and means to frictionally retard the progress of the boxes through the chute whereby the required pressure to cause the adherence of the labels to the boxes is secured by the action of the boxes one against another, substantially as described.

MICHAEL J. MILMOE.

Witnesses:

ALBERT BLAUVELT,
FRED G. BROOKS.

UNITED STATES PATENT OFFICE.

MICHAEL J. MILMOE, OF CHICAGO, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO PACKAGE MACHINERY COMPANY, OF SPRINGFIELD, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

PACKAGE FOR CHEWING-GUM AND OTHER ARTICLES OF MERCHANDISE.

1,126,823.

Specification of Letters Patent.

Patented Feb. 2, 1915.

Application filed February 15, 1912. Serial No. 677,813.

To all whom it may concern:

Be it known that I, MICHAEL J. MILMOE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Packages for Chewing-Gum and other Articles of Merchandise, of which the following is a specification.

The invention relates to packages for inclosing chewing gum and similar relatively thin articles of merchandise, and has for its primary object to provide a package for inclosing chewing gum and other confections and merchandise, which shall completely envelop the article and thoroughly protect it from atmospheric conditions and at the same time be economically and easily manufactured, particularly by automatic wrapping machinery.

To attain these ends and to accomplish certain other new and useful objects, the invention consists in the features of novelty hereinafter described, shown in the drawing forming a part of the specification, and described more particularly in the appended claims.

In the drawings, Figure 1 is a perspective view of a flat wrapper with the article to be wrapped, which is a stick of chewing gum superposed upon the wrapper. Fig. 2 is a similar view showing one longitudinal side of the wrapper folded flat upon the article before the ends are tucked in. Fig. 3 shows a similar view, with the other longitudinal side of the wrapper folded flat upon the article before the end is tucked in. Fig. 4 shows a perspective view of the wrapper with the two longitudinal sides folded and the ends tucked in at both sides. Fig. 5 is an end view of the wrapper folded to the form shown in Fig. 4. Fig. 6 shows the buckled or contracted projecting end portions of the wrapper folded to the vertical position, while Fig. 7 shows these ends folded flat upon the seam side of the package. Fig. 8 is a perspective view of a completely wrapped package with the binder in place and pasted down upon an article wrapped as shown in Fig. 7, the function of the binder being to secure the buckled or crimped and folded end portions of the wrapper. Fig. 9 is a view similar to Fig. 7 showing a modified form of the package before the binder is applied, the buckled or

crimped end portions of the wrapper being folded flat upon the flat side of the package opposite the seam. To this form of package the binder is to be applied as shown in Fig. 8.

The article to be wrapped which is shown in the embodiment of the invention is a relatively thin stick of chewing gum, designated by the reference character 10, and is superposed (as shown in Fig. 1 and others of the figures) upon the wrapper 11 which is usually rectangular in form and of considerably greater length and width than the article to be wrapped, so that there is a substantially uniform peripheral portion of the paper extending beyond the limits of the article for the purpose of forming an envelop or covering therefor. The assembling of the article and wrapper may be by hand or may be effected by automatic machinery as is common in this art. The first longitudinal side fold is designated in Fig. 2 by the reference character 11^a, and the last longitudinal side fold by the reference character 11^b, as shown in Figs. 3 and 4. It is evident that the first longitudinal fold may be made either by hand or automatic machinery in the form shown in Fig. 2 of the drawing, and if made by hand a later step will be the tucking in of the ends beyond the ends of the gum as shown in Figs. 4 and 5; but if made by automatic machinery, while this same order of procedure may be followed, it is preferable to fold the longitudinal sides and at the same time by a further movement of a part of the same tool to tuck in the ends as shown in Figs. 4 and 5 at 11^a, so that in such case the first fold, instead of looking like that shown in Fig. 2 will resemble the front side of Fig. 4, where the ends have been tucked in in the same operation with the longitudinal folding action. This tucking, buckling or crimping of the relatively thin sides of the tubular portion of the wrapper projecting beyond the extremities of the article is, so far as I am aware, a departure from the prior art and makes a very neat and secure package. This buckling or crimping of the material at the ends of the wrapper is performed on the portions of the wrapper indicated by 11^c in Fig. 3, and the portions of the wrapper buckled or crimped inwardly from the opposite thin side edges of the package, which results in contracting the peripheral measurements of these projecting end

tions of such face free from the paste, one or more feed rollers to move the label, and one or more guides for such labels, said feed rollers and guides being adapted to contact only with the unpasted sections of the pasted face of the label, substantially as described.

7. In a machine of the character described, the combination of means to support an adhesive label, means to move a box against the adhesive coated side of the label and to continue the movement of the box and label in the same direction, and a pressure means adapted to wipe across the advancing face of the box and label to cause adhesion of the latter to the former, substantially as described.

8. In a machine of the character described, the combination of means to support an adhesive label, means to move a box against the adhesive coated side of the label, and to continue the movement of the box and label, and a yielding arm actuated by the movement of the box to wipe across the advancing face of the box and label to cause adhesion of the latter to the former, substantially as described.

9. In a machine of the character described, the combination of means to support an adhesive label, means to move a box against the adhesive coated side of the label and to continue the movement of the box and label, and a yielding arm actuated by the movement of the box to wipe across the advancing face and another adjacent face of the box and label to cause adhesion of the latter to the former, substantially as described.

10. In a machine of the character described, the combination of a pair of opposed cushioning devices one stationary and the other movable, means to advance a series of freshly covered boxes progressively therebetween, and means to repeatedly actuate the movable cushioning device to squeeze each of the boxes a plurality of times at different stages of its advance therebetween, substantially as described.

11. In a machine of the character described, the combination of a cushion, an arm, means to advance a series of labeled boxes between said cushion and arm, and means to move said arm to squeeze the boxes between itself and said cushion, said operating means giving the boxes a plurality of squeezes at each actuation, substantially as described.

12. In a machine of the character described, the combination of a table, a movable finger, means to feed labels, and means to feed boxes against the labels and adjacent to said finger whereby the latter may act to assist in applying the labels to said boxes, said finger being in the path of travel of said box feeding means and adapted to be moved by the latter out of the way, substantially as described.

13. In a machine of the character described, the combination of a table, a spring-actuated fulcrumed finger, means to feed labels, and means to feed boxes against the labels and adjacent to said finger whereby the latter may act to assist in applying the labels to said boxes, said finger being in the path of travel of said box feeding means and adapted to be swung to normal position by its spring action, substantially as described.

14. In a machine of the character described, the combination of means to apply an adhesive to portions of labels, means to feed said labels including a mutilated roller adapted to contact with the portion of the labels not supplied with adhesive, and means to shift the labels when the roller is out of contact therewith, due to its mutilated portion, substantially as described.

15. In a machine of the character described, the combination of means to apply an adhesive label to the first face of a box, means to fold the label over on to the second and third faces of the box which are adjacent to said first face, means to apply the portion of the label protruding from said second face to the fourth face of the box, and means to fold the remaining portion of the label on to the third face of the box, substantially as described.

16. In a labeling machine, the combination of a receiving chute for boxes, guide means leading upwardly from the lower end of said chute, a pivotally mounted arm for successively moving said boxes from said chute through said guiding means, actuating means associated with said arm for moving said boxes in a horizontal plane after their delivery from said guiding means, and means arranged in advance of the guiding means to apply labels to said boxes, substantially as described.

17. In a labeling machine, the combination of a box-receiving chute, guiding means leading from the lower end of said chute, an oscillatory shaft, an arm mounted on said shaft for successively moving said boxes from said chute through said guiding means, actuating members mounted on said shaft, means for moving said shaft in the direction of its longitudinal axis, whereby the actuating members on said shaft will move said boxes in a horizontal plane after their delivery from said guiding means, and means to interpose adhesive labels in the horizontal path of the boxes, substantially as described.

18. In a labeling machine, the combination of a box-receiving chute, guiding means leading from the lower end of said chute, means for successively moving said boxes upwardly through said guiding means, means for moving said boxes in a horizontal plane after their delivery from said guiding

I claim:

1. A merchandise package comprising a substantially rectangular, relatively thin article with a wrapper of greater length and width than the article, and having the longitudinal flaps or projecting portions thereof folded flat upon the same flat side of the article, the end portions of the wrapper projecting beyond the ends of the article being buckled or crimped inwardly from the opposite thin side edges of the package to contract the peripheral measurements of the projecting end portions, and being folded inwardly and upon the same flat side of the package, whereby the said end portions when folded form single flaps at each end of the package of constantly decreasing width from the extreme outer ends of the package to the inner flat folded ends of the said flaps.

2. A merchandise package comprising a substantially rectangular elongated relatively thin article with a wrapper of greater length and width than the article, and having the longitudinal flaps or projecting portions thereof overlapped and folded flat upon a flat side of the article, the end portions of the wrapper projecting beyond the ends of the article being buckled or crimped inwardly from the opposite thin side edges of the package to contact the peripheral measurements of the projecting end portions, and being folded inwardly and flat upon a flat side of the package, whereby the said end portions when folded flat upon the package form closed flaps of constantly decreasing width from the extreme outer ends of the package to the inner flat folded ends of the flaps and means for securing the said end portions on a flat side of the package.

3. A merchandise package comprising a substantially rectangular, relatively thin article with a wrapper of greater length and width than the article, and having the longitudinal flaps or projecting portions thereof folded flat upon the same flat side of the article, the end portions of the wrapper projecting beyond the ends of the article being buckled or crimped inwardly from the opposite thin side edges of the package to contract the peripheral measurements of the projecting end portions, and being folded inwardly and upon the same flat side of the package, whereby the said end portions when folded form single flaps at each end of the package of constantly decreasing width from the extreme outer ends of the package to the inner flat folded ends of the said flaps, a binder being folded to envelop the longitudinal sides and edges of the said wrapped article, and to secure the said folded end flaps in position and means for securing the binder in position over the said end flaps.

4. A merchandise package comprising a substantially rectangular, relatively thin

article with a wrapper of greater length and width than the article, and having the longitudinal flaps or projecting portions thereof folded flat upon the same flat side of the article, the end portions of the wrapper projecting beyond the ends of the article being buckled or crimped inwardly from the opposite thin side edges of the package to contract the peripheral measurements of the projecting end portions, and being folded inwardly and upon the same flat side of the package, whereby the said end portions when folded form single flaps at each end of the package of constantly decreasing width from the extreme outer ends of the package to the inner flat folded ends of the said flaps, and a binder of less width than the total length of the completed package, being folded to envelop the longitudinal sides and edges of the said wrapped article and securing the said folded end flaps in position.

5. A merchandise package comprising a substantially rectangular elongated relatively thin article with a wrapper of greater length and width than the article, and having the longitudinal flaps or projecting portions thereof overlapped and folded flat upon a flat side of the article, the end portions of the wrapper projecting beyond the ends of the article being buckled or crimped inwardly from the opposite thin side edges of the package to contract the peripheral measurements of the projecting end portions, and being folded inwardly and flat upon the same flat side of the package, whereby the said end portions when folded flat upon the package form closed flaps of constantly decreasing width from the extreme outer ends of the package to the inner flat folded ends of the flaps, and a binder adapted to substantially cover the wrapped package being folded to envelop the longitudinal sides and edges thereof, and having its ends pasted together to secure the said folded end flaps in position.

6. A merchandise package comprising a substantially rectangular elongated relatively thin article with a wrapper of greater length and width than the article, and having the longitudinal flaps or projecting portions thereof overlapped and folded flat upon a flat side of the article, the end portions of the wrapper projecting beyond the ends of the article being buckled or crimped inwardly from the opposite thin side edges of the package to contract the peripheral measurements of the projecting end portions, and being folded inwardly and flat upon a flat side of the package, whereby the said end portions when folded flat upon the package form closed flaps of constantly decreasing width from the extreme outer ends of the package to the inner flat folded ends of the flaps, and a binder

of less width than the total length of the completed package being folded to envelop the longitudinal sides and edges of the wrapped article and to secure the said 5 folded end flaps in position.

7. A merchandise package comprising a substantially rectangular, relatively thin article with a wrapper of greater length and width than the article, and having the 10 longitudinal flaps or projecting portions thereof folded flat upon the same flat side of the article, the end portions of the wrapper projecting beyond the ends of the article being buckled or crimped inwardly 15 from the opposite thin side edges of the package to contract the peripheral measurements of the projecting end portions, and being folded inwardly and upon the same flat side of the package, whereby the said

end portions when folded form single flaps 20 at each end of the package of constantly decreasing width from the extreme outer ends of the package to the inner flat folded ends of the said flaps, and a binder of less width 25 than the total length of the completed package, being folded to envelop the longitudinal sides and edges of the said wrapped article with its ends overlapping and pasted together for securing the said folded end 30 flaps in position.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this eighth day of February A. D. 1912.

MICHAEL J. MILMOE.

Witnesses:

FRANK B. REDINGTON,
FRED T. BROOKS.